

# Bridging the Gap:

## A Review of Social and Ecological Determinants of Health in One Health Research



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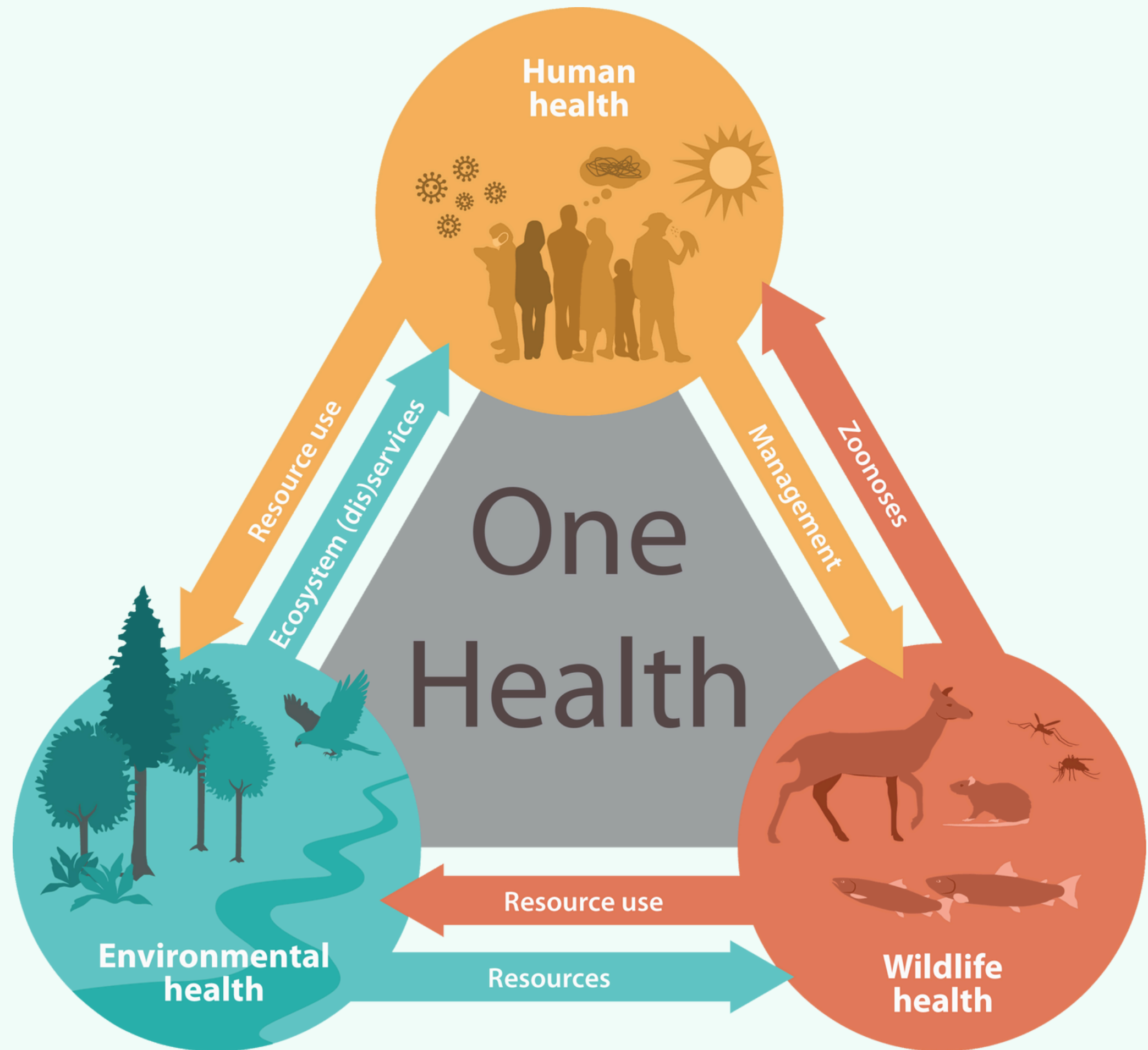
**Our world is  
increasingly  
connected and  
faces a variety of  
complex,  
interconnected  
health threats**

