ONE HEALTH CORE COMPETENCY DOMAINS, SUBDOMAINS, AND COMPETENCY EXAMPLES

GLOBAL OHCC WORKING GROUP

USAID RESPOND INITIATIVE

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PREFACE

What is this document, and how do I use it?

The following document is a product of the Global One Health Core Competencies (OHCC) Working Group as part of the global RESPOND Initiative, USAID Emerging Pandemic Threats Program. The Working Group met several times between November 2011 and December 2012. The proceedings of each Working Group meeting are captured in other documents.

The **purpose** of this document is to summarize the Global OHCC Working Group's **guiding framework** for OHCC curriculum mapping, curriculum development, and other faculty or staff development and training activities that **can be customized** to an audience's needs, regardless of sector.

Contents of this document include: 1) definitions and comments on key terms used in the document, 2) a 2-page Overview that can be used as an introduction for potential audiences, 3) the seven Global Working Group OHCC Domains and corresponding examples of Subdomains and Sample Competencies that support effective One Health approaches, and 4) the Global OHCC Working Group member list.

While the OHCC Domain categories (starting on page 5) are meant to remain relatively fixed, the corresponding subdomains may change or be amended according to the specific requirements of the target group being trained. Each subdomain, in turn, is followed by examples of competencies that fall under that subdomain category. The first "Competency" example following each subdomain illustrates a One Health approach—how that competency is different when one considers effective One Health practices. The "Other Example Competencies" are in draft form and are intended as starting material to be used in workshop exercises to develop competencies more specific to One Health.

Our working group recognizes that there are many organizations and groups currently working in the One Health area, each with their own approach. We feel that we have much in common, and much that we can learn from each other as we build upon each other's work. In that spirit, we encourage others to use what is helpful to further our common goal—truly *global* health.

<div align="right">The Global OHCC Working Group</div>

DEFINITIONS AND COMMENTS ON KEY TERMS

- **Domains** (nouns) represent a set of competencies that are grouped together in a logical category; domains are intended to be stable over time, are critical for curriculum mapping and development activities, and are most useful when agreed upon by partners to enable co-development and open sharing of subsequent resources.
- **Domain definitions** reflect what is *necessary* in an effective OH approach in that domain, even if it is not necessarily specific to OH.
- **Subdomains** (nouns) illustrate what areas can be included within each domain; faculty will likely identify additional subdomains during development activities.
- **Sample Competencies** (start with a verb) illustrate a measurable knowledge, skill, or behavior that every member of an effective One Health team must demonstrate; these competencies illustrate what is *necessary* in a OH approach within that subdomain, even if not specific to OH; faculty will identify competencies that are important to their specific program outcome goals.

Clarification of multidisciplinarity, interdisciplinarity, and transdiscipinarity*
- Multidisciplinarity draws on knowledge from different disciplines but stays within their boundaries.
- Interdisciplinarity analyzes, synthesizes and harmonizes links between disciplines into a coordinated and coherent whole.
- Transdisciplinarity integrates the natural, social and health sciences in a humanities context, and transcends their traditional boundaries.

The three terms refer to the involvement of multiple disciplines to varying degrees on the same continuum. The common words for multidisciplinary, interdisciplinary and transdisciplinary are additive, interactive, and holistic, respectively. With their own specific meanings, these terms should not be used interchangeably. The more general term "multipledisciplinary" is suggested for when the nature of involvement of multiple disciplines is unknown or unspecified.

*Directly from: Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness Bernard C.K. Choi, PhD, MSc, Anita W.P. Pak, PhD, MA, Med. Clin Invest Med 2006; 29 (6): 351. http://courseweb.edteched.uottawa.ca/pop8910/PDF%20Files/Choi_Multidisciplinary.pdf

Definitions For Sectors/Organizations
- Public sector: https://global.theiia.org/standards-guidance/Public%20Documents/Public%20Sector%20Definition.pdf
- Third sector: http://www.emes.net/index.php?id=235

USAID EMERGING PANDEMIC THREATS:
ONE HEALTH CORE COMPETENCY FRAMEWORK OVERVIEW

The speed with which diseases of animal origin that pose a risk to humans--including HIV/AIDS, severe acute respiratory syndrome (SARS), H5N1 avian influenza, and the 2009 H1N1 influenza virus--emerge and spread across our interconnected globe presents enormous public health, economic, and development concerns. This threat underscores the need for a comprehensive, proactive approach that draws on a wide array of technical resources to build sound detection and response capacity. USAID's Emerging Pandemic Threats (EPT) program focuses resources on detecting dangerous pathogens at an early stage, building appropriate laboratory capacity to support surveillance, responding in an appropriate and timely manner, strengthening national and local response capacities, and educating at-risk populations on how to prevent exposure to these dangerous pathogens. The EPT program is managed by USAID with technical support from the U.S. Centers for Disease Control and Prevention and the United States Department of Agriculture.

