One Health

History

Although the term "One Health" is fairly new, the concept has long been recognized both nationally and globally. Since the 1800s, scientists have noted the similarity in disease processes among animals and humans, but human and animal medicine were practiced separately until the 20th century. In recent years, through the support of key individuals and vital events, the One Health concept has gained more recognition in the public health and animal health communities.

Click on a year below to learn more about the important people and events in the history of One Health.

Timeline: People and Events in One Health

2013

The Second International One Health Congress is held in conjunction with the Prince Mahidol Award Conference

From January 29 through February 2, 2013, the second International One Health Congress was held in conjunction with the Prince Mahidol Award Conference. With more than 1,000 attendees from over 70 countries, it was the largest One Health conference to date. The conference encouraged collaboration across disciplines to promote effective policy development related to human, animal, and environmental health.

2012

The Global Risk Forum sponsors the first One Health Summit

February 19-22, 2012, the first One Health Summit was held in Davos, Switzerland. The Summit presented the One Health concept as a way to manage health threats, focusing on food safety and security. The conference ended by approving the "Davos One Health Action Plan," which pinpointed ways to improve public health through multi-sectoral and multi-stakeholder cooperation.

The High Level Technical Meeting to Address Health Risks at the Human-Animal-Ecosystem Interface Builds Political Will for The One Health Movement

The Tripartite organized a high-level technical meeting in Mexico City November 15-17, 2011. The focus of this meeting was to address health risks that occur in different geographic regions by highlighting three priority One Health topics—rabies, influenza, and antimicrobial resistance. These topics served as a basis to discuss what needs to be done to build political will and more actively engage ministers of health in the One Health movement.

The First International One Health Congress is Held in Melbourne, Australia

February 14-16, 2011, the first International One Health Congress was held in Melbourne, Australia. More than 650 people from 60 countries and a range of disciplines came together to discuss the benefits of working together to promote a One Health approach. In addition to understanding the interdependence of human, animal, and environmental health, attendees agreed that it is important to include other disciplines such as economics, social behavior, and food security and safety.

2010 –

The European Union Reaffirms its Commitment to Operate Under a One Health Umbrella

In August 2010, the European Union published the "Outcome and Impact Assessment of the Global Response to the Avian Influenza Crisis" report. This report states, "The European Union has already taken new initiatives under the One Health umbrella and will continue to do so in the coming years." The report emphasizes the need to translate the One Health concept into practical policies and strategies that promote interagency and cross-sectoral collaboration.

The United Nations and the World Bank Recommend Adoption of One Health Approaches

In July 2010, the United Nations and the World Bank released the "Fifth Global Progress Report on Animal and Pandemic Influenza." The report reiterated the findings of the delegates at the Stone Mountain Meeting. It also emphasized the importance of adopting a One Health approach to sustain momentum in pandemic preparedness. Rather than focusing on controlling avian influenza through emergency initiatives, countries and regional bodies should build One Health capacity to respond to a broad range of emerging and existing disease threats, the report advised.

Experts Identify Clear and Concrete Actions to Move the Concept of One Health from Vision to Implementation

May 4-6, 2010, CDC, in collaboration with the World Organisation for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO), and the World Health Organization (WHO), hosted a meeting in Stone Mountain, GA, titled, "Operationalizing 'One Health': A Policy Perspective—Taking Stock and Shaping an Implementation Roadmap [PDF – 24 pages]." The meeting, which came to be known as the "Stone Mountain Meeting," was designed to define specific action steps to move the concept of One Health forward. Participants identified seven key activities to advance the One Health agenda. These activities formed the basis of which focused on:

- Cataloguing and developing One Health trainings and curricula
- Establishing a global network
- Developing a country-level needs assessment
- Building capacity at the country level
- Developing a business case to promote donor support
- Gathering evidence for proof of concept through literature reviews and prospective studies

The Tripartite Concept Note is Published

Recognizing that managing and responding to emerging infectious diseases is complex and requires multisectoral cooperation, OIE, FAO, and WHO joined together to publish the Tripartite Concept Note in April 2010. This paper proposes a long-term strategic direction for international collaboration aimed at sharing responsibilities and coordinating global activities to address health risks that arise when humans, animals, and the ecosystem interface.