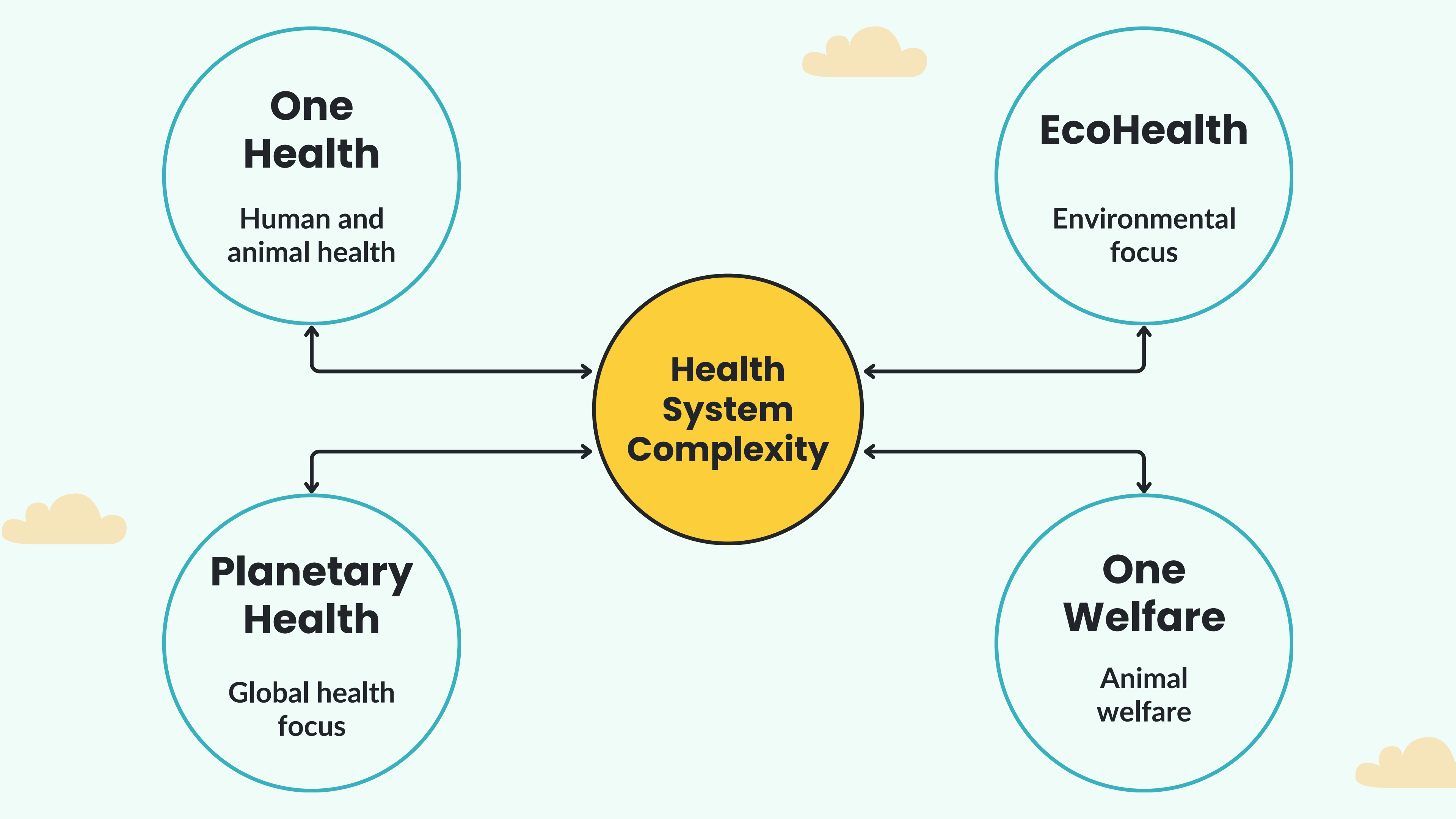




*“...an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems”*

**One Health** is one framework for understanding these systems and finding solutions







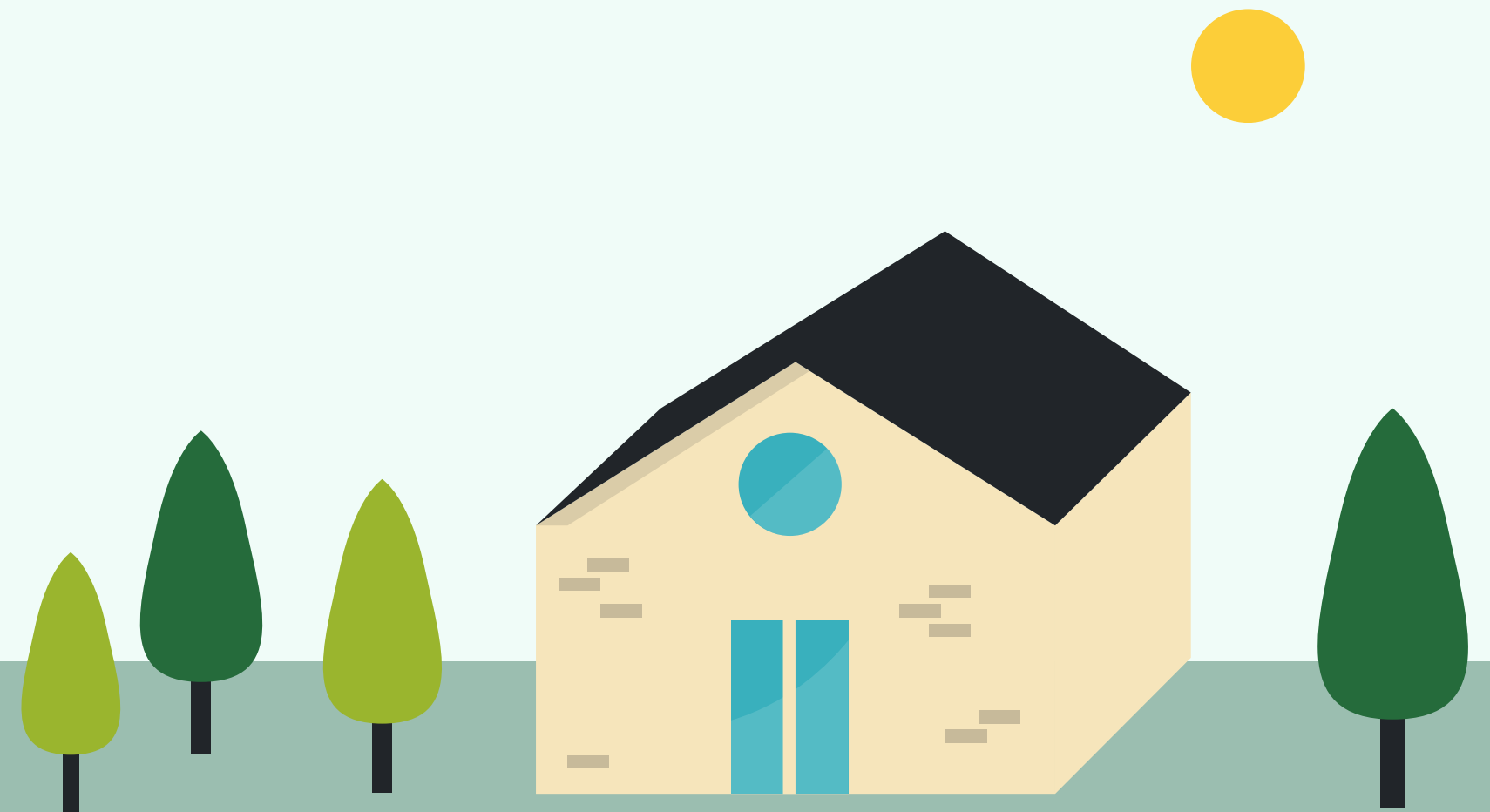
# **Social and Ecological Factors Drive Health Outcomes**





