

2025
2029

National ONE HEALTH Framework

to Address Zoonotic Diseases
and Advance Public Health
Preparedness
in the United States



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Executive Summary

The first ever **National One Health Framework to Address Zoonotic Diseases and Advance Public Health Preparedness in the United States** (NOHF-Zoonoses), 2025-2029, establishes a structure to facilitate multisectoral and transdisciplinary coordination, collaboration, and communication across the federal government. Using the One Health approach, the framework addresses zoonotic diseases and other priority One Health issues in the United States (U.S.). The One Health approach recognizes the interdependence of the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems). This approach mobilizes multiple diverse sectors, disciplines, and communities to work together to promote well-being and address health and ecosystem threats.

Previous multisectoral work in the U.S. identified the critical need to formalize federal One Health coordination to address zoonotic diseases and other One Health related issues across the U.S. Government. Therefore, in the 2023 Consolidated Appropriations Act and the 2021 House Appropriations Committee Report, Congress directed the Centers for Disease Control and Prevention (CDC) in coordination with other federal agencies, to develop a framework based on the One Health approach to address zoonotic diseases and advance public health preparedness. The Act also directed CDC to coordinate with the U.S. Department of Agriculture (USDA) and the Department of the Interior (DOI) to develop a mechanism to support coordination at the federal level related to prevention, detection, control, and response for zoonotic diseases and related One Health activities.

The One Health approach applies to zoonotic diseases as well as many other health threats at the interconnection between people, animals, plants, and the environment. While the primary focus of the NOHF-Zoonoses is addressing zoonotic diseases and advancing public health preparedness, the U.S. OHCU has also incorporated other components of One Health into this framework.

To meet these directives CDC partnered with DOI, USDA and other federal agencies beginning in November 2021, to plan the establishment of the United States One Health Coordination Unit (U.S. OHCU) and to draft the NOHF-Zoonoses. The U.S. OHCU was launched in January 2024, with joint leadership from CDC (Chair 2024-2026), DOI, and USDA. The U.S. OHCU is coordinated by a Chair that will rotate between CDC, USDA, and DOI on a biennial calendar year basis. U.S. OHCU membership includes 24 agencies related to health, agriculture, interior, wildlife, environment, development, state, commerce, defense, security, and other fields. The draft NOHF-Zoonoses was published in September 2023 via the Federal Register Notice process, to engage and obtain input from state, Tribe, local, and territorial (STLT), non-governmental partners, and the public.

The NOHF-Zoonoses presents goals and objectives for application of the One Health approach to protect people, animals, and our shared environment in the U.S. from zoonotic diseases and advance public health preparedness to optimize health, food safety and security, and sustainability while also promoting biodiversity and conservation outcomes. The NOHF-Zoonoses was designed to align with and complement existing U.S. initiatives that incorporate the One Health approach. The seven goals outlined in the NOHF-Zoonoses include the following areas: (1) Coordination, Collaboration and Communication; (2) Prevention; (3) Preparedness; (4) Coordinated Outbreak Investigation, Response, and Recovery; (5) Surveillance; (6) Laboratory; and (7) Workforce.

While this framework focuses on One Health coordination at the federal level, its success depends on robust partnerships with STLT, non-governmental organizations, academia, and private sector partners as well as collaboration with relevant international partners. Knowledge and best practices from the implementation of the NOHF-Zoonoses will inform future One Health priorities and strengthen the nation's ability to address One Health threats and promote health, safety, security, and resilience at the human-animal-plant-environment interface.

Advancing One Health collaboration in the U.S. through the U.S. OHCU and the NOHF-Zoonoses will enhance our ability to jointly prevent, detect, and respond to zoonotic disease threats and related One Health issues. This initiative will improve efficiency across the U.S. government by enhancing collaboration across all relevant sectors with governmental and non-governmental partners while optimizing resource use in order to protect the health, safety, and security of people, animals, plants, and our shared environment.



