

Prevention and Management of Influenza A (H1N1)

Introduction

Mexican Flu also named as Influenza A detected first time in Mexico is caused by H1N1 virus. WHO has already declared the disease as alert level to phase 5, one step short of full fledged pandemic. With current movements of the population, our country may not remain free from the disease. Therefore preventive measures are required in place so that virus does not reach to our country, through carrier or patient. Even if it reaches preventive measures for the containment will be taken against the spread of virus. Following guidelines are prepared on the basis of best practices being followed in the affected countries on the advice of WHO and CDC Atlanta. These guidelines also include recommendations of International Workshop on Pandemic Preparedness beyond Health held on 21 and 22 Apr 2008 organized by NDMA.

I. Prevention

- a. Active surveillance by medical screening at Air ports, Sea ports and International land entry points is required.
- b. All persons coming from affected countries and showing symptoms of influenza will be screened. Teams of trained doctors and para medical staff need to be placed at air port, sea ports and at land entry points of our neighboring countries for medical screening of passengers arriving from the influenza affected countries.
- c. A standard format will be used for the screening purposes across the country. During the screening doctors must look for the symptoms of fever, cough, sore throat, head-ache, nasal discharge, sneezing, chills and fatigue. Some cases may have diarrhea and vomiting as well. Passengers having these symptoms must be quarantined and their nasopharyngeal swab should be taken. Passengers having possible symptoms indicating flu need to be quarantined at least for three days, their samples will be taken and sent for virus identification to the designated bio-safety laboratories (BSL). Adequate sample collection kit and Personal Protective Equipments (PPE) will be placed for the sampling. All medical teams will observe universal safety measures.
- d. **Nasal and Throat swab taking:** Both nose and throat swabs will be taken and placed into a bottle of viral transport medium, using swabs preferably with a plastic shaft. The staff members taking the swabs should wear a

face mask, plastic apron and gloves. All lab staff taking swab must be trained for correct procedures of sample taking.

- e. **Strict Quarantine:** Passengers travelling from affected countries and those showing flu like symptoms will be placed under strict quarantine for a period of minimum three days and will only be cleared after receiving a negative report for H1N1 virus.

II. Hospital Preparedness:

- a. All hospital in the major cities will be earmarked to create capacities to isolate these patients during quarantine period. All doctors, para-medical staffs, nurses, laboratory technicians and other staff likely to come in contact with suspected person will use personal protective equipment (PPE). Adequate stock of PPE consisting of face masks, gloves and protective disposable suits with goggles will be kept for the use of hospital staff. Similar measures shall also be taken for international air ports, major hospitals in major cities and laboratories. Plans should also be prepared to cater for large number of patients that may come at the pandemic phase. Such capacity can be surged by discharging cold surgery and chronic cases. Wards for H1N1 influenza patients will be isolated to prevent the infection to the other patients. Medical team treating H1N1 influenza cases in hospital are required to use FFP3 standard mask (International Standard).
- b. **Chemoprophylaxis:** Those in close contact of person showing symptoms will be given antiviral drug TamiFlu. A stock of ten million doses of Oseltamivir (TamiFlu) to be procured and distributed. The TamiFlu should be stocked at international air ports and designated hospitals. Drugs can be given for prophylaxis to medical and para medial staff and for the treatment of affected cases and people who have come in contact with affected cases.
- c. **Laboratory backup:** Adequate laboratory back up of BSL3 and BSL4 labs is required to be activated to support the hospital and the screening team.

III. Logistics support:

- a. Adequate amount of TamiFlu to be procured and stocked at the location decided by the nodal ministry.
- b. Pharmaceutical companies will be advised to keep themselves ready to manufacture larger quantities of TamiFlu at a short notice.

IV. Public Awareness: Press and Electronic Media will be used for this purpose Doø and Dontø will be regularly relayed to the community. Public should be specifically advised not to hide the disease and advised to report the nearest medical authority in case of Flu symptoms. Doø and Dontø are attached as annexure-A.

V. Communication:

- a. Control rooms will be established at airports, sea ports, hospitals, director health services of states, to be linked with state crisis management groups, ministry of health and family welfare, and ministry of home affairs, National Crisis Management Committee and National Disaster Management Authority.
- b. Regular updates on development across the country must be monitored by the nodal officer so appointed by Ministry of Health and Family Welfare and Department of Health.
- c. Crisis Management Group must meet every day to review the status and apprise NCMC and NDMA on day to day basis.

VI. Business continuity plan:

- a. Plan for Maintenance of Essential Services and Continuity of Operations should be prepared for full fledged pandemic. Such plans will be applicable both for government and private sectors through awareness strategies, monitoring and regulation mechanisms for compliance.
- b. Sub-committees need to be constituted for handling issues related to civil continuity with working groups for concerned ministries. For pandemic preparedness and planning refer annexure-D of proceedings of "International Workshop on Pandemic Preparedness beyond Health" (attached).

VII. Recommendation for coordination and ensuring implementation

- a. It is proposed to constitute teams which will have representative from Ministry of Health and Family Welfare, State Health departments of affected states and NDMA.
- b. The teams will visit airports and hospitals to coordinate and over see the proper functioning.

Annexure-A

Do's and Dont's for the public:

Do's

- Cover your mouth and nose with a handkerchief or tissue while coughing or sneezing.
- Wash your hands every time after coughing or sneezing, thoroughly with soap and water, before and after touching your nose, eyes or mouth.
- Avoid crowded places.
- Stay at home if infected with flu like illness.
- Keep at least an arm's distance from people affected with symptoms of influenza like cough, running nose, sneezing and fever.
- Sleep well, stay physically active and effectively manage stress.
- Drink plenty of water and eat nutritious food.

Dont's

- Shake hands, hug and kiss socially, or use other contact greetings.
- Take medicines without consulting the physician.
- Spit outdoors.
- Aspirin not to be used in children.