# Social Determinants of Health

Non-medical factors that  
influence health outcomes





# SDH



Income



Access to  
Health Services



Housing



Education



Unemployment



Social inclusion



Food security



# Ecological Determinants of Health

Earth's life-supporting systems...[that] encompass  
not just human needs, but the needs of all life





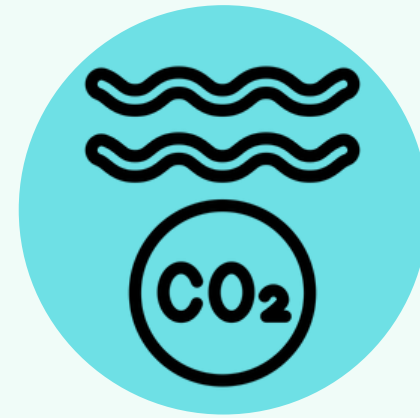
# EDH



Climate change



Land  
degradation



Ocean  
acidification



Land, soil, water



Resource  
depletion



Biodiversity loss



Pollution



# Objective

To understand how the **Social Determinants of Health (SDH)** and **Ecological Determinants of Health (EDH)** have been considered within One Health and other related frameworks



# Systematic Literature Review

**1**

## Databases

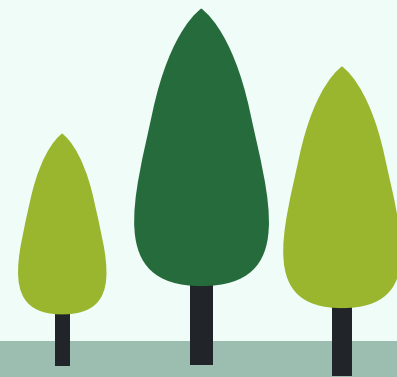
PubMed  
Scopus  
Web of Science

**2**

## Search Terms

One Health  
EcoHealth  
Planetary Health  
One Welfare

Social Determinants of Health  
Ecological Determinants of Health  
Environmental Determinants of Health



# Exclusion Criteria

i)

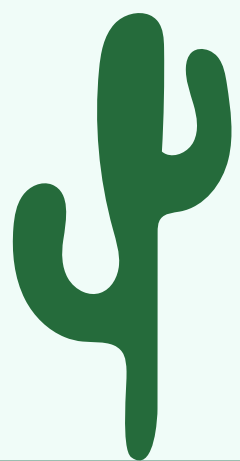
Irrelevant to One Health and the other frameworks

ii)

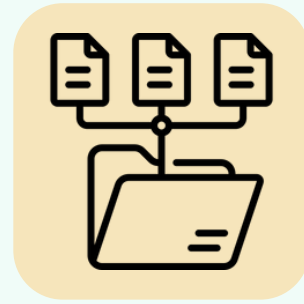
Did not discuss the integration of SDH, EDH, or environmental determinants of health

iii)

