"H3N2 in the Air, Swine Flu in the Shadows What You Should Know"

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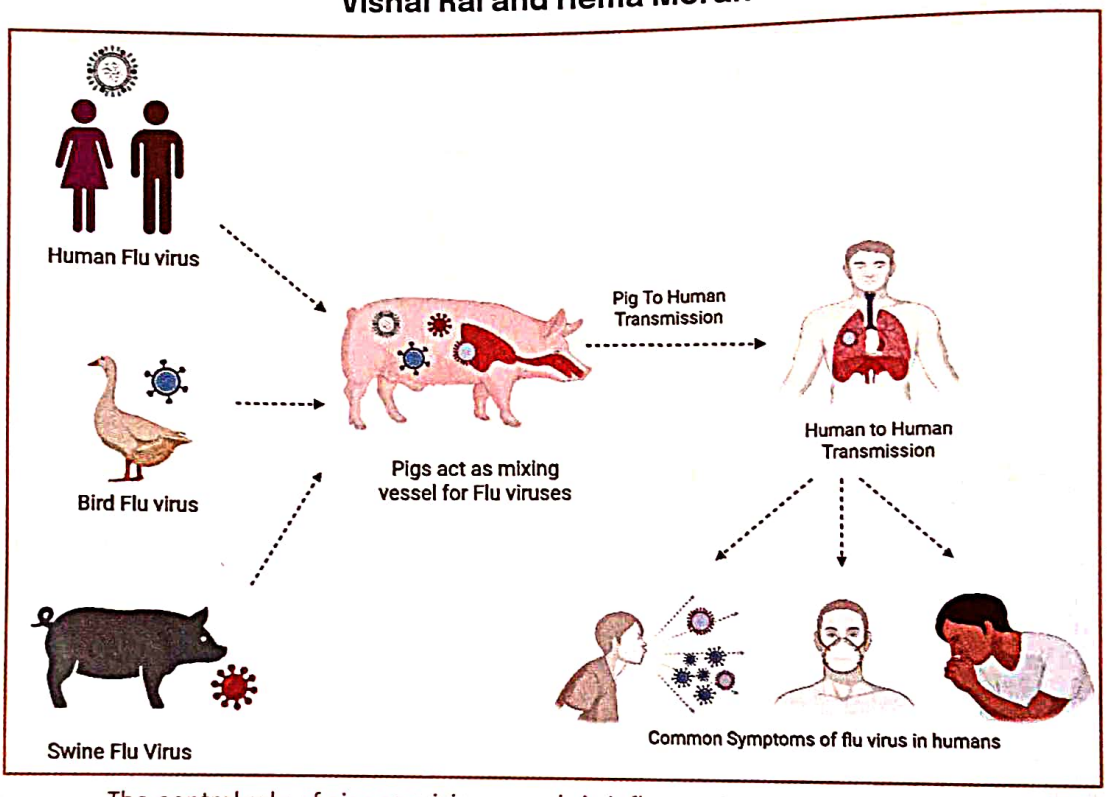

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The central role of pigs as mixing vessels in influenza transmission dynamics

THE flu was back in the headlines last year. A rise in the number of H3N2 influenza cases was reported in Delhi & surrounding National Capital Region (NCR), with one report that almost 69% of families in Delhi NCR were affected by this virus. Outpatient clinics were packed with patients complaining of fever, sore throat, cough & prolonged weakness. According to doctors, recovery was slower in this season than usual, with many working professionals affected.

So, the question is, what makes influenza so uncertain and relentless? The answer lies in the intricate and at times alarming biology of influenza viruses. Let us take a look at some of the facts about this virus.

Fact 1: H3N2 is not a new virus

The said culprit, H3N2, is a subtype of the Influenza A virus. Influenza A virus is a member of the Orthomyxoviridae family and is a major pathogen causing respiratory infections in humans, birds, and several mammalian species. The term "H3N2" derives from two proteins on the viral surface: H (Hemagglutinin), which helps the virus to enter cells, and N (Neuraminidase), which helps it spread.

H3N2 has been prevalent among people for decades. However, akin to all influenza viruses, it keeps changing bit by bit — a phenomenon referred to as antigenic drift. These minor alterations enable it to dodge our immune system, resulting in recurrent waves of infection annually.

Fact 2: The season's surge has local triggers

What is the reason for the surge in cases in Delhi? The phenomenon is attributed to a combination of factors:

- The changing of weather from monsoon to autumn favours virus survival
- Crowded schools, colleges, and offices, where transmission takes place easily
- Reduced immunity after two years of masking and limited flu exposure during COVID-19.

Together, these factors have helped H3N2 spread widely, even among young adults.

Fact 3: Certain groups remain at higher risk

While anybody can contract the flu, certain groups are at a