

**Questions to guide thinking:
How can environment influence health?
Are the SDGs interconnected within each other?**

**Hidden
treasure game
with post-its
[LO1]**



Icebreaker moment

Question

Do you consider that environment has an influence in your health?

Question

Do you consider that environment has an influence in animals' health?

Question

Do you know diseases that affect both humans and animals? Refer some diseases.

Question

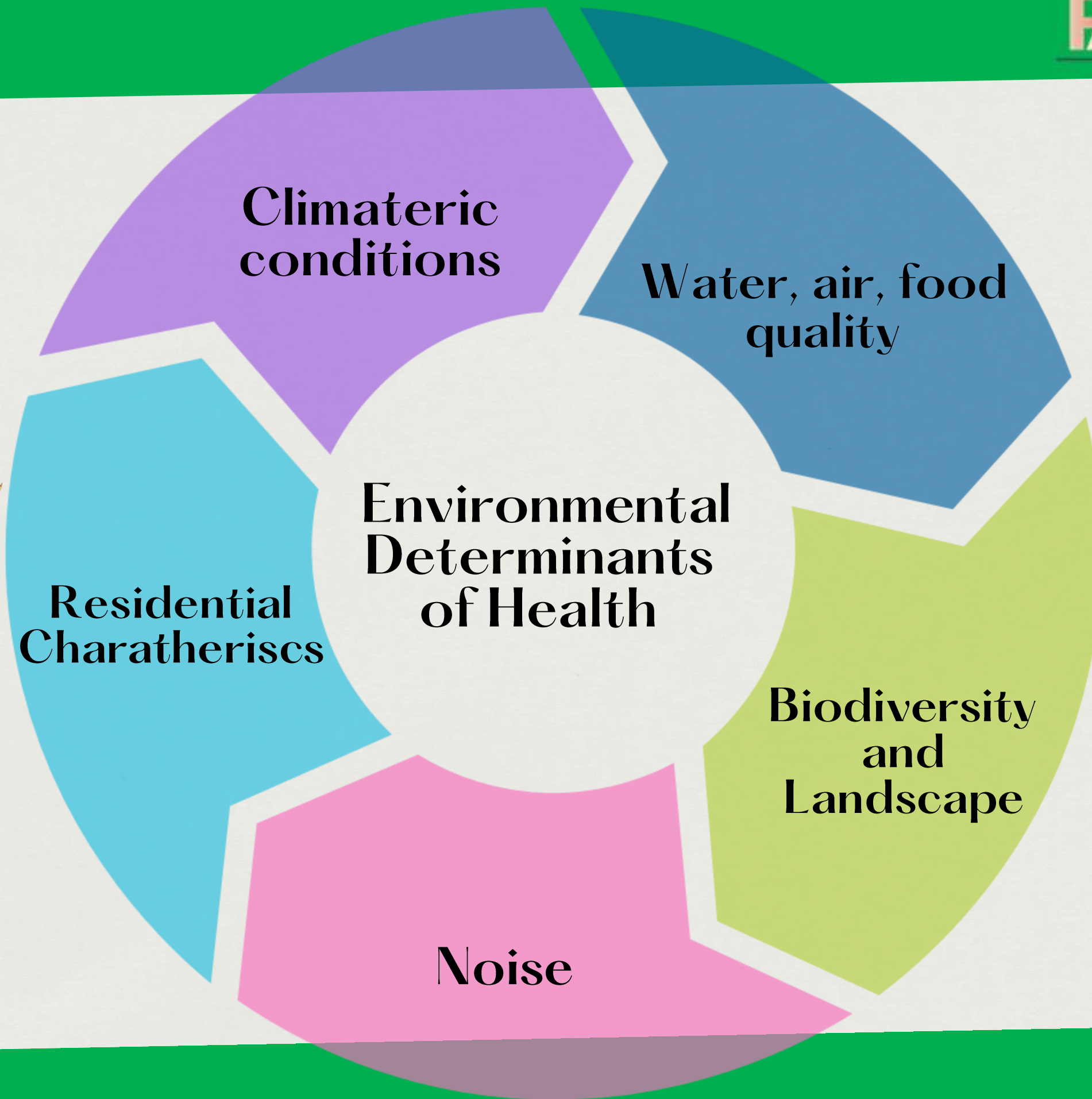
Which compartments of the environment may affect your health?

