

# INFLUENZA A (H1N1) PANDEMIC CURRENT SITUATION IN MALAYSIA

Disease Control Division  
Ministry of Health

*1 July 2009*



Ministry of Health Malaysia

# Global Situation

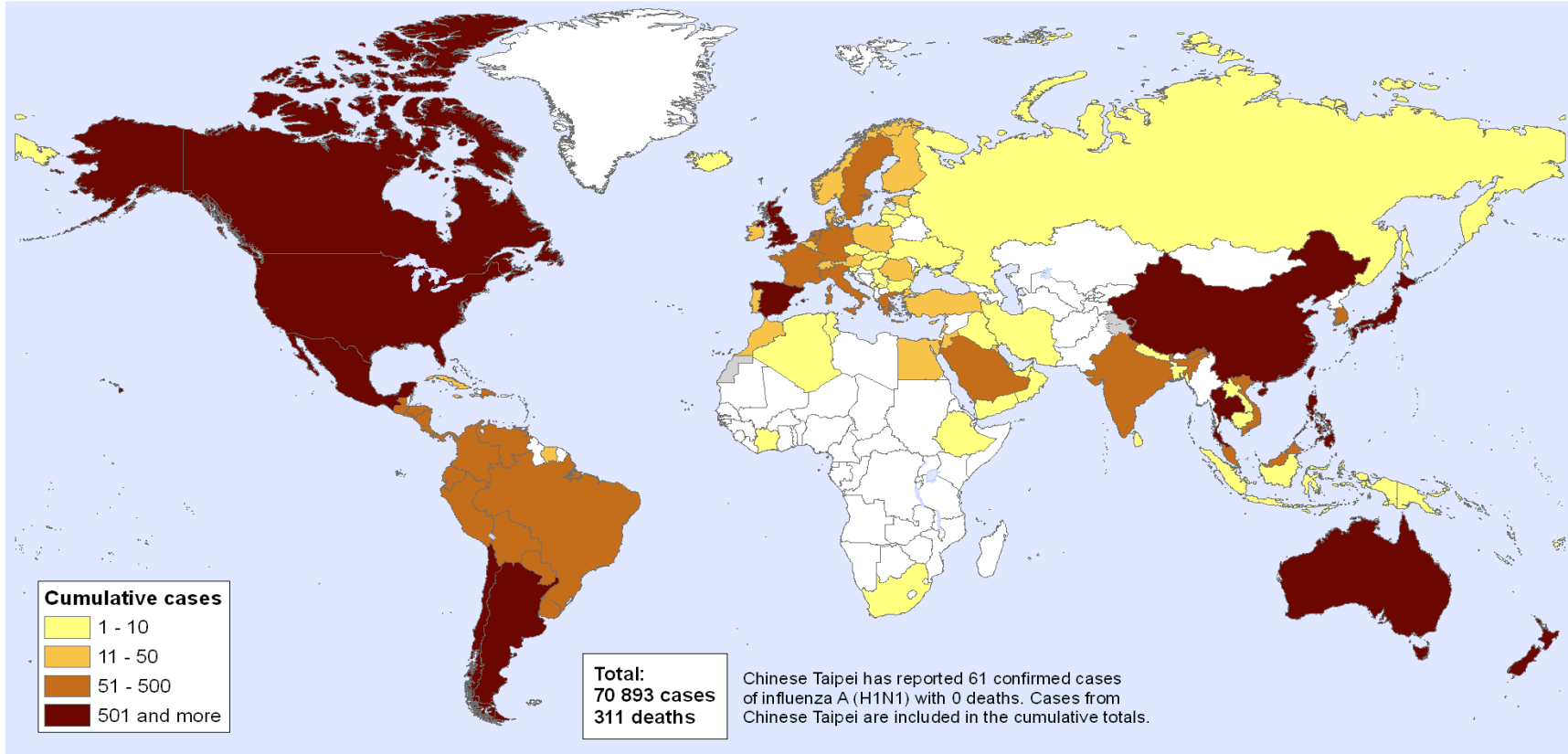
- **Till 1 July 2009 @ 8.00 am;**
  - **116 countries reported confirmed cases**
  - **71,480 confirmed cases with 311 deaths**
  - **35 countries with local transmission**
  - **11 countries with sustained human-to-human transmission**



