



# **Pandemic Influenza A (H1N1)**

## **Actions Beyond Health**

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# **Pandemic Influenza A(H1N1)**

**Pandemic Influenza caused by H1N1 virus, is a respiratory disease characterized by Fever, Cough, Sore Throat, Runny Nose, Headache, Muscle Aches & In some cases vomiting and diarrhea can also occur. Influenza A H1N1 is spreading from person to person through out the globe, leading to pandemic.**

## **Pandemic Influenza : Preparedness Initiatives**

- ✘** In April 2008 a Workshop on “Pandemic Preparedness Beyond Health” by NDMA in collaboration with UNDMT, WHO, PIC Team & OCHA, Geneva
- ✘** Issued Guidelines on “Influenza A- Pandemic Preparedness for Business Continuity in Non Health Sectors” followed by a workshop at NDMA on 01 Jun 09.
- ✘** Format for information report by DDMA & SDMA

## LESSONS LEARNED FORM *PAST PANDEMICS*

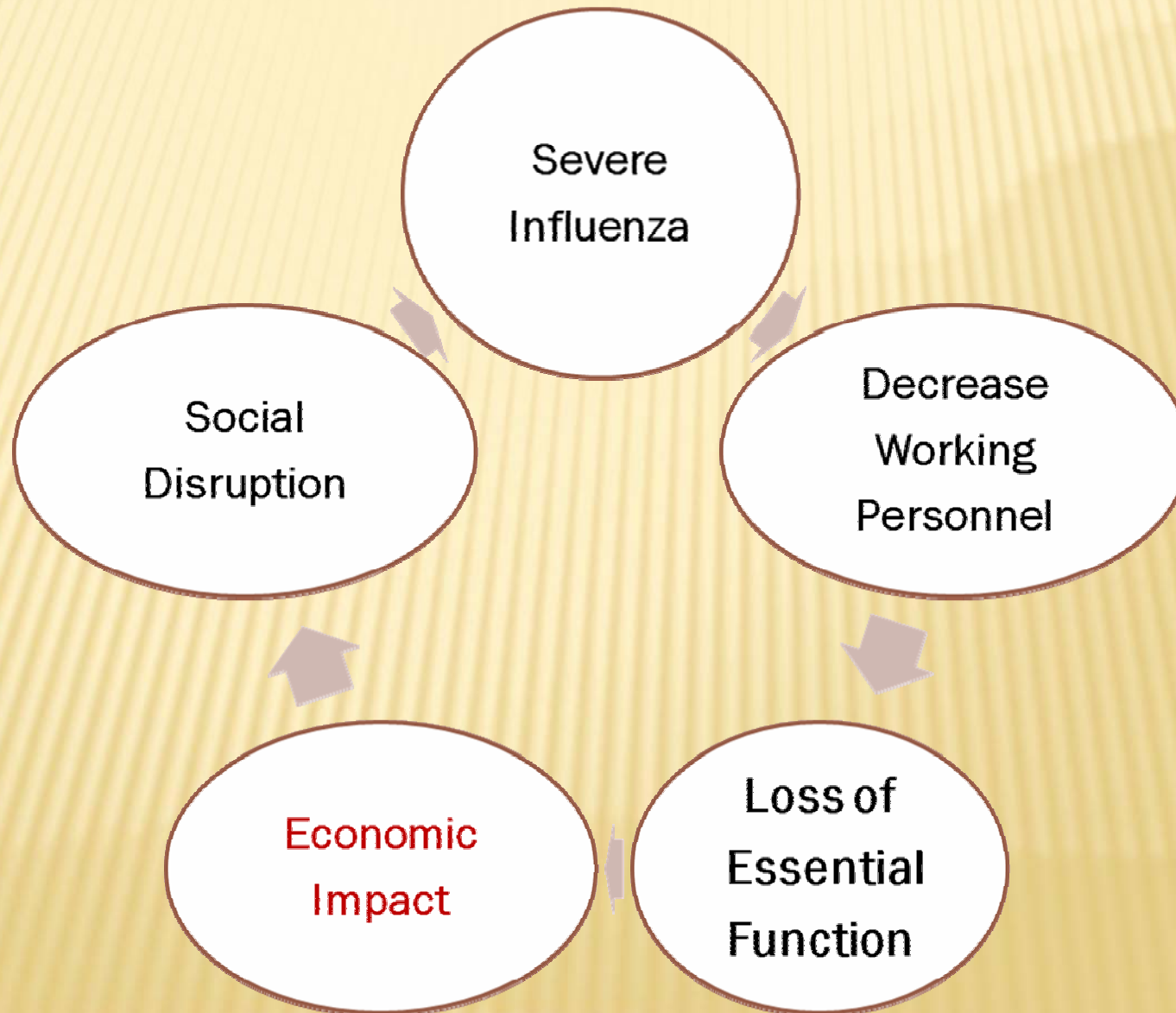
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- **March 1918 **Spanish flu**: First outbreak in Europe. Virus traveled to USA on troop ships, Land & sea travel to Africa, Asia. Warning signal was missed**
- **August, 1918 simultaneous explosive outbreaks in France, Sierra Leone, USA, 10-fold increase in death rate, Highest death rate ages 15-35 years 20-40 million killed in less than 1 year**
- **1957 -Asian flu (2 million died)**
- **1968 -Hongkong flu (1million died)**