Question

Does the climate change affect humans' health?



**Environmental
determinants of
health
[DER1]**



Smart and green cities

[DER2]



THE GLOBAL GOALS



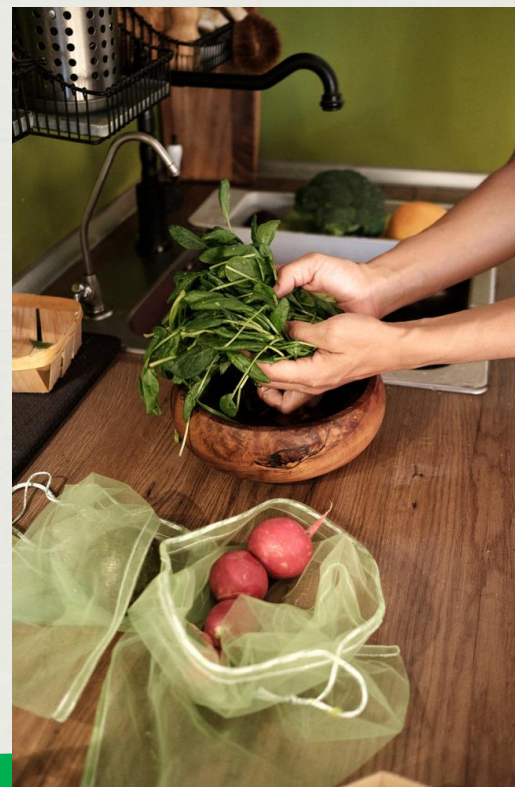
SDG 3 – Good health

SDG 6 – Clean water and sanitation

SDG 11 – Sustainable cities and communities

SDG 12 – Responsible consumption and production

SDG 15 – Life on land



Main determinants of health linked to Sustainable Development Goals [DER3]



SDG 3, SD7 and SDG 13
[DER4]



THE GLOBAL GOALS

3 GOOD HEALTH AND WELL-BEING



7 AFFORDABLE AND CLEAN ENERGY



13 CLIMATE ACTION



SDG 3
connected with
the other SDGs
[DER5]