No English text available







**594 articles**

Initial identification  
from 3 databases

Full-paper screening

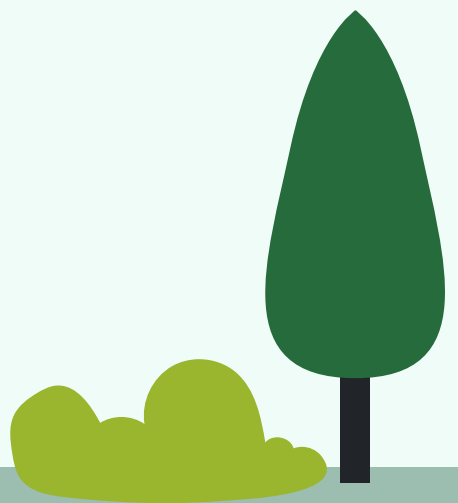


**101 articles**

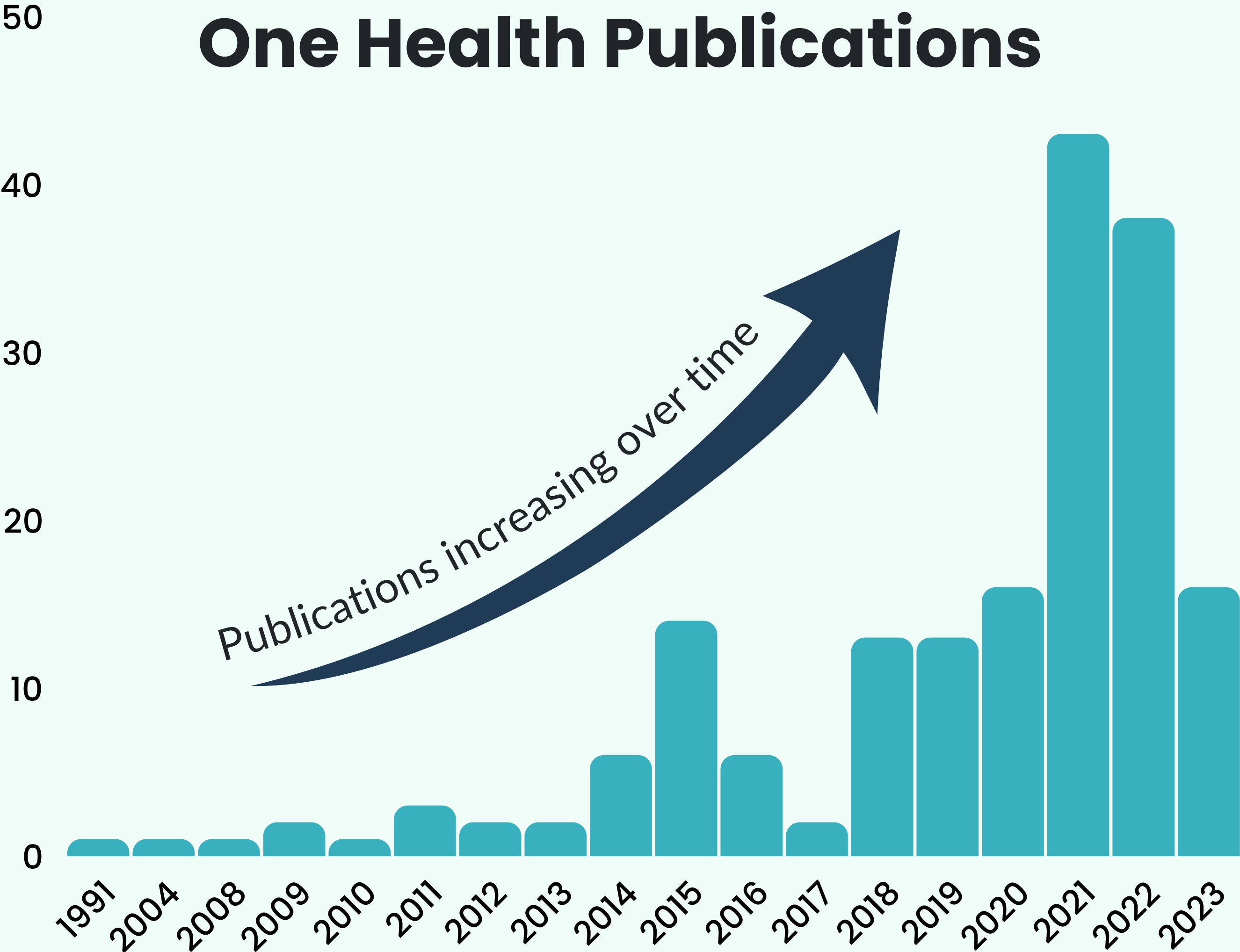
Ready for data  
extraction



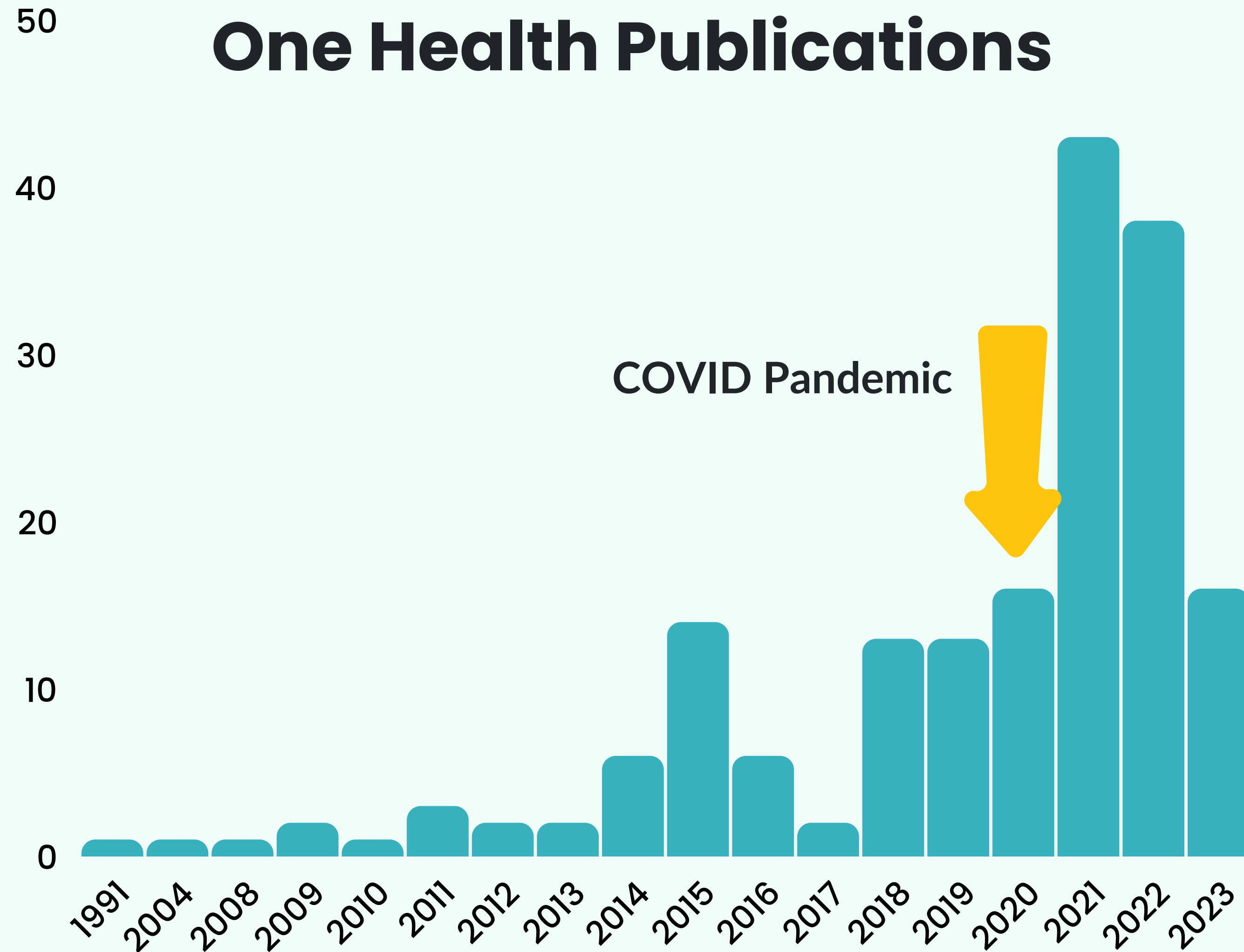
**193 articles**



# One Health Publications

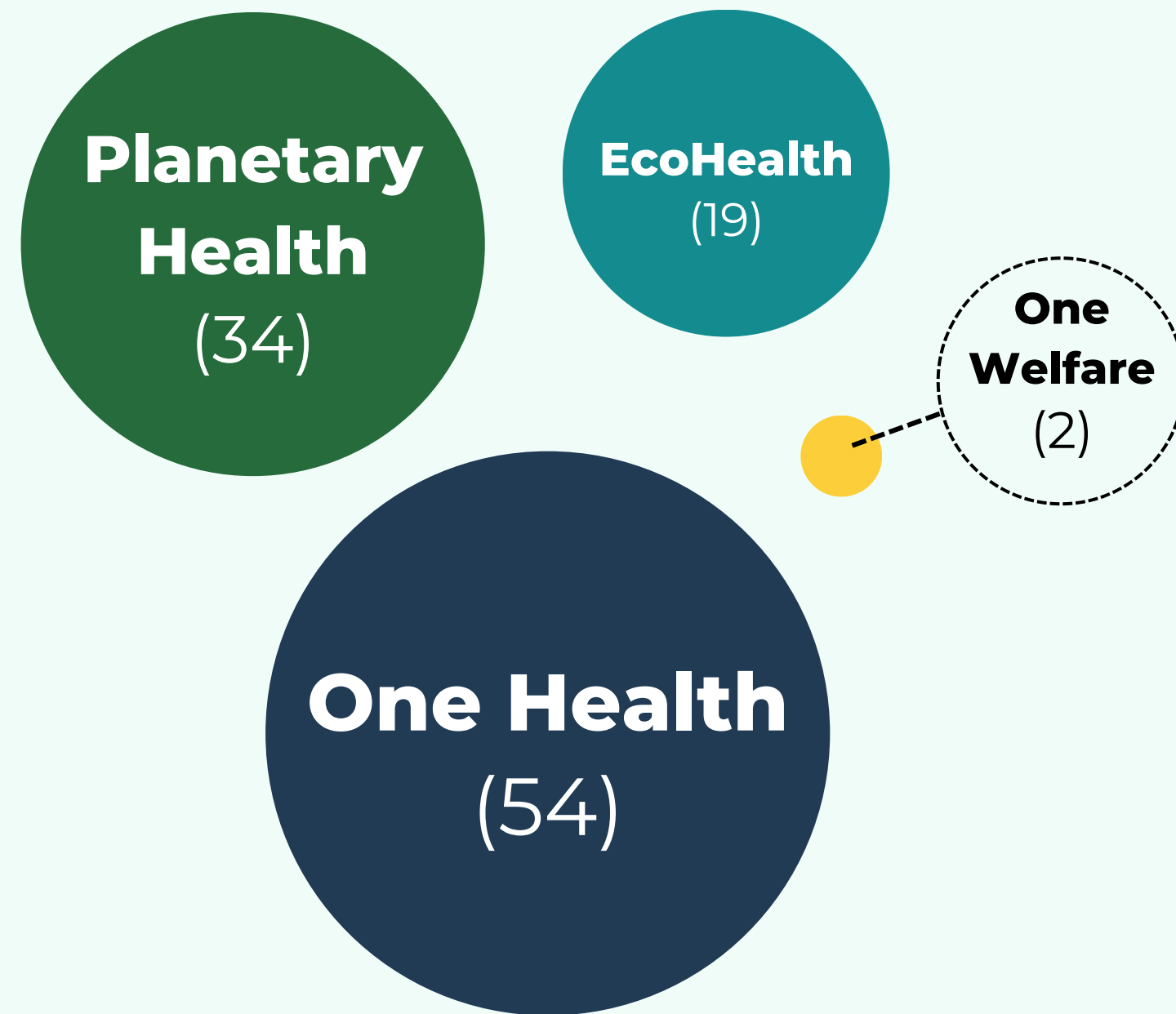


# One Health Publications





# Greater emphasis on One Health



# One Health

SDH and EDH in  
zoonotic  
disease and  
public health

SDH: education,  
economic stability

EDH:  
environmental  
contamination

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# EcoHealth

SDH/EDH are  
drivers  
of health  
disparities

SDH: poverty,  
education

EDH: biodiversity  
loss



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# Planetary Health

Broad focus on  
climate change  
and system  
inequities

Climate change is a  
modifier  
of SDH disparities

Disproportionate  
impacts on  
vulnerable  
populations

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# One Welfare

Contexts of  
animal welfare  
and mental  
health

SDH: poverty,  
social inclusion,  
cultural attitudes

EDH: habitat  
degradation,  
climate effects

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climate effects

# But we need the full picture to understand the system

## Avian Influenza



**Income:**  
proper biosecurity



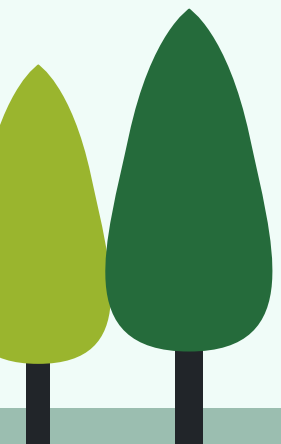
**Land degradation:**  
wild bird  
congregation