The RESPOND project within USAID's EPT program builds on the successes of the Agency's programs in disease surveillance, training, and outbreak response and over 30 years of experience in building long-term capacities in health training through international networks and partnerships between U.S. and local academic institutions. The project is focused on the development of outbreak investigation and response training that merges animal, human, and environmental health dynamics into a comprehensive capacity for disease detection and control.

ONE HEALTH CORE COMPETENCIES

The One Health Core Competency (OHCC) initiative has involved U.S. partner organizations, the South East Asia One Health University Network (SEAOHUN), and the One Health Central and East Africa (OHCEA) university network in building a competency framework on which both in-service and pre-service curricula can be designed and initiated. The OHCC framework encompasses three levels of program and curriculum development: 1) *country* level competencies to facilitate curriculum development to meet the needs of institutions and programs within a specific country, 2) *regional* competencies to facilitate coordination of curriculum development within a regional network such as SEAOHUN or OHCEA, and 3) global competencies to facilitate sharing curriculum development across regional and network boundaries. Within this framework core competencies are defined as knowledge, behaviors, and attitudes needed by every member of a One Health outbreak team for prevention, surveillance, or response. Table One shows the current list of OHCC Domains from the Global, and Regional (SEAOHUN and OHCEA) RESPOND working groups.

Table One: Draft OHCC Domains as of December 17, 2012

GLOBAL	SEAOHUN	OHCEA
Management	Management	Management
Communication and Informatics	Communication and Informatics	Communication
Culture and Beliefs	Culture and Beliefs	Culture, Beliefs, and Gender
Leadership	Leadership	Leadership
Collaboration and Partnership	Collaboration and Partnership	Collaboration and Partnership
Values and Ethics	Values and Ethics	Values and Ethics
Systems Thinking	Systems Thinking	Systems Thinking
		Policy and Advocacy
		Research

EMPLOYING THE ONE HEALTH CORE COMPETENCY FRAMEWORK: CURRICULUM DEVELOPMENT AND MAPPING

At the country or institution level, the OHCC Framework is useful in assessing curricula used to train One Health professionals. To operationalize the OHCC Framework, it is best to involve both faculty and administrators in the process of a local strengths/needs assessment, followed by mapping the OHCC domains to existing curricula to determine where enhancements are desired. The more challenging task lies in how to design and implement One Health competencies within overcrowded and restricted curricula. For example, while the Management Domain may already exist in a current curriculum, it may not include competencies that pertain directly to One Health training. Given the range of curricular restrictions at any particular institution, the process of integrating the Management Domain's competencies will take considerable thought and planning. Faculty will need to determine whether integration of new modules versus development of new courses will be the most time and cost efficient method to implement a curriculum based on the OHCCs. Faculty development programs that focus on course design and more active teaching methodologies will enhance the success of the process. Figure One presents a schematic of the desired outcome where course content, be it in-service training or pre-service programming, is developed using the OHCC framework. Specific learning objectives are linked to the One Health Core Competency Framework described above and guide the development of content and training methods that are integrated into curricula.

