

# CARY SCIENCE CONVERSATION

VIRTUAL EVENT

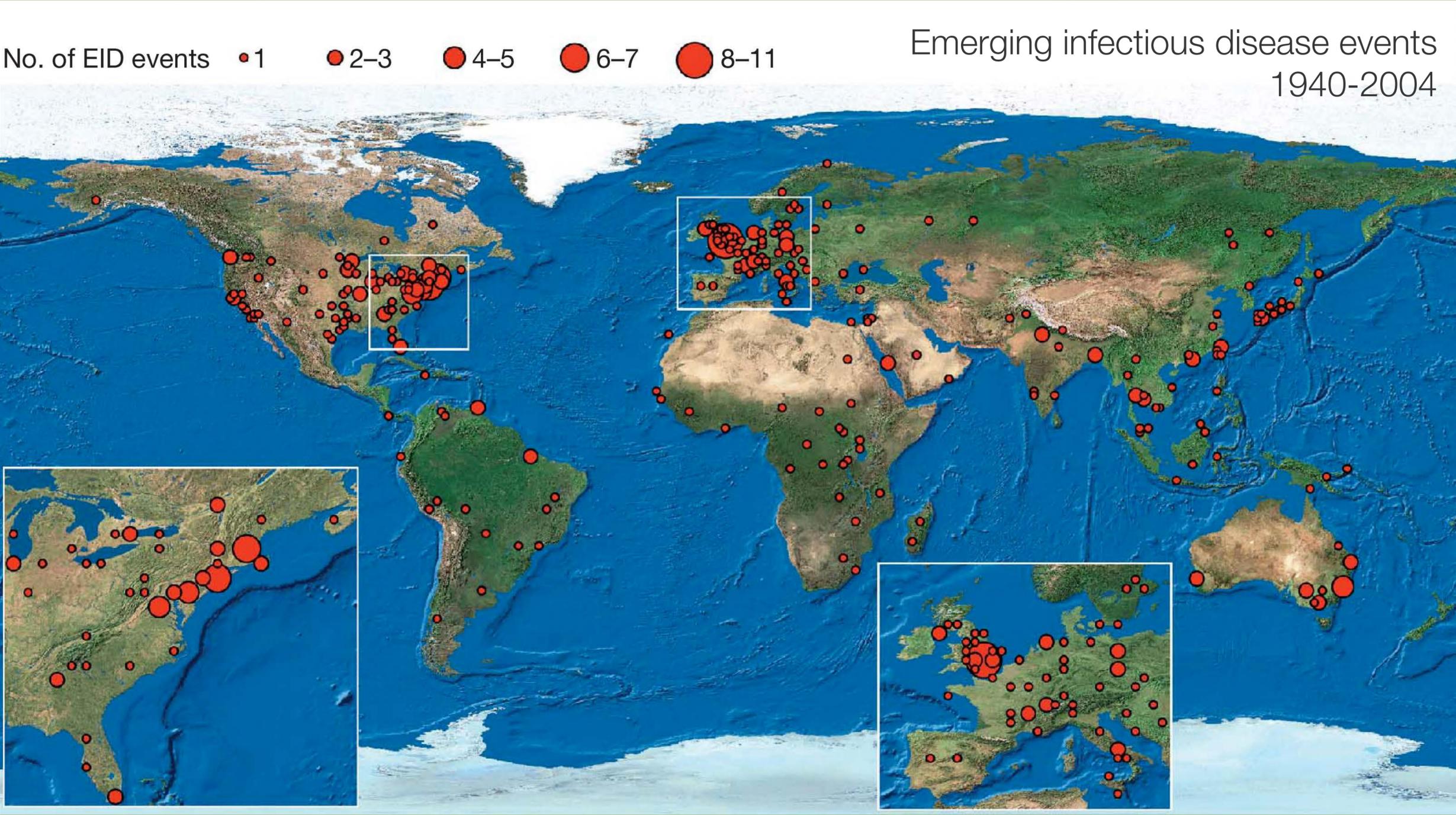
## Preventing Pandemics: Why Biodiversity Matters

*Presented by*

Drs. Felicia Keesing, Rick Ostfeld, and Joshua Ginsberg

[www.caryinstitute.org](http://www.caryinstitute.org)

