Mitigation Response to Influenza A (H1N1) Virus Infection

Objectives

- To slow down the virus spread in the community & minimize transmission to the most vulnerable group
- To improve health facility preparedness in providing necessary treatment particularly for severe cases to reduce mortality impact
- To minimize social disruption & other negative consequences

Severity Assessment

- Virological factor (Properties of the virus)
  - Self-limiting infections in majority of infected individuals
  - Can cause very sever form of infections among the high risk group
- Population vulnerability
  - Relatively high in the Philippines
- Capacity to respond
  - Established outbreak response mechanism at national & regional levels

Components/Framework of Response

- Command system
- Surveillance
- Health facility response
- Public health interventions
- Risk communication

Stepwise Approach

- Mitigation response level 1
  - A few sporadic cases
  - No clustering of cases
  - No community level transmission
- Mitigation response level 2
  - Beginning of community level transmission
  - Clustering of confirmed cases of Influenza A (H1N1) in defined communities or specific areas (schools, workplace, etc...)
- Mitigation response level 3
  - Sustained community transmission
  - A series of clusters in a population in a given period of time & becoming wider in a given geographical area

Response Matrix

Command System
• DOH Task Force (National / CHDs) • NDCC / RDCC (DOH Secretary is the de facto chair currently) • Local Task Force on Influenza A (H1N1)   • Provincial, municipal, city
Command system should be functional at all mitigation response levels

Mitigation Response Level 1

Surveillance	Health Facility Response
•Laboratory Surveillance • If it fits the case definition of Case Under Observation, needs to perform confirmatory exam • Disease Surveillance • Look for clustering of cases • If with clustering of ILI, needs to perform random confirmatory exam • Contact tracing • Event based surveillance	•Identify referral hospitals • check number of beds, isolation rooms, respirators, etc… • Capacitate referral hospitals to manage confirmed cases • Intensify infection control • Prepare essential meds & equipments incl. protocols • Admit ALL confirmed cases • Antiviral meds to all probable & confirmed cases • Prepare RHU / Health Centers / Private clinics & Primary hospitals to manage mild cases, ambulatory cases or screen ILI & establish referral system for severe cases

Mitigation Response Level 1

Public Health Interventions	Risk Communication
•Containment measures • Non-pharmaceutical interventions • Quarantine • Isolation • Social distancing • School closure • intensify infection control program in the community • infection control committee, trainings, available PPEs, protocols	• Focus on individual, household & public awareness • Prevention • Infection control • Hand hygiene • Cough manners • Containment • Provide accurate & up to date information • Prepare, reproduce & distribute information materials specific for containment & mitigation measures

Mitigation Response Level 2

Surveillance	Health Facility Response
•Laboratory Surveillance • If it fits the case definition of CUO, needs to perform confirmatory exam • Scale up lab capacity to cope up with the increasing number of CUO • When community transmission has been established in an area, conduct random sampling of CUOs to establish if there is sustained transmission • Disease Surveillance • Establish the extent of spread of the disease & if there is sustained community level transmission • Event based surveillance • If community transmission has been established, no need to perform contact tracing	•If community transmission has been observed in the affected area: • Mild cases to be observed / managed at home • Admit probable & confirmed cases showing signs of respiratory infections & severe medical conditions •Treatment dose of Oseltamivir for the compromised / vulnerable sick group • No prophylaxis dose for close contacts except for health care providers exposed to probable & confirmed case without use of appropriate PPE • Triaging at the hospitals, public health centers & clinics • Hospitals, health centers & clinics should be ready to handle surge of consultations & possible admissions or referrals • Intensify infection control in hospitals, health centers & clinics

Mitigation Response Level 2

Public Health Interventions	Risk Communication
•Non-pharmaceutical interventions • Home confinement / Isolation of mild cases • Isolation for cases admitted in hospitals • Social distancing for close contacts • Social distancing like school closure will depend on local epidemiological situation • intensify infection control program in the community • infection control committee, trainings, available PPEs, protocols	• Focus on individual, household & public awareness • Prevention • Infection control same as level 1 • Containment • Mitigation measures • Provide accurate & up to date information • Special attention to the vulnerable group of population most likely to develop complications • Emphasize self quarantine for the exposed & home treatment for the mild cases, early consultation to prevent complications & severe outcome of the disease • Continuous information to the public through IEC • Communication should focus on the DOH best efforts to contain the disease, until such time that mitigation process has to start • Mitigation process has to be proactive

Mitigation Response Level 3

Surveillance	Health Facility Response
•Laboratory Surveillance • RITM & other laboratory to prioritize high risk groups •Lab exam to include monitoring the properties of the virus (mutation, resistance, etc...) • Disease Surveillance • No more contact tracing • Monitoring disease to know if activity levels are going up or down • Monitor changes in the natural history of the disease	•Admit severe respiratory infections & with severe medical conditions • Public & private hospitals should be prepared to manage higher number of complicated, severe cases •Health centers, RHUs / private clinics should be prepared to manage higher number of mild cases as out patient or ambulatory cases • Prioritize treatment dose of oseltamivir •Public health facilities (RHUs, health centers) to be ready to admit severe / complicated cases once the surge capacity of the hospitals can no longer address the need of the pandemic

Mitigation Response Level 3

Public Health Interventions	Risk Communication
•Non-pharmaceutical interventions same as above • Use of appropriate PPEs, facility modified to cater the infection control measure needs, systems flow • Debriefing of frontline health workers	• Sustain level of public awareness • Mitigation measures • Infection control • Provide accurate & up to date information • Minimize fear, anxiety & unrest • Continuous information to the public through IEC

