



National Institute for Public Health
and the Environment
Ministry of Health, Welfare and Sport



**Integrale aanpak van
Zoönosen | Aanhaken en
haken aan One Health**

**Kiezen én delen:
De uitdaging bij
integratie!**

11 december 2018

Marieta Braks, Dr.
Medisch Entomologe

I&W

GGD globaal DWHC

adaptatie integreren klimaat
natuurbeleid modelleur

WUR

dierenarts

afwegingskader

blauw-groen

Zoonose nationaal

arts signaleringsoverleg integraal

provincies

samenwerken privaat

kiezen

leefomgeving

Vectoren

planneren

gemeentes

LNV

overleg

RIVM

integratie

zoonose

ongevingswet

preventie

IZB

omgeving

stakeholders ziekte

delen gezondheid

epidemioloog eco-health

diagnostiek entomoloog

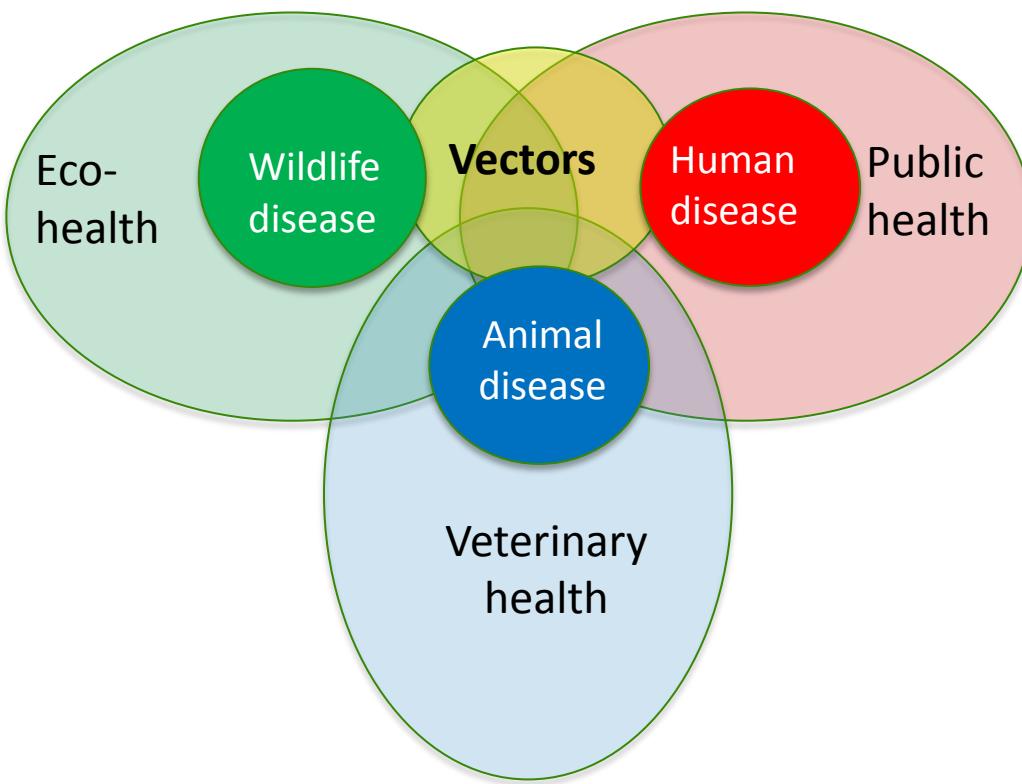
symptomen

vws mmk

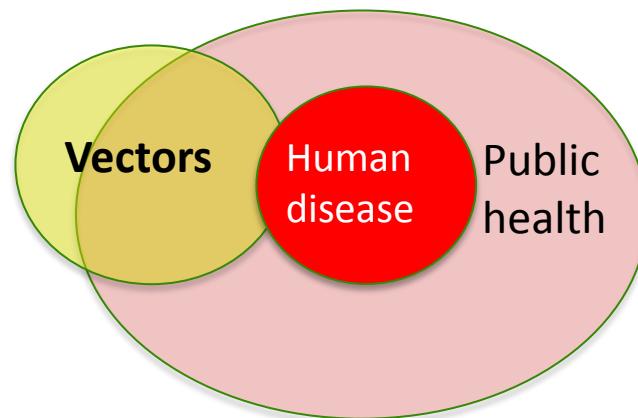


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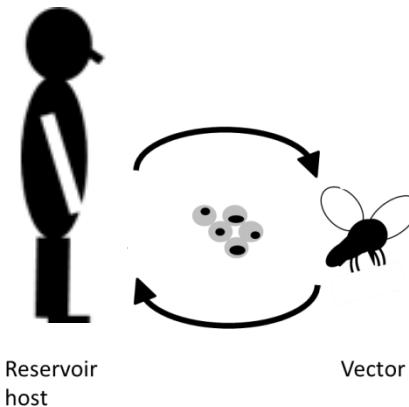
Vector-overdraagbare infecties



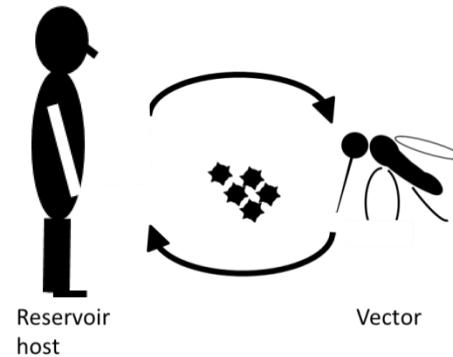
Sectoriale Indeling: waar de ziektelelast voorkomt

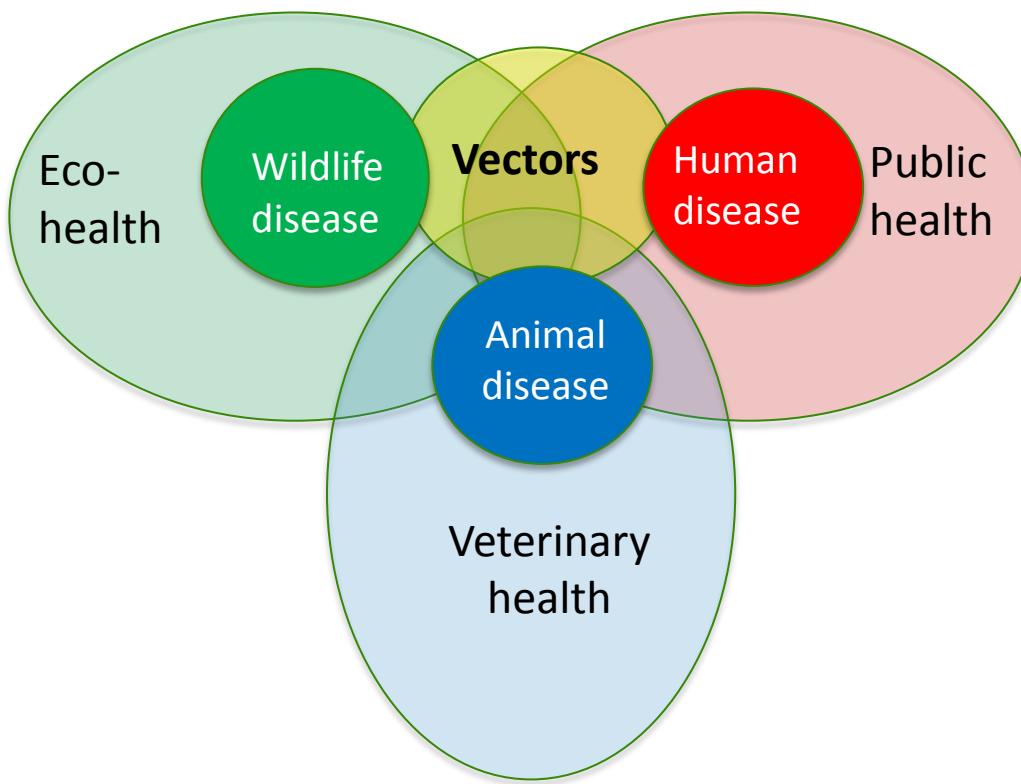


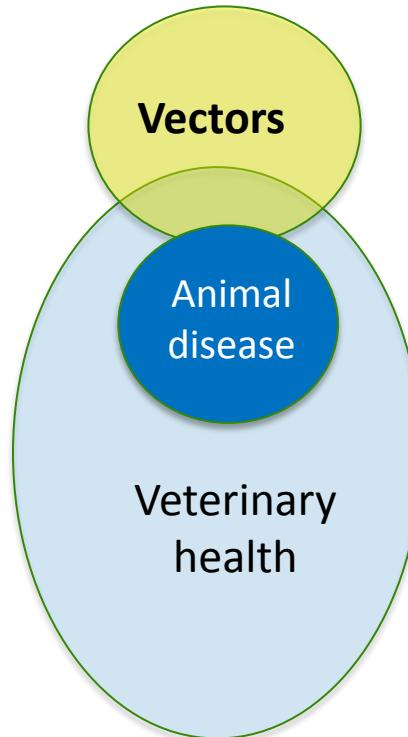
- ✓ leishmaniasis
 - door *Leishmania donovani*