**Food security:**  
close contact  
with birds

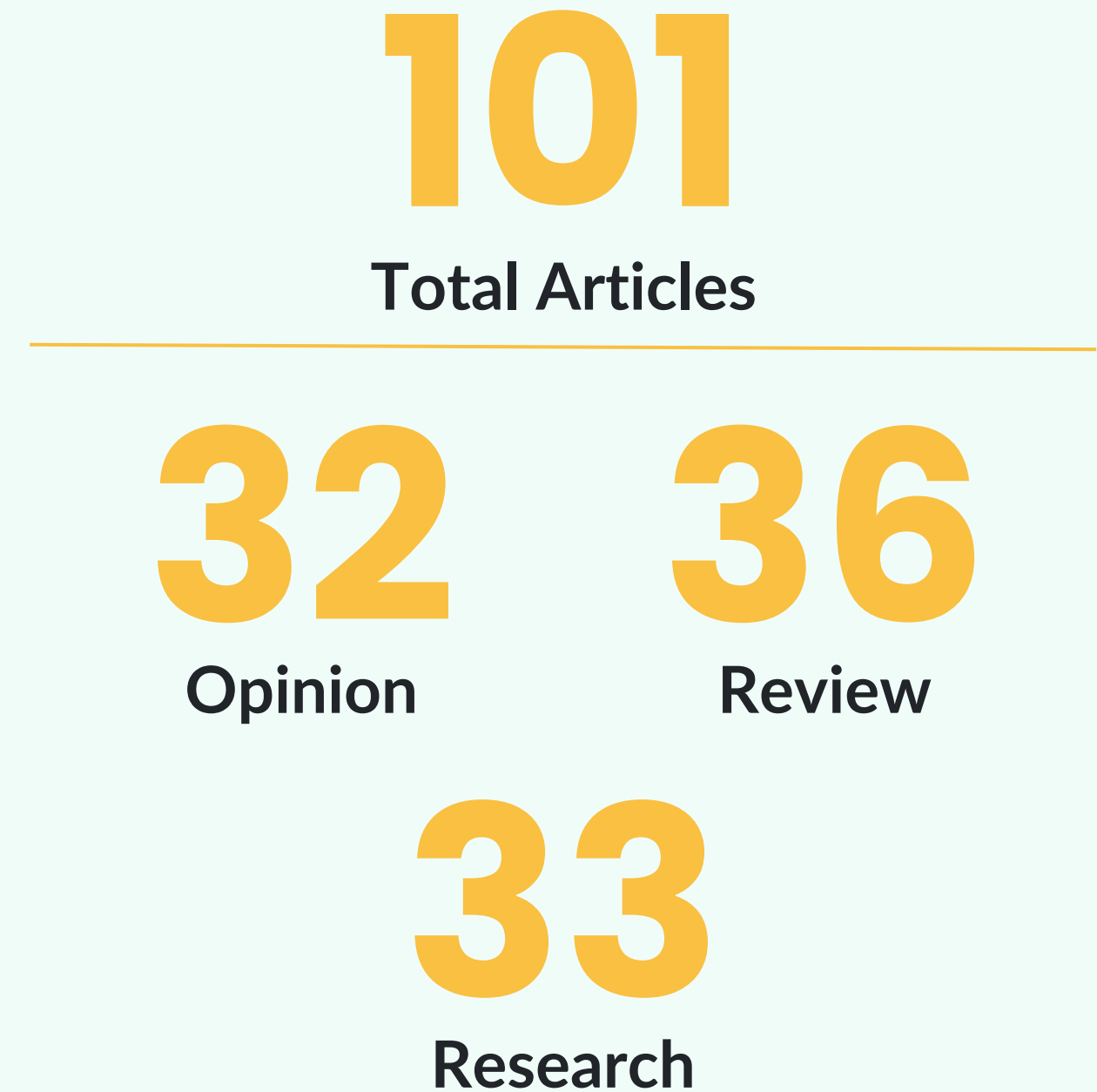
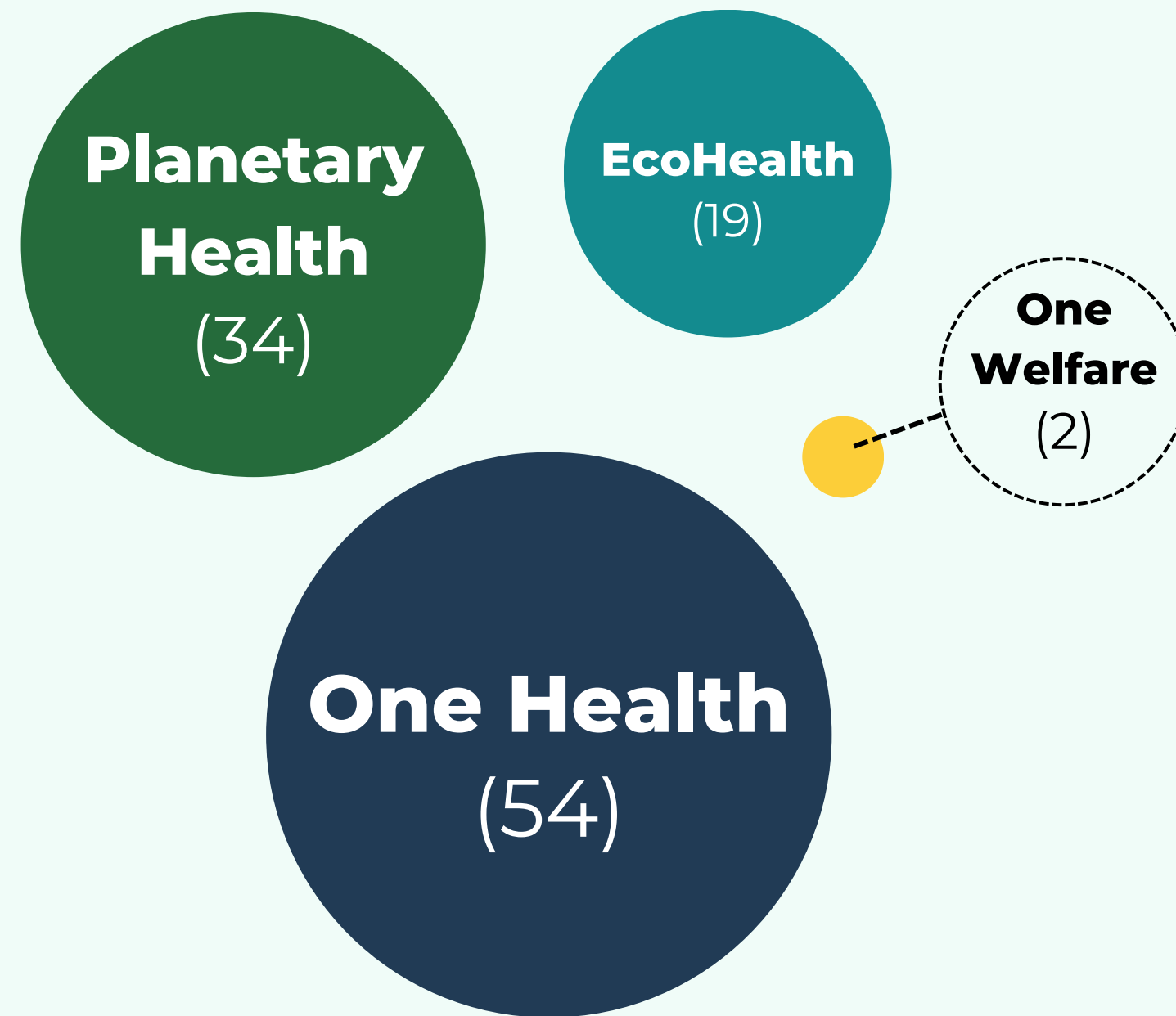


