

# DETERMINING ONE – HEALTHNESS: BARRIERS, GAPS AND DRIVERS

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Make today matter



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
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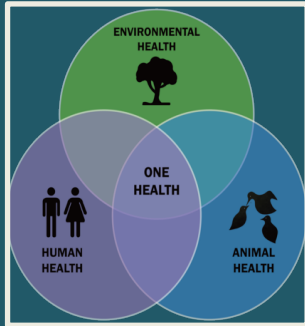
Faculty of  
Veterinary Science

Fakulteit Veeartsenykunde  
Lefapha la Disaense tša Bongakadiruiwa

**100**  
**YEARS**  
OF VETERINARY EDUCATION



# OVERVIEW



WHAT IS ONE  
HEALTH?



ONE HEALTH-  
NESS

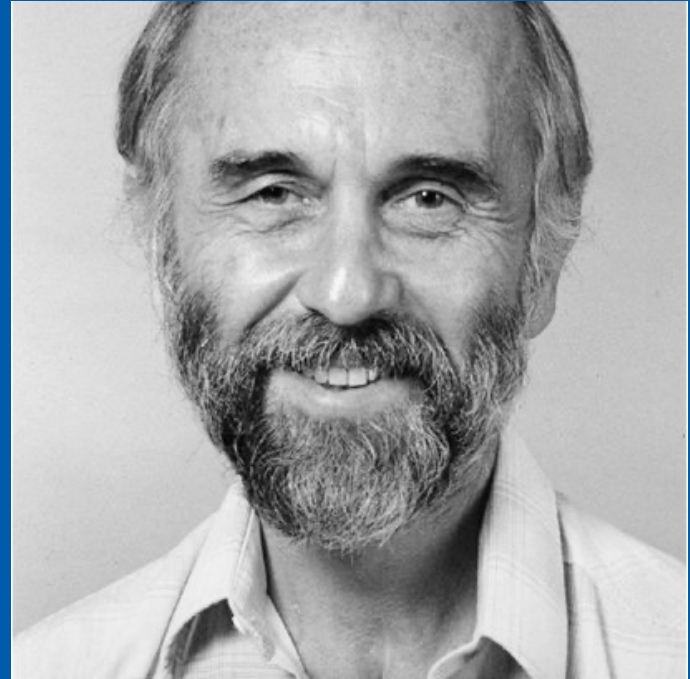


ONE HEALTH-NESS  
@ FVS

# What is One Health?

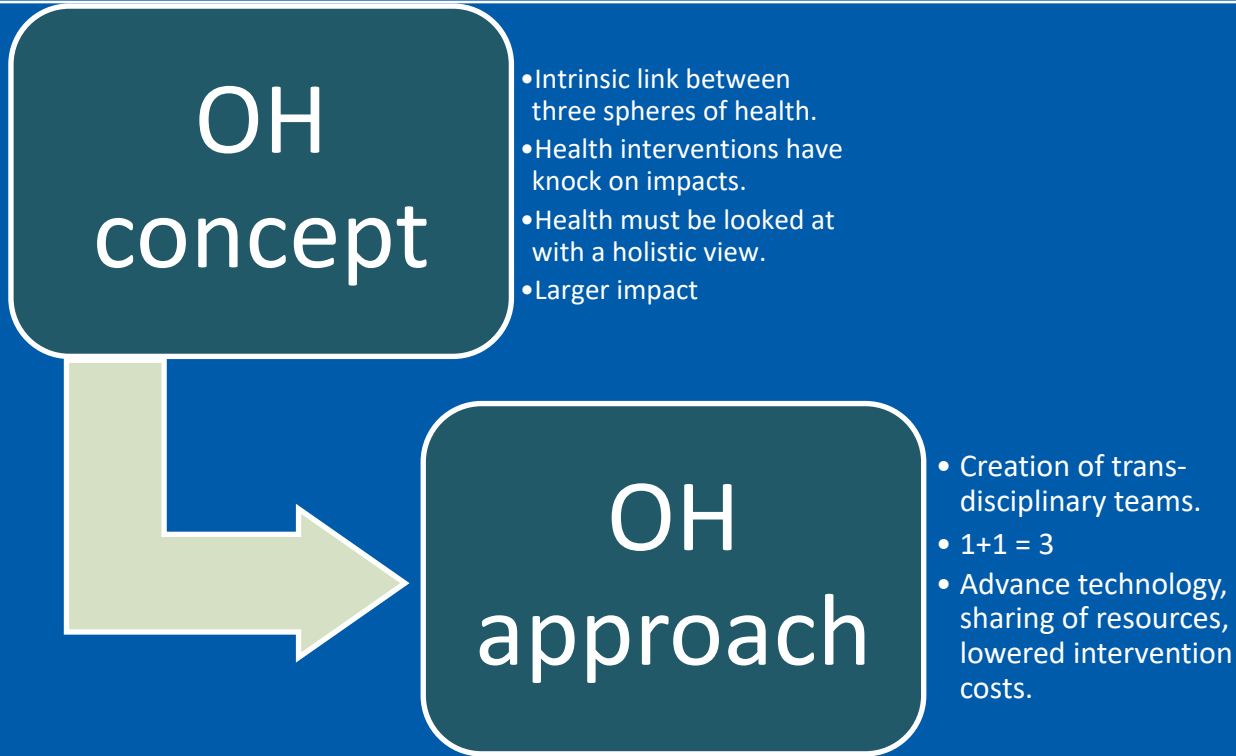
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- Term One Health(OH) coined by Dr Calvin Schwabe in 1976
- Grew from the term “One Medicine”
- Globally there is a lack of a common definition of OH
- OH involves multiple thematic areas