# Global Situation of Influenza A (H1N1) Pandemic – till 29 May 2009

New Influenza A (H1N1),  
Number of laboratory confirmed cases as reported to WHO

Status as of 29 June 2009  
09:00 GMT



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization  
Map Production: Public Health Information  
and Geographic Information Systems (GIS)  
World Health Organization



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Map produced: 29 June 2009 13:18 GMT



Ministry of Health Malaysia

# Malaysia's Current Situation

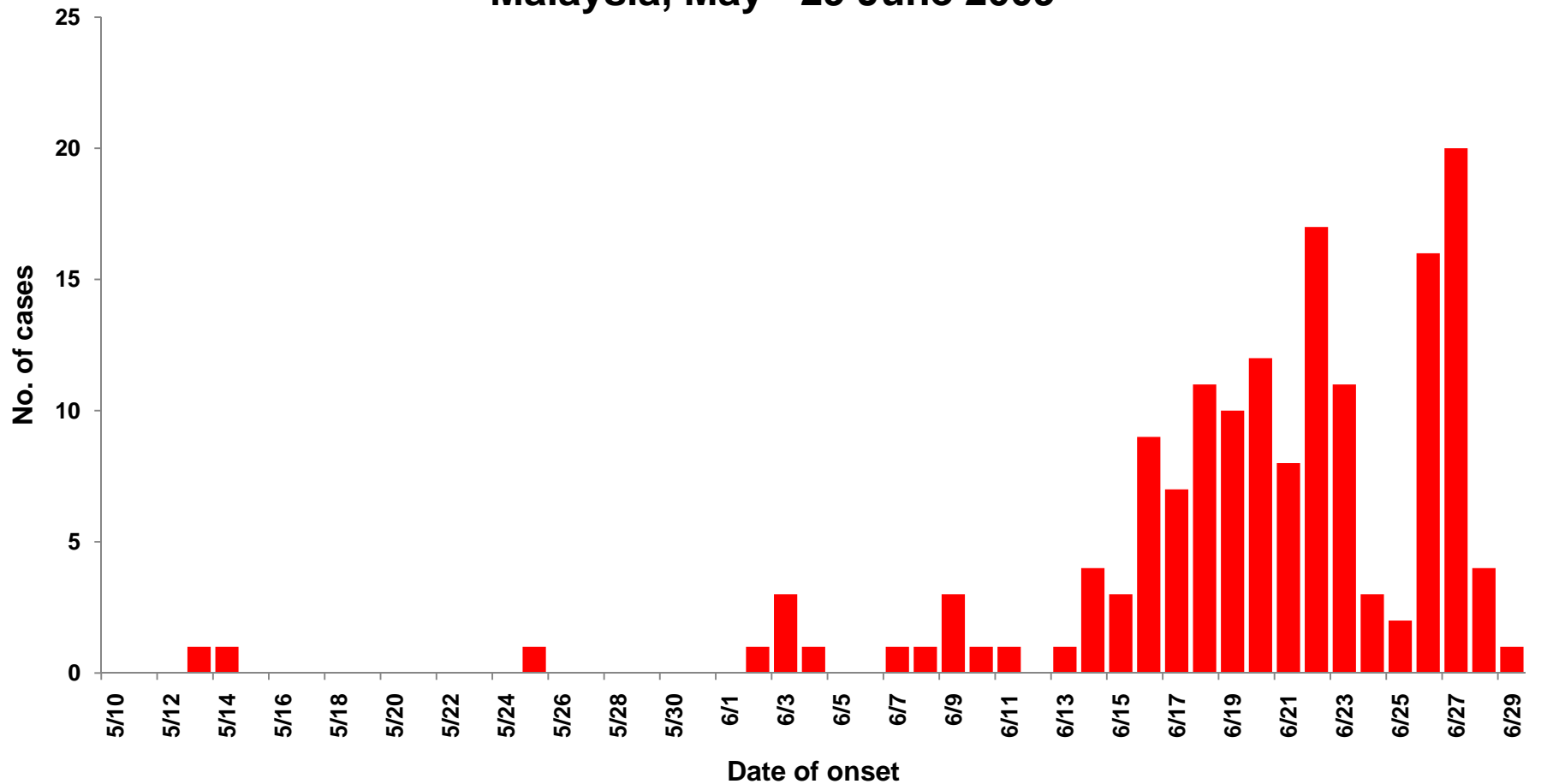
(1 July 2009 @ 9.00 am)