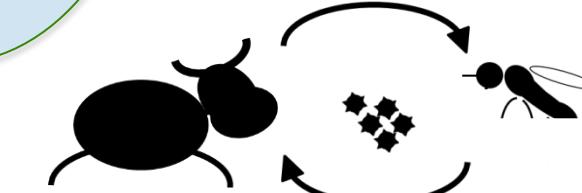
- ✓ Zika, dengue, chikungunya



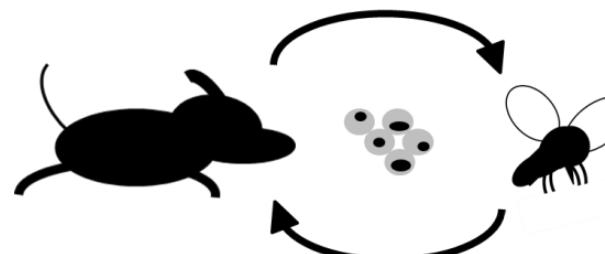




- ✓ Schmallenberg
- ✓ blauwtong

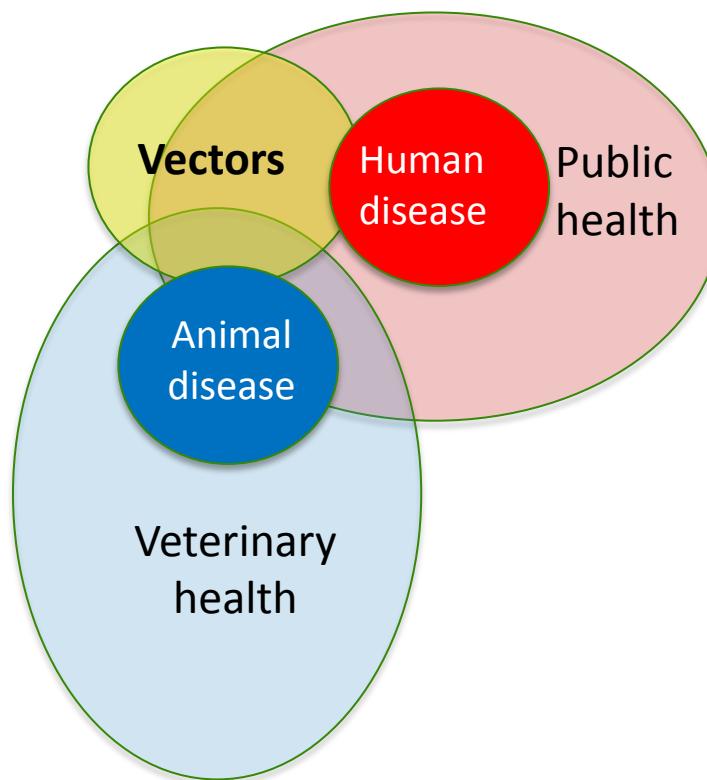


Reservoir host Vector

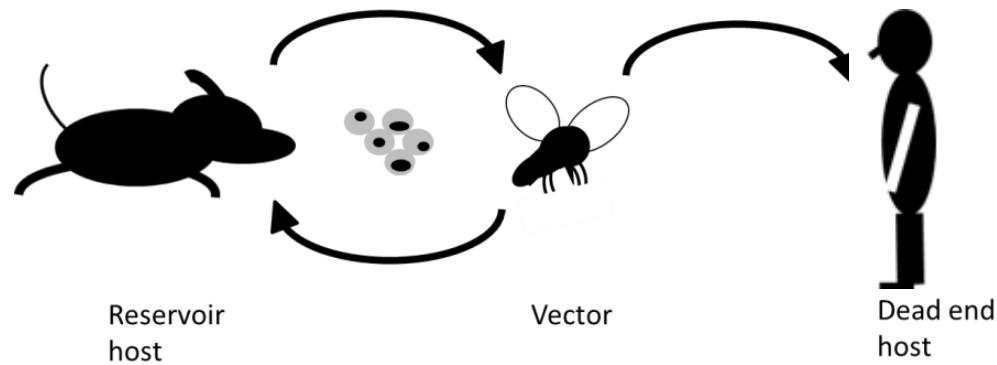


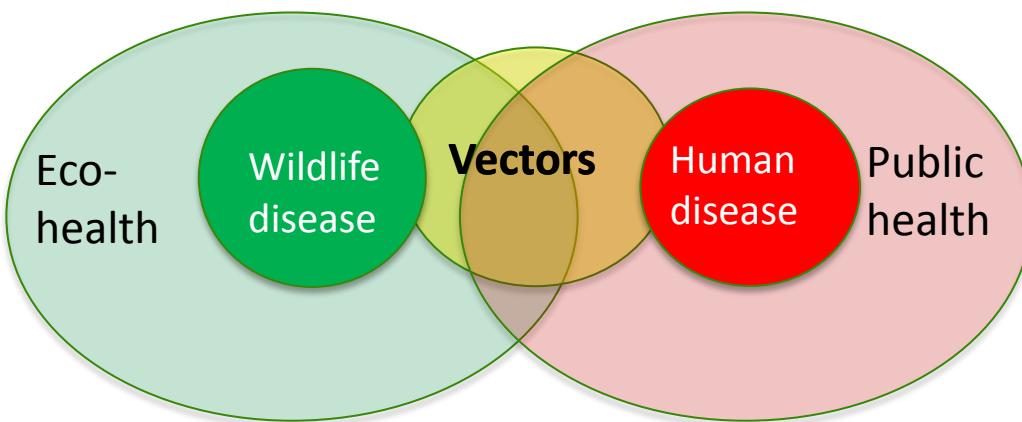
Reservoir host Vector

- ✓ leishmaniasis
 - door *Leishmania infantum*

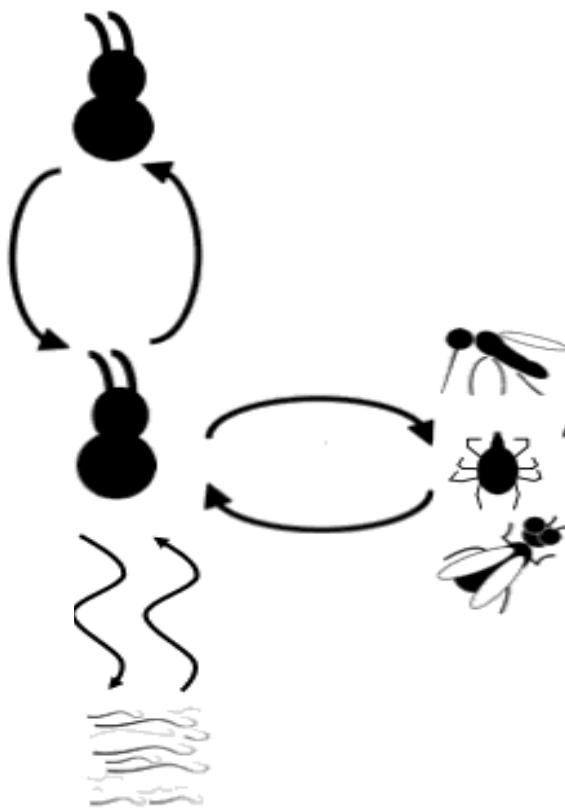


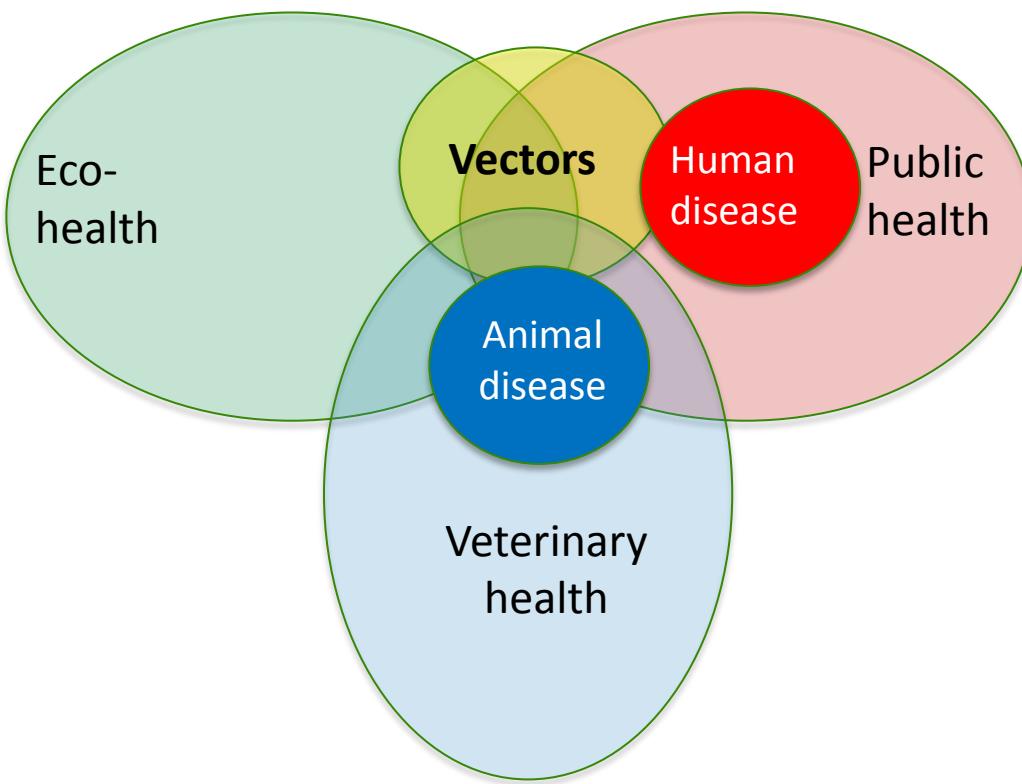
- ✓ leishmaniasis
 - door *Leishmania infantum*



