

ECOHEALTH REFRAMING OF DISEASE MONITORING

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Decade-old (7) and recent warnings for coronaviruses with zoonotic epidemic potential (2) could have prevented the emergence of coronavirus disease 2019 (COVID-19) (3). We therefore agree with Watsa and colleagues (“Rigorous wildlife disease surveillance,” *Perspective*, 10 July, p. 145) that wildlife biosurveillance should increase. However, representing animals as a threat to humans through disease transmission leads to ill-conceived reactive policies (4). A perspective (5) in which animals and humans share similar risks of pathogens and infections, making animals relevant disease models and sentinels, would be more effective. Clarifying the connection between animal and human health could increase public support for research seeking to understand host-switching in animals, such as the study of virus evolution (5), interactions in pathogen communities (7), and pathogen discovery (8).

A shared-risk perspective on emerging infectious diseases mirrors the field of EcoHealth, which explores the links between ecosystem, animal, and human health. Such strategies place value in healthy ecosystems through an integrative approach that considers both pathogen biodiversity and social-ecological drivers (9). Prevention based on understanding the transmission of pathogens through EcoHealth-based emerging infectious disease surveillance is a promising avenue for sustainability science, orders of magnitude cheaper than mitigation in response to a transfer to human hosts (70), and less intrusive than current crisis responses.

References

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