Zoonotic diseases

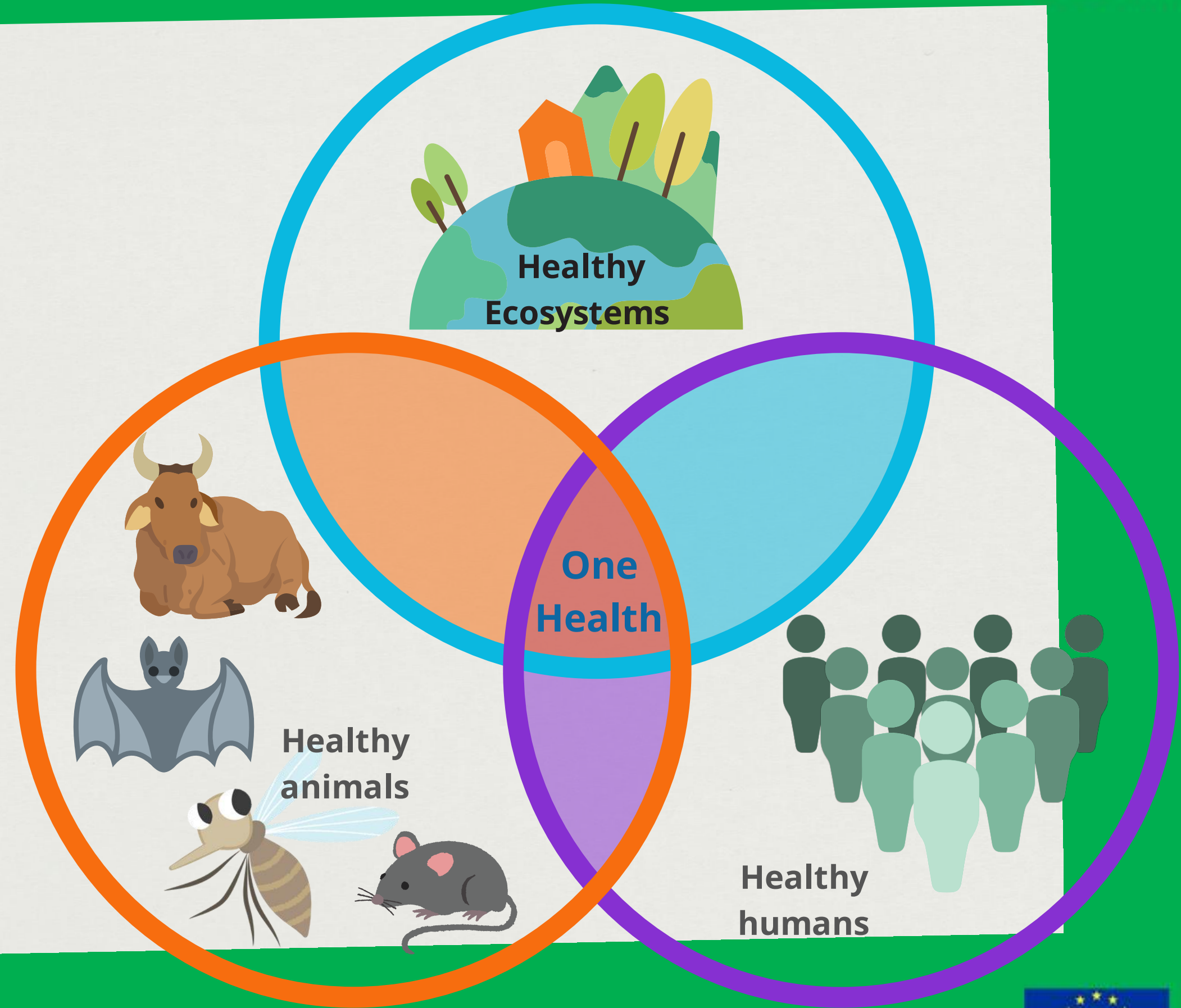
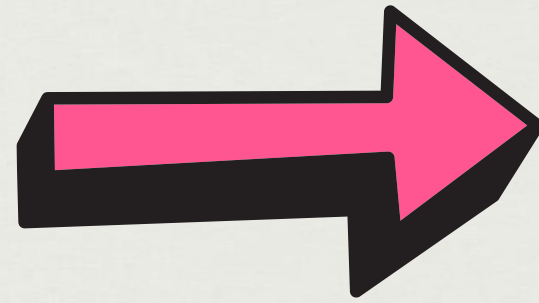
[DER6]



How zoonotic diseases are transmitted?