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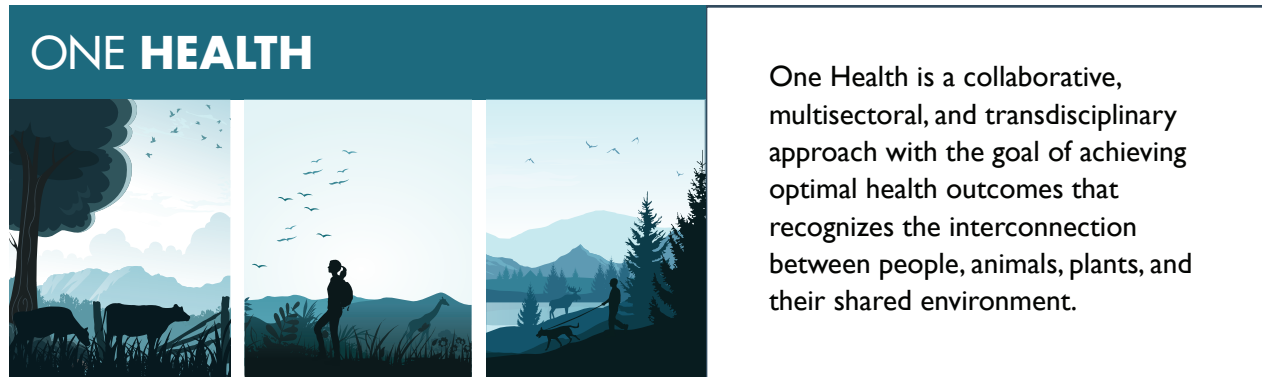
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National One Health Framework to Address Zoonotic Diseases and Advance Public Health Preparedness in the United States



CONNECTING HUMAN, ANIMAL, AND ENVIRONMENTAL HEALTH

One Health is a collaborative, multisectoral, and transdisciplinary approach with the goal of achieving optimal health outcomes that recognizes the interconnection between people, animals, plants, and their shared environment.

Introduction

The **ONE HEALTH** approach applies across local, regional, national, and global levels and involves multisectoral coordination and transdisciplinary collaboration of experts across human, animal, plant, environment, and other relevant sectors. Implementing the One Health approach to address complex issues is critical to achieving optimal health outcomes, addressing health inequities, and building resilience for all sectors. Many issues can benefit from the One Health approach, including zoonotic diseases (diseases shared between animals and people); emerging and reemerging infectious diseases; antimicrobial resistance; food safety and security; vector-borne diseases; animal health and welfare; responsible wildlife management; threats to our environment and terrestrial and aquatic ecosystems,¹ including invasive species, climate change, and loss of biodiversity and habitat; protected areas management and land use changes; and other shared One Health issues. Equitable, timely, and transparent coordination, collaboration, and communication across human, animal, plant, and environmental health disciplines, as well as other relevant sectors (e.g., commerce, security, defense), are key to successful implementation of the One Health approach to maintain and promote the health and resilience of all species and ecosystems upon which we depend.

Multisectoral and transdisciplinary work can provide a basis to address complex issues sustainably and effectively and can facilitate rapid responses to endemic and emerging zoonotic disease threats, as well as others with epidemic or pandemic potential. One Health partnerships at all levels are fundamental to addressing zoonotic diseases and other priority One Health issues across federal agencies and non-federal partners including state, Tribal, local, and territorial government jurisdictions and involve non-governmental, academic, and private sector partners. Nature as a foundation for physical and mental health and cultural values should be incorporated as part of the One Health approach. As original stewards of the natural environment, indigenous communities and their knowledge should be integrated into One Health initiatives as appropriate.

¹ An ecosystem is the natural environment that includes plants and animals that live and interact within that environment.



Previous multisectoral work has identified a need for a coordinated national One Health framework to address zoonotic diseases and advance public health preparedness in the United States. In 2017, the Centers for Disease Control and Prevention (CDC), the U.S. Department of the Interior (DOI), and the U.S. Department of Agriculture (USDA) organized a [One Health Zoonotic Disease Prioritization \(OHZDP\) workshop](#) for the United States. Participants included 30 government officials from federal and state agencies who work to address zoonotic diseases in the public health, animal health, and environment sectors. The workshop used the One Health approach to identify and prioritize endemic and emerging zoonotic diseases of greatest national concern that should be jointly addressed by federal zoonotic disease programs ([Appendix A](#)). Participants also developed plans for implementing and strengthening the One Health approach to address these diseases in the United States. The “National One Health Framework to Address Zoonotic Diseases and Advance Public Health Preparedness in the United States,” or NOHF-Zoonoses, responds to one of the recommendations from the OHZDP workshop and is primarily focused on coordinated federal activities in the United States. In addition, Congress directed CDC, in partnership with other departments and agencies, to develop a One Health framework to address zoonotic diseases and advance public health preparedness in both the House Appropriations Committee report accompanying the 2021 omnibus appropriations bill and the [2023 Consolidated Appropriations Act](#).