Figure One: Employing the OHCC Framework in Curriculum Development
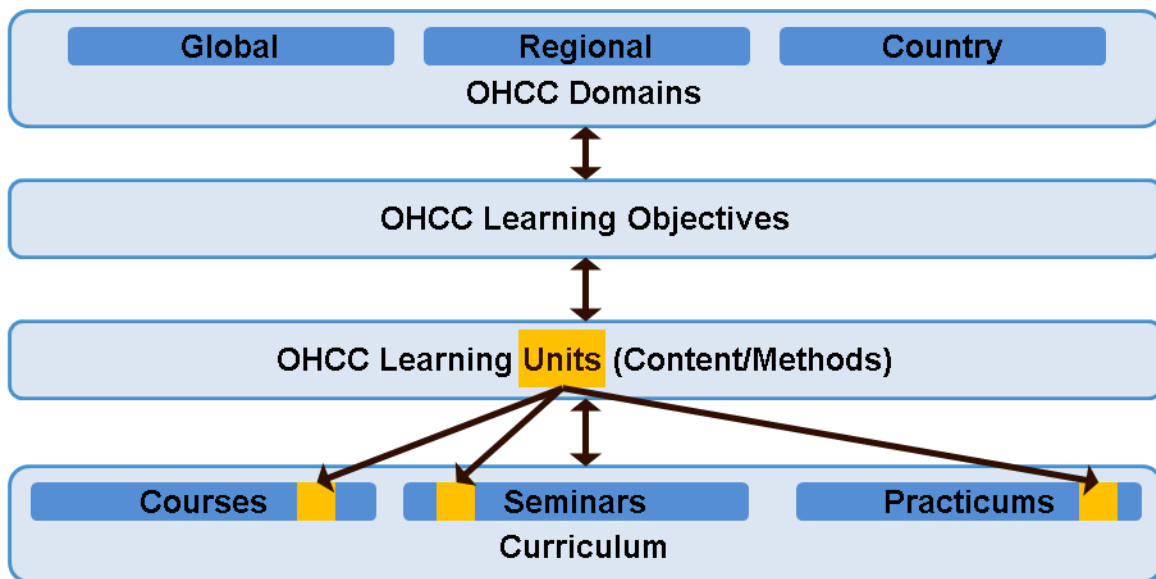
Identified OHCC learning needs can be fulfilled by learning/teaching units that can be *integrated* into appropriate segments of an existing curriculum.

OHCC DOMAINS, SUBDOMAINS, AND COMPETENCY EXAMPLES

DOMAIN: MANAGEMENT

Includes competencies that enable partners to plan, design, implement, and evaluate programs across disciplines and sectors in order to maximize effectiveness of action and desired One Health outcomes

Subdomain: Planning

Competency:
- Assess resource needs for accomplishment of your roles and responsibilities in managing a One Health intervention (prevention, surveillance, or outbreak)

Other Example Competencies:
- Contribute to interdisciplinary planning

Subdomain: Design

Competency:
- Develop surveillance initiatives for zoonotic infectious disease

Other Example Competencies:
- Understand one's roles and responsibilities within a One Health team
- Create team management and planning protocols
- Develop outbreak response programs and plans

Subdomain: Implementation

Competency:
- Manage effective use of one's time and resources as part of a One Health team

Other Example Competencies:
- Prioritize tasks in one's own role responsibilities within an interdisciplinary team
- Demonstrate ability to work together as a team to improvise when the anticipated resources are not available or the situation changes

Subdomain: Evaluation

Competency:
- Specify metrics to support the evaluation of an effort to respond to a zoonotic disease threat

DOMAIN: CULTURE AND BELIEFS

Includes competencies focusing on effective communication and interactions through the understanding of diverse social norms, roles, and practices of individuals, communities, and organizations that impact an intended One Health outcome

Subdomain: Cultural Sensitivity

Competency:
- Interact with team members from various backgrounds (cultures, disciplines, etc) during the outbreak response

Other Example Competencies:
- Demonstrate familiarity with local languages, practices, and customs of the affected outbreak area
- Identify common and specific (local/regional) cultural sensitivity issues
- Optimize cultural diversity in team building and networking

Subdomain: Belief Systems

Competency:
- Distinguish between different existing belief systems and spiritual practices among various ethnic groups involved in outbreak areas

Other Example Competencies:
- Acquire and use knowledge of diversity principles to identify common ideas and beliefs of those involved in responding to an outbreak
- Adapt disease management to cultures, beliefs, and practices

DOMAIN: VALUES AND ETHICS

Includes competencies that enable partners to identify and respond with respect and fairness across all disciplines and sectors to One Health issues in diverse human, animal, and ecosystem contexts, and promote accountability for the full impact of decisions on the integrated system at local, national, and international levels

Subdomain: Respect and Fairness for Individuals

Competency:
- Demonstrate willingness to listen to and recognize individuals from other disciplines and sectors, and to change ideas, opinions, or approaches based on resulting new information or situations