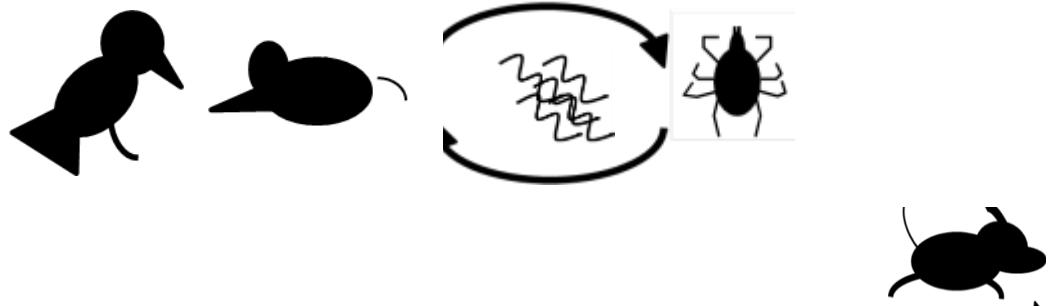


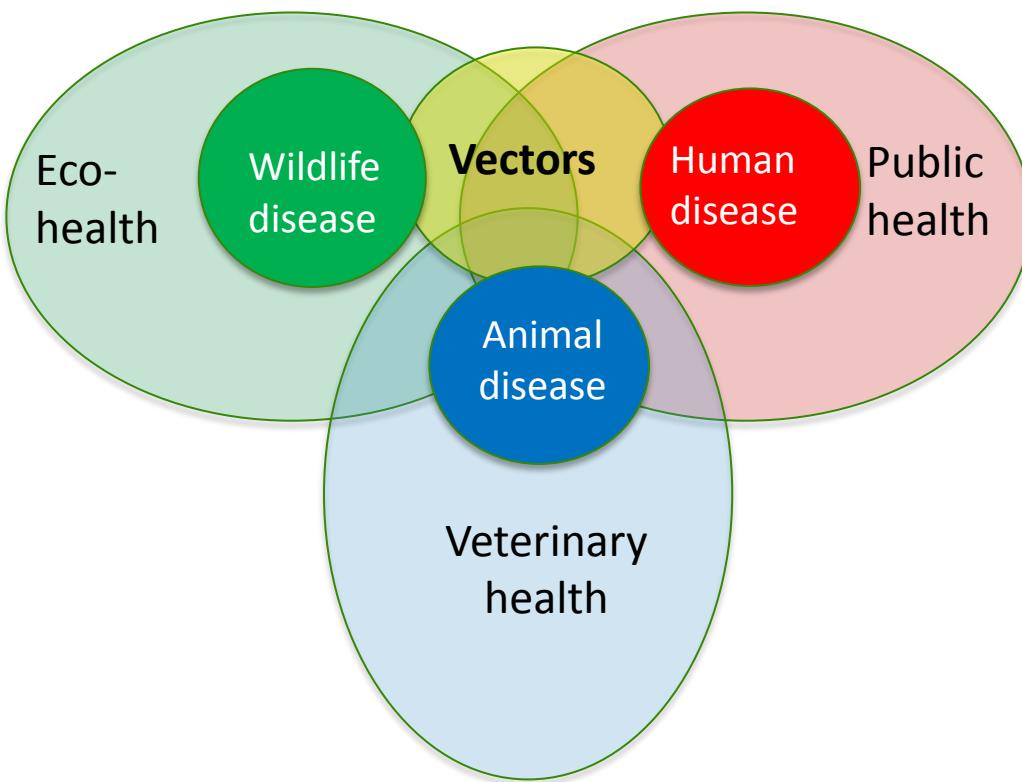
- ✓ Tularemia/
- ✓ Hazenpest



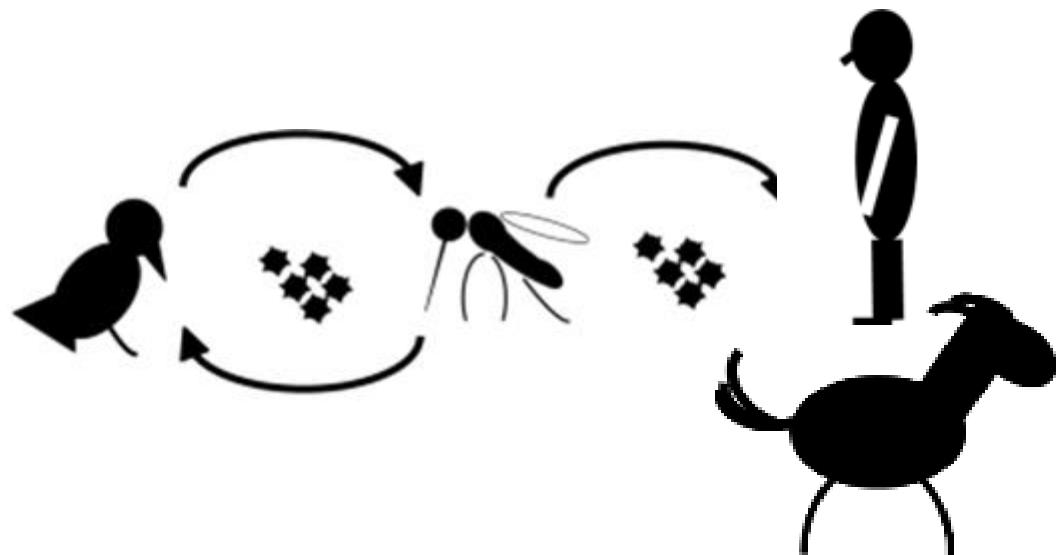


✓ ziekte van Lyme





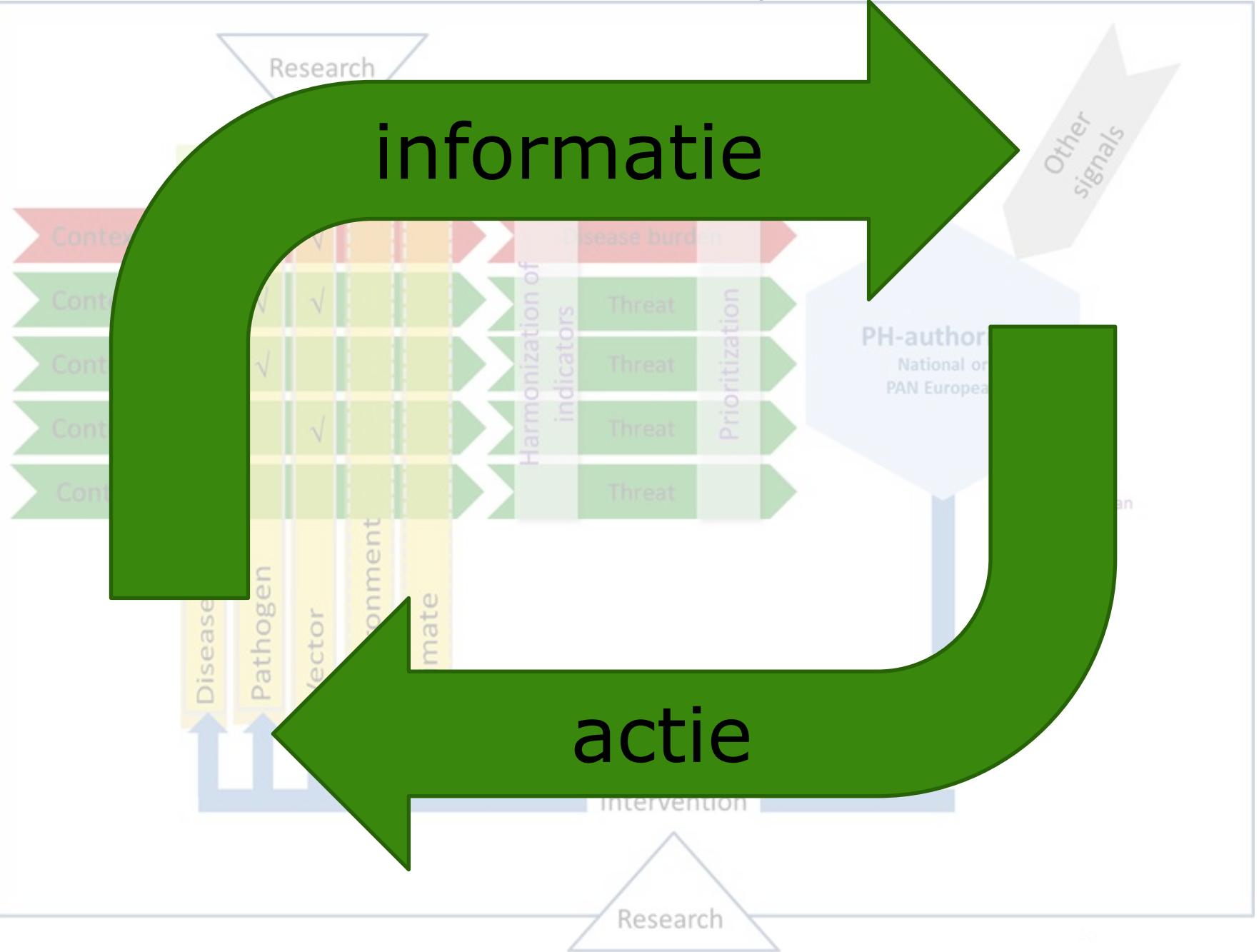
✓ West Nijl koorts





SURVEILLANCE

Surveillance feedback system



informatie

PH-authority
National or
PAN European



actie

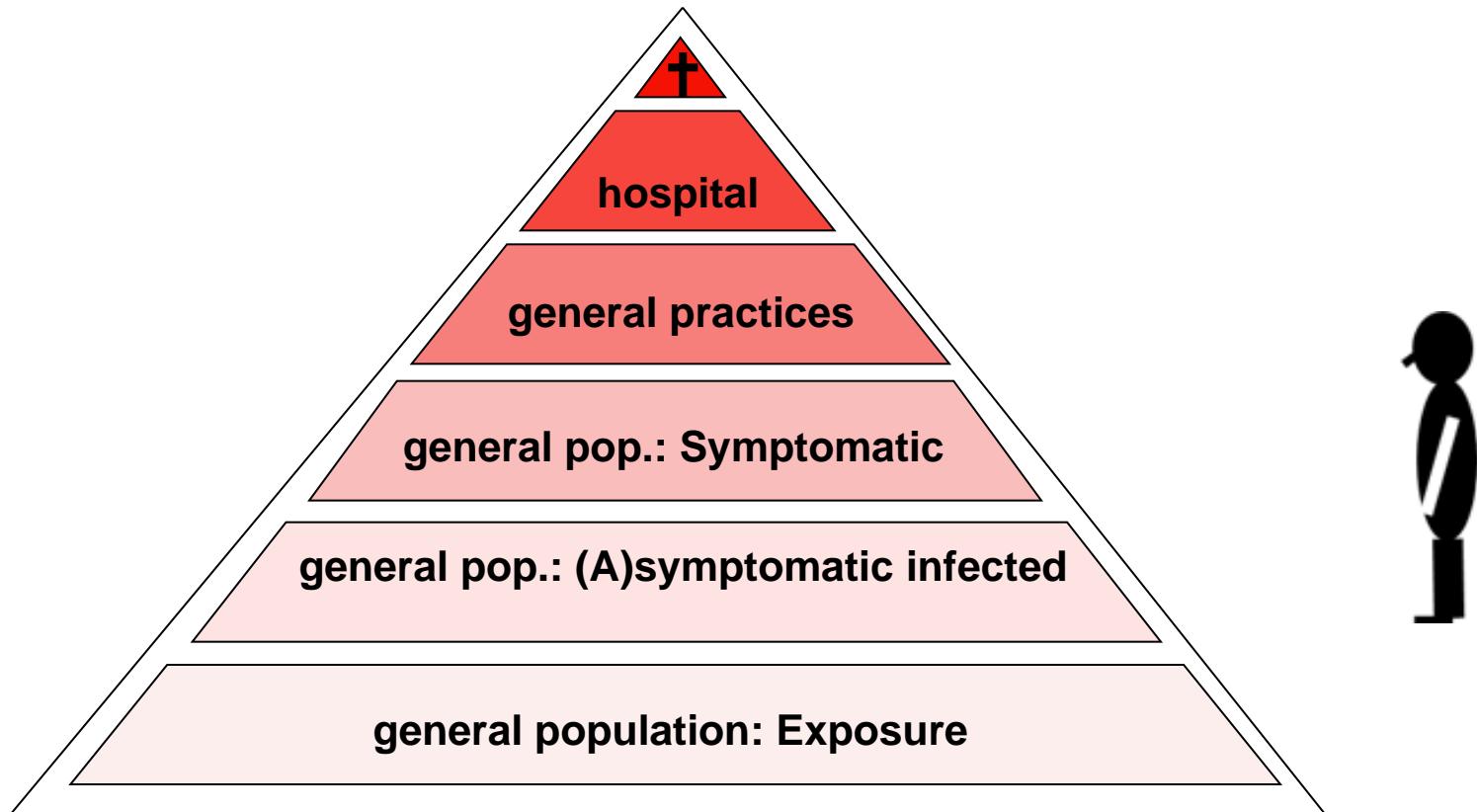
Research

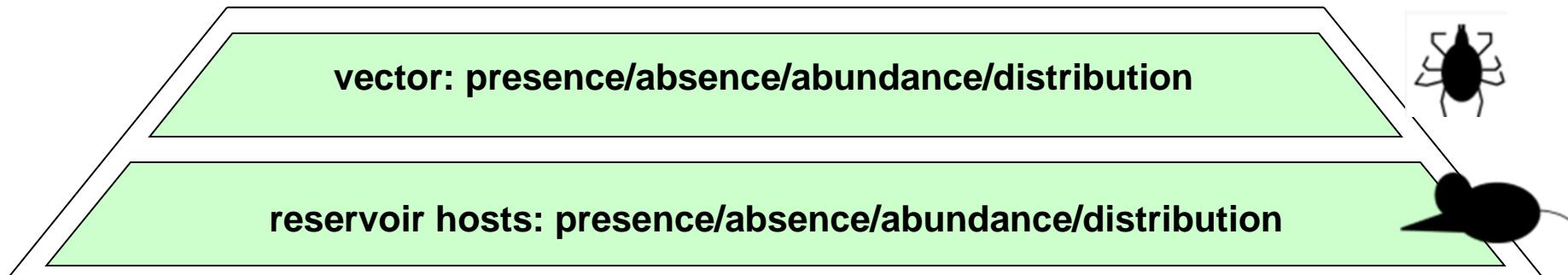
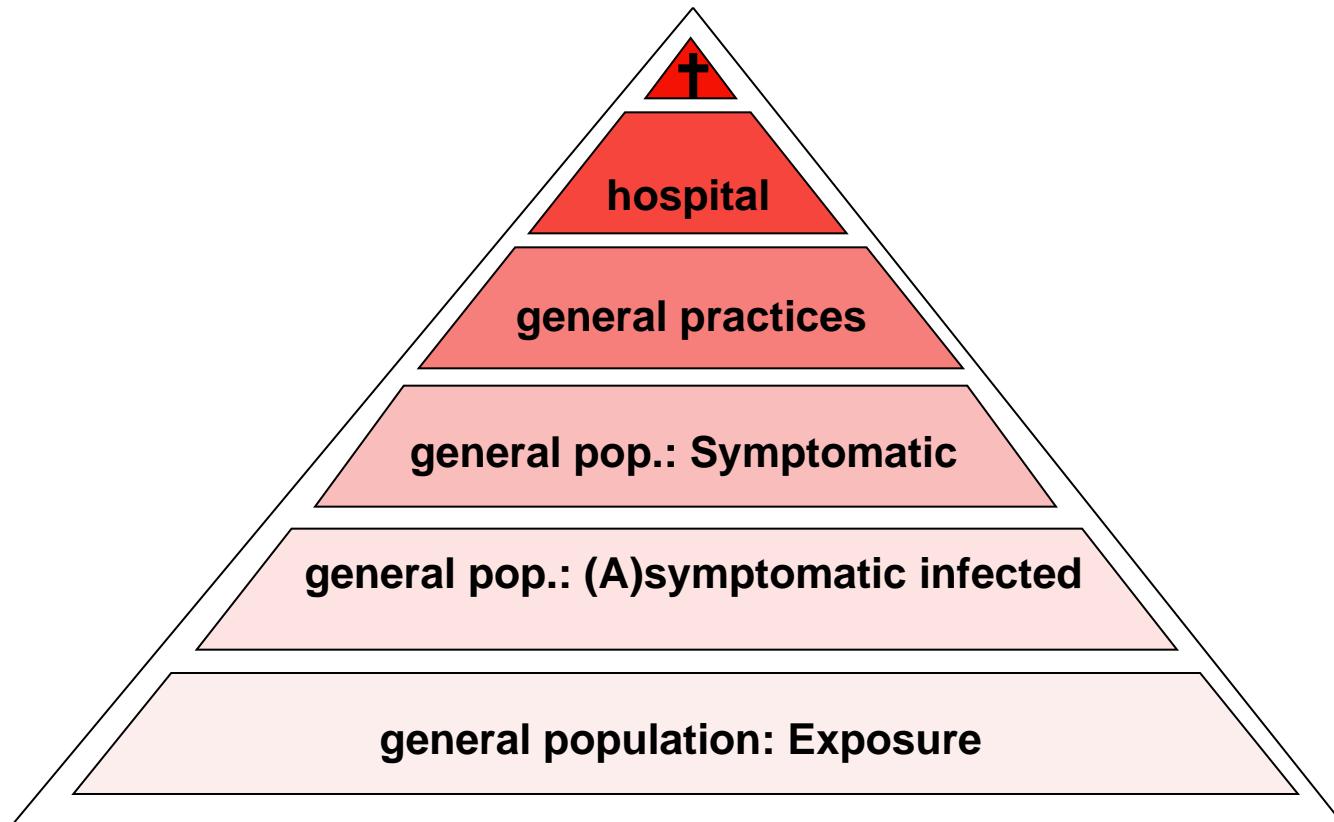