- **First case confirmed on 15 May 2009**
- **Current : 196 confirmed cases of Influenza A H1N1**
- **167 imported cases (mostly from countries with local transmission)**
- **29 local transmission (mostly school children)**



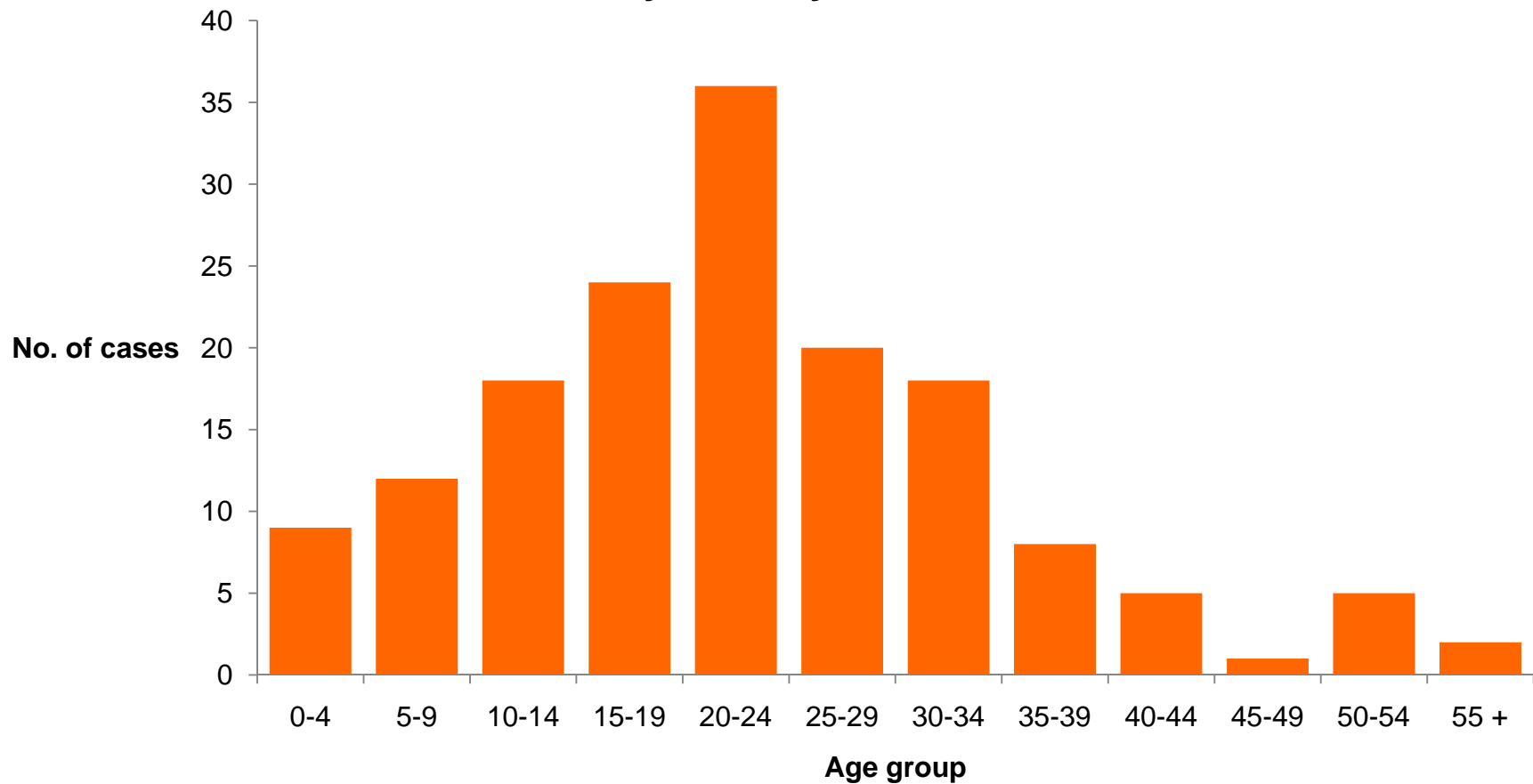
# Malaysia's Current Situation (30 June 2009 @ 9.00 am)