# What is One Health

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# What is One Health



# What is One Health

## Thematic Areas

Zoonotic disease

Anti-microbial disease

Adverse weather events

Diseases of economic importance

Loss of biodiversity

Land use change

Air pollution

# What is One Health

## Who is involved in OH?

### Basic Understanding

- Veterinarians
- Medical doctors

### Support

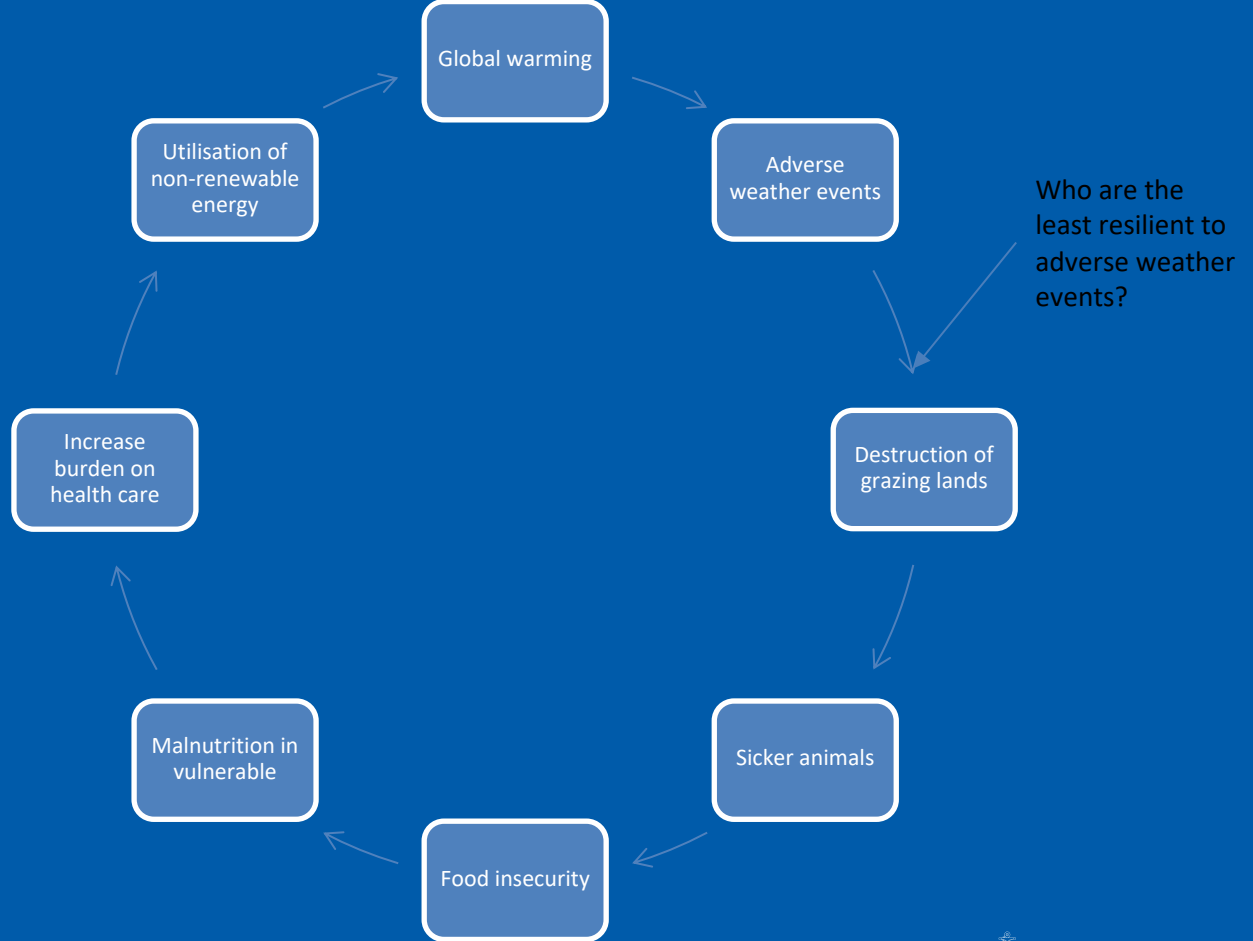
- Para-professionals
- Epidemiologist
- Microbiologist, virologist
- Biologist