The NOHF-Zoonoses was designed to align with other U.S. initiatives that incorporate the One Health approach including the [National Biodefense Strategy and Implementation Plan](#) and the [National Public Health Strategy to Prevent and Control Vector-Borne Diseases in People](#), and was developed with the same foundational components including improving communication and coordination and focusing on strengthening prevention, preparedness, response, and recovery in the United States. The NOHF-Zoonoses was created to complement and fit within the landscape of aligned U.S. federal initiatives to help strengthen disease prevention, control, preparedness, response, and recovery using the One Health approach to address zoonotic diseases and other One Health related issues across the U.S. Government.

Recognizing the importance of international action, the U.S. Government works to advance One Health globally in partnership with the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Health Organization (WHO), and the World Organisation for Animal Health (WOAH) – known collectively as the Quadripartite – and with other international partners. Although the NOHF-Zoonoses is meant to guide coordinated federal activities in the United States, similar efforts are underway globally. For example, in 2022, the Quadripartite Organizations released the first ever [One Health Joint Plan of Action](#), which aims to create a framework to integrate systems and capacity in six areas, so that countries and regions can collectively better prevent, predict, detect, and respond to health threats: One Health capacities for health systems; emerging and re-emerging zoonotic epidemics; endemic zoonotic, neglected tropical, neglected tropical and vector-borne diseases; food safety risks; antimicrobial resistance; and the environment. Once implemented, the NOHF-Zoonoses will enable strong, coordinated U.S. federal government representation to such global efforts.

Framework Purpose and Scope

All relevant sectors are encouraged to collaborate for effective and consistent One Health outcomes. Successful federal One Health collaboration is contingent on continued strong partnerships and coordination with public health, safety, agriculture, wildlife, environment, incident response, and other relevant authorities at the state, Tribe, local, and territorial levels. The activities described in the NOHF-Zoonoses are intended to complement existing efforts.

Although this framework focuses primarily on zoonotic diseases and does not specifically address other issues of One Health importance, the resulting partnerships, systems, and lessons will inform future One Health priorities and strengthen the nation's ability to address other threats and promote health, safety, security, and resilience at the human-animal-plant-environment interface. Strong partnerships established between federal, regional, state, Tribe, territorial, local, academic, nongovernmental, and private entities, as well as affected communities and the public with culturally appropriate and equitable One Health representation, will foster collaboration and promote engagement across relevant sectors and disciplines. Additionally, these efforts aim to strengthen public health resilience and cultivate trust in and support of the NOHF-Zoonoses. Full implementation of the activities described in this framework is dependent upon expanding existing One Health capacities and resources within the federal government. Monitoring and evaluating the value and effects of existing subnational, national, regional, and global initiatives will also maximize outcomes.

Implementation of this framework will be coordinated by the United States One Health Coordination Unit (U.S. OHCU), which was launched in January 2024. The U.S. OHCU is a federal level coordinating structure with shared leadership between CDC, DOI, and USDA, representing an equal balance across public health, animal health, response agencies, and environmental sectors. Over 20 federal agencies from multiple departments have representatives participating in the U.S. OHCU.

Framework Mission

Apply the One Health approach to protect people, animals, and the environment in the United States from zoonotic diseases and, advance public health preparedness to optimize health, food safety and security, and sustainability while also promoting biodiversity and conservation outcomes.

Framework Vision

A prepared nation where people, animals (domestic and wildlife), and the environment are protected from zoonotic disease threats by a proactive, coordinated, and collaborative system using the One Health approach.





