









# The importance for Development of a One Health curriculum for Universities in Vietnam

Dr. Pham-Duc PHUC

Vietnam One Health University Network (VOHUN)

Cellphone: +84 904049969; Email: pdp@vohun.org







Zoonoses

Food safety

**AMR** 

Climate change

Environmental change

Disaster

Migration

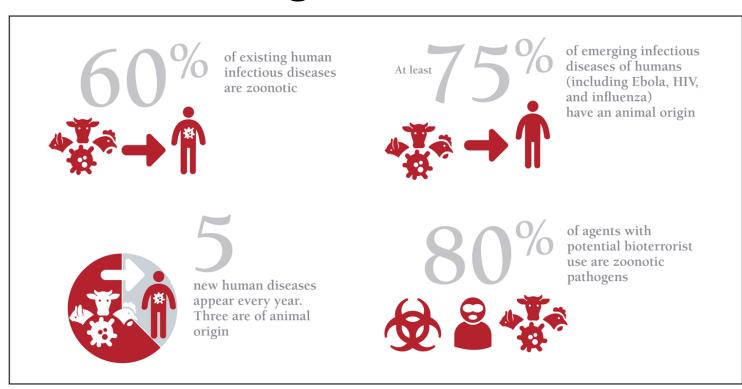
**Urbanization** 

Air pollution

**NCDs** 

etc.

# **Grand challenges**

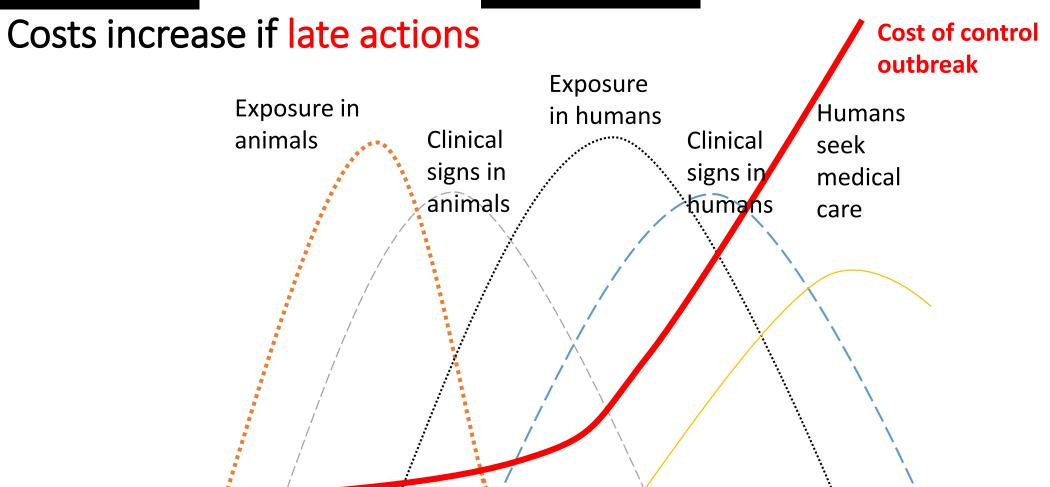


Investigation and control of zoonotic diseases, and other complex problems is impossible without a multidisciplinary approach involving human, animal, environmental and other scientific disciplines.









Adapted from IOM (2009)





# Global Health Security Agenda



GHSA (2014) to advance a world safe and secure **from infectious disease threats**, to **bring together nations from all over the world** to make new, concrete commitments, and to elevate global health security as a national leaders-level priority.

