Brief Overview

Over the past decade Africa and the world have faced severe public health threats, ranging from infectious disease outbreaks to environmental disruptions such as the Ebola outbreak in West Africa, to the devastating effects of Hurricane Matthew in Haiti. These all demonstrate how a geographically isolated public health incident can cause global disruption and underscores the economic and humanitarian impacts of such threats at the human domestic animal wildlife and environmental interface.

What type of training will provide public health professionals with the skills and competencies needed to combat such threats and thereby create a stronger sustainable public health workforce? The One Health Central and Eastern African network (OHCEA) a network of 21 schools of public health, veterinary medicine and environmental sciences in East Central and West Africa has developed One Health core competencies and course modules that are key to delivering knowledge and skills to a multi-disciplinary workforce and building a framework on which One Health curricula can be designed and implemented. These course modules can be used for both in service and preservice as short courses or integrated into curricula for professionals who impact disease detection, prevention and response. You are welcome to use these modules as needed.
OHCEA ONE HEALTH COURSE MODULES

TRAINING THE CURRENT AND FUTURE PUBLIC HEALTH WORKFORCE USING A ONE HEALTH APPROACH

Summary

There is abundant evidence that no single sector or department can sufficiently manage the challenges of public health in any country, region or continent. Experiences from the fight against Ebola and the highly pathogenic avian influenza in the past few years demonstrated the effectiveness of multi-sectoral, multi-agency approaches and the need for specific training targeting multi-sectoral and multi-disciplinary public health professionals not limited by national or regional borders in dealing with public health threats. In response to this challenge, the One Health approach has been advocated as the global framework for strengthening collaboration and capacities of the sectors and actors involved in health service delivery.

One Health Central and Eastern Africa (OHCEA) is a network of universities in Central and Eastern Africa which are collaborating to build One Health capacity and academic partnerships between the member institutions in the region and with governments. The overall goal of this collaboration is to enhance One Health policy formation and implementation, to contribute to improved capacity of countries to respond to any emerging pandemics in the region. OHCEA seeks to expand the human resource base needed to prevent, detect and respond to potential pandemic disease outbreaks, and increase integration of domestic animal, wildlife and human disease surveillance and outbreak response systems.

OHCEA has identified One Health core competencies and developed modules based on the identified competencies that are key to delivering knowledge and skills to a multidisciplinary workforce and building a framework on which One Health curricula can be designed and implemented. They combine human health, animal health, infectious disease management with principles of ecology, social and environmental sciences. A total of 16 modules have been developed including One Health soft skills such as communication, culture, leadership, gender and core technical skills such as ecosystem health, infectious disease epidemiology, One Health concepts and outbreak response. These modules can be used at both pre-service and in-service levels as full courses, workshops or integrated into course materials for professionals who impact disease detection, prevention and response, allowing them to successfully function as an integral part of a larger, multi-disciplinary, team of professionals. This is key to creating a stronger sustainable Public Health workforce.

Each module contains a facilitator guide, student guide, Power point slides and a folder of resources/references for users. These modules are iterative and are continuously being revised. The current versions are still in a draft form. OHCEA would therefore appreciate any feedback and suggestions to improve the modules.

One Health is defined as the collaborative effort of multiple disciplines working together locally, nationally, and globally to attain optimal health for people, animals and the environment.

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The One Health paradigm emerged from the recognition that the well-being of humans, animals and the ecosystem are interrelated and interdependent and there is a need for more systematic and cross sectoral approaches to identifying and responding to global public health emergencies and other public health threats arising at the human-animal ecosystem interface.
Workforce transformation using a One Health Approach: The modules are intended to:

- Create a framework for One Health curriculum
- Improve workforce capacity to prevent, detect and respond to threats posed by infectious diseases and zoonosis
- Generate a shift in countries workforce culture and training structure
- Enable working across sectors and disciplines for a stronger and more effective public health sector
- Allow universities to be key drivers of the future workforce as they forge partnerships and drive change
- Combine human health, animal health, infectious disease with principles of ecology and environmental sciences
- Be used at both pre-service and in-service levels in workshops, as full courses or integrated into course materials

List of Modules: The following is a list of the 16 modules developed

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Course/ Module Developers

These 16 modules were developed by collaborative efforts of multiple disciplines and teams of people from seven different OHCEA partner countries with the support of two US university partners namely Tufts University and University of Minnesota. A team of fifty-five (55) people were engaged in the development of these modules. All the materials represent contribution by the faculty and leadership of the OHCEA network institutions and the technical and managerial support of the OHCEA Secretariat. The modules were built off previous One Health modules developed by SEAOHUN- network: https://seaohunonehealth.wordpress.com/ecosystem-health/ with addition of more Africa- specific materials, examples and case studies relevant and applicable to the region. Each module was reviewed by OHCEA network faculty including US university partners with technical expertise as well as partners with field experience that allows for OH application and appreciation of the local African context. Development of these training materials would not have been possible without the contribution of the following people:

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