Guiding Principles

Health Equity: Health equity is the state in which everyone has a fair and just opportunity to attain their highest level of health. Achieving health equity requires focused and ongoing societal efforts to address historical and contemporary injustices, overcome obstacles to health and healthcare, and eliminate preventable health differences adversely affecting socially, economically, or environmentally disadvantaged groups.² Multisectoral efforts are needed to actively promote policies, systems, and overall community conditions that enable optimal health for all and seek to remove systemic and structural barriers that have resulted in health inequities.³

Sustainability: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans, animals, and environment can exist in productive harmony to support present and future generations in addition to mitigating risks that threaten sustainability.

Stewardship: Stewardship and the responsibility of humans to adopt behaviors to provide responsible solutions that recognize the importance of animal health and welfare and the integrity of the whole ecosystem is integral to securing the well-being of current and future generations.

Multisectoral and Transdisciplinary Collaboration: Engaging all relevant sectors and disciplines, including efforts by federal partners, involved in implementing the One Health approach to address zoonotic diseases and other priority One Health issues.

² [Health Equity | Health Equity | CDC](#)

³ [10 Essential Public Health Services | Public Health Gateway | CDC](#)

Goals and Objectives

Goal #1: Coordination, Collaboration, and Communication: Establish a standing, formal One Health coordination mechanism, the U.S. One Health Coordination Unit, to provide a common platform and governance structure to address One Health needs.

Objective 1.1: Describe roles and responsibilities of federal agencies engaged in One Health and disseminate information on their roles and responsibilities relevant to implementation of this framework.

Objective 1.2: Coordinate, collect, and disseminate in a timely manner information regarding progress, including successes and challenges for each objective under this framework through the U.S. One Health Coordination Unit.

Objective 1.3: Develop and support ongoing initiatives and joint communication activities and materials for coordinated outreach and education at all relevant levels to advance One Health in the United States.

Objective 1.4: Develop joint priorities for One Health science and research to better understand, predict, respond to, and prevent priority zoonotic diseases, as well as endemic, emerging, and reemerging zoonotic diseases, including upstream drivers.

Goal #2: Prevention: Strengthen existing and identify new opportunities for One Health collaboration to prevent, respond to, and control zoonotic diseases, and to address early prevention, including spillover and spillback.

Objective 2.1: Leverage and expand existing initiatives to efficiently exchange information from relevant sectors regarding surveillance, research, ecosystem restoration⁴ and other One Health activities used to jointly identify and assess priority, endemic, emerging, and reemerging zoonotic disease issues, risks, and potential threats.

Objective 2.2: Collaborate with state, Tribe, local, territorial, and other relevant partners to develop resources and implement joint prevention, response, and control strategies including the use of novel approaches to address gaps in preventing and controlling zoonotic diseases.

Objective 2.3: Coordinate timely, scientific, evidence-based One Health messaging and communication activities for preventing priority, endemic, emerging, and reemerging zoonotic diseases and other priority One Health issues to ensure guidance and outreach reflect a unified federal voice.

Objective 2.4: Collaborate with state, Tribe, local, territorial, nongovernmental, and other partners to explore and address determinants of health and develop interventions and capacity to improve human, animal, and ecosystem resilience.⁵ These interventions should consider changing biological, social, cultural, economic, and environmental factors that may increase the risk of zoonotic diseases and other priority One Health issues.

Objective 2.5: Support and expand efforts to sustainably preserve and restore ecosystem health, addressing factors that contribute to zoonotic disease emergence, reemergence, spillover and spillback, and enhancing resilience among people and the ecosystems on which they depend.

Objective 2.6: Address early prevention through measures aimed at safe and responsible management of wildlife, livestock, and companion animals where the human-animal-plant-environment interface is at high risk of zoonotic disease emergence and re-emergence.

⁴ Ecosystem restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed to make the ecosystem sustainable, resilient, and healthy under current and future conditions.

⁵ Ecosystem resilience is the capacity for an ecosystem to respond to agitation or disturbance by resisting damage and recovering quickly.



Goal #3: Preparedness: Strengthen One Health collaborations for preparedness and build new approaches where needed to address priority, endemic, emerging, and reemerging zoonotic diseases and other priority One Health issues to optimize the health and sustainability of people, animals, plants, and ecosystems.

Objective 3.1: Support the integration of the One Health approach during development, review, implementation, and revision of preparedness and response plans.