Data collectie

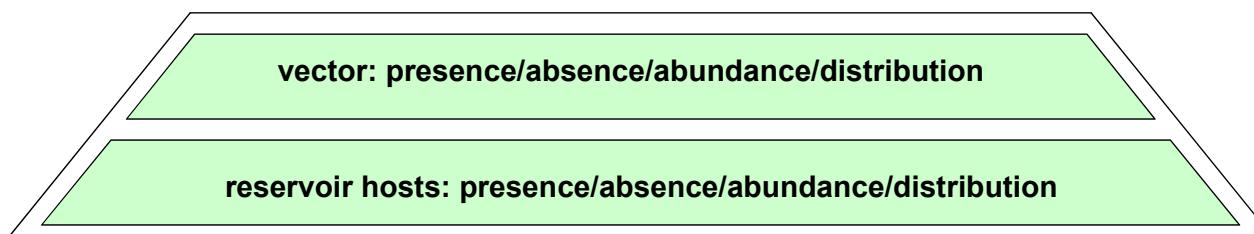
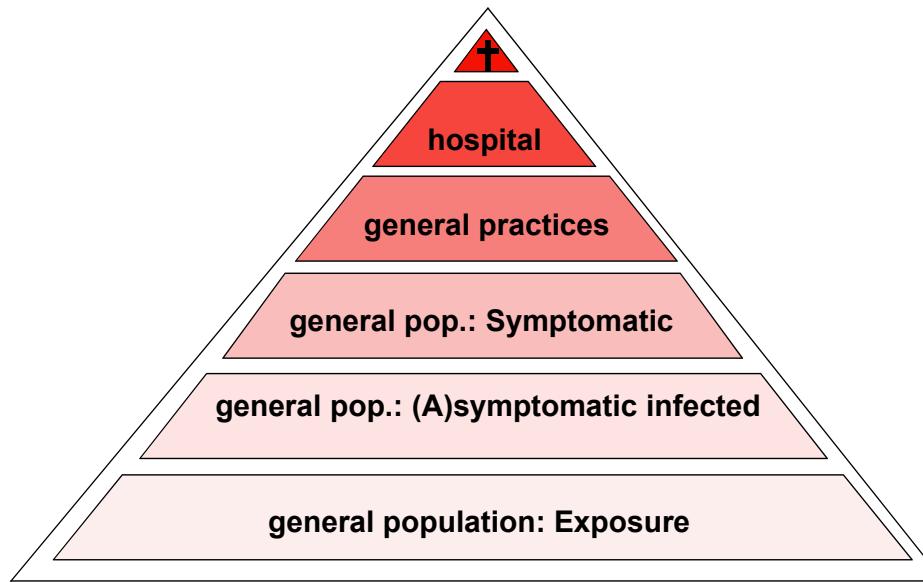
- Pathogeen data-collectie.
- Serologische data-collectie
- Klinische data-collectie
- Syndroom data-collectie
- Risico data-collectie

Surveillance is **informatie voor actie**





ziektelast
drieling

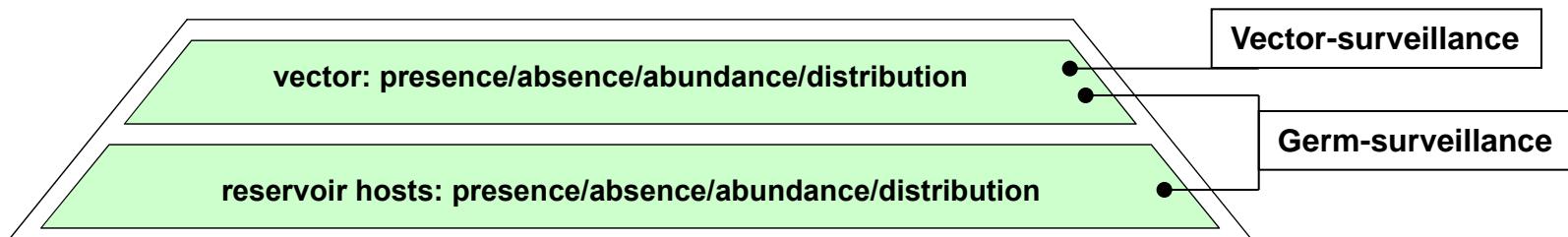
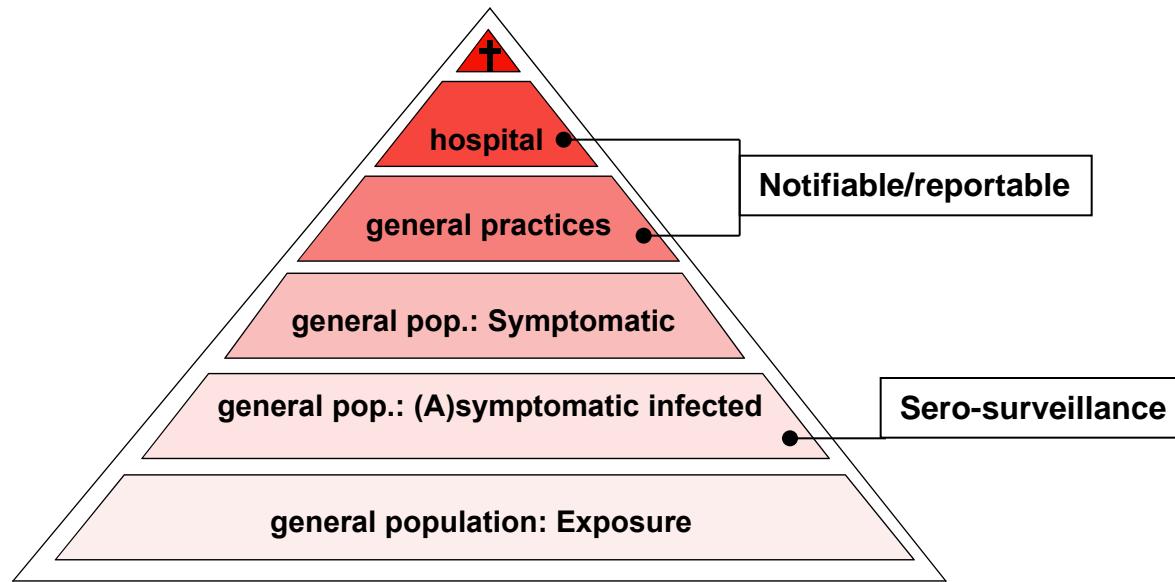