**One Health
[IDER7]**



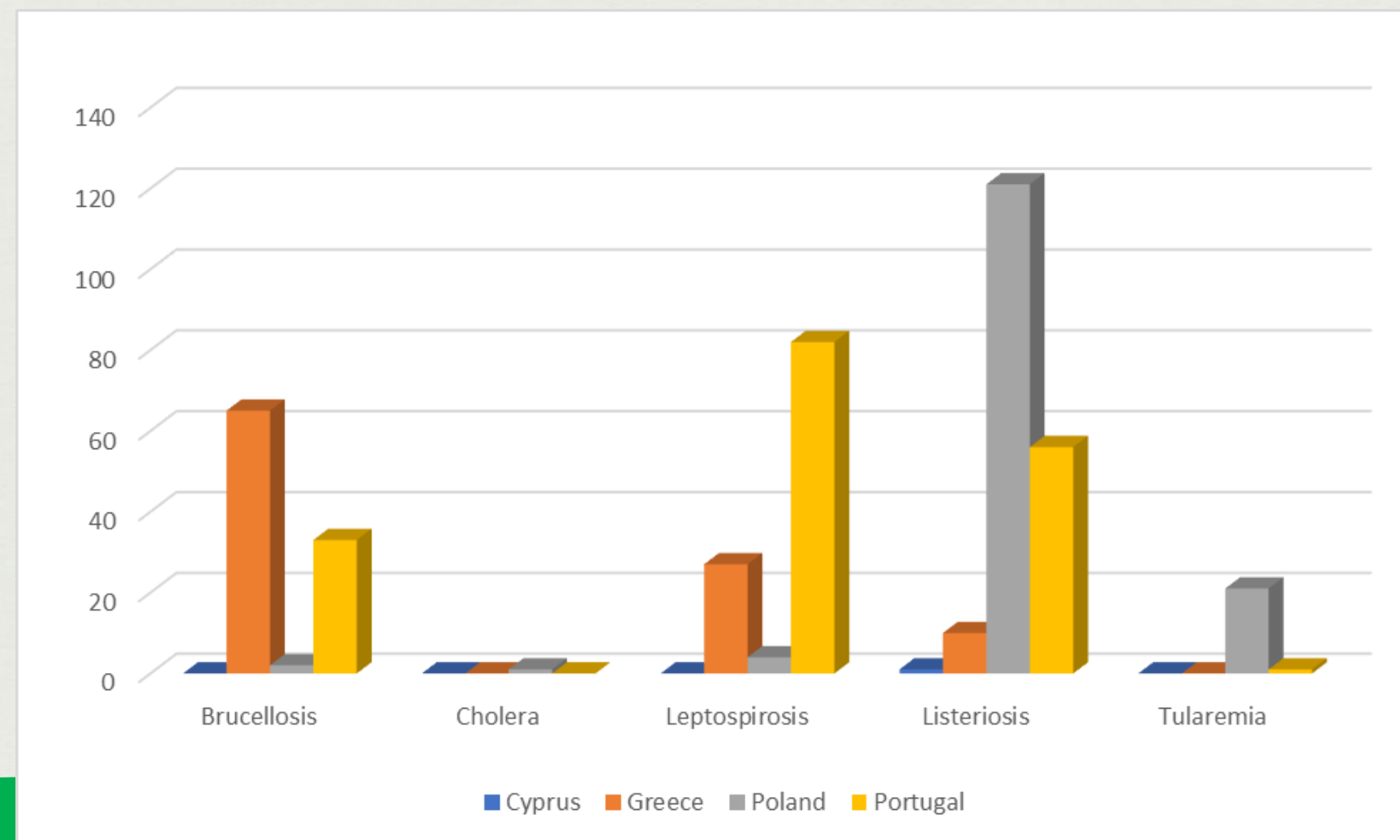
Number of reported cases in 2019

Zoonose	European Union	Cyprus	Greece	Poland	Portugal
Brucellosis	310	0	65	2	33
Cholera	26	0	0	1	0
Leptospirosis	1049	0	27	4	82
Listeriosis	2621	1	10	121	56
Tularemia	1280	0	0	21	1
Campylobacteriosis	220639	21	366	715	887
Salmonellosis	89050	62	643	8373	432



Data from surveillance systems for zoonotic diseases

[DER8]



**Concepts
related with
climate change
(cards game)**

[LO2]



