"One Health approach"- Zoonoses in Wildlife from Ministry of Environment, Forest, and Climate Change

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The intricate web of connection between human, animal, and environmental health underscores the need for a holistic approach to address emerging threats. Within this framework, the One Health concept has gained prominence, emphasizing the interdependence of these three domains. One critical facet of One Health is the management of zoonoses, infectious diseases that can jump from animals to humans. This article explores the significance of adopting a One Health approach to tackle zoonoses in wildlife. The One Health approach recognizes that the health of humans, animals, and the environment in interconnected. Zoonotic diseases, which account for a significant proportion of emerging infectious diseases, highlight the potential consequences of ignoring these interconnections.

Diseases such as Ebola, Zika, and most recently the COVID-19 pandemic have demonstrated the devastating impact of zoonoses on global health. Wildlife plays a crucial role in the transmission of zoonotic diseases. Many pathogens have reservoirs in wild animals, serving as a source of infection for domestic animals and humans. The encroachment of human activities into natural habitats, wildlife trade, and climate change contribute to the increased risk of spillover events where pathogens jump from animals to humans. Effective surveillance and monitoring systems are pivotal components of One Health approach to zoonoses in wildlife. These systems involve regular monitoring of wildlife populations to detect potential outbreaks or unusual patterns of disease. Early detection enables prompt response measures to prevent the spread of zoonotic pathogens and mitigate the risk of human infections.

In-depth research is essential to understand the dynamics of zoonotic diseases in wildlife. This includes studying the ecology of pathogens, their transmission pathways, and the factors influencing their emergence. Collaboration and data sharing across disciplines and institutions facilities a comprehensive understanding of zoonoses, aiding in the development of targeted interventions and preventive strategies. Conservation efforts and sustainable habitat management are integral to the One Health approach. Habitat destruction and fragmentation can increase the likelihood of human-wildlife interactions, facilitating the transmission of zoonotic pathogens. Protecting natural habitats and implementing conservation measures contribute to reducing the risk of zoonotic spillover events. Educating communities, healthcare professionals, wildlife enthusiasts is crucial in preventing and controlling zoonoses.

Public awareness campaigns can highlight the risks associated with certain behaviours, such as consuming wildlife or encroaching on their habitats. Informed communities are more likely to adopt practices that minimizes the risk of zoonosis. Developing and implementing policies that address the root causes of zoonotic diseases is imperative. Regulations governing wildlife trade, land use and environmental protection contribute to minimizing the risk of disease transmission. A cohesive policy framework ensures unified and proactive approach to zoonoses at local, national, and international levels. Zoonotic diseases recognize no borders, emphasizing the importance of collaboration, sharing information, resources, and expertise enhances the global community's ability to respond effectively to emerging threats.

Collaborative efforts can strengthen surveillance, research and response capacities, creating a coordinated defense against zoonotic diseases. In embracing the One Health approach to zoonoses in wildlife, we acknowledge the interconnectedness of human, animal, and environmental health. By promoting collaborative efforts in surveillance, research, conservation, public health education, policy development, and international cooperation, we can build a resilient framework to address the complex challenges posed by zoonotic diseases.

Through a unified commitment to One Health, we strive to protect the well-being of both humans and wildlife, ensuring a harmonious coexistence in our shared ecosystem. We also commend the initiative taken by the NCDC to launch an E-Journal focused on "One Health." This platform will serve to encourage contributions from the realm of public health research, as well as from other institutions such as those involved in environmental and veterinary sectors.