

# Re-emerging Infectious Diseases: A Serious Risk to the Health of Livestock

# Lochyński Strub\*

Department of Biological Sciences, University of Warsaw, Warsaw, Poland

# DESCRIPTION

In recent years, the re-emergence of infectious diseases has posed a significant threat to livestock around the world. Livestock farming is a crucial component of global agriculture, providing essential resources such as meat, milk, and leather. However, the resurgence of infectious diseases among livestock has not only led to severe economic losses for farmers but has also raised concerns about food security and public health.

## The dynamics of re-emerging diseases

Re-emerging infectious diseases affecting livestock are often caused by a complex interplay of factors. Environmental changes, global trade, and human activities contribute to the spread and resurgence of these diseases. Climate change, for instance, can alter the distribution of vectors and increase the suitability of certain regions for disease transmission. Additionally, the intensification of global trade facilitates the movement of livestock and their products across borders, creating pathways for the introduction and spread of infectious agents.

#### Impact on livestock health

Livestock diseases can have devastating effects on animal health, leading to decreased productivity, increased mortality rates, and compromised welfare. Some of these diseases are highly contagious, spreading rapidly within herds and even crossing species barriers. Foot-and-mouth disease, avian influenza, and African swine fever are examples of re-emerging diseases that have caused widespread outbreaks with profound economic consequences.

#### **Economic implications**

The economic impact of re-emerging infectious diseases on the livestock industry is substantial. Outbreaks often result in trade restrictions, disrupting the international movement of livestock and related products. This not only affects the affected countries but also creates a ripple effect across the global supply chain. Farmers face financial losses due to reduced production, culling of infected animals, and increased expenses on disease control measures.

## Food security concerns

The re-emergence of infectious diseases in livestock poses a direct threat to food security. Livestock products, such as meat, milk, and eggs, are primary sources of protein for a large portion of the global population. When disease outbreaks occur, there is a decline in the availability of these products, leading to increased prices and potential shortages. This, in turn, impacts vulnerable communities that depend on livestock as a crucial source of nutrition.

# Public health risks

The link between animal and human health is undeniable, and the re-emergence of infectious diseases in livestock raises concerns about potential spillover into human populations. Zoonotic diseases, those transmitted from animals to humans, can have severe public health implications. Examples include brucellosis and Q fever, both of which can be transmitted from infected livestock to humans, causing a range of symptoms from mild to severe.

#### Mitigation strategies

Addressing the re-emergence of infectious diseases in livestock requires a multifaceted approach. Surveillance and early detection systems are essential to identify outbreaks quickly and implement control measures. International collaboration is crucial to developing and implementing effective strategies for disease prevention and control. This includes sharing information, coordinating research efforts, and establishing protocols for the movement of livestock across borders.

Investment in research and development of vaccines and diagnostic tools is paramount. Vaccination programs can play a pivotal role in preventing the spread of infectious diseases, and early diagnosis allows for timely intervention. Moreover, promoting biosecurity measures on farms, such as quarantine protocols and hygiene practices, can help minimize the risk of disease introduction and transmission.

Correspondence to: Lochyński Strub, Department of Biological Sciences, University of Warsaw, Warsaw, Poland; E-mail: strubL@pwr.wroc.pl

Received: 28-Nov-2023, Manuscript No. GJLSBR-24-28874; Editor assigned: 01-Dec-2023, Pre QC No. GJLSBR-24-28874 (PQ); Reviewed: 15-Dec-2023, QC No. GJLSBR-24-28874; Revised: 22-Dec-2023, Manuscript No. GJLSBR-24-28874 (R); Published: 29-Dec-2023; DOI: 10.35248/2456-3102.23.9.049

Citation: Strub L (2023) Re-emerging Infectious Diseases: A Serious Risk to the Health of Livestock. Glob J Lif Sci Biol Res. 9:049.

**Copyright:** © 2023 Strub L. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

The re-emergence of infectious diseases affecting livestock poses a significant threat to global agriculture, food security, and public health. As all navigate a rapidly changing world, characterized by environmental shifts and increased global connectivity, the risk of infectious disease outbreaks among livestock is likely to persist. Addressing these challenges requires a concerted effort from governments, international organizations, researchers, and farmers to implement effective prevention and control measures. Only through collaboration and proactive strategies can hope to mitigate the impact of re-emerging infectious diseases on the health and well-being of livestock, ensuring a secure and sustainable future for the global food supply.