Group 1

climate
change

Group 2

greenhouse
gases

Group 3

extreme weather
conditions

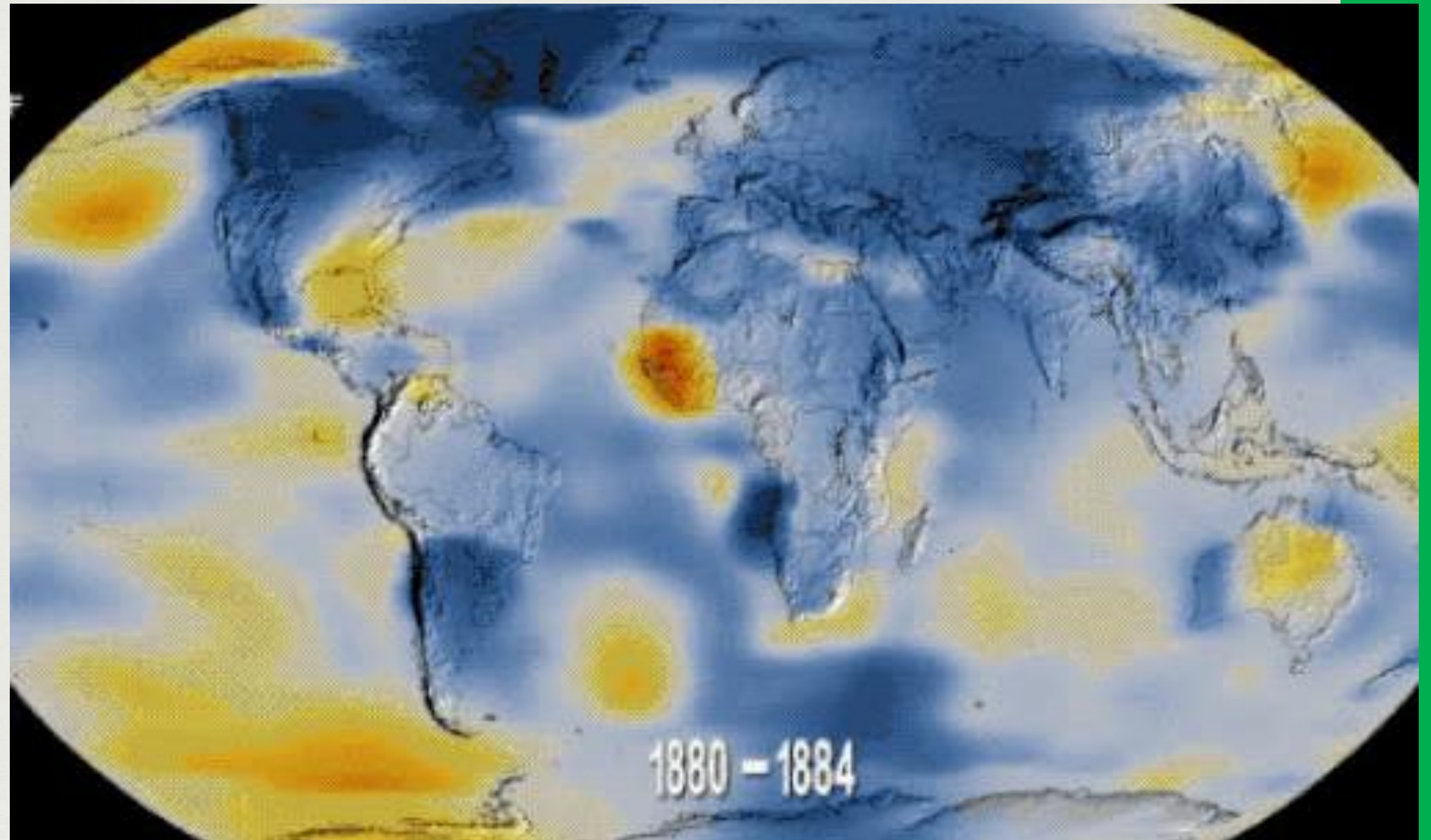
Group 4

sustainable
development
goal

Atmospheric Temperature Rise

What is climate
change?

[DER9]



1880 - 1884

How does climate change impact health?

[DER10]



Climate change is causing variety of impacts to our health, ecosystems and economy.

These impacts are likely to become more serious in the coming decades.

If not addressed, these impacts could prove very costly, in terms of ill health, adverse effects on ecosystems, and damaged property and infrastructure.

Climate-sensitive health risks

Health outcomes



Injury and mortality from extreme weather events



Heat-related illness



Respiratory illness



Malnutrition and food-borne diseases



Vector-borne diseases



Water-borne diseases



Zoonoses



Non-communicable diseases



Mental and psychosocial health

Health systems & facilities outcomes



Impacts on healthcare facilities and health systems



Decarbonization and health [DER11]