Objective 3.2: Conduct One Health trainings and interagency exercises to reinforce and test preparedness coordination structures.

Objective 3.3: Review, prioritize, and implement relevant recommendations from completed interagency response exercises.

Objective 3.4: Support One Health collaboration to identify, assess, and address the effects of environmental and social determinants of health,^{6,7} including climate change and environmental justice, on priority endemic, emerging, and reemerging zoonotic diseases and other priority One Health issues.

Objective 3.5: Support the development, validation, and use of models and risk-prediction tools that include surveillance data and practices from humans, wildlife, domestic animals, and terrestrial and aquatic ecosystems. Incorporate geospatial modeling data of land, air, water, and climate components that may contribute to pathogen transmission to better predict zoonotic disease outbreaks or emergent events.

Objective 3.6: Support the advancement of research to inform preparedness and response efforts, including medical, veterinary, public health, environmental, and agricultural product research, development, and supply chain needs for new and targeted diagnostics, vaccines, therapeutics, and mitigation strategies.

Objective 3.7: Support the understanding, development, and adoption of nature-based solutions, as appropriate, to increase community and environmental resilience against disruption from and impacts of zoonotic disease and associated environmental changes and drivers.

⁶ [Environmental Determinants of Health | NNLM](#)

⁷ [Social Determinants of Health - Healthy People 2030 | health.gov](#)

Goal #4: Coordinated Outbreak Investigation, Response, and Recovery:

Build and strengthen the One Health approach to coordinate zoonotic disease outbreak investigation, response, and recovery across relevant sectors.

Objective 4.1: Identify best practices across existing One Health processes for coordinated zoonotic disease outbreak investigations and responses between relevant federal, state, Tribe, local, and territorial One Health partners.

Objective 4.2: Develop and maintain a flexible model One Health framework for coordinated zoonotic disease outbreak investigations and responses between relevant sectors and jurisdictions, including coordination of real-time research needs.

Objective 4.3: Support the integration of the One Health approach during development, after-action review, and revision of response and recovery plans.

Objective 4.4: Collaboratively develop standard operating procedures for interagency coordination with state, Tribal, local, and territorial governments, and non-governmental, academic, and private sector partners.

Goal #5: Surveillance: Strengthen coordinated surveillance and information sharing for zoonotic disease surveillance and other One Health-relevant surveillance and reporting systems across sectors.

Objective 5.1: Leverage and expand on existing surveillance system evaluations to review One Health collaboration, coordination, communication, and information exchange across relevant sectors.

Objective 5.2: Develop a model One Health framework for coordinated surveillance and secure information sharing for priority, endemic, emerging, and reemerging zoonotic diseases, between relevant U.S. government departments and agencies, including international efforts.

Objective 5.3: Enhance knowledge and strengthen One Health collaboration, coordination, communication, information exchange, and data interoperability for surveillance and secure information sharing systems. The initial focus may include the effects of social, economic, and environmental determinants of health and upstream drivers such as climate change and land-use on priority, endemic, emerging, and reemerging zoonotic diseases and other priority One Health issues.



Goal #6: Laboratory: Strengthen One Health laboratory capacity (e.g., trained personnel and use of advanced laboratory techniques), coordination, research, and reporting for detection of priority, endemic, emerging, and reemerging zoonotic diseases and other priority One Health issues.

Objective 6.1: Support efforts to institutionalize partnerships among relevant federal agencies to harmonize and ensure consistency of laboratory and sample collection protocols, secure sample sharing, and validated diagnostic assay development.

Objective 6.2: Identify One Health laboratory capacity gaps to effectively detect priority, endemic, emerging, and reemerging zoonotic diseases.

Objective 6.3: Support efforts to establish and strengthen laboratory reporting processes and timely data sharing.

Objective 6.4: Detect and characterize emerging and reemerging zoonotic disease threats through the coordinated One Health approach, including use of advanced pathogen and host/vector assessment detection technologies such as advanced molecular detection and genetic analyses.

Objective 6.5: Support research to identify risk and science-based strategies to detect and mitigate zoonotic diseases using the One Health approach and support applied biosafety and biosecurity innovation and enhance laboratory biosafety and biosecurity procedures and best practices.