### System understanding

- Geographer
- Economist
- Architects
- Engineers
- Social scientist

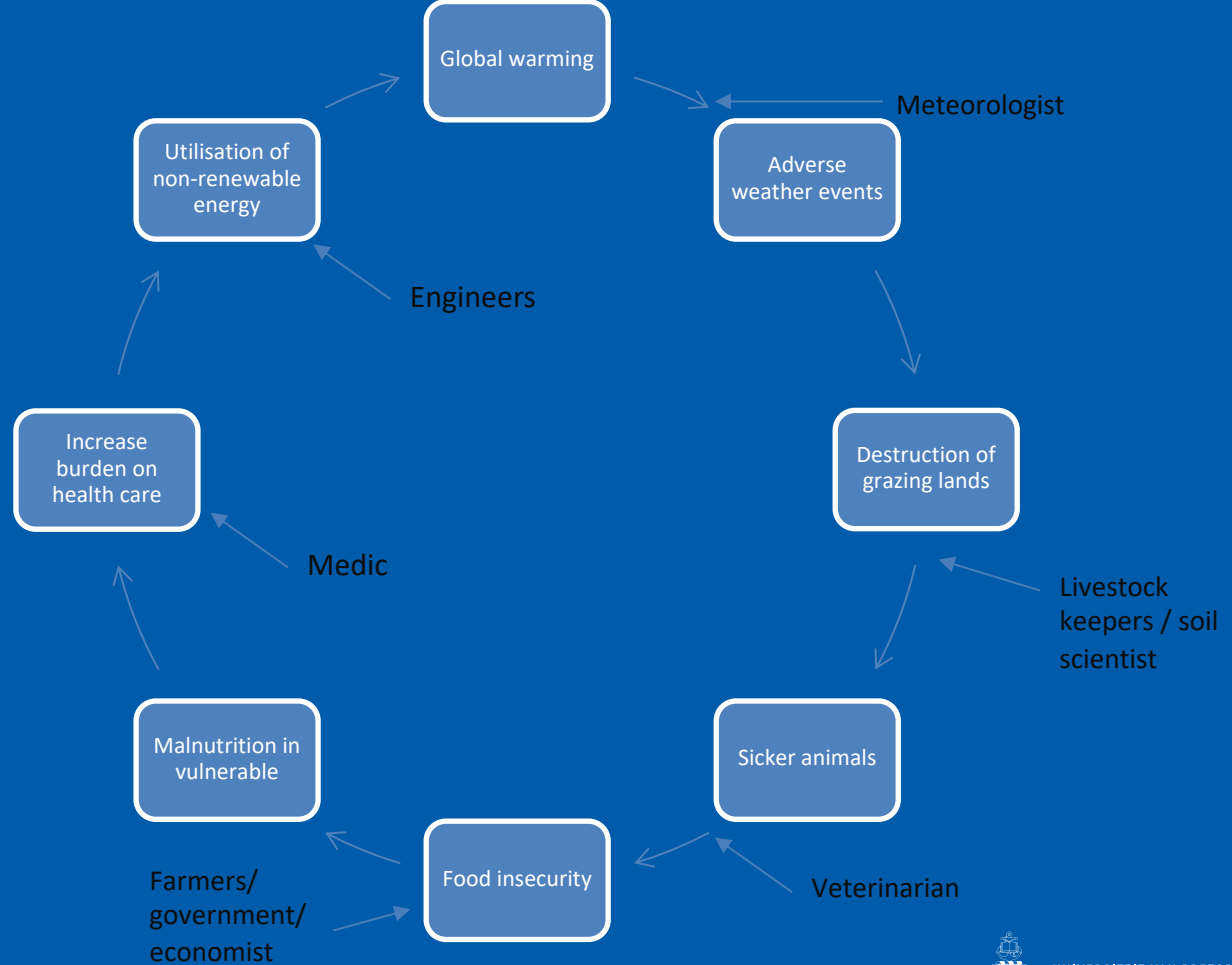
# One Health in Action

## Climate and land use change



# One Health in Action