**Climate change:**  
seasonal shifts  
in transmission





# Many publications are theoretical



# Health inequities and justice

Studies advocate for **justice-oriented** approaches

Inclusion of Indigenous perspectives, gender-based analyses, and addressing historical injustices



# Community involvement

Communities should be involved in research

Participatory methods are **culturally relevant**





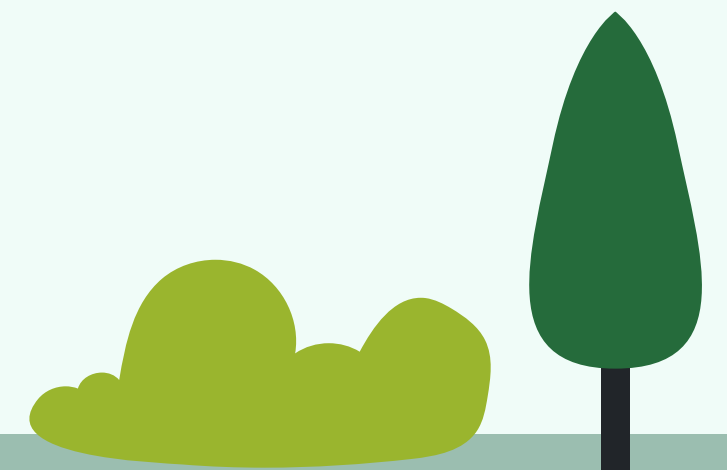
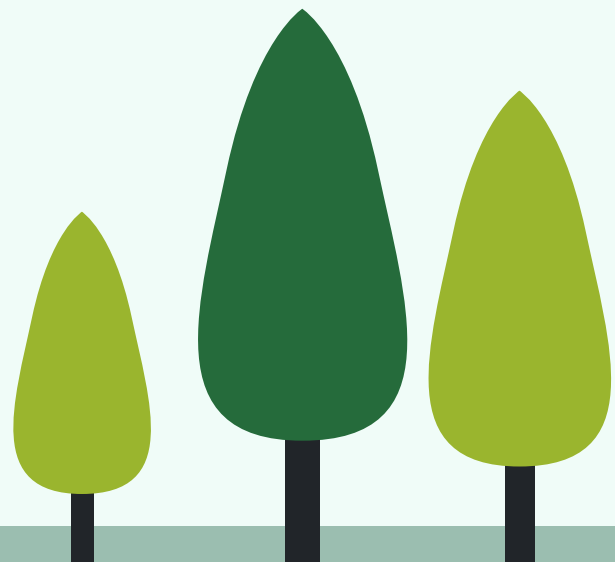
# SDH/EDH within frameworks

Studies frequently reference **One Health**, **EcoHealth**, or **Planetary Health**

The majority of publications **lack** definitions of the holistic frameworks

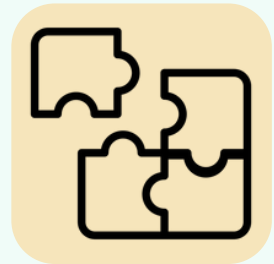
The **SDH** and **EDH** are also **rarely** defined

**More research** publications are needed



# Summary

Frameworks have **different focuses** that could result in **gaps in data and understanding**

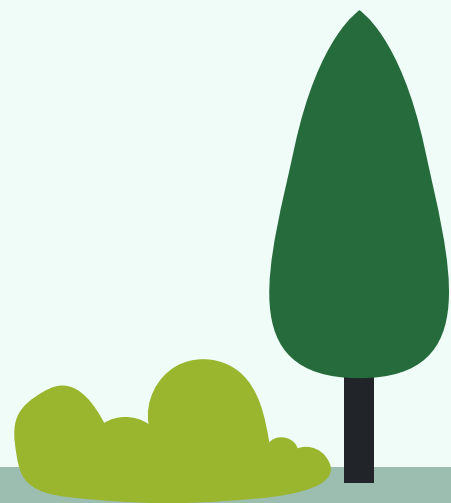
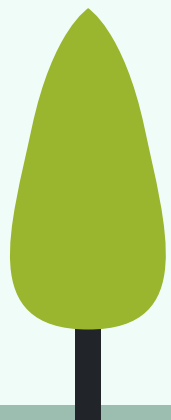


There is **little research integrating the SDH and EDH** within these frameworks

**Clear definitions are needed** to guide comparative work and to built a robust understanding of these issues



**This review will provide recommendations on integrating the SDH/EDH into One Health research**



# Thank you!

Special thanks to Dr. Kaylee Byers, Dr. Sarah Robinson, Dr. Julia Smith, and Dr. Maureen Murray



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