1. Prevent 1 : Antimicrobial Resistance

2. Prevent 2 : Zoonotic Disease

3. Prevent 3 : Biosafety and Biosecurity

4. Prevent 4 : Immunization

5. Detect 1 : National Laboratory System

6. Detect 2 & 3 : Real-Time Surveillance

7. Detect 4 : Reporting

8. Detect 5 : Workforce Development

9. Respond 1 : Emergency Operations Centers

10.Respond 2 : Linking Public Health with Law and Multisectoral Rapid Response

11.Respond 3 : Medical Countermeasures and Personnel Deployment













THE VIET NAM ONE HEALTH STRATEGIC PLAN FOR ZOONOTIC DISEASES 2016-2020



#### Seven One Health focus areas

- **Building OH capacity**
- OH approaches for managing human disease emergencies of zoonotic origin
- OH approaches for managing zoonotic agents with pandemic potential that are yet to emerge
- OH approaches for managing zoonotic influenza viruses with pandemic potential
- OH approaches for managing rabies
- OH approaches for managing antimicrobial resistance
- OH approaches for managing other priority zoonotic diseases







#### **VOHUN Established**

Supports universities transition from disciplinary to trans-disciplinary training

**OH University Education System** 

**GOAL:** To promote the OH approach through university training and research to inspire a new generation of lecturers and researchers equipped with a full range of knowledge and skills to practice the OH approach.







#### **One Health Modules**

#### **OH core competency modules**

- 1. Collaboration and Partnership
- 2. Communication and Informatics
- 3. Culture, Beliefs
- 4. Values and Ethics
- 5. Leadership
- 6. Management
- 7. Systems Thinking
- 8. Policy, Advocacy and Regulation

#### OH technical modules

- 1. One Health Concepts and Knowledge
- 2. Fundamentals of Infectious Disease
- 3. Infectious Disease Management
- 4. Epidemiology
- 5. Risk Analysis
- 6. Public Heath
- 7. Ecosystem Health
- 8. Behavior Development
- 9. One Health Economics
- 10. Zoonotic diseases
- 11. Wildlife diseases
- 12. Environmental & livestock waste management
- 13. Antimicrobial resistance
- 14. BioRisk Management







# Key achievements

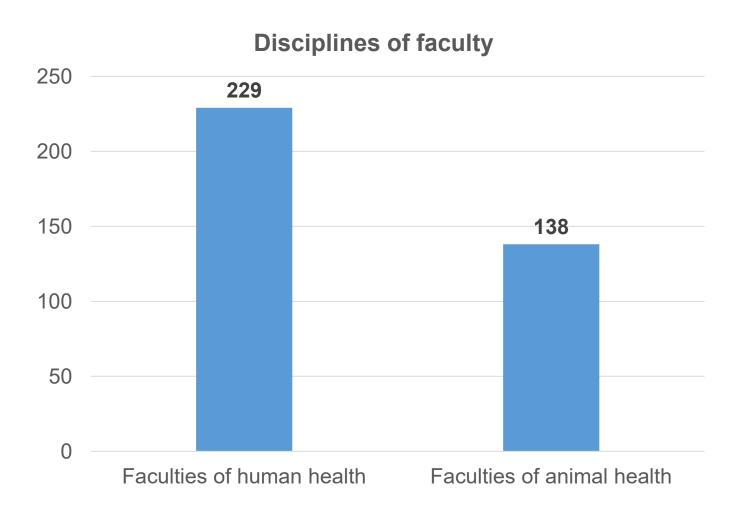
- ▶ OH compulsory module (2-3 credits, under-graduate & post-graduate students: PH, PM, MD, DVM., etc.)
- Master of Public Health with OH oriented teaching in English (HMU)
- Master of Public Health majoring in Environmental Health (HUPH)
- Master of Veterinary Public Health teaching in English (HCM NLU)
- 400 current health & veterinary staff were trained OH
- ▶ 15 OH students clubs were established (> 1,000 students)
- Field-based OH teaching & learning
- ► OH SMART, etc.

