

# Swine flu

February 1, 2019

## Manifest Pedagogy

Global epidemics like zika, ebola and swine flu are to be tracked. They have to be studied from the angles of biology and social issues. Also, the international cooperation, national and global efforts to fight these endemics have to be emphasized.

## In news

Outbreak of Swine flu in India

## Placing it in the syllabus

Issues related Public health, development and management of Social Sector/Services relating to Health

## Static dimensions

1. Epidemic and endemic diseases
2. History of Swine flu

## Current dimensions

1. Recurrence of swine flu in India

## Content

Swine flu is a human respiratory infection caused by an influenza strain that started in pigs. Swine flu is caused by the H1N1 virus strain, which started in pigs.

**Swine influenza** is an infection caused by any one of several types of swine influenza viruses. **Swine influenza virus(SIV)**

or **swine-origin influenza virus (S-OIV)** is any strain of the influenza family of viruses that is endemic in pigs.

## **History**

The Swine flu was initially seen in humans in Mexico in 2009, where the strain of the particular virus was a mixture from 3 types of strains. Six of the genes are very similar to the H1N2 influenza virus that was found in pigs around 2000.

Swine influenza virus is common throughout pig populations worldwide. Transmission of the virus from pigs to humans is not common and does not always lead to human flu, often resulting only in the production of antibodies in the blood. If transmission does cause human flu, it is called zoonotic swine flu. People with regular exposure to pigs are at increased risk of swine flu infection.

Around the mid-20th century, identification of influenza subtypes became possible, allowing accurate diagnosis of transmission to humans. Since then, only 50 such transmissions have been confirmed. These strains of swine flu rarely pass from human to human.

In August 2010, the World Health Organization declared the swine flu pandemic officially over.

## **How it spreads?**

1. By airborne respiratory droplets (coughs or sneezes).
2. By saliva (kissing or shared drinks).
3. By touching a contaminated surface (blanket or doorknob).
4. By skin-to-skin contact (handshakes or hugs).

## **Symptoms**

H1N1 causes a respiratory illness and is very contagious. Symptoms of H1N1 are similar to those of the seasonal flu and may include fever, cough, sore throat, chills, weakness and

body aches. Children, pregnant women and the elderly are at risk from severe infection.

### **Menace of Swine Flu in India**

Swine flu has claimed many lives this year, with Rajasthan topping the list, according to reports.

H1N1 typically spikes between January and March in North India, and abates as the summer sets in. It resurfaces during the monsoon and lasts until after the rains. However, some cases are reported round the year, which is why the World Health Organisation calls for people to get vaccinated against the flu.

### **Possible reason**

Cold weather, conducive for the viral multiplication, has aggravated the outbreak.

### **Government of India initiative regarding swine flu**

The Government of India 2015 issued guidelines for the states to combat swine flu and its outbreak in various states of our nations. It has asked the states to create categories for screening, isolation, hospitalization and treatment. Health workers have been informed to screen people with symptoms of the flu on the basis of severity and categorize them as properly so as to prevent the infection from infecting other people.

As per the guidelines, the disease has been categorised into three main categories :

### **Category A : Low Risk Group**

Are those people who do not require H1N1 testing. These patients are people suffering with mild fever, cough, sore throat, headache, nausea, diarrhea and body ache. These patients will be monitored for 24 to 48 hours and will be

advised to stay home and not interact with other people. They will not need treatment with vaccine 'Oseltamivir'.

### **Category B : High Risk Group**

Comprises of those people who have all the symptoms of category A but are simultaneously suffering from high grade fever and are in the high-risk category. They will need treatment with Oseltamivir and will have to remain at home for proper treatment and for preventing the disease from spreading further. The High risk category includes children with mild illness, pregnant women, people with lungs, heart, kidney, blood or neurological disorders and people over 65 years of age.

### **Category C : Very High Risk Group**

This Group is formed of people showing all the typical signs and symptoms of the disease like breathing difficulties, coughing, high grade fever, rapid fluctuations in blood pressure, inability to feed, influenza like illness, chest pain, drowsiness, bluish or dis-colourization of nails.

Awareness has to be spread by experts about the effects and the possible ways to defend against the disease so that our nation can combat from this outbreak as a whole by eradicating our various states of this killer disease.

### **Global response to swine flu outbreak**

The reference to swine comes from 2009, when the world saw a particularly severe outbreak that the World Health Organisation labelled a "pandemic".

As the leading international agency for human health, WHO assumed a global leadership role in response to H1N1. It presented four sections: WHO's initial response, WHO global response plan, the vaccine deployment initiative and the IHR Review Committee. WHO's response to H1N1 involved all levels

of the Organization, working in close collaboration with partners.

The overarching goal was to mitigate the impact of the pandemic by coordinating essential global activities and strengthening the readiness and response capacities of countries and communities, particularly the world's most vulnerable populations. This innovative, cross-cutting, and dynamic functional approach was effectively adapted to the evolving pandemic situation.