Decarbonization



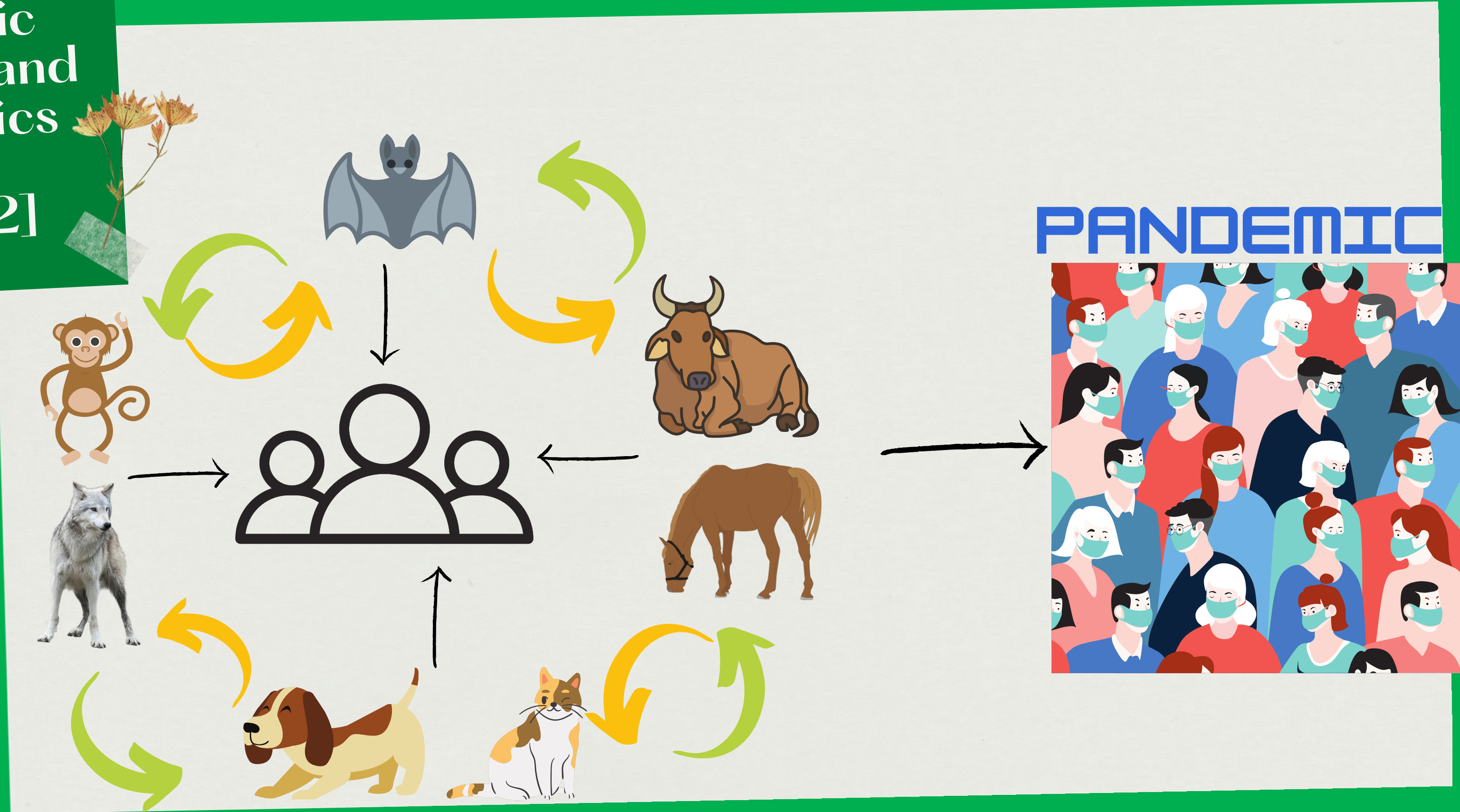
Reduced impact on climate



Reduced impact on health

Zoonotic diseases and pandemics

[DER12]



**From
epidemics to
pandemics**
[DER13]

Epidemic



- Event in which a disease is actively spreading
- Often used to describe problem that has grown of control

VS.

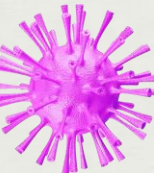
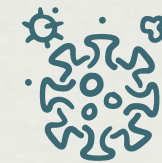
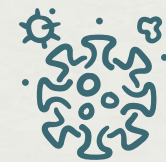
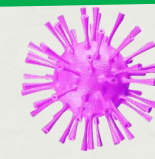
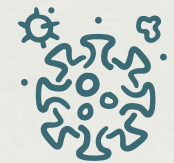
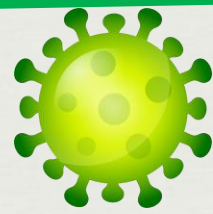
Pandemic



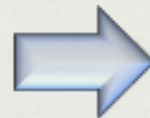
- Relates to geographic spread
- Describes disease that affects a whole country OR the entire world

Anthropogenic activities and pandemics

[DER14]



Microbes are a key part of wildlife diversity & often drive population dynamics



Anthropogenic environmental changes



Habitat loss
Increased interaction among animals & species, including humans



Deforestation
Pollution
Industrialization
Urbanization

Spillover among wildlife, livestock and people

Cards with mortality data from pandemics

[LO3]



Pandemics – Mortality data

Name

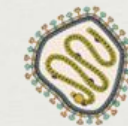
Antonine Plague

Time

165-180

Agent

Smallpox or measles viruses
Unknown!