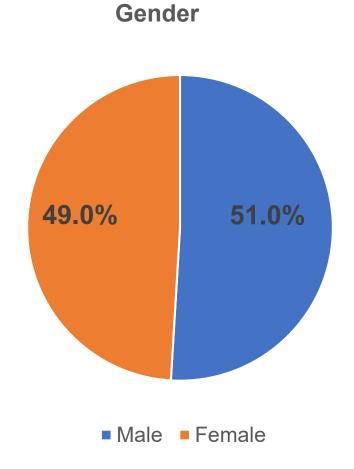






Number of lecturers trained OH: 367 – average age: 35.4 years old

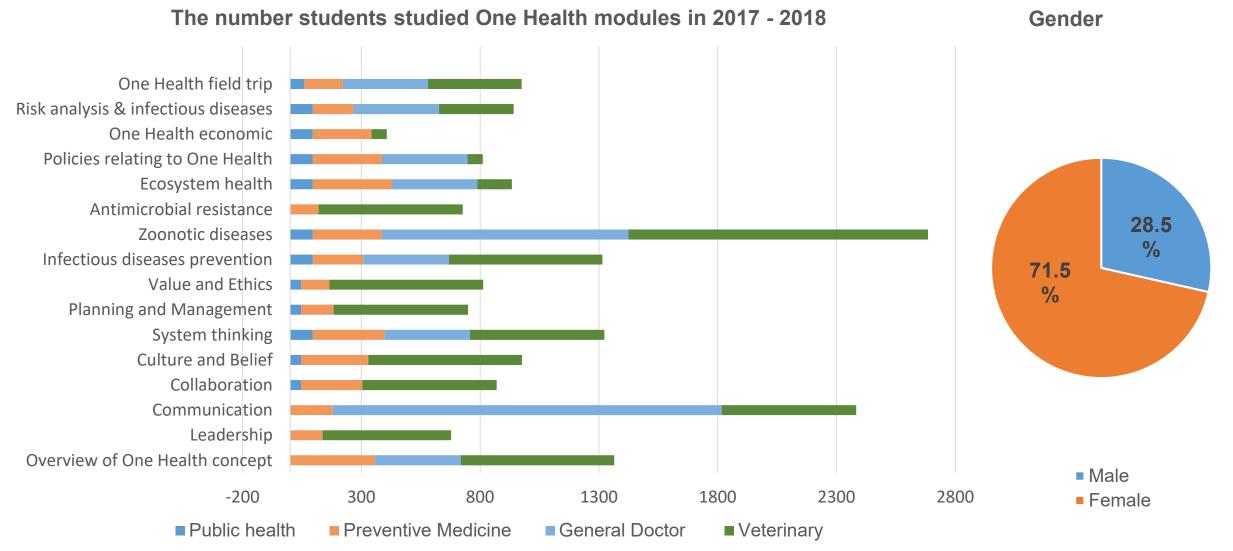












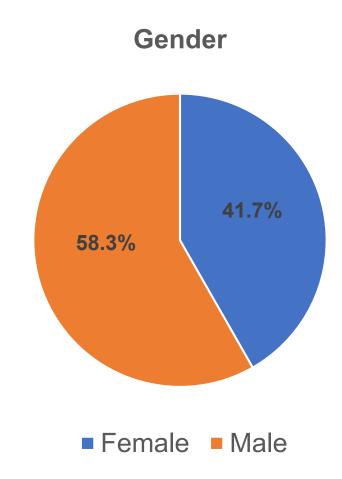






## Number of professional staff trained OH: 448 – average age: 33.9 years old











# Collaboration & Communication

National One Health
Forum
One Health
Communication
Network
(One Health Partnership)





World Rabies Day AMR (GDPM, DAH, NIHE, WHO, FAO)

BioRisk Management curriculum (DTRA)





OH short training course for professionals (CDC, Sub-DAH)







# Government agencies consultation















## Reflection on One Health Workforce

- Acceptance, policy engagement (e.g. ministries)
- How to share credits, added values of OH curricular among universities & government agencies & other organizations
- Closer collaboration/partnership between universities & government agencies, private sectors, NGOs, CSOs, etc.
- Engaging OHW frameworks within ministries (e.g. National Action Plan)
- Improving the translation of OH education & research evidences into policy
- Complementarity: OH curriculum for other health issue (e.g. NCDs)
- Maintenance & expansion of the networks







# Thank you very much!