# Impact of pandemic on business continuity

- **Nearly 35% population will be affected, leading to significant fall in work force, who has to take care of affected people as well as operational work.**
- **Getting the experience from past flu pandemic in 1918, it could be anticipated that as the severity enhances, the working strength will decrease, causing direct impact on economy.**
- **The decrease in work functionaries is proportional to loss of essential functions which leads to a vicious cycle of social disruption.**

# Vicious Cycle causing Impact of Pandemic on Economy



# Why Are We Concerned?

## H1N1 vs Seasonal Influenza

- × H1N1 - High Transmission Risk → 22-33%  
Seasonal Influenza → 5-15%
- × H1N1 - young & healthy adults Productive age group (20-60 yrs)  
Seasonal flu -  $\geq 65$  years
- × WHO (conservative estimates) → 2 - 7.4 million deaths worldwide (based on 1957 pandemic)
- × WHO estimates worse economic disruption than past pandemics

# Business continuity plan for non health sectors

There is a latency period between two consecutive waves of pandemic. During this period, **necessary business continuity planning of essential service providers needs to be undertaken on priority.**

# **Basic Features of Business Continuity Planning-**

## **Ensuring Personnel Resilience:**

- **Identification of critical skills employees.**
- **Procurement of Personal Protective Equipment (PPE) for critical staff.**
- **Methodology for identification of Backup Resources**
- **Work from home strategy, thereby reducing the number of workforce at office premises.**

## ***Ensuring continuity of operations***

- Expected absenteeism may go up to 70%.
- Identification of the critical sites and maintenance of optimal connectivity using ICT (Information, Communication and Telephony) tools from controlling unit.
- Shutting down of non critical sites and surplus manpower will be diverted as per requirement.
- Defining chain of command to take decisions on absenteeism (management with selective staff).
- **Necessary directions be given to maintain the buffer stocks of essential commodities Very essential for survival, less essential but usable for long term storage**

**The important non-health services identified in International Workshop on Pandemic Preparedness Beyond Health held on 21-22 April, 2008 include:**

