Advancing Global Public Health
Universities and Workforce Development

ONE HEALTH WORKFORCE PROJECT
University of Minnesota (5 December, 2019)

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Multisectoral Threats are arising and we need to be prepared

- Ongoing Ebola Outbreak in DRC
- Antimicrobial Resistance
- African Swine Fever
Key Factors That Enable Effective One Health Collaborations

Literature Review Results

**INDIVIDUAL FACTORS**
- Education & Training
- Prior Experience & Relationships

**ORGANIZATIONAL FACTORS**
- Organizational Structures
- Organizational Culture
- Human Resources
- Communication

**NETWORK FACTORS**
- Network Structures
- Relationships
- Leadership
- Management
- Available & Accessible Resources
- Political Environment

*Errecaborde et al. (in press)*
Universities are catalysts for local workforce change
A One Health Workforce requires a new kind of worker
What is a One Health workforce?
A One Health Workforce fosters a multi-sectoral approach to infectious disease prevention, detection and response.

**COLLABORATIVE ENGAGEMENT**
A One Health workforce fosters cross sectoral/ disciplinary engagement

**TECHNICAL COMPETENCE**
A One Health workforce supports sector-specific technical training

**ENABLING ENVIRONMENT**
A One Health workforce requires supporting systems to enable timely, effective and multi-sectoral response
Multi-Sectoral Engagement

The One Health Workforce project engages university, government, intergovernmental, and community stakeholders to promote One Health approaches and prevent, detect, and respond to emerging health threats posed by zoonotic diseases and AMR.

What We Do

- Advocate for One Health policies and approaches
- Expand the evidence base on One Health through research & evaluation
- Support governments to identify and address health workforce needs and priorities
- Establish partnerships to support far-reaching, high impact, and sustainable programs
- Improve community health and develop student leaders through community outreach
- Engage universities and communities in disease preparedness and response efforts

Year 5 Achievements

- 3 workforce assessments supported
- 9 reports or journal articles published
- 27 community outreach activities reached approximately 2,500 community members in 7 countries

Year 1-5 Achievements

- 11 national workforce assessments supported
- 18 outbreak investigations supported
- 167 community outreach activities supported
Time Line of Outbreaks and Partners involved in OHCEA Uganda

9 Outbreak Responses where SOHIC participated

1. Rift Valley Fever (RVF) outbreak investigation
2. Yellow Fever, June 2016
3. Human Adenoviruses
5. Disease Surveillance Workshop
6. Ebola surveillance
7. Highly Pathogenic Avian Influenza
8. Anthrax, Feb. 2017
9. Anthrax, May 2017
10. Anthrax, July 2017
11. Anthrax, July 2017

Lead Partner:
1. MoH
2. MAAIF
3. MoH
4. CDC-FETP
5. MoH
6. PREDICT-2
7. MoH
8. MoH
9. MAAIF
10. FAO-ECTAD-2

13 Outbreak Responses where OH Graduate Fellowship participated

1. Rift Valley Fever (RVF) outbreak investigation
2. Marburg Virus Fever, Nov. 2017
3. RVF and CCHF outbreak investigation
4. Anthrax outbreak investigation
5. Anthrax post-outbreak investigation
6. Anthrax, Aug. 2017
7. Anthrax outbreak investigation
8. Anthrax post-outbreak investigation
9. Anthrax, Feb. 2018
10. Anthrax, Aug. 2018
11. Anthrax, Aug. 2018
12. Anthrax, Aug. 2018
13. Anthrax, Aug. 2018
15. Anthrax, Aug. 2018
16. Anthrax, Aug. 2018
17. Anthrax, Aug. 2018
18. Anthrax, Aug. 2018
19. Anthrax, Aug. 2018
20. Anthrax, Aug. 2018
21. Anthrax, Aug. 2018
22. Anthrax, Aug. 2018

Lead Partner:
1. MAAIF
2. MoH
3. MAAIF
4. CDC-FETP
5. MAAIF
6. CHC
7. IDI
8. MoH
9. MAAIF
10. Red Cross CP3
11. MAAIF
12. FAO-ECTAD-2
13. MAAIF
14. NARO
15. MAAIF
Education & Training

OHW partners with university members to equip current and future health professionals with the necessary skills and experiences to prevent, detect, and respond to emerging disease threats.

What we do

- Expand access to OH education through scholarships & grants
- Transform OH education through innovative, applied, and student-centered learning
- Create community and academic partnerships for field-based research and training
- Support the transition from school to work with One Health Fellowships
- Provide professional development and training for the current health workforce
- Empower community health workers through One Health outreach, training, and service

Year 5 Achievements

- 12 new field sites established
- 2 new student clubs established
- 4 One Health fellows placed
- 1,640 students trained
- 588 current health professionals trained

Year 1-5 Achievements

- 55 OH student clubs established
- 42 OH field sites established
- 85 OH fellows placed
- 11,840 students trained
- 4,180 current health professionals trained
COURSE & CURRICULUM DEVELOPMENT HIGHLIGHT

OHW Partners Develop One Health Education & Training Materials

OHW supports the development, sharing, and local adaptation of One Health education and training materials to enable network members to offer One Health education and training opportunities to current and future health professionals. OHW’s collection of One Health educational materials includes course and training modules, textbooks, and case studies, among other resources. Materials developed or adapted this year include:

- One Health Training Manual (OHCEA-Tanzania)
- One Health Front-Liners Disaster Module Assessment and Scenario Development (MyOHUN)
- One Health PBL Book 2 for Multidisciplinary Students (MyOHUN)
- AMR Educational Toolkit for Animal and Aquatic Health (MyOHUN)
- AMR Training Modules for Pre-Service & In-Service Training (THOHUN)
- Online Modules for International Short Course on Ecosystem Health (THOHUN)
- Portable Electronic Platform for One Health Operation Manual (THOHUN)
Health Workforce Development

Project Reflections

• Broad student engagement and excitement (i.e. case competitions)

• Transformation of students into One Health leaders
Health Workforce Development

Project Reflections

Development of University Networks
- Engaging government partners
- Creating educational materials (and better teaching and scholarship)
- Moving to sustainability

Innovation and response to emerging issues
- Outbreak response and government engagement (i.e. Ebola, Influenza, Anthrax, and Rabies prevention)
Health Workforce Development

Summary

• Breaking down academic silos (even at our own U.S. institutions)
• Engaged Universities as a consortium for preparing a Global Public Health Workforce
• Built multi-sectoral responses to Global Health challenges
Questions?

ONE HEALTH WORKFORCE PROJECT

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