Interventie

Surveillance

ziektelast

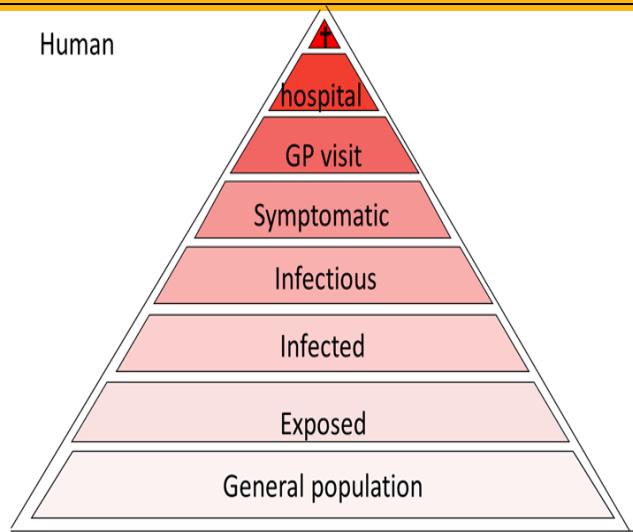
dreiging



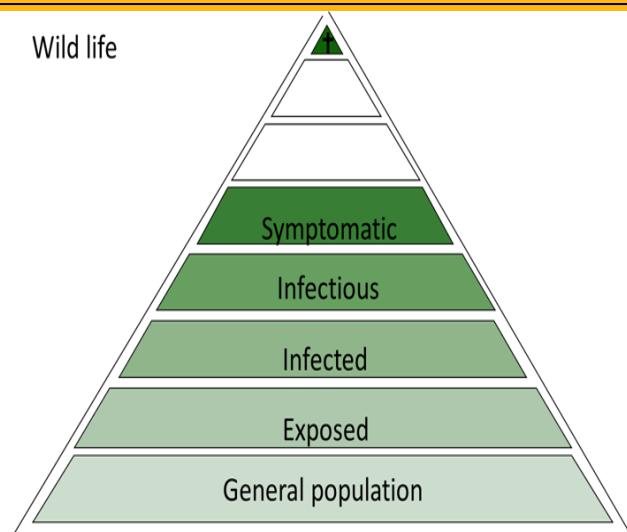
BOUWSTENEN VOOR SURVEILLANCE



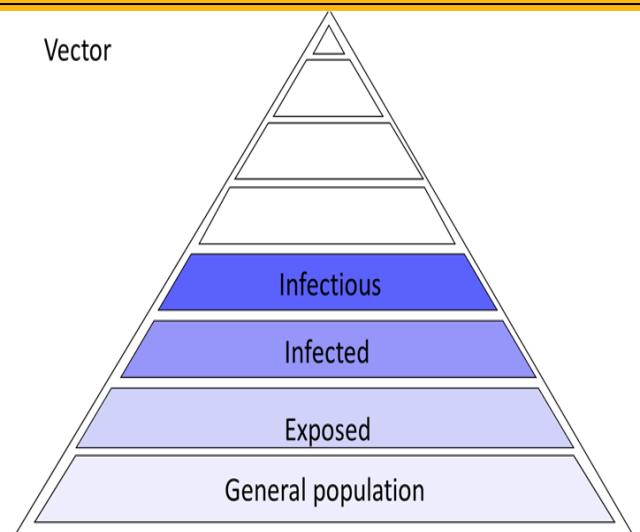
Human



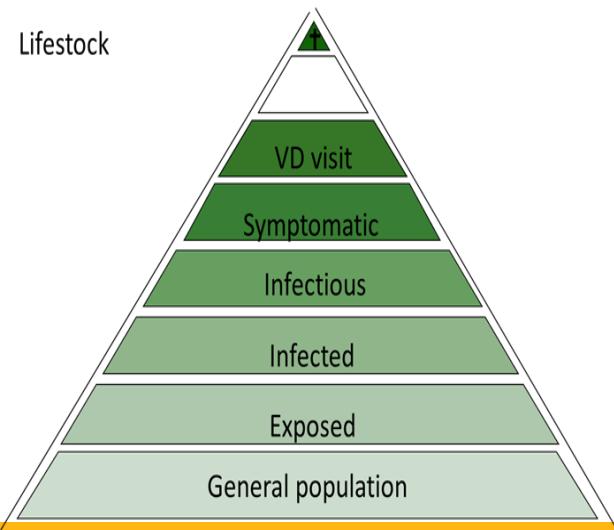
Wild life



Vector

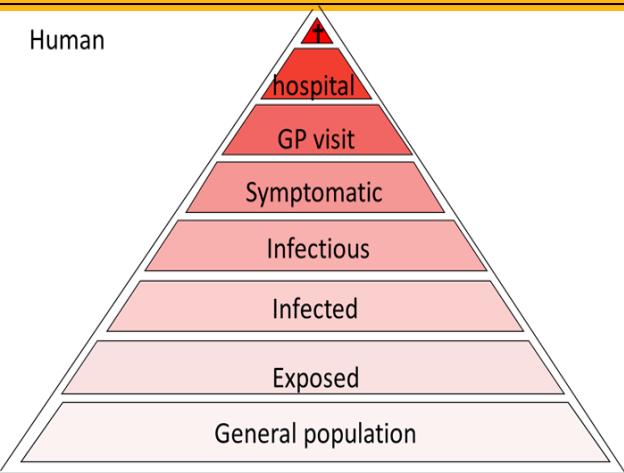


Livestock

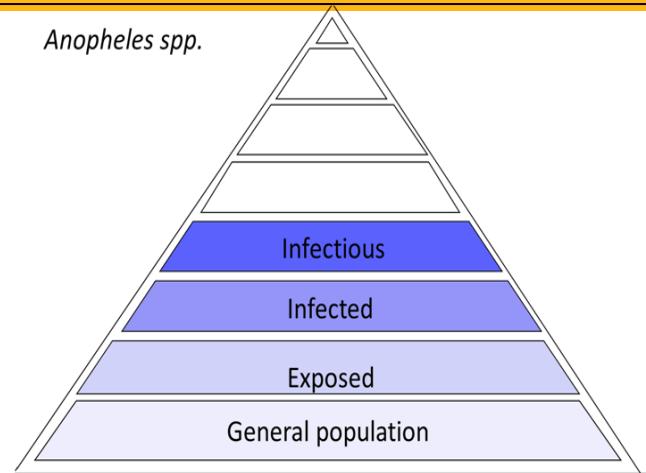


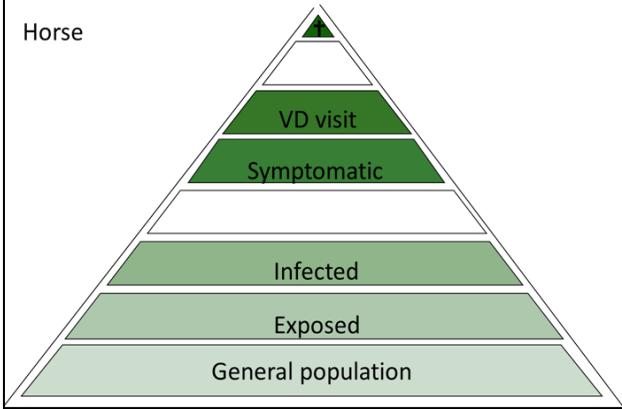
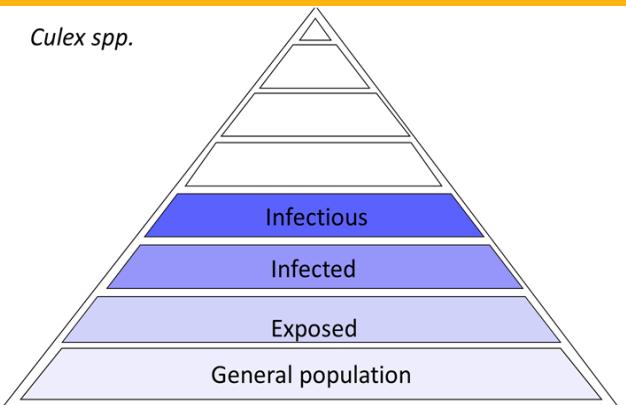
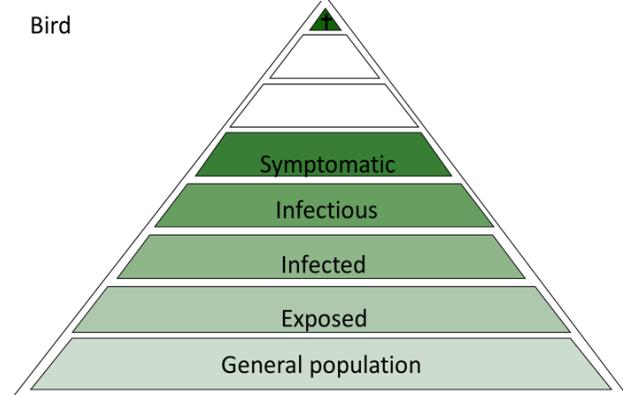
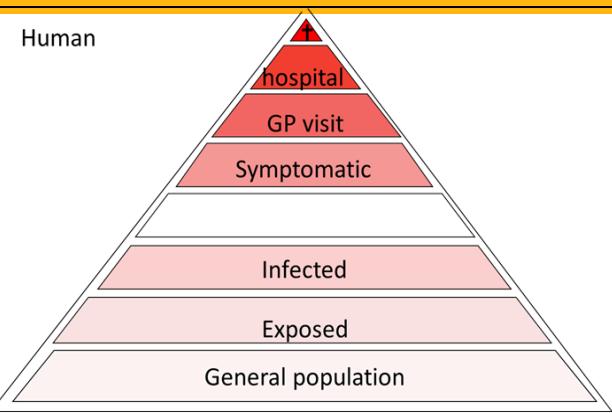


Human

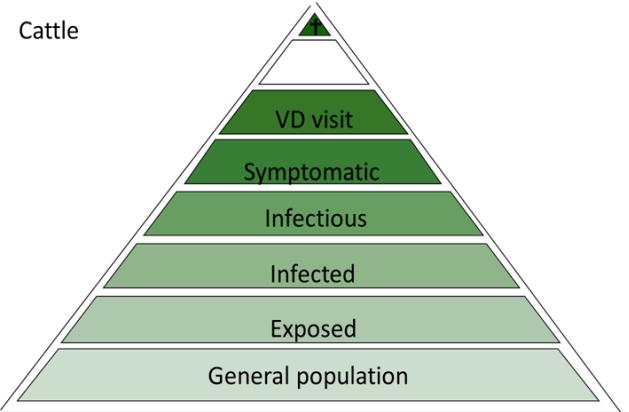
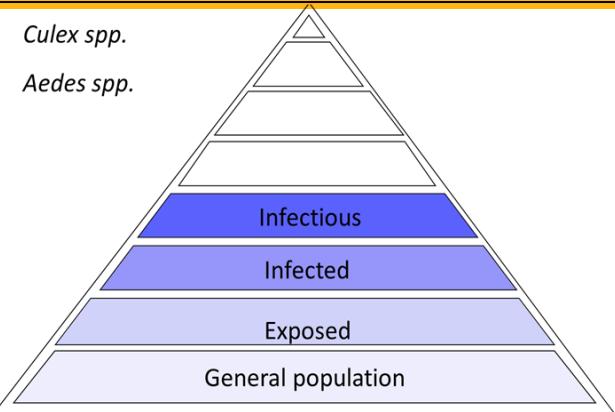
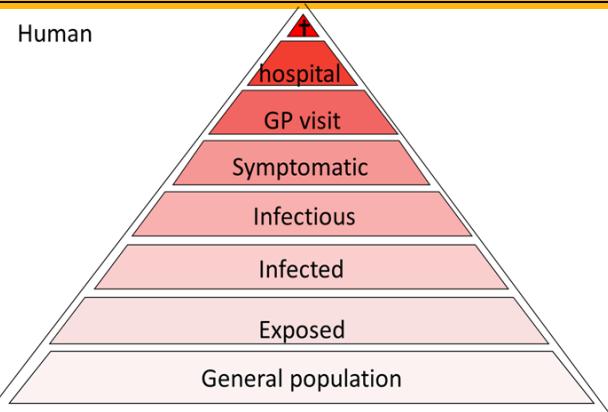


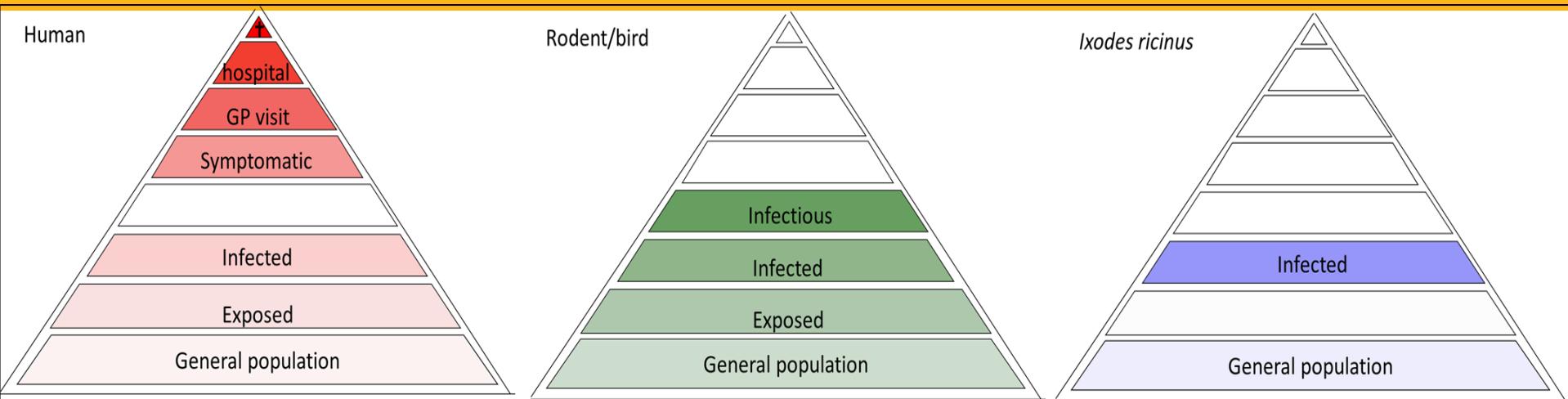
Anopheles spp.