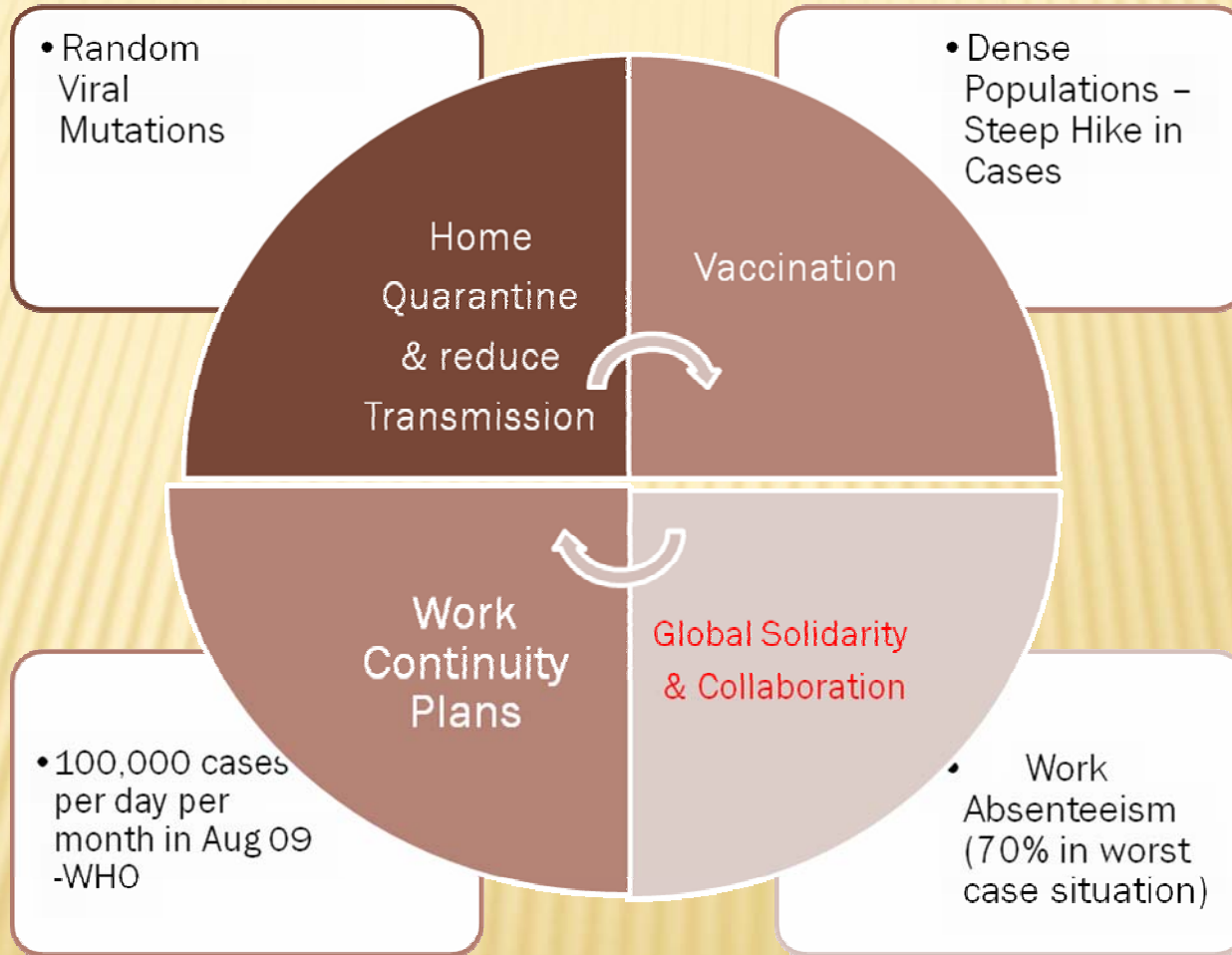
- Supply of food and essential commodities
- Water Resources
- Law and order
- Surface Transport & Shipping
- Civil Aviation
- Railways
- Information and Communication
- Power
- Commerce and Industry
- Rural Sector
- Finance
- Defence

## Non Health Business continuity plan for voluntary organizations & private bodies

Voluntary organizations & private bodies also need to develop their business continuity operational plans.

- To continue their own activities
- To assist stakeholders in the management of pandemic

# Future ??



# CONCLUSION

- In the event of severe pandemic, business continuity plan will have a key role to play in reducing the risk to the employees health as well as maintaining the essential operations.
- Based upon past experience and the way the current H1N1 outbreak is spreading rapidly, there is a likelihood that there might be a second wave which could be more virulent.
- From 1918 flu, lesson learnt is that more than one third world population will be affected by the pandemic, if not planned before hand it will paralyze all the activities. This is the high time that plans need to be prepared which will be able to address the scenarios arising from the pandemic.
- It is therefore important that Stake holders of non health sectors need **ACTIONS BEYOND HEALTH for having business continuity plan** in place urgently, to handle severe pandemic in an effective manner.

# Jai Hind

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# Supply of Food and Essential Commodities

Nodal Ministry/ Department
Ministry of Agriculture
Ministry of Consumer Affairs, Food and Public Distribution
Ministry of Food Processing Industry

Need planning to ensure :

- Food Supply,
- Production-cum- storage site
- Transportation
- Storage / Distribution Sites
- Regional transportation vehicles / services
- Small dealers, distributors at local level
- Controlling Unit will exchange information with the Department concerned

## Law and Order

<b>Nodal Ministry/ Department</b>
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Ministry of Home Affairs
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- The optimal number of police force personnel and logistics will be maintained.
- Police act as a first emergency responder irrespective of the nature of emergency. Thus, adequate number of PPE will be made available to them.