The Hanoi Declaration, Which Recommends Broad Implementation of One Health, is Adopted Unanimously

April 19-21, 2010, a total of 71 countries and regional bodies, along with representatives from international organizations, development banks and other stakeholders, attended the 2010 International Ministerial Conference on Avian and Pandemic Influenza in Hanoi, Vietnam. With the experience of the H1N1 pandemic and highly pathogenic H5N1 avian influenza, participants confirmed the need to bring greater attention to the links between human and animal health to address threats that happen when animals, humans, and the ecosystem interface. At the conclusion of the meeting, participants unanimously adopted the declaration, which called for focused action at the animal-human-ecosystem interface and recommended broad implementation of One Health.

Key Recommendations for One World, One Health™ are Developed

March 16-19, 2009, the Public Health Agency of Canada hosted One World, One Health™: From Ideas to Action expert consultation in Winnipeg, Manitoba. Experts attended from 23 countries. This technical meeting was held to further discuss the One World, One Health™ strategy and the objectives in "Contributing to One World, One Health™-A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystems Interface" ☑, which was first released at the 2008 International Ministerial Conference on Avian and Pandemic Influenza in Sharm el-Sheikh. During the meeting, key recommendations emerged for actions that countries could take to advance the concepts of One Health.

USAID Establishes the Emerging Pandemic Threats Program

In 2009, the USAID launched the Emerging Pandemic Threats Program. The program's purpose is to ensure a coordinated, comprehensive international effort to prevent the emergence of diseases of animal origin that could threaten human health. The EPT program draws on expertise from across the animal and human health sectors to build regional, national, and local One Health capacities for early disease detection, laboratory-based disease diagnosis, rapid disease response and containment, and risk reduction.

The One Health Office is Established at CDC

In 2009, Lonnie King, then director of CDC's National Center for Zoonotic, Vectorborne, and Enteric Diseases, proposed the One Health Office. The office was created as a point of contact for external animal health organizations and to maximize external funding opportunities. Since that time, the role of the One Health Office has expanded to include supporting public health research that furthers the One Health concept, facilitating the exchange of data and information among researchers across disciplines and sectors.

One Health Becomes a Recommended Approach and a Political Reality

October 25-26, 2008, representatives from more than 120 countries and 26 international and regional organizations attended the 2008 International Ministerial Conference on Avian and Pandemic Influenza in Sharm el-Sheikh, Egypt. During this meeting, "Contributing to One World, One Health™-A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystems Interface" was officially released. Based on the framework, participants endorsed a new strategy for fighting avian influenza and other infectious diseases, one that focuses infectious disease control in areas where animals, humans, and ecosystems meet.

FAO, OIE, and WHO Collaborate with UNICEF, UNSIC, and the World Bank to develop a Joint Strategic Framework in Response to the Evolving Risk of Emerging and Reemerging Infectious Diseases

In response to the recommendations of the 2007 International Ministerial Conference on Avian and Pandemic Influenza in New Delhi, FAO, OIE, WHO, UNICEF, the World Bank, and the United Nations System Influenza Coordination (UNSIC) came together to develop a document titled "Contributing to One World, One Health™-A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystems Interface." It built on the lessons learned from the highly pathogenic H5N1 avian influenza response during the early 2000s and presented a strategy for applying the One Health concept to emerging infectious diseases at the animal-human-ecosystem interface.

2007

The One Health Approach is Recommended for Pandemic Preparedness

December 4-6, 2007, representatives of 111 countries and 29 international organizations met in New Delhi India for the International Ministerial Conference on Avian and Pandemic Influenza. During this meeting, governments were encouraged to further develop the One Health concept by building linkages between human and animal health systems for pandemic preparedness and human security.

