

# Emerging Infectious Disease (EID) involving Respiratory Tract

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# Underlying causes for EID

## 1. Generalized social changes

- worldwide urbanization, IV drug abuse, changing sexual practice

## 2. Demographic changes

- ↑ human mobility and refugee population

## 3. Medical care

- blood transfusion, organ transplant, re-used syringes for antibiotic injections, contamination vaccines and antibiotic resistance

# Underlying causes for EID

## 4. Economic and commercial trends

- intensive food production, extended irrigation, liberalized trading pattern

## 5. Climatic changes

- global warming and regional changes

## 6. Ecosystem disturbance

- deforestation, eutrophication of waterways, reduction in predators of disease vector organisms

# **Human Metapneumovirus (hMPV)**

# hMPV

- Is a pathogen that emerged as a result of increased and tenacious diagnostic efforts rather than through expansion of its range or transmission to a new host species
- First identified in 2001 by van den Hoogen BC, et al. (Nat Med 2001;7:719)
- Isolated from 28 young children, stored nasopharyngeal aspiration (NPA) with RTI over 20 years in Netherlands
  - New member of *Metapneumovirus* genus, *Paramyxoviridae* family