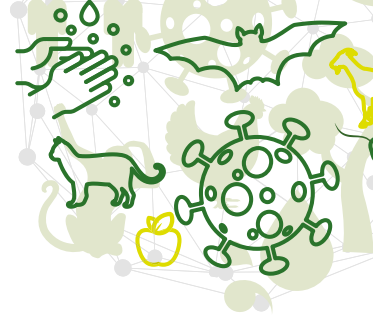


Key Messages



This evidence-based scientific assessment has identified the following key messages for decision-makers:

1. DE-RISKING FOOD SYSTEMS

Many new science-based policy reports continue to focus on the global public health emergency caused by the COVID-19 pandemic, following the fast spread of the infectious SARS-CoV-2 virus of zoonotic origin. We need more evidence-based scientific assessments, such as this one, to examine the environmental and zoonotic context of the current pandemic, as well as the risk of future zoonotic disease outbreaks.

2. URGENCY

Diseases are emerging more frequently from animals. Rapid action is necessary to fill the science gap and fast-track the development of knowledge and tools to help national governments, businesses, the health sector, local communities and other stakeholders – especially those with limited resources – to reduce the risk of future pandemics.

3. REPORT AUDIENCE

To help fill this gap, a scientific assessment was conducted to explore the role of wild and domesticated animals in emerging zoonotic infectious diseases. This rapid assessment is designed for decision-makers in government, business and civil society at all levels and in all regions.

4. SCOPE OF THE PROBLEM

About 60 per cent of human infections are estimated to have an animal origin. Of all new and emerging human infectious diseases, some 75 per cent “jump species” from other animals to people. Most described zoonoses happen indirectly, e.g. via the food system.

5. OUTBREAK FREQUENCY AND PREDICTABILITY

The frequency of pathogenic microorganisms jumping from other animals to people is increasing due to unsustainable human activities. Pandemics such as the COVID-19 outbreak are a predictable and predicted outcome of how people source and grow food, trade and consume animals, and alter environments.

6. CONNECTIVITY AND COMPLEXITY

The links among the wider environment, biodiversity and emerging infectious diseases are complex. While wildlife are the most common source of emerging human disease, domesticated animals may be original sources, transmission pathways, or amplifiers of zoonotic disease. Such linkages – as well as the interconnectedness with issues such as air and water quality, food security and nutrition, and mental and physical health – should inform policies that address the challenges posed by current and future emerging infectious diseases, including zoonoses.

7. DISEASE DRIVERS

Seven human-mediated factors are most likely driving the emergence of zoonotic diseases: 1) increasing human demand for animal protein; 2) unsustainable agricultural intensification; 3) increased use and exploitation of wildlife; 4) unsustainable utilization of natural resources accelerated by urbanization, land use change and extractive industries; 5) increased travel and transportation; 6) changes in food supply; and 7) climate change.

8. IMPACT AND COST

Emerging zoonotic diseases threaten human and animal health, economic development and the environment. The greatest burden of zoonotic disease is borne by poor people, but emerging infectious diseases impact everyone, with monetary losses of emerging infectious disease much greater in high-income countries. Given that a single zoonotic outbreak can incur trillions of US dollars in costs across the globe, prevention is significantly more cost-effective than response.

9. POLICY OPTIONS

This assessment recommends ten policy response options to reduce the risk of future zoonotic pandemics and to ‘build back better’: (i) raise awareness of health and environment risks and prevention; (ii) improve health governance, including by engaging environmental stakeholders; (iii) expand scientific inquiry into the environmental dimensions of zoonotic diseases; (iv) ensure full-cost financial accounting of the societal impacts of disease; (v) enhance monitoring and regulation of food systems using risk-based approaches; (vi) phase out unsustainable agricultural practices; (vii) develop and implement stronger biosecurity measures; (viii) strengthen animal health (including wildlife health services); (ix) build capacity among health stakeholders to incorporate environmental dimensions of health; and (x) mainstream and implement One Health approaches. These policy options are discussed in detail in Section Five of this report.

10. ONE HEALTH

This report confirms and builds on the conclusions of the FAO-OIE-WHO Tripartite Alliance and many other expert groups that a One Health approach is the optimal method for preventing as well as responding to zoonotic disease outbreaks and pandemics. Adopting a One Health approach, which unites medical, veterinary and environmental expertise, will help governments, businesses and civil society achieve enduring health for people, animals and environments alike.