# Water Supply

**Nodal Ministry/ Department**

**Ministry of Water Resources- Department of Water Supply**

- Storage-cum- purification site
- Various water depots / tanks within district/ city/state or UT
- Pipeline Transportation and Maintenance Agency
- Various water tankers (in public and private sector with list of various drivers
- Dedicated pipelines to higher priority areas like hospitals
- Drinking Water Trolleys, their drivers and sites of storage
- Various companies working in water purification systems

# Transportation- Surface Transport / Shipping

Nodal Ministry/Department

**Ministry of Shipping, Road Transportation and Highways**

- Department of transportation include civil transportation within city; across the district / state borders, public / private carriers carrying food, essential commodities etc. It is the backbone of the industry and economy. The failure of this sector is critical for a cascade of reactions leading to social disruption. Therefore, adequate number of vehicles will be pooled from both governmental and private sectors.

## Civil Aviation

<b>Nodal Ministry/Department</b>
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Ministry of Civil Aviation
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- Establish mechanism of active surveillance of all passengers travelling by air at all the airports to screen the possible suspects.
- All the airports, Ministerial office, Departments at domestic locations, cargo offices, linked essential offices for continuity of air operations are referred as critical sites,
- The active surveillance for prevention of spread across the community and also within the office personnel is necessary
- Protocols for detection of suspected cases

# Railways

<b>Nodal Ministry/Department</b>
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Ministry of Railways
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- Railways are able to provide medical assistance in remote regions and also during evacuation of affected community to earmarked health care facility
- The active surveillance for prevention of spread across the community and also with in the office personnel is necessary
- Protocols for detection of suspected cases

## Information and Communication

### Nodal Ministry/Department

Ministry of Information and communication technology

- The business continuity planning for all the interconnected organization needs to be developed for maintenance of all critical operations
- Each critical site has a defined number of personnel doing assigned roles. It is pertinent to identify critical functions to operate the functions of nodal ministry / department

## Power Sector

<b>Nodal Ministry/Department</b>
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Ministry of Power
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- The identified sites like hospitals, life-line buildings etc that needs complete power backup needs to be prioritized by the department itself.
- The grid network needs to operationalise on 24 X 7 basis by all possible means to provide power back to all the essential service providers.

# Commerce and Industry

<b>Nodal Ministry/Department</b>
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Ministry of Commerce and Industry
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- The industries which are required to maintain the production - like food processing industries, to maintain the basic level of availability of essential commodities at fair prices, will be prioritized.
- Encouragement of e-commerce and maintenance of essential connectivity / functioning plays an important role to minimize economic losses which provides necessary cash flow in the market.

## Rural Sector

<b>Nodal Ministry/ Department</b>
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Ministry of Rural Development
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- Maintenance of proper hygienic conditions with optimal supply of required medication i.e. antiviral drugs is necessary which requires activation of local Crisis Management Group to work in coordination with IDSP for immediate reporting and prompt responsive actions.
- Rural sector infrastructural development, awareness campaigns and vaccination program (if necessary) are some of the mitigation approaches. These activities will reduce the possibility of occurrence of flu cases and eventually the food grains production will not be affected significantly.

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# Finance Sector

<b>Nodal Ministry/Department</b>
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Ministry of Finance
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- **Internet based financial exchange, online payments for purchases and other fewer people – to- person contact options will be practiced to prevent spread of flu.**
- **Management of panic among the community requires confidence building measures by continued operations of stock exchange, information about shares and other facilities required to be augmented.**
- **Emergency response funding needs to be diverted as per immediate requirement.**

## Defence

<b>Nodal Ministry/ Department</b>
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Ministry of Defence
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- To provide necessary assistance like food supplies, medical care, water resources management and other facilities to civilian sector
- MoD shall provide necessary directions to DRDO to develop various novel technologies in prevention, detection and decontamination, awareness materials, Dos' and existing Don'ts and adequate initiatives to be taken to develop a vaccine against the existing evolving virus in liaison with MoH&FW.

# CONCLUSION

- In the event of influenza pandemic, business continuity will have a key role to play in reducing the risk to the employees health as well as maintaining the essential operations.
- Based upon past experience and the way the current H1N1 outbreak is spreading rapidly, there is a likelihood that there might be a second wave which could be more virulent.
- From 1918 flu, lesson learnt is that more than one third world population will be affected by the pandemics, if not planned before hand it will paralyze all the activities. This is the high time that plans need to be prepared which will be able to address the scenarios arising from the pandemic.
- It is therefore important that Stake holders of non health sectors need **ACTIONS BEYOND HEALTH** by having **business continuity plan** in place urgently to handle influenza pandemic in an effective manner.