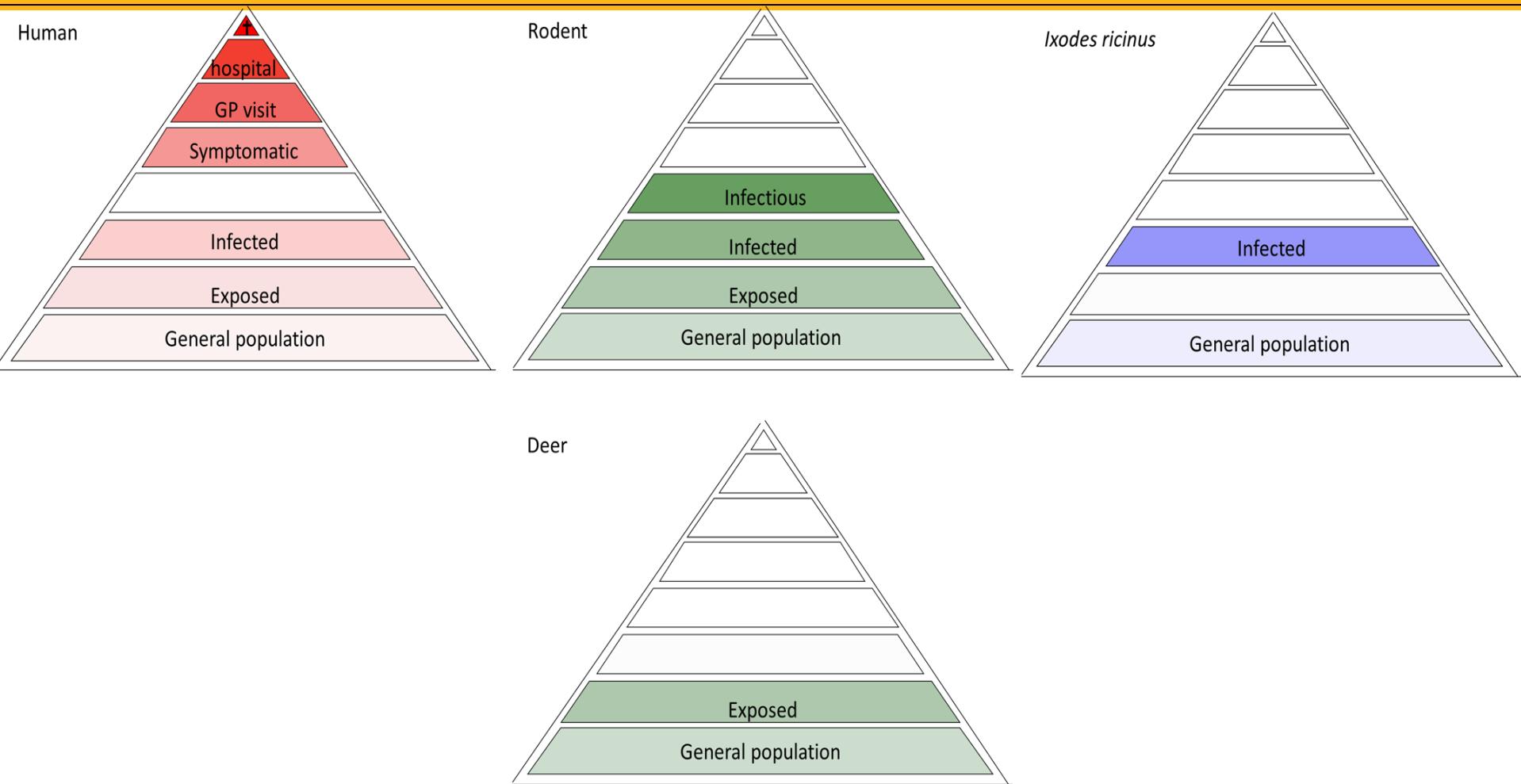




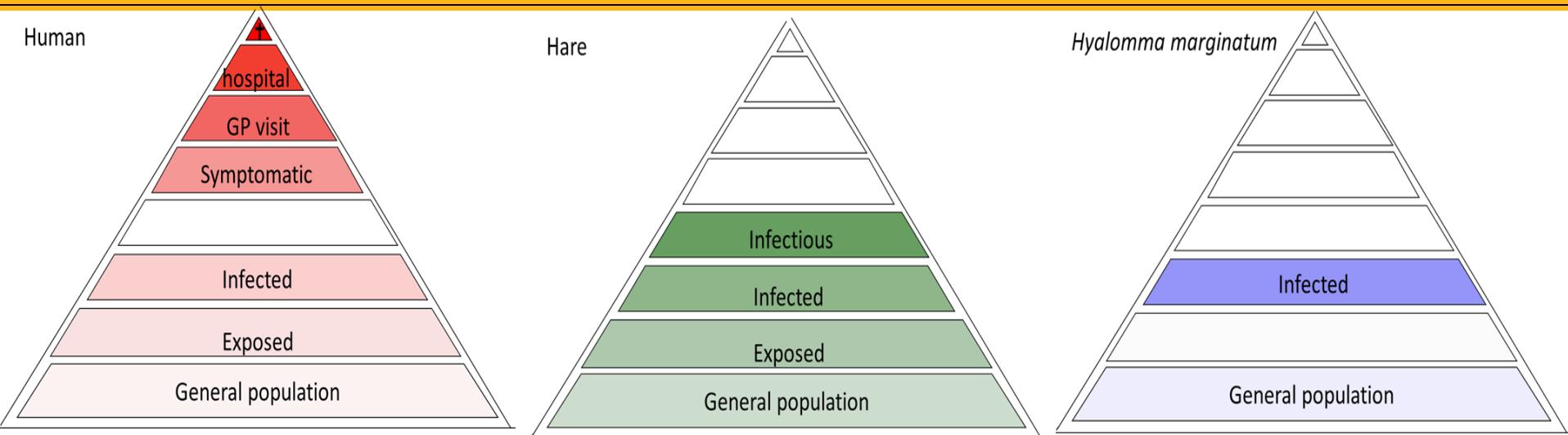
Rift Valley koorts





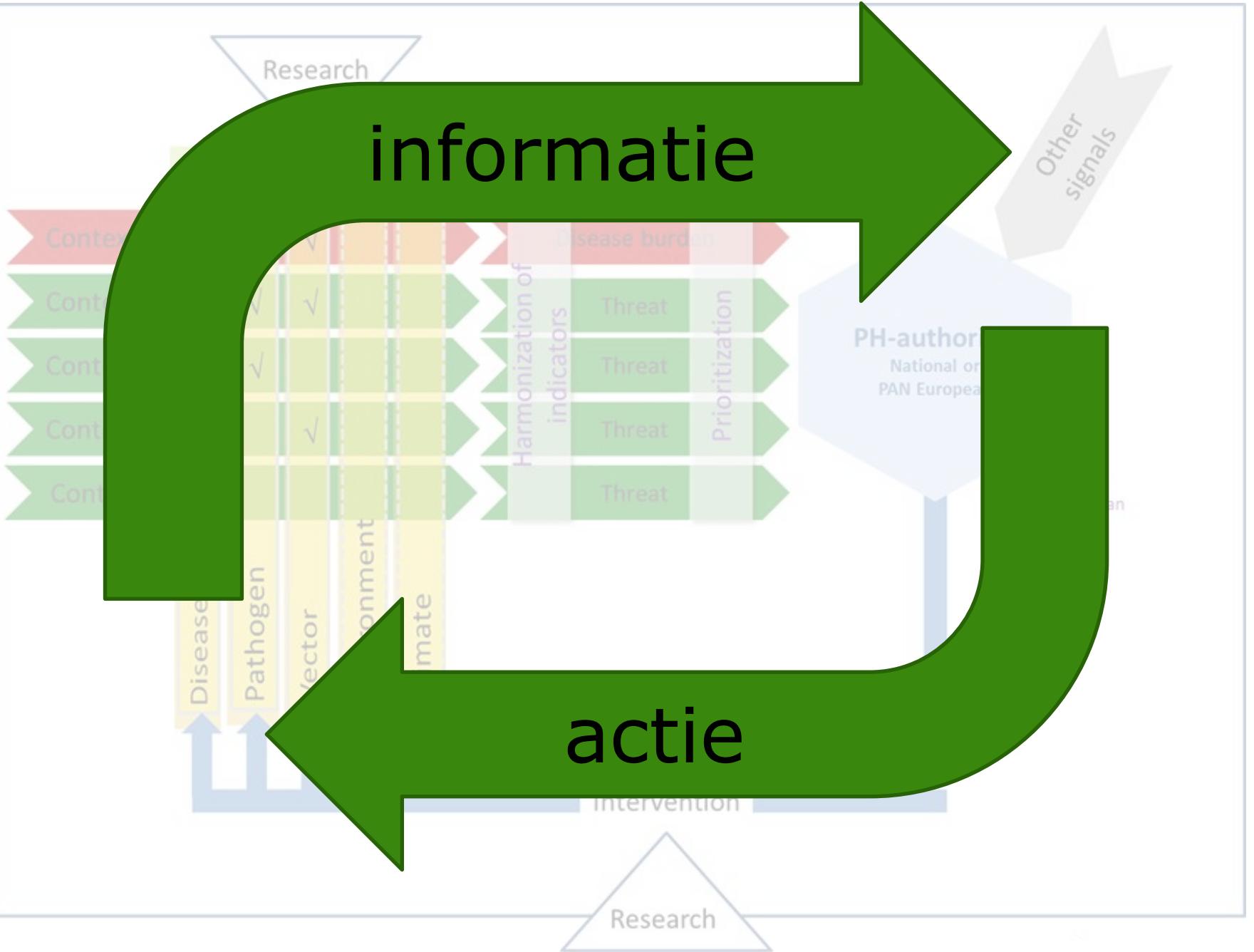


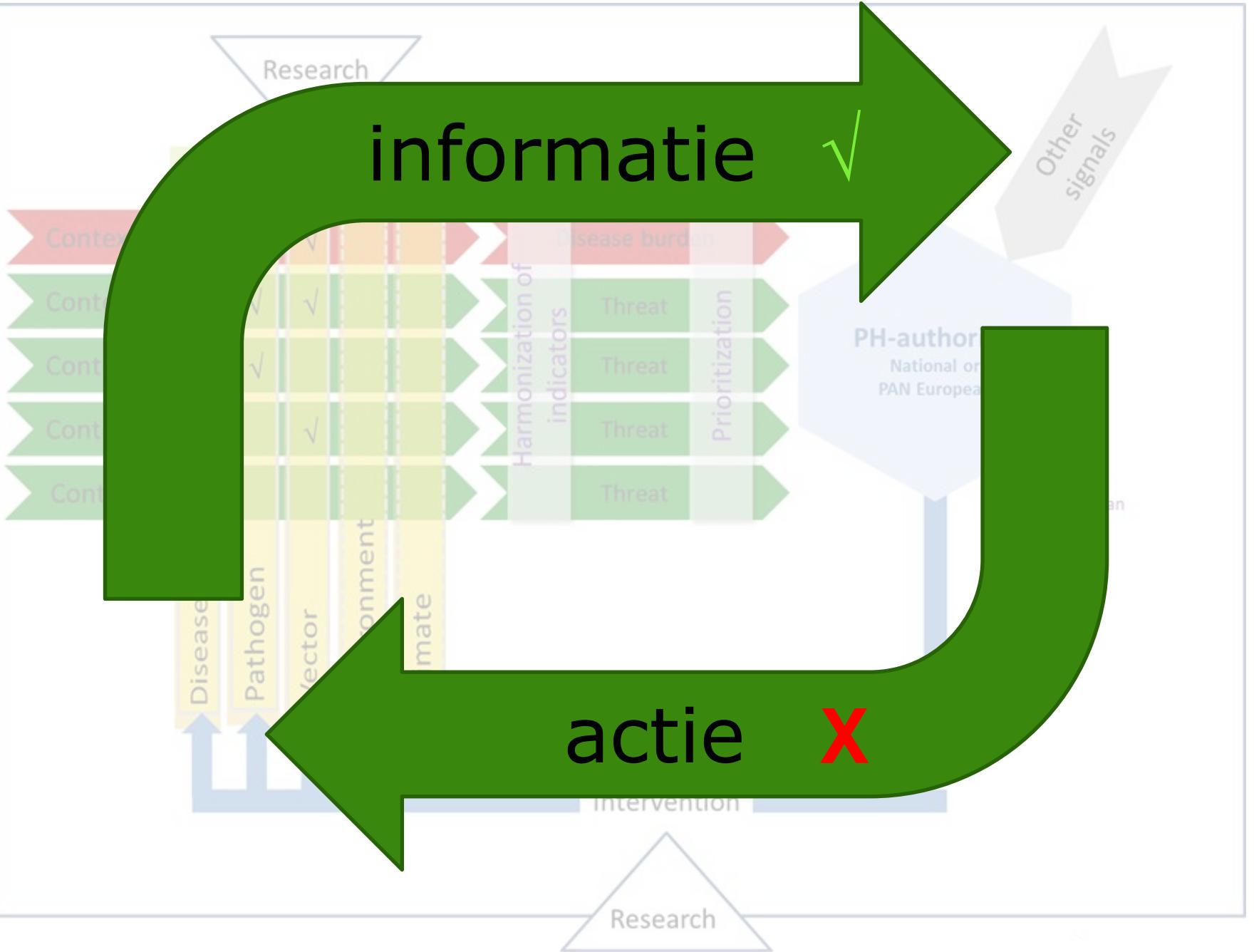
Krim Congo haemorrhagische koorts





Integrale aanpak van zoonoses







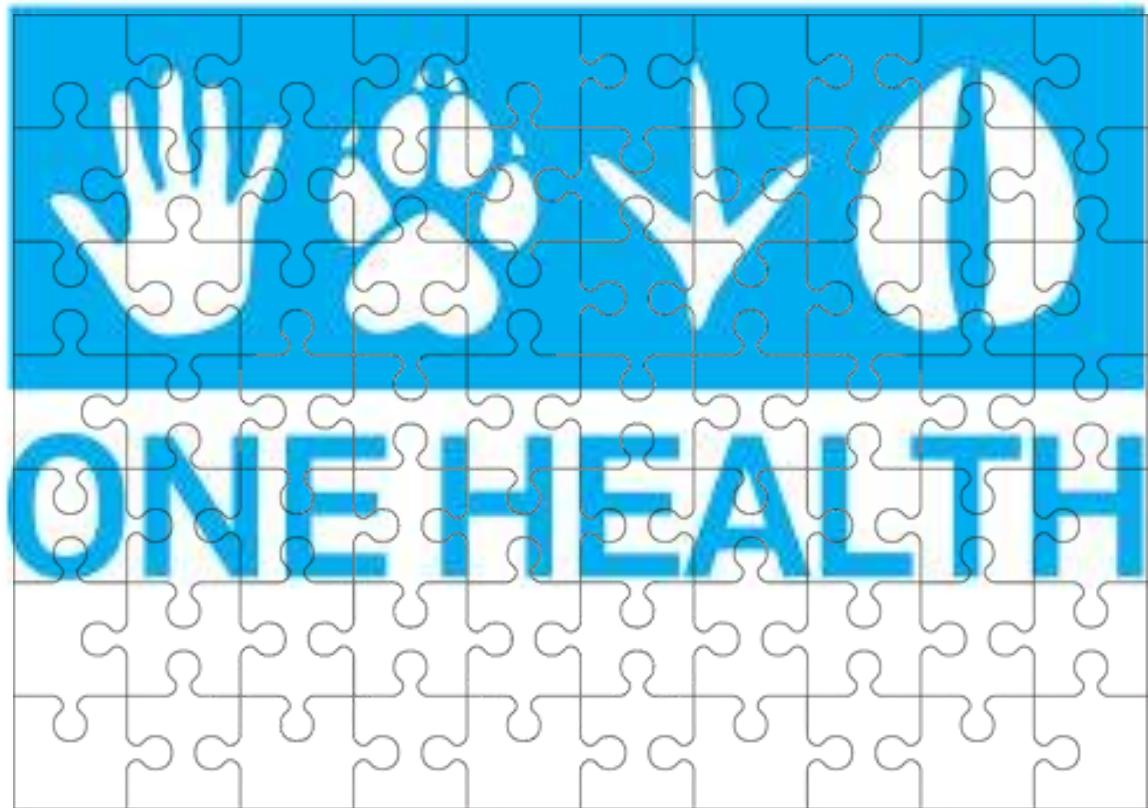
Integrale aanpak van zoonoses

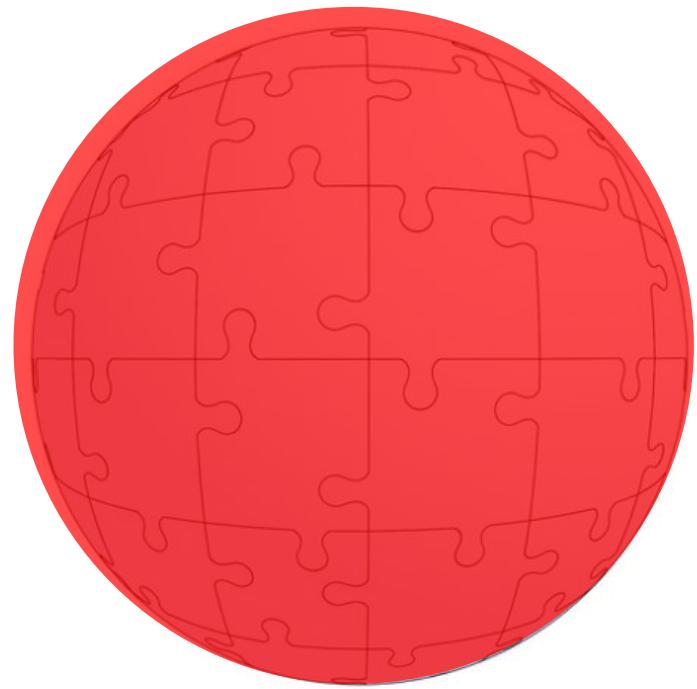
Vaak lastig, omdat vaak ook hulp nodig is
van stakeholders
buiten het health domein