Mortality

5 000 000

Pandemics – Mortality data

Name

Japanese smallpox epidemic

Time

735-737

Agent

Smallpox virus



Mortality

1 000 000

Template for infographics [DER16]

Control and Prevention (One Health)

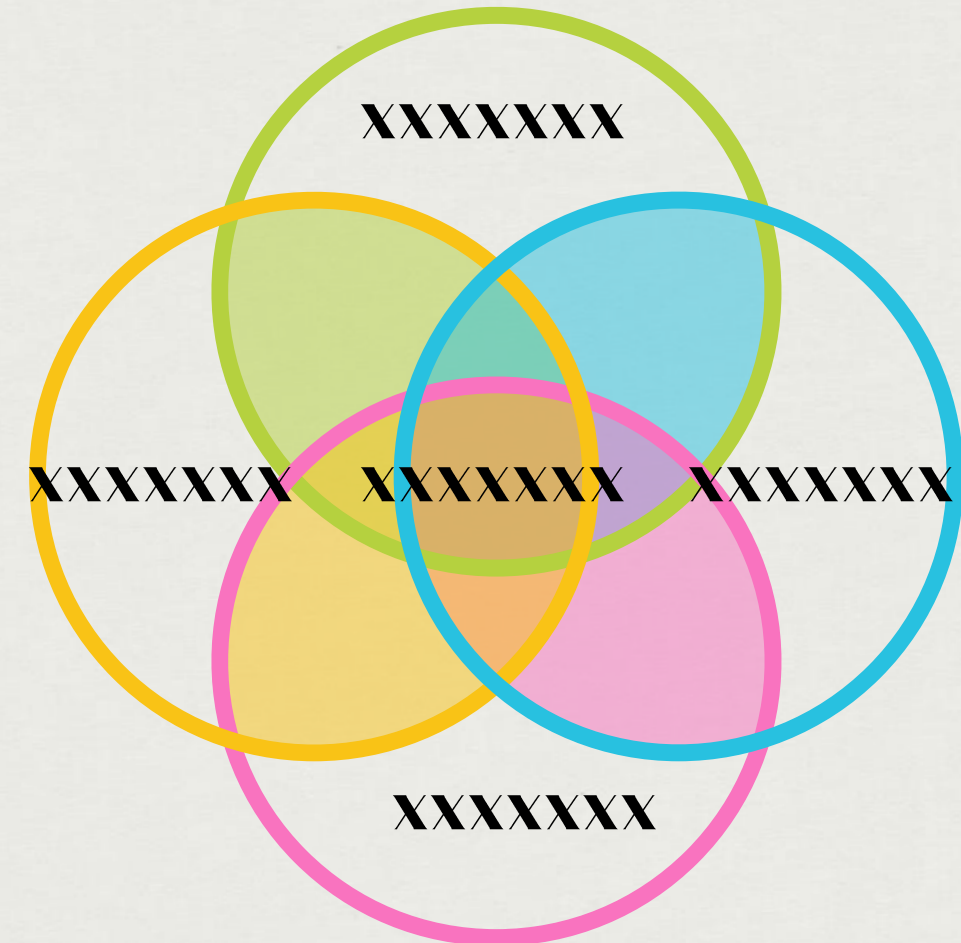
Zoonoses

XXXXXXXXXXXXXXXXXXXXXXXXXX

- XXXXXXXX
- XXXXXXXX

Transmission

XXXXXXXXXXXXXXXXXXXXXXXXXX



Template to brainstorm about climate change action in the community [DER17]

What can we do to change?

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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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Future actions in community

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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

What people said about these issues?

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