Date onset of confirmed influenza A(H1N1) cases,  
Malaysia, May - 29 June 2009



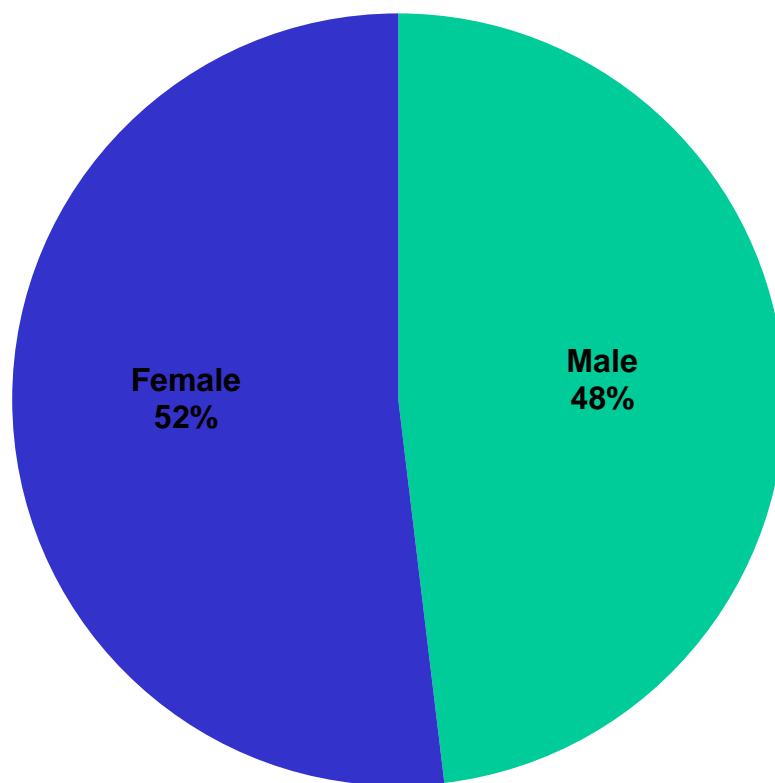
# Malaysia's Current Situation (30 June 2009 @ 9.00 am)

Age group of confirmed influenza A(H1N1) cases,  
Malaysia, May - 29 June 2009



# Malaysia's Current Situation (30 June 2009 @ 9.00 am)

Gender proportion of confirmed influenza A(H1N1) cases,  
Malaysia, May - 29 June 2009