Integrale aanpak van zoonoses

Aanhaken en haken aan One Health

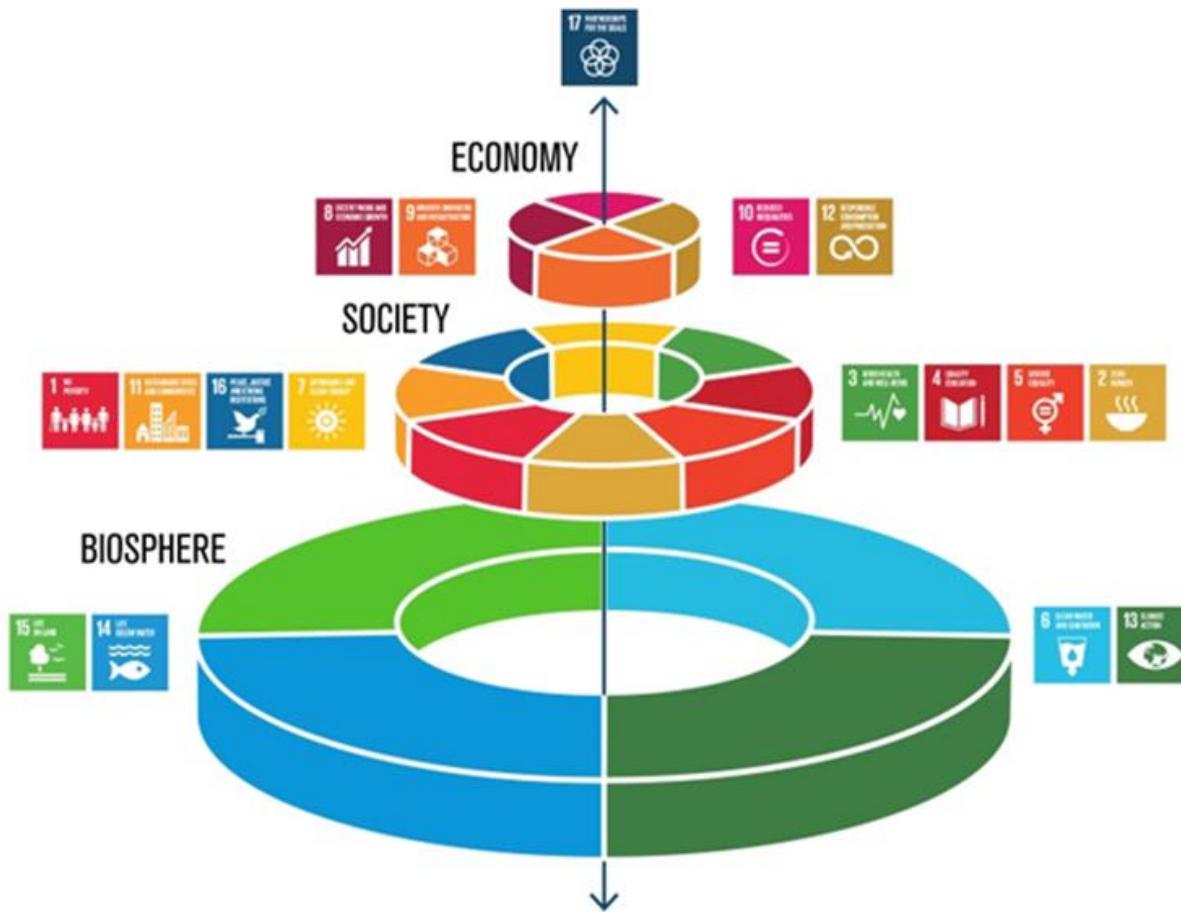




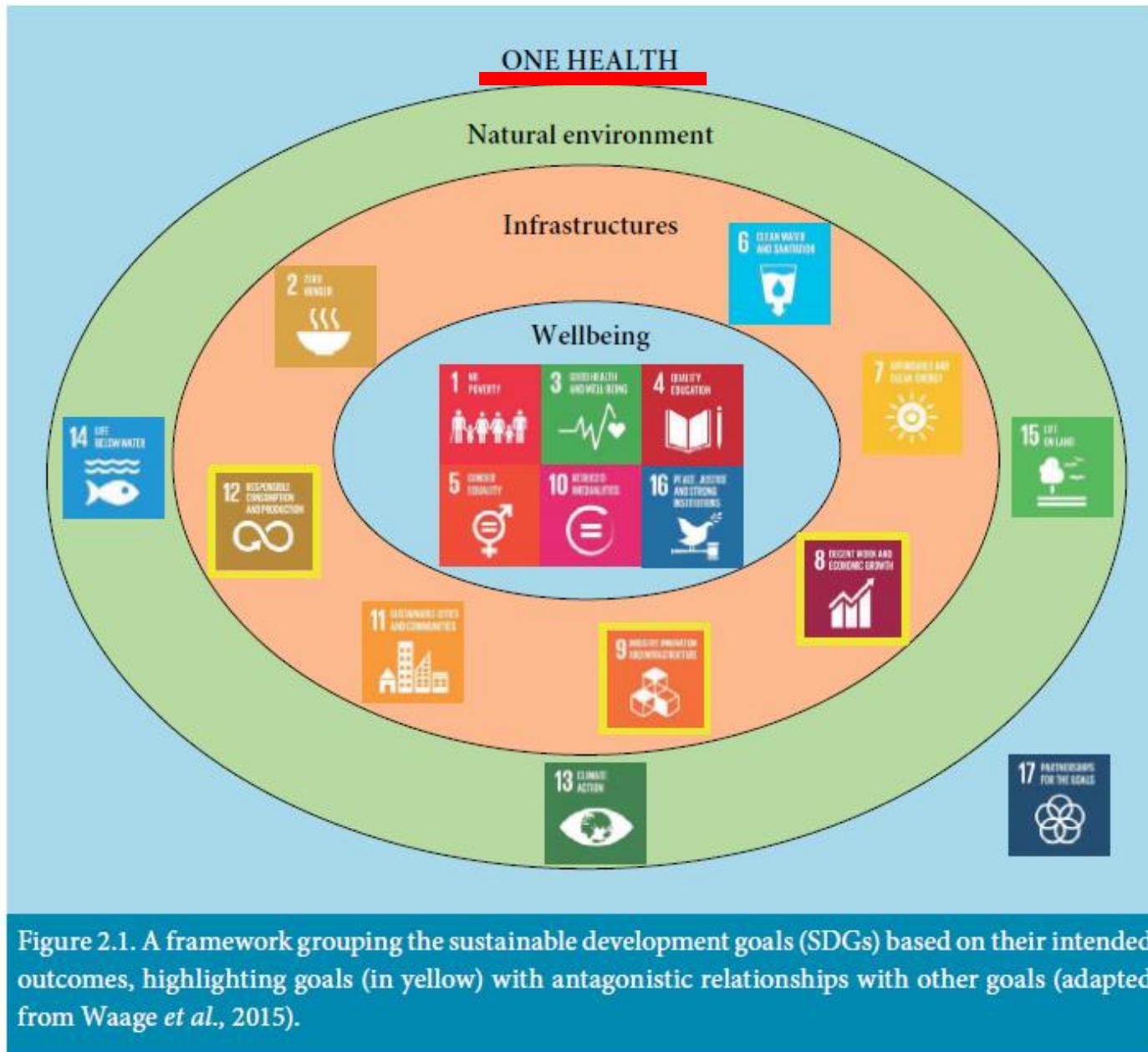


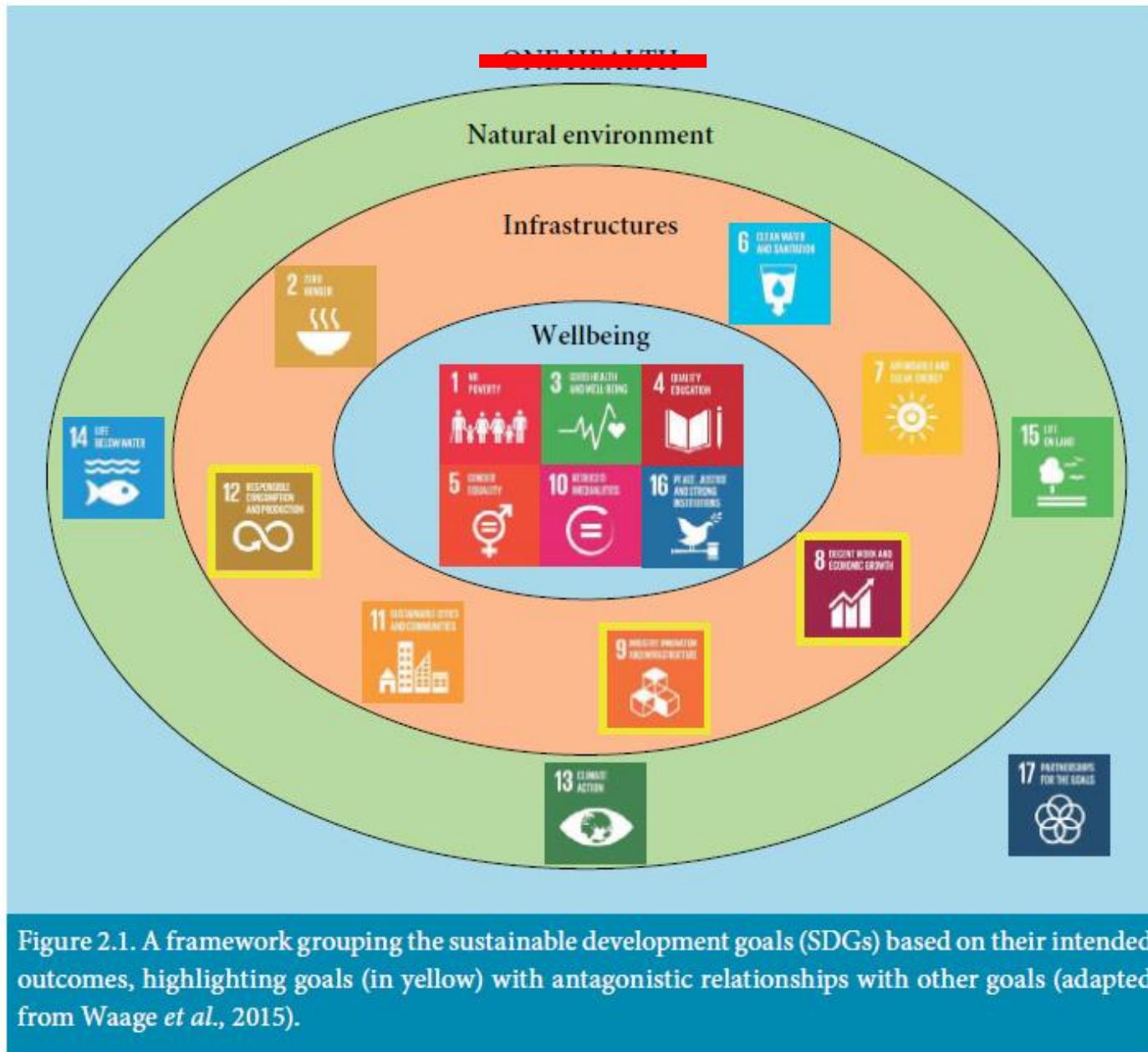


SUSTAINABLE DEVELOPMENT GOALS



Graphic by Jeroen Coenraadse







SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS

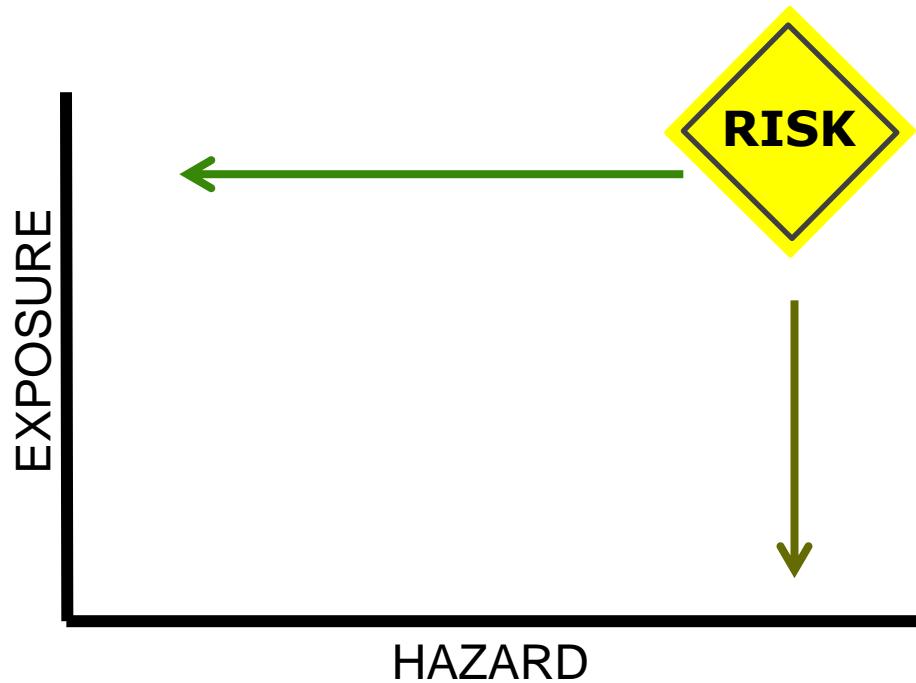


17 PARTNERSHIPS FOR THE GOALS



SUSTAINABLE
DEVELOPMENT
GOALS

INTERVENTIE / RISICO REDUCTIE





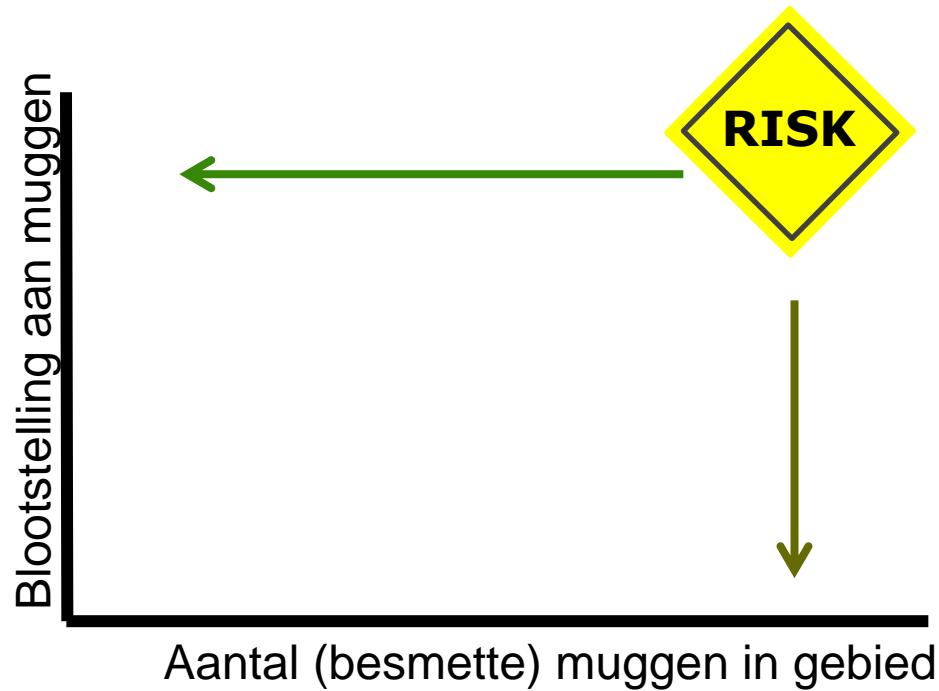
SUSTAINABLE
DEVELOPMENT
GOALS

Dengue

Lyme

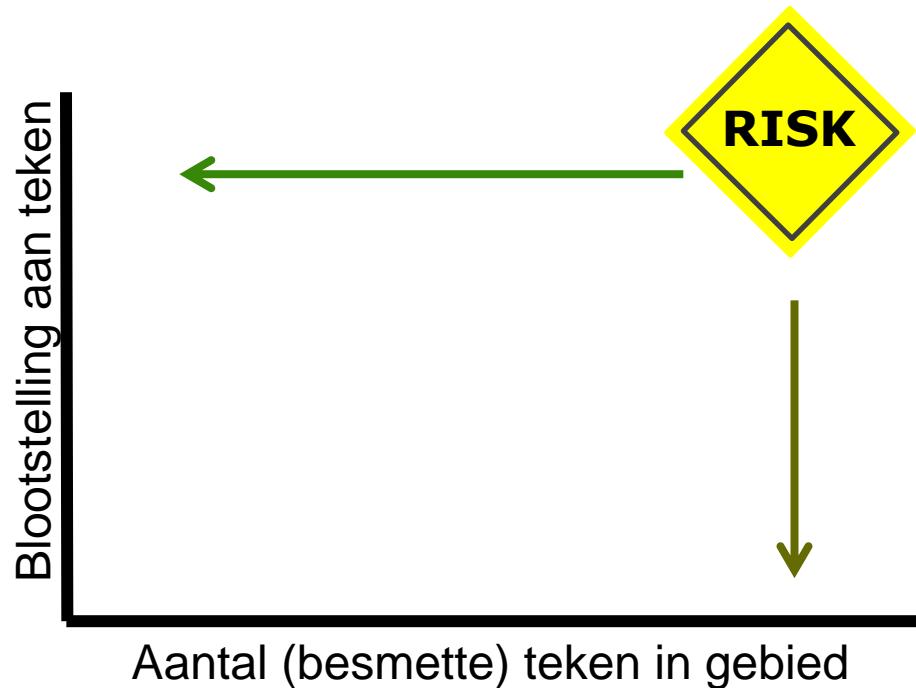


Dengue





Ziekte van Lyme





SUSTAINABLE DEVELOPMENT GOALS



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



6 CLEAN WATER AND SANITATION



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND

Dengue

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

3.D Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

Lyme

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

13.2 Integrate climate change measures into national policies, strategies and planning.



Making vector-borne disease surveillance work: Changing our perspectives

1 **Marieta Braks^{1*}, Giorgia Giglio², Laura Tomassone², Hein Sprong¹, Teresa Leslie³**

2 ¹ Center for Zoonoses and Environmental Microbiology, National Institute for Public Health and
3 the Environment, Bilthoven, The Netherlands

4 ² Dipartimento di Scienze Veterinarie, Università degli Studi di Torino, Torino, Italy

5 ³ Eastern Caribbean Public Health Foundation, Oranjestad, Sint Eustatius

6 *** Correspondence:**

7 Dr. Marieta Braks