# THE GROWING GLOBAL HEALTH CRISIS



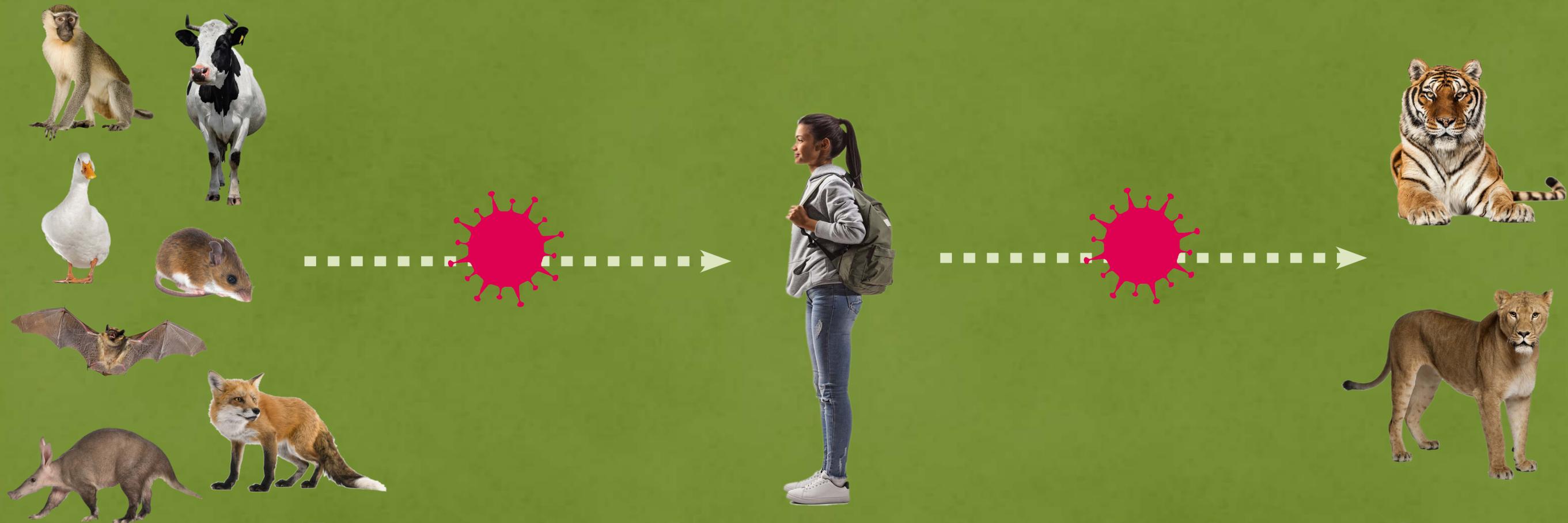
# ZOOONOTIC DISEASES: PATHWAYS TO INFECTION

## WHAT IS A ZOOONOTIC DISEASE?

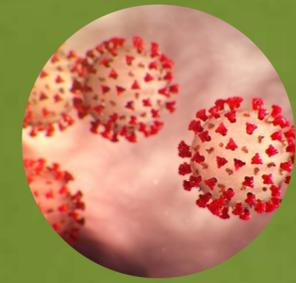
Caused by bacteria, viruses, and parasites that spread between vertebrate animals and humans

75%

of emerging infectious diseases are zoonotic



# COVID 19: BY THE NUMBERS



JOHNS HOPKINS  
UNIVERSITY & MEDICINE

CORONAVIRUS  
RESOURCE CENTER

Global Cases

**31,926,175**

Global Deaths

**977,357**

201,920 deaths  
US

138,105 deaths  
Brazil

91,149 deaths  
India

74,949 deaths  
Mexico

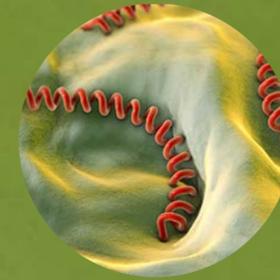
41,951 deaths  
United Kingdom



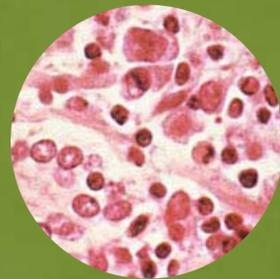
# ZOO NOTIC DISEASES



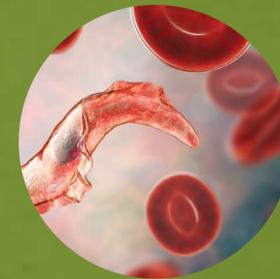
Lyme disease



Leptospirosis



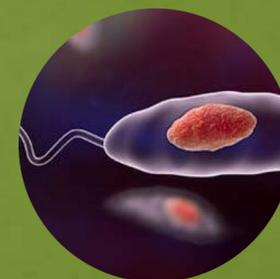
Hantavirus diseases



Chagas disease



Ebola disease



Leishmaniasis

# BIODIVERSITY: HAZARD OR PROTECTION?



# DISEASE RISK & ANIMAL TRAITS



# BIODIVERSITY: HAZARD OR PROTECTION?



# WHAT INCREASES THE RISK OF ZOOONOTIC DISEASES?

HABITAT CONVERSION



CLIMATE CHANGE



HARVESTING



POLLUTION



**LOSS OF BIODIVERSITY**

The most competent host(s) remain when biodiversity declines

# WHAT CAN YOU DO?

Reduce carbon consumption



Consume fewer animal products



Use your voice



Support science & science-based decision making