# Malaysia's Current Situation

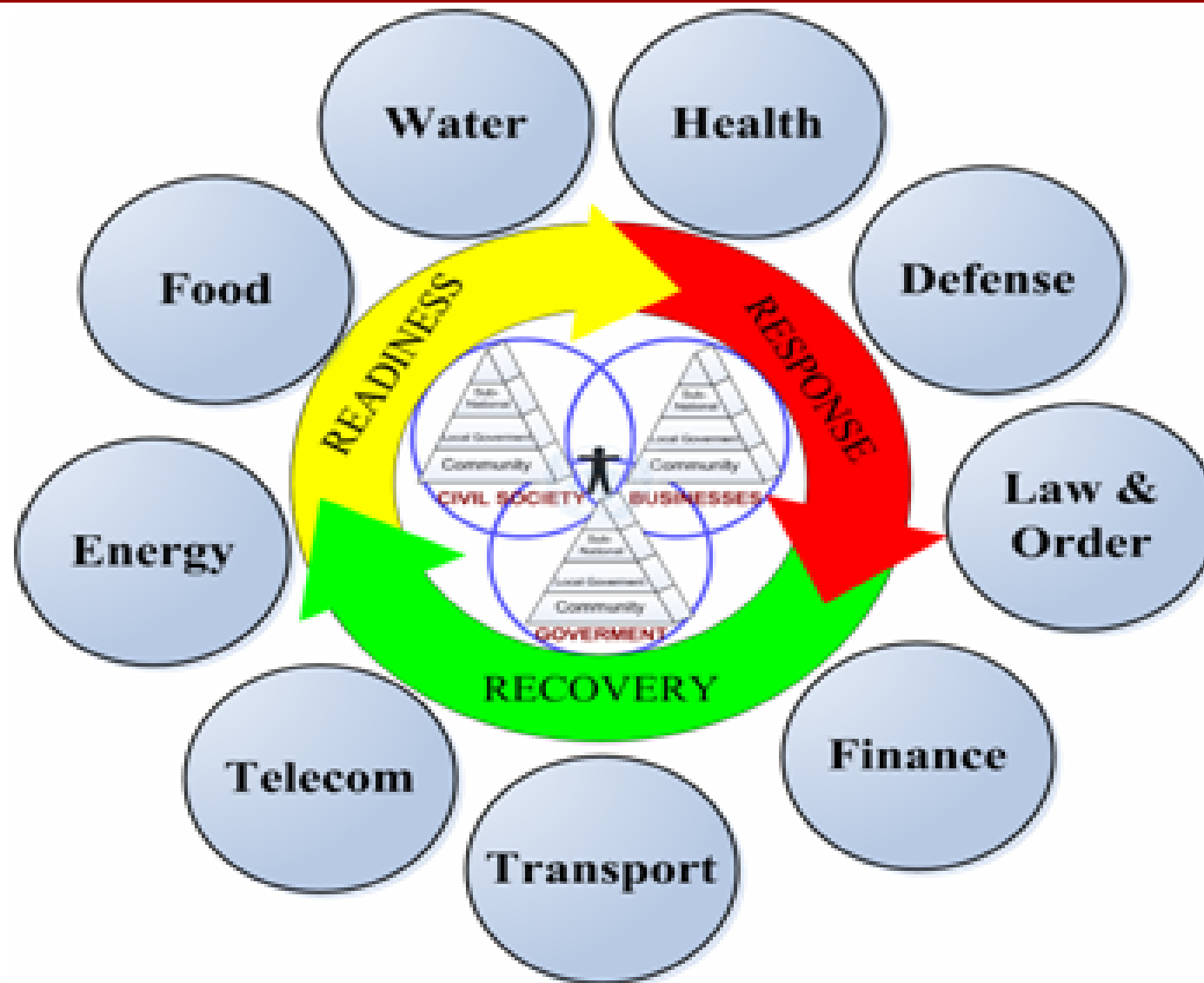
(30 June 2009 @ 9.00 am)