8 Marieta.braks@rivm.nl

9 **Keywords:** vector-borne disease, surveillance, one health, sustainable development goals,
10 dengue, Lyme borreliosis

SUBMITTED DRAFT



Dus integratie is niet alleen
DELEN van info
maar ook

KIEZEN

Sustainable Development Goals

Tool not to forget and not to be forgotten



| | | Aanpassing | |
|-----------------------|-----|-------------|--------------------------|
| | | Ja | Nee |
| Acculturatiestrategie | Ja | Integratie | Separatie/ segregatie |
| | Nee | Assimilatie | Marginalisatie |
| Cultuurbehoud | | | |

Criteria for Successful Collaboration

based on *Ziad Abdeen* Professor and Founder Al-Quds Nutrition and Health Research Institute CISEPO Program Director, Palestine



VectorNe_xt

Deliverables

| | |
|------------|--------------|
| Specific | Sensitivity |
| Measurable | Mutuality |
| Achievable | Appreciation |
| Relevant | Respect |
| Time bound | Trust |



VectorNe_xt

Community



National Institute for Public Health
and the Environment
Ministry of Health, Welfare and Sport



**Integrale aanpak van
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haken aan One Health**

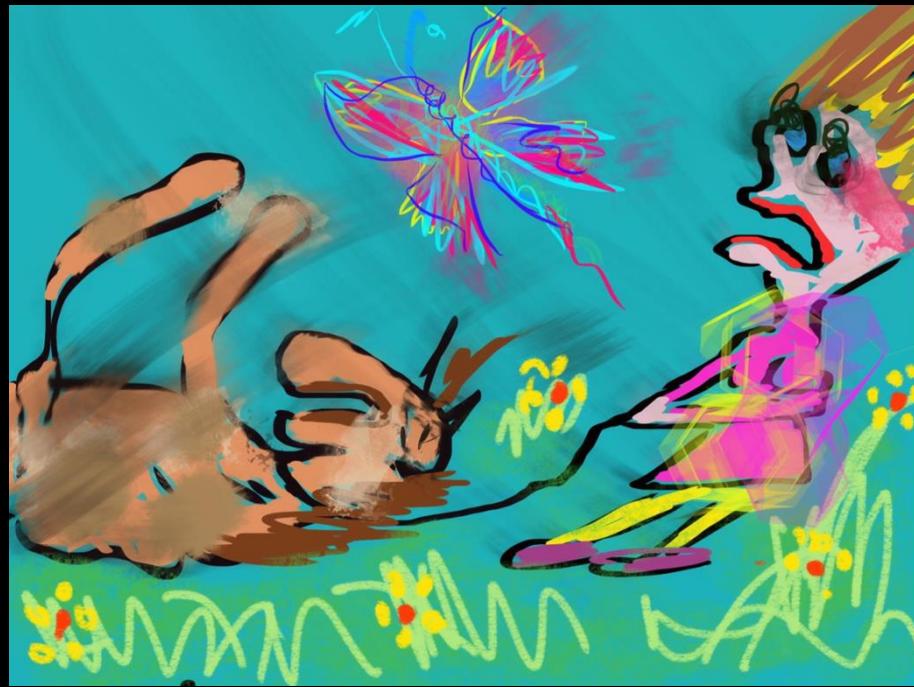
**Kiezen én delen:
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11 december 2018

Marieta Braks, Dr.
Medisch Entomologe



National Institute for Public Health
and the Environment
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**Integrale aanpak van
Zoönosen | *Aanhaken en
haken aan One Health***

**Delen én kiezen:
De uitdaging bij
integratie!**

11 december 2018

Dank u voor uw keuze