- Referral system must be functional in all mitigation response levels

Major Policy Changes from Containment to Mitigation Response to the Influenza A (H1N1) Outbreak in the Country

Major Policy Changes

	FROM	TO
Infection Control Measures	Provisions of Interim Guidelines Nos. 1 to 15 (issued between May 4 to June 8, 2009)	In response to observation of index cases & cohort of cases & WHO Pandemic Phase 6
1. Prophylaxis with the anti-viral (oseltamivir)	• For ALL first responders or health care workers tending suspected, probable & confirmed cases • For ALL household & close contacts (Interim Guidelines nos. 1, 2 & 8)	SELECTIVE Prophylaxis • Post exposure prophylaxis ONLY for close contacts with existing unstable medical conditions that may be aggravated by a viral infection • NO pre-exposure prophylaxis for health care workers or first responders • Post exposure prophylaxis for health care workers who did not have adequate PPE when in contact with confirmed cases

Major Policy Changes

	FROM	TO
2. Anti-viral treatment for confirmed Influenza A (H1N1) cases	• For ALL confirmed (positive) cases of Influenza A (H1N1) (Interim Guidelines nos. 1 & 2)	Limited to specific indications & with medical supervision • Anti-viral treatment ONLY for confirmed cases with: • Severe or progressive illness • Pre-existing or concurrent medical condition that compromise system or pulmonary function • Emphasize: Use anti-viral in pregnancy ONLY when benefits outweigh the risk to embryo or fetus

Major Policy Changes

	FROM	TO
3. Quarantine Rule for Travellers	• Home quarantine for 10 days for ALL travellers coming from countries reporting confirmed cases of Influenza A (H1N1), with or without ILI	RESPONSIBLE SELF MONITORING • Travellers shall monitor self for 10 days after arrival, observe for signs & symptoms of ILI & submit to National DOH Guidelines if ILI develops • For patients diagnosed as confirmed case of Influenza A (H1N1) & intending to travel outside the Philippines, travel clearance shall be provided 7 days after resolution of fever

Major Policy Changes

	FROM	TO
4. Confinement or isolation & quarantine measures for suspected cases or CUOs	• For ALL suspected cases or CUO (ILI & history of recent travel or exposure to confirmed cases) until laboratory results are obtained (Interim Guidelines no. 15)	RESPONSIBLE, VOLUNTARY CONFINEMENT • In general, voluntary home confinement • Hospital admission only when clinically indicated

Major Policy Changes

	FROM	TO
5. Confinement or Isolation of Probable or Confirmed Cases	• "Probable & confirmed cases shall remain in confinement... until asymptomatic" (Interim Guidelines no. 2)	MEDICALLY PRESCRIBED Hospital Confinement • A great majority of probable & confirmed cases are for home care. They are those with stable clinical manifestations or those identified when they were in the recovery stage of the illness • Hospital admission criteria include those manifesting with respiratory difficulty, progressively acute illness & debility & others belonging to risk groups

Major Policy Changes

	FROM	TO
6. Laboratory Diagnosis	• For suspected cases & CUOs •At the Research Institute for Tropical Medicine (Interim Guidelines nos. 3, 7 & 15)	SELECTIVE Laboratory Confirmatory Testing • Indications for laboratory testing are: • Mandatory investigation of CUOs identified at various ports of entry in the country • Investigation of first suspect cases in a specific area or community • Random sampling of persons in clusters with ILI manifesting with unusual symptoms or severity • Investigation of ILI in persons at high risk of developing complications because of other medical conditions or problems • NO LABORATORY FOLLOW-UP TESTS ARE NECESSARY PRIOR TO DISCHARGE

Major Policy Changes

	FROM	TO
7. Reporting of Influenza A (H1N1) Suspects or CUOs	• Mandatory reporting of ILI among travellers from countries where there are confirmed cases & of close contacts of confirmed cases • Reporting of all rumors on occurence of ILIs (Interim Guidelines no. 7)	• Routine reporting of ILI through the nationwide Philippine Integrated Disease & Surveillance Reporting System (PIDSR) • Pursue screening & reporting of persons with ILI detected at international ports of entry

Major Policy Changes

	FROM	TO
8. Contact Tracing	• For ALL close contacts of confirmed cases (Interim Guidelines no. 14)	• Routine contact tracing for disease investigation shall only be conducted to document first & second generation transmission in communities or specific areas with no previous cases based on the assessment of CHDs & local health officials

Individuals at Increased Risk for Hospitalizations and Death

- Elderly $\geq$ 60 years
- Children less than two years
- Certain chronic diseases
  - Heart or lung disease, including asthma, pneumonia who needs hospitalization in 2nd or 3rd level of care
  - Metabolic disease, including uncontrolled diabetes
  - HIV/AIDs, other immunosuppression, organ transplant patient
  - Conditions that can compromise respiratory function or the handling of respiratory secretions like COPD, PTB (active & untreated), MDRTB or previous pulmonary pathology which requires hospitalization
  - Patient with rapid progression of disease
  - Patient with criterion for admission in ICU
  - Patient with severe malnutrition

Individuals at Increased Risk for Hospitalizations and Death

- Certain chronic diseases
  - Complex congenital cardiopathy that requires hospitalization in 2nd or 3rd level of care
  - Chronic renal insufficiency that requires hospitalizations
  - Heart defect or previous cardiac pathology that requires hospitalization
  - Patients with underlying chronic diseases that present progression to deterioration
- Pregnant women

Thank You!