## Climate and land use change



# One Health-Ness

## What and why



Orientation of an institute to OH approach



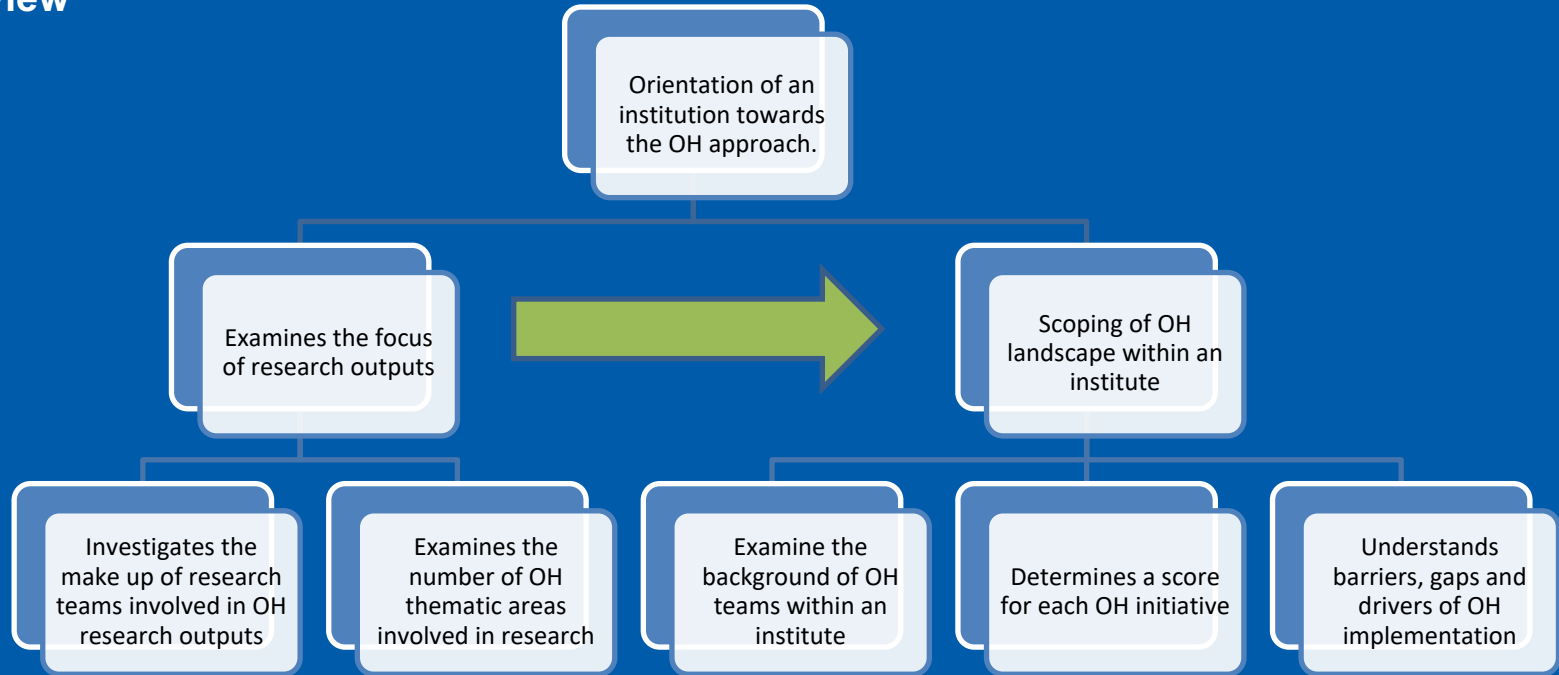
Development of a baseline to evaluate interventions