Goal #7: Workforce: Support and expand efforts to develop a qualified, diverse, equitable, and inclusive One Health workforce to address zoonotic disease threats.

Objective 7.1: Identify opportunities to collaboratively develop and deliver trainings to build critical competencies to accomplish goals of agencies, departments, and the NOHF-Zoonoses.

Objective 7.2: Support the integration of One Health into sector-specific trainings among relevant departments and agencies to ensure an adequately trained One Health workforce.

Objective 7.3: Enhance equitable recruitment, development, and retention of qualified, diverse staff to ensure a sustainable and dedicated One Health workforce.

Objective 7.4: Encourage integration of One Health into curriculums across all relevant disciplines.



Conclusion

Implementing the One Health approach means involving all relevant sectors concerning human, animal, plant, and environmental health to address health concerns in a more collaborative, effective, efficient, and sustainable manner than each sector approaching these issues alone. The National One Health Framework to Address Zoonotic Diseases and Advance Public Health Preparedness in the United States will inform One Health work across the U.S. Government, strengthen cooperative efforts to address the threat of zoonotic diseases, and advance public health preparedness. This framework will also strengthen federal collaborations with state, Tribe, local, territorial, international, non-governmental, academic, and private sector partners. Although the NOHF- Zoonoses is primarily focused on zoonotic diseases, the partnerships, systems, and lessons learned from the proposed activities can be expanded and applied to other priority One Health issues and shared priorities. The activities described in this framework are intended to support and encourage collaboration and cooperation with existing efforts, initiatives, and plans rather than create a parallel set of activities and priorities over the next five years (2025-2029). At the end of the five-year period, collaborating federal agencies may determine whether to renew their commitment to this framework or update the goals and objectives. Future work needed to support the framework's objectives, including evaluation efforts and gap analyses, will be conducted within the five-year period.



Appendix A

Prioritized Zoonotic Diseases of National Concern in the United States.

Identified as part of the 2017 [U.S. One Health Zoonotic Disease Prioritization workshop](#)*

1. Zoonotic Influenza
2. Salmonellosis
3. West Nile virus
4. Plague
5. Emerging coronaviruses (SARS, MERS)**
6. Rabies
7. Brucellosis
8. Lyme disease

* For additional context please refer to the full [U.S. One Health Zoonotic Disease Prioritization Report](#)

**NOTE: This list was developed in December 2017 prior to the emergence of SARS-CoV-2, the virus that causes COVID-19



Federal Partner Collaboration

U.S. Department of Health & Human Services (HHS)

Centers for Disease Control and Prevention (**CDC**)

Administration for Strategic Preparedness and Response (**ASPR**)

U.S. Food and Drug Administration (**FDA**)

National Institutes of Health (**NIH**)

Office of Global Affairs (**OGA**)

U.S. Department of Agriculture (USDA)

Animal and Plant Health Inspection Service (**APHIS**)

Agricultural Research Service (**ARS**)

Food Safety and Inspection Service (**FSIS**)

Forest Service (**FS**)

National Institute of Food and Agriculture (**NIFA**)

U.S. Department of the Interior (DOI)

Bureau of Reclamation (**USBR**)

U.S. Fish and Wildlife Service (**FWS**)

U.S. Geological Survey (**USGS**)

Indian Affairs (**IA**)

National Park Service (**NPS**)

Department of Commerce (DOC)

National Oceanic and Atmospheric Administration (**NOAA**)

U.S. Department of Defense (DOD)

Health Readiness Policy and Oversight (**HRP&O**)-
Office of the Assistant Secretary of Defense for
Health Affairs (**OASD[HA]**)

U.S. Department of Energy (DOE)

Office of Science (**SC**)

U.S. Department of Homeland Security (DHS)

Federal Emergency Management Agency (**FEMA**)

Office of Health Security (**OHS**)

U.S. Department of State (DOS)

Bureau of Oceans and International
Environmental and Scientific Affairs
Office of Conservation and Water (**OES/ECW**)

Environmental Protection Agency (EPA)

U.S. Agency for International Development (USAID)

23 Agencies
representing 8 federal
departments (HHS, USDA,
DOI, DOC, DOD, DOE
DHS, DOS) developed this
Framework