## Schools involved

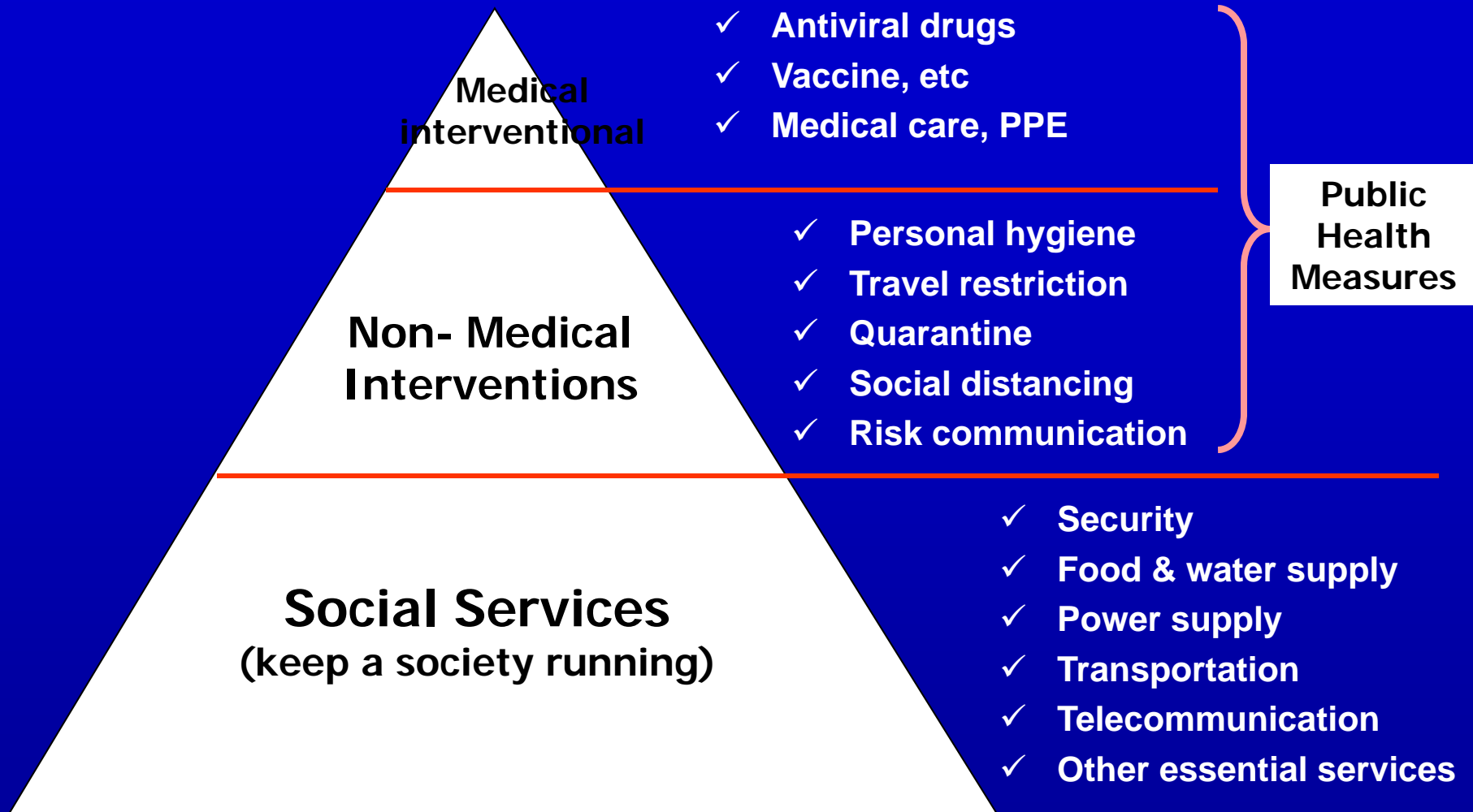
- SRKJ(C) Jln. Davidson – school closed (completed)
- Seri Chempaka Int. Schools – school closed (completed)
- SRK Assunta 1 & 2 – school closed (completed)
- SMK Damansara Utama 2 – 1 class closed (Completed)
- SMK Wangsa Maju, SS 2, 1 – class closed (completed)
- SMK Seksyen 9, Shah Alam – 1 class closed (completed)
- **SMK Abdul Rahim 2 – 2 classes – (voluntarily – school closed)**
- **SM Tsun Jin, KL – school closed**
- **Sek Tinggi Chung Hwa, Seremban – school closed**