The American Medical Association Passes the One Health Resolution Promoting Partnership Between Human and Veterinary Medicine

In June 2007, Ronald Davis, MD, President of the American Medical Association, collaborated with Roger Mahr, DVM, President of the American Veterinary Medical Association, to establish a bond between the two organizations. On July 3, 2007, the House of Delegates of the AMA unanimously approved a calling for increased collaboration between the human and veterinary medical communities.

The Wildlife Conservation Society Publishes the 12 Manhattan Principles

On September 29, 2004, the Wildlife Conservation Society brought together a group of human and animal health experts for a symposium at Rockefeller University in New York City. Attendees of this symposium, titled "Building Interdisciplinary Bridges to Health in a 'Globalized World'," discussed the movement of diseases among humans, domestic animals, and wildlife. The symposium set 12 priorities to combat health threats to human and animal health. These priorities, known as the "Manhattan Principlesexternal icon \(\mathbb{C}\)," called for an international, interdisciplinary approach to prevent disease and formed the basis of the "One Health, One World\(^{TM''}\) concept.

1927-2006 -

Calvin Schwabe Coins the Term "One Medicine" and Calls for a Unified Approach Against Zoonoses That Uses Both Human and Veterinary Medicine

Calvin Schwabe, DVM, ScD, MPH, made many important contributions to veterinary epidemiology over his career. He began his career studying zoonotic parasitic diseases and directed the programs on hydatid disease and other parasitic diseases. In 1966, Dr. Schwabe became the founding chair of the Department of Epidemiology and Preventive Medicine at the Veterinary School at the University of California Davis. It was the first department of its kind at a veterinary school.

Dr. Schwabe's support for One Health was evident in his writings. In the 1964 edition of his monograph, he proposed that veterinary and human health professionals collaborate to combat zoonotic diseases. In his textbook, *Veterinary Medicine and Human Health*, Dr. Schwabe coined the term "One Medicine." The term emphasizes the similarities between human and veterinary medicine and the need for collaboration to effectively cure, prevent, and control illnesses that affect both humans and animals.

1947

The Veterinary Public Health Division is Established at CDC

In 1947, James H. Steele, DVM, MPH, founded the Veterinary Public Health Division at CDC. Dr. Steele understood the important role of animals in the epidemiology of zoonotic diseases (the study of how these diseases are spread and how they can be controlled), and he recognized that good animal health is important for good public health. The Division played an important role in the public health response to diseases such as rabies, brucellosis, salmonellosis, Q fever, bovine tuberculosis, and leptospirosis. With this Division at CDC, the principles of veterinary public health were introduced to the United States and other countries around the world.

1849-1919 -

William Osler, Father of Veterinary Pathology

William Osler, MD, was a Canadian physician who is considered the father of veterinary pathology in North America. Dr. Osler had a deep interest in the linkages between human and veterinary medicine. He trained with many well-known physicians and veterinarians, including Dr. Virchow. One of his first publications was titled, "The Relation of Animals to Man." While serving on the medical faculty of McGill University, Dr. Osler lectured to medical students and veterinary students from nearby Montreal Veterinary College.

Following his time at McGill, Dr. Osler became the Chair of Clinical Medicine at the University of Pennsylvania in Philadelphia. In 1889, he became the first Physician-in-Chief of Johns Hopkins Hospital and played an instrumental role in establishing the Johns Hopkins University School of Medicine.

1821-1902

Virchow Recognizes the Link Between Human and Animal Health

Rudolf Virchow, MD, was one of the most prominent physicians of the 19th century. Dr. Virchow was a German pathologist who became interested in the linkages between human and veterinary medicine while studying a roundworm, Trichinella spiralis, in swine. He coined the term "zoonosis" to indicate an infectious disease that is passed between humans and animals.

In addition to his medical career, Dr. Virchow served in several parliamentary posts and advocated for the importance of improved veterinary education. He emphasized, "Between animal and human medicine there are no dividing lines—nor should there be. The object is different but the experience obtained constitutes the basis of all medicine."

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