Understand the landscape at an institute

# One Health-Ness

## Overview



# One Health-Ness

## Methodology – Research output

- Review all the publications from an institute over a period
- Designated publications into different thematic areas (9 themes)
  - With a primary and sometime a secondary designation
  - Identified number of authors from different institutes

Theme Areas	Designation code
Termed One Health (TOH):	A
Public Health (PH):	B
Involving animal, human and environmental health in a combination/ or together (IAHET):	C
Infectious disease with zoonotic implications (IDZ):	D
Infectious disease that has socio-economic effects (IDSE):	E
Food security (FSe):	F
Food safety (FSa):	G
Antimicrobial Resistance (AMR):	H
Climate change that involves public health response (CC):	I

# One Health-Ness

## Methodology – Interviews



Participants were selected based on identified OH publications and an open invitation to staff who felt their work was OH related



Determine a conceptual understanding of the OH activity



Create a quantitative baseline for OH activities (NEOH)

Planning

Working

Sharing

Systemic Organisation

# One Health-Ness

OHness @ FVS



12% of total publications being OH-related (197/1680)



Year on year was similar total OH publications. Year on year decrease of OH publications as a proportion of total publications



Year on year increase in the number of publications that have two designations



Most publications involved zoonosis but 60% only had a secondary designation



Wide difference in number of publications identified by different researchers

# One Health-ness

## OHness @ FVS

<u>Descriptors of identified objectives of OH initiatives</u>		<u>One Health Initiative 1 (OHi 1)</u>	<u>One Health Initiative 2 (OHi 2)</u>	<u>One Health Initiative 3 (OHi 3)</u>	<u>One Health Initiative 4 (OHi 4)</u>	<u>One Health Initiative 5 (OHi 5)</u>
Drivers	What started the initiative?	Fill a scientific gap.	Lack of strategic plan.	Fill a scientific gap.	Detection of zoonotic disease.	Detection of zoonotic disease.
	What are the objectives of the initiative?	Knowledge creation to help shape future programmes, policy and interventions.	Educate, promote and train health care workers and population.	Knowledge creation to help shape future programmes, policy and interventions.	Decrease zoonotic disease transmission and improve health.	Decrease zoonotic disease transmission and improve knowledge regarding zoonotic disease
Spheres	What is the background of the members?	Animal Human	Animal Human Environment	Animal Human	Animal Human Environment	Animal Human
	What are the spheres of intervention?	Animal Human	Animal Human Environment	Human	Animal Human Environment	Human
Barriers	What are the major barriers faced for OH working?	Funding Lack of FVS OH plan	Specialised collaborative spaces	Funding Performance target	Funding Lack of FVS OH plan	Funding Specialised collaborative spaces
Duration of OH initiative		2013 to current	2014 to current	2009 to current	2005 to current	2009 to current

# One Health-ness

OHness @ FVS Planning:

*Stakeholder and actor engagement; Self-assessment and plan revisions – 5/9 scored below 0.4*

*Working:*

*Transdisciplinary balance- 6/9 scored below 0.3*

Sharing:

Sharing and institutional balance scored above 0.6

Systemic  
Organisation

Leadership in all projects scored above 0.6

# One Health-ness

## OHness @ FVS

- FVS has multiple OH projects
- None of the indicators show improvement in the OH orientation of the work performed
- Having multiple researchers can advance the rigidity of the publication output
- Barriers to OH work is funding, performance management, lack of a collaborative centre
- Focus is on zoonoses and the impact and drivers in human and environmental health is rarely evaluated
- A OH framework should be developed
- The methodology utilised is effective and can be used in other HEI to assess the OH-ness

# OH @ UP

## Conclusion

- Importance of differentiation between the OH concept and the OH approach
- Creation of trans-disciplinary teams requires communication, collaboration and coordination
- OH approach can be expanded to many different aspects of everyday life
- The OH-ness methodology provides a tool to understand OH at an institution
- Understanding of barriers, gaps and drivers can lead to effective OH plans

# Thank You