# SECTORS



# Multi-sectoral Approach to Pandemic Response



# Degree of action measure taken will be according to level of pandemic alert

## INFLUENZA PANDEMIC – PHASES AND STRATEGIC ACTIONS

	Phase	Transmission	Objectives	Strategic actions
Inter-pandemic period (planning and preparedness)	1	Influenza virus subtype in animals only (risk to humans low)	Strengthen pandemic preparedness at all levels	<ul style="list-style-type: none"> <li>•Prepare Pandemic Preparedness Plan</li> <li>•Established surveillance in animal</li> <li>•Establish human influenza surveillance</li> <li>•Establish collaboration between human and animal sectors</li> </ul>
	2	Influenza virus subtype in animals only (risk to humans substantial) Confirm pandemic outside Malaysia	Minimize the risk of transmission to humans; Detect and report rapidly, if it occurs	<ul style="list-style-type: none"> <li>•Enhance animal surveillance and aggressive response to animal outbreaks</li> <li>•Strengthen human surveillance</li> <li>•Stockpile antiviral, PPE etc</li> <li>•Strengthen collaboration between different sectors and WHO/OIE/FAO</li> <li>•Develop and implement risk communication strategy</li> <li>•Prepare health and essential service contingency plan</li> </ul>
Pandemic Alert (emergency and pre-emptive response)	3	Human infection (transmission in close contacts only) Confirm Pandemic within Malaysia 3a: imported 3b: within Malaysia	Ensure rapid characterization of new virus Detect, notify and respond to additional cases	<ul style="list-style-type: none"> <li>•Enhance animal surveillance and aggressive animal outbreak containment</li> <li>•Enhance human surveillance and aggressive outbreak management</li> <li>•Early strategic use of antivirals</li> <li>•Social distancing</li> <li>•Implement risk communication strategy</li> <li>•Issue alert for quick implementation of health and essential service contingency plan</li> </ul>
	4	Limited human-to-human spread; small clusters <25 cases lasting <2 weeks Second waves or other waves of pandemic 4a outside Malaysia 4b inside Malaysia	Contain the virus or delay its spread	
	5	Localized human to human spread; Larger clusters 25-50 cases over 2-4 weeks	Maximum efforts to contain or delay the spread	
Pandemic (minimizing impact)	6	Widespread in general population	Minimize the impact of the pandemic	<ul style="list-style-type: none"> <li>•Implement health and essential services contingency plan</li> <li>•Risk communication;</li> <li>•Treat case and contacts with antivirals, if available,</li> <li>•Social distancing: close schools, ban gatherings</li> </ul>



# Influenza Pandemic – Phases and Strategic Actions

	Phases	Transmission	Objectives	Strategic actions
	4	Small cluster(s) with limited human to human transmission but spread is highly localised, suggesting that the virus is not well adapted to humans.	Contain the virus or delay its spread	
	5	Larger cluster(s) but human to human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	Maximum efforts to contain or delay the spread	
Pandemic (minimising impact)	6	<b>Pandemic period</b> Pandemic phase: increased and sustained transmission in general population	Minimize the impact of the pandemic	<ul style="list-style-type: none"> <li>• Implement health and essential services contingency plan</li> <li>• Risk communication;</li> <li>• Treat case and contacts with antivirals, if available,</li> <li>• Social distancing: close schools, ban gatherings</li> </ul>
Postpandemic period		<b>Post pandemic period</b> Return to interpandemic period.		



# Containment vs Mitigation Phase

- Containment Phase:

- Cases, **MOSTLY** imported and clearly defined local cases (linked to imported cases).
- Aim of control strategies: to **delay spread** of disease in our community

- Mitigation Phase:

- There is sustained community spread and new cases have no defined epidemiological links with existing cases.
- Aim of control strategies:
  - To **reduce morbidity and mortality** from the disease
  - To **slow the spread** of disease
  - To **minimize disruption to essential services**



# Transition from Containment to Mitigation Phase

- When?
  - When there is evidence of beginnings of widespread community transmission where there are a number of unlinked cases in the community with no known epidemiological link to any known cases.



# Mitigation Phase – Surveillance

## Surveillance:

### Disease Surveillance

- Event based surveillance
- Look for clustering
- Establish the extent of spread of disease
- Monitoring changes in the natural history of the disease including severity of disease

### Laboratory

- Random sampling for confirmation
- Virus characterization
- Monitor emergence of drug resistance



# Mitigation Phase – Control Measures

## Public Health Intervention:

### 1. Individual/household level measures

- Personal protective measures (including hand & respiratory hygiene)
- Isolation of ill persons
- Quarantine of contacts
- Infection prevention and control in the home setting
- Use of masks in the community setting

### 2. Societal level measures, including social distancing

- Suspension of classes and child care programmes
- Adjusting or changing work patterns
- Restriction of public or mass gatherings
- Domestic travel advisories and restrictions



# Mitigation Phase – Control Measures

**Health Facility (Medical):**

**Triaging**

**Admit severe cases. Mild cases observe at home**

**Intensify infection control**



# Issues

- *Self quarantine* – non-Malaysia travellers
- Function of employer – to ensure employee can undergone self quarantine at home, need MC ?
- Tourism industry – reduced 20%
- Mitigation phase – when to start?



# THANK YOU

