Emerging Pest and Pathogens (EPP)

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Abstract

Emerging pests and pathogens (EPPs) are an increasingly disruptive force to human society that can cause large social and ecological changes far beyond their initial site of emergence. Three forces contribute to this growing challenge now and in the foreseeable future: first, potential EPPs are more likely to come in to first contact with human habitats as human land use expands. Second, denser human trade and travel networks mean that EPPs are more likely to emerge in new regions. Third, human technology, such as biocidal agents, increases risks for re-emergence. Understanding how EPPs cascade across scales in social-ecological systems is therefore an urgent priority, but no formal approach currently exists for analysing the ripple effects at scale, from their seeding to their lasting societal imprints. This project aims to fill this gap in sustainability science for society.

## 1 Introduction

## 2 Methods

Data retrieved from WHO-DON can merge with data from (Carlson et al. 2023)

## 3 Results

## 4 Discussion

## 5 Conclusion

## 6 References

Carlson, Colin J., Matthew R. Boyce, Margaret Dunne, Ellie Graeden, Jessica Lin, Yasser Omar Abdellatif, Max A. Palys, Munir Pavez, Alexandra L. Phelan, and Rebecca Katz. 2023. “The World Health Organization’s Disease Outbreak News: A Retrospective Database.” Edited by Claudio A. Mendez. *PLOS Global Public Health* 3 (1): e0001083. <https://doi.org/10.1371/journal.pgph.0001083>.