Other Example Competencies:
- Behave in an honest, fair, and ethical manner
- Treat others fairly and with respect
- Take responsibility for own work, including problems and issues, and openly admit mistakes
- Use applicable professional standards and established procedures, policies, and/or legislation when taking action and making decisions
- Demonstrate willingness to change ideas, perceptions, or opinions based on new information or situations
- Identify different ethical aspects of a situation when making decisions
- Identify competing values when selecting approaches or recommendations for dealing with a situation
- Identify ethical dilemmas and conflict of interest situations and take action to avoid and prevent them

Subdomain: Respect and Fairness in Teams

Competency:
- Identify the different ethical aspects of decisions including dilemmas and conflict of interest that exist across disciplines and sectors, and take account of these when making decisions about team actions

Other Example Competencies:
- Actively seek to learn from others
- Foster a climate of trust within the team
- Promote personal accountability in practice
- Actively support other team members, and show willingness to share skills, knowledge, expertise, and time
- Interact with others fairly and objectively
- Advise others in maintaining fair and consistent dealings with others and in dealing with ethical dilemmas
- Deal directly and constructively with lapses of integrity (e.g., intervene in a timely fashion to remind others of the need to respect the dignity of others)
- Identify underlying issues that impact negatively on people and take appropriate action to rectify the issues (e.g., systemic discrimination)

Subdomain: Respect and Fairness between Organizations

Competency:
- Ensure that decisions take into account ethics and values of all the organizations and stakeholders involved in One Health actions

Other Example Competencies:
- Define, communicate, and consistently exemplify the organization's values and ethics
- Ensure that standards and safeguards are in place to protect the organization's integrity (e.g., professional standards for financial reporting, integrity/ security of information systems)

Subdomain: Accountability for Full Impact

Competency:
- Recognize and admit when unintended consequences result from a lack of understanding of disciplinary differences and develop plans for improvement in future actions

Other Example Competencies:
- Implement processes and structures to deal with difficulties in confidentiality and/or security

DOMAIN: COLLABORATION AND PARTNERSHIP

Includes competencies that identify, recruit, work with, and sustain the willingness and ability of a diverse range of stakeholders to work effectively to advance One Health

Subdomain: Stakeholder Identification

Competency:
- Promote inclusion of representatives of diverse constituencies across human, animal, environmental health and other One Health relevant disciplines in collaborations/partnerships

Other Example Competencies:
- Take a broad view of the potential stakeholders and the roles they might play, both now and in the future, in a One Health approach to meeting the objectives of the collaboration/partnership.
- Respect and leverage diversity
- Understand each potential stakeholder's value, motivation, legitimacy, willingness to engage, and necessity to the collaboration/partnership

Subdomain: Stakeholder Recruitment

Competency:
- Contact potential stakeholders and clearly articulate the needs, interests, and objectives of the One Health collaboration/partnership, the alignment these with each stakeholder's objectives, and the expected commitments required of participating stakeholders

Other Example Competencies:
- Tell the stories of One Health success in a compelling manner, and tell them in a manner that illustrates the complementarity between stakeholder's motivation and the objectives of the approach
- Strategically select the stakeholders that are necessary and sufficient to accomplish the objectives

Subdomain: Stakeholder Roles

Competency:
- Share vision, power, responsibility, accountability and credit among human, animal, environmental health and other participants

Other Example Competencies:
- Listen, speak and write to be understood by all (i.e. avoid jargon, acronyms, and other discipline and sector-specific language or behaviors.)
- Recognize and demonstrate respect for others' expertise, professional abilities, perspectives and cultures
- Demonstrate empathy and seek to understand the motivation of others
- Create an environment that fosters innovation and creativity
- Develop procedures and processes for joint analysis, planning, communication, and commitment of decisions into action to achieve common goals
- Clearly define joint expectations, commitments, roles, responsibilities and time lines
- Communicate transparently on decisions taken, lessons learned and ongoing progress and challenges
- Ensure information is accessible to everyone and keep stakeholders informed through a variety of communication strategies (e.g., regular stakeholder meetings, distribution of minutes, etc.)
- Proactively plan to manage conflict, and collaboratively resolve conflict
- Recognize the potential benefit of conflict as a catalyst for improvement and change; leverage positive aspects of conflict while ameliorating the negative aspects

Subdomain: Stakeholder Retention

Competency:
- Ensure that individuals and organizations continue to understand the alignment of the goals and objectives of the collaboration/partnership with their own and to recognize the benefits of the collaboration/partnership

