



Strong intersectoral partnerships in health

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Managing zoonotic public health risks at the human–animal–ecosystem interface

o Why invest in public health risks at the human–animal–ecosystem interface?

Domestic and wild animals, and their ecosystems, contribute to the health and well-being of people. Among other things, they provide protein-rich nutrients, transportation, traction power, fuel, recreation, and companionship. Alongside the many benefits people derive from animals, the latter can also contribute to public health risks that emerge at the human, animal and ecosystem interface.

This human–animal–ecosystem interface can be described as a continuum of direct or indirect human exposure to animals, their products and their environments. Some zoonotic diseases also have the potential to spread efficiently across international boundaries, thereby affecting not only people's health and their livelihoods but also international travel and trade. More than 60% of the newly identified infectious agents that have affected people over the past few decades have been caused by pathogens originating from animals or animal products. Of these zoonotic infections, 70% originate from wildlife.

o What is WHO doing?

WHO is partner to an international, multidisciplinary and intersectoral framework that recognizes the linkages between animal, human and ecosystem health domains, and seeks to diminish the public health risk and the global impact of infectious diseases by enhancing livestock and wildlife disease intelligence, surveillance and emergency

response systems at local, national, regional and international levels.

This area of work requires sharing of responsibilities and coordinating global activities to address health risks at the animal-human-ecosystems interfaces and shifts the focus from mostly short term intervention to medium and long-term national capacity building in countries with a focus on promoting better governance and supportive legal frameworks, surveillance and assessment of potential public health risks, preparedness and prevention, outbreak detection and control. Improved outcomes will depend on improved communication between the human, veterinary, and food sectors.

WHO recognizes, that there is need for focused effort in consort with its strategic partners for the management of zoonotic public health risks at the human–animal-ecosystems interface.

The following elements summarize the work of WHO in this area:

1. Defining policies, approaches and sustainable programmes for prevention and control of priority zoonotic diseases.
2. Implementing sustainable programmes to strengthen early detection, investigation, risk assessment and rapid response to zoonotic public health risks of national and international concern, including infectious disease outbreaks.
3. Developing capacity, tools, and mechanisms to support the programmatic work for the detection, prevention, assessment and management of zoonotic human health risks.

The mission of the WHO Department of Food Safety and Zoonoses is to lower the burden of disease from food and animals, focusing on industrialized and traditional production systems, and integrating prevention from farm to table. This work includes the provision of scientific advice, efficient standard setting, and clear communication in support of foodborne and zoonotic disease prevention and international efforts to food-related outbreak detection and response.

o Activities and achievements

- Developing joint action plan with strategic partners and stakeholders for the management of zoonotic public health risks at the human–animal interface
- Supporting countries to develop legal frameworks, good governance and intersectoral collaboration to manage health risks at the human–animal interface
- Detecting public health threats and performing joint risk assessment through the Global Early Warning and Response System for Major Animal Diseases, including Zoonoses (GLEWS), which is a joint initiative of WHO, the Food and Agriculture Organization of the United Nations (FAO), and the World Organization for Animal Health (OIE) to better target action
- Developing international guidelines to mitigate the public health risk of zoonotic disease at the human–animal interface
- Estimating the burden of human leptospirosis and other zoonotic diseases to influence policy for prevention, control and intervention



o Planned activities

- Promote Member State awareness and buy-in to foster the multi-level, multi-ministry political will to drive progress through active communication.
- Develop further global early warning and response mechanisms and networks, including GLEWS.
- Assist the International Health Regulations (2005) by building core capacities for surveillance and response in countries.
- Develop, pilot test and disseminate international guidelines to mitigate the public health risk of zoonotic disease at the human–animal interface.
- Estimate the burden of human leptospirosis and other zoonoses to influence policy for prevention, control and intervention.

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