

# Resurgence of Human Metapneumovirus: Bridging Gaps in Prevention, Diagnostics and Treatment

Victor Abiola Adepoju<sup>1</sup>, Qorinah Estiningtyas Sakilah Adnani<sup>2</sup>, and Safayet Jamil<sup>3</sup>

<sup>1</sup>Johns Hopkins University Division of Infectious Diseases

<sup>2</sup>Universitas Padjadjaran Fakultas Kedokteran

<sup>3</sup>Daffodil International University

January 15, 2025

## Abstract

The resurgence of human metapneumovirus (hMPV) highlights its significant yet under-recognized role in respiratory infections globally. Recent outbreaks in China, India, and Europe underscore its clinical burden, with severe cases linked to bronchiolitis, pneumonia, and exacerbations of chronic conditions. Despite its impact, hMPV remains underdiagnosed due to limited access to molecular diagnostics and routine surveillance, particularly in low- and middle-income countries. The absence of antivirals or vaccines exacerbates its public health challenge. Advances in multiplex diagnostics and vaccine development offer hope but require sustained global investment. Addressing gaps in prevention, diagnostics, and treatment is critical to mitigating hMPV's growing threat and ensuring equitable healthcare outcomes.

## Hosted file

Manuscript.doc available at <https://authorea.com/users/880760/articles/1259789-resurgence-of-human-metapneumovirus-bridging-gaps-in-prevention-diagnostics-and-treatment>