Other Example Competencies:
- Reinforce the goals and objectives of the collaboration/partnership (results driven)
- Maintain trust and transparency, ensure that all voices are heard
- Recognize and remove barriers to collaboration and progress
- Recognize, congratulate and reward contributing individuals and organizations
- Maintain positive attitudes and working environments
- Celebrate successful milestones and benchmarks towards achieving the goals and objectives
- Individuals and/or organizations recognize when involvement is no longer necessary or productive, either replacing individual representatives or withdrawing the organization from the collaboration/partnership
- Explore and understand the motivation behind withdrawal or replacement of a stakeholder's representative, and take any corrective actions necessary
- Seek opportunities to transfer information and knowledge among stakeholders and to the wider public

DOMAIN: LEADERSHIP

Includes competencies that focus on creating shared visions, championing collaborative solutions through critical and strategic decision- making, and energizing commitment to transdisciplinary approaches for One Health challenges.

Subdomain: Strategic and Critical Thinking

Competency:
- Evaluate project, team, and event performance, outcomes, and impact to implement continuous improvement

Other Example Competencies:
- Formulate objectives, priorities, and strategies for OH teams and organizations
- Implement continuous improvement in OH teams, organizations, and strategies
- Design a strategic plan based on situational analysis

Subdomain: Shared Visions

Competency:
- Demonstrate ability to advocate, create partnerships, and foster collaboration in OH teams

Other Example Competencies:
- Create and communicate a shared vision across sectors and disciplines
- Promote mutual respect between different professionals in a OH team
- Utilize change management strategies to guide people or teams to accept new ideas

Subdomain: Decision Making

Competency:
- Make informed decisions in order to move forward after collaboration or consensus building by multidisciplinary team

Subdomain: Collaborative Solutions

Competency:
- Facilitate cooperation, mutual trust, team function, and commitment throughout an outbreak response

Other Example Competencies:
- Lead efforts in implementation of a collaborative response to a OH challenge
- Develop an integrative vision

Subdomain: Team Commitment

Competency:
- Motivate the outbreak team to work together to achieve the agreed upon goals of the team

Other Example Competencies:
- Create the environment leading to engagement and commitment by team members
- Energize commitment to goals across sectors and disciplines
- Mobilize, coach, and mentor others from a variety of disciplines

DOMAIN: COMMUNICATION

Includes competencies that foster effective communication and information sharing across disciplines and sectors.

Subdomain: Communication Management

Competency:
- Listen to others and communicate in a manner that fosters open communication to support and enable a One Health response

Other Example Competencies:
- Communicate effectively with the media and public
- Identify who the designated spokesperson(s) are for particular issues
- Demonstrate ability to communicate risk at multiple levels

Subdomain: Information Management

Competency:
- Analyze lessons learned in the field in a way that other team members can understand how they are relevant to a zoonotic disease threat

Other Example Competencies:
- Use fundamental IT methods and demonstrate willingness to learn new technologies as needed
- Collect, manage, organize, and report data to ensure that each person in the team has the information they need to do their job
- Know government, industry, and academic policies on releasing and sharing information

DOMAIN: SYSTEMS THINKING

Includes competencies that recognize how elements influence and interact with one another within a whole that results from the dynamic interdependencies among human, animal, environmental, and ecological systems, and how these interdependencies affect the relationships among individuals, groups, organizations, and communities

Subdomain: Systems Knowledge

Competency:
- Provide examples of integrated complex systems that include human, animal, environmental, and ecological components, and identify key characteristics, elements, and integration points where individual system components (e.g. social networks, organizations, government, communities, ecosystems) interact

Other Example Competencies:
- Explain how the contexts of gender, culture, beliefs, history, etc. are important in the design of interventions within One Health systems

Subdomain: Systems Management

Competency:
- Demonstrate the ability to integrate information across disciplines and sectors to determine and mitigate potential unintended consequences of planned interventions in a complex system

Other Example Competencies:
- Provide an example of unintended consequences produced by changes in one part of a One Health system
- Analyze the effects of political, social, and economic policies on One Health systems at the local, state, national, and international levels
- Analyze the impact of global trends and interdependencies on One Health related problems and systems

Subdomain: Systems Evaluation and Improvement

Competency:
- Illustrate how both intended and unintended changes in One Health systems (including input, processes, and output) can be measured and analyzed for future improvement

Other Example Competencies:
- Provide examples of essential feedback loops to support an effective One Health system
- Assess strengths and weaknesses of applying the systems approach to One Health problems

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