



# Access to pandemic vaccines: developing country perspectives

Viroj Tangcharoensathien MD., Ph.D.

Director: International Health Policy Program

Ministry of Public Health,  
Thailand

WHO Geneva  
25 April 2007

# Outline presentation

- Current context
- Guiding principles
- Messages to key stakeholders
  - Developing countries
  - Vaccine industries

# Global production capacity

Source: WHO 2006 global pandemic influenza action plan to increase vaccine supply

Current production capacity 2007 (inactivated trivalent 15 ug of HA per dose)	<b>350</b> million
Current capacity + optimize current output, 3 shift per day	<b>500</b> million
Planned expansion extra capacity in next 2-3 years, <b>280</b> million (2009)	<b>780</b> million
If production switches to monovalent assuming 15 ug HA per dose	<b>2,340</b> million

Expected production capacity among 6 projects (US Japan supports): **40-50** million trivalent (120-150 m monovalent) in 5 years (2012)

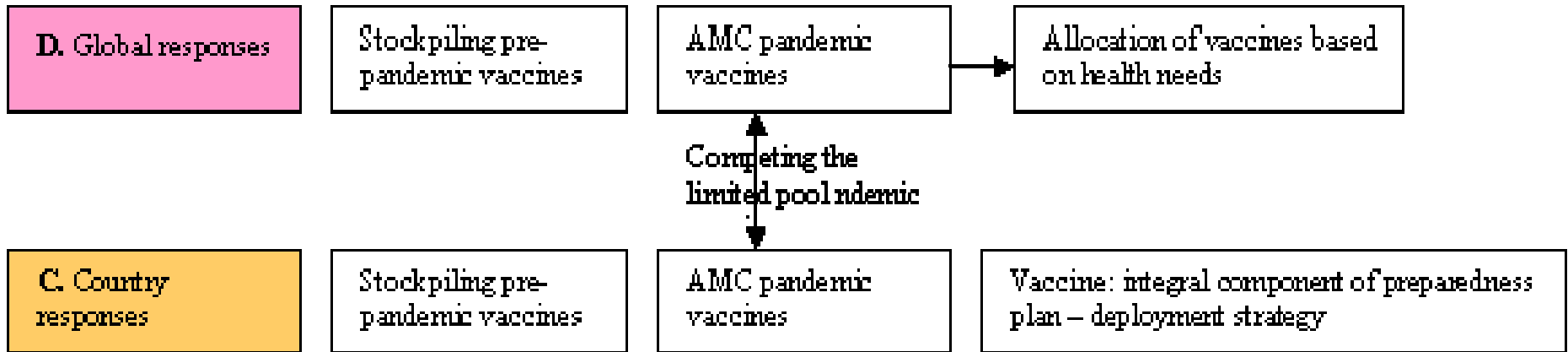
## Advancement today

- In 2007, compared to the last pandemic influenza
  - The world had accomplished hugely
    - Vaccine production capacity
    - Health systems capacity to delivery services
    - Better understanding of the virus, and its
    - Science and Technology advancement in virus genetic
    - Well function GISN
  - But still huge disparities between rich and poor nations
    - 115 NIC in 89 countries, large gap in Africa
    - Health systems capacity and core capacity on IHR implementation
    - Limited financial resources and competing public health priorities

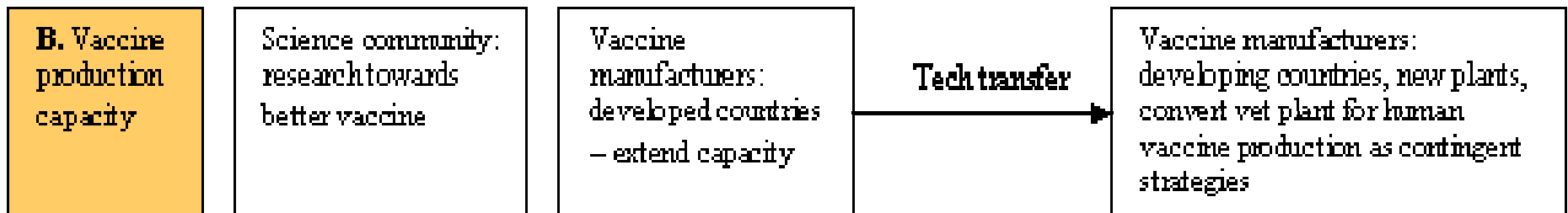
## Current WHO global vaccine policy

- Short term:
  - Stockpiling of pre-pandemic vaccine
- Medium term:
  - Bulk stockpiling, filling and finishing
- Long term:
  - Increase production capacity
    - New plants in developing countries
    - Scaling up existing plants
    - Diversified vet vaccine plants for human vaccines production

# Global vaccine strategic responses



**A. GISN (NIC, WHO CC, HSRef Lab) as backbone of global responses, accelerate core competency of countries, country capacity gap to comply with IHR [transparency, virus sharing]**



**Level 3** maintain until vaccine production capacity reaches a global security **Level 4** **Level 5**

Year 0	1	2	3	4	5
2007	2008	2009	2010	2011	2012

# Pre-pandemic vaccines stockpiling

- Need to strike balance between
  - Country and global stockpiling,
  - Global pre-pandemic and pandemic vaccines
    - As both are competing with the limited pool of resources, the good is an enemy of the best
- Do we really need pre-pandemic vaccines?
  - Current global production capacity
  - Benefit
    - Stimulate demand and production responses
    - Ring fencing the first/ second wave of pandemic, including full use of oseltamivir for first waves
  - Risk
    - Stockpiling of wrong bullets
      - Selection of potential cross clade protections
    - Financial implication in relation to pandemic vaccines

## Access to pandemic vaccines: guiding principle

- Together we live, separate we die
- Appropriate global level collective defence tools
  - Global AMC of pandemic vaccines
- Principle of vertical equity
  - Access to pandemic vaccine based on health need, not capacity to pay
  - Individual country responses on AMC
    - Access to vaccines based on capacity to pay – the rich countries do, poorer don't
    - Deplete the potential global response
- Shared responsibility
  - Countries – adhere to IHR and GISN [sharing virus and dissemination of vaccine virus]
  - Corporate – human faces > shareholder and dividend
  - Development partners, donor community – resource mobilization
  - UN agencies, WHO – conductors

## Global Influenza Surveillance Network

- GISN a backbone of response to influenza pandemic is a network of
  - NIC
  - WHO CC
  - H5 Reference laboratories
- Trust is
  - Difficult to build up
  - Easy to destroy
- Ensure trust in the GISN
  - Sharing of virus specimens and equitable access to pandemic vaccines

# Messages

- Countries
  - Improve core competency in IHR
  - Fully participate in GISN and sharing of influenza virus
  - Establish new production capacity of influenza vaccines
    - Including conversion of vet plant for human vaccines production as contingent strategies
  - Ensure vaccine an integral component of national preparedness plan
  - Maintain Level 3 for at least five years until better vaccine production capacity
  - Support the DG's dream comes true
    - Global public health security

## Messages

- Vaccine industries
  - Research towards better, effective and safe vaccines
    - Better adjuvants, high yield, cross clade immunogenicity
    - Live attenuated vaccines
  - Affordable price
  - Putting first human faces

## Messages

- WHO
  - Steers, monitor and re-adjust the global efforts
  - Resource mobilization
    - Continued support the existing 6 proposals supported by Japan and USA
  - Medium term capacity building of developing countries lab, and core competency of IHR
  - Continued work on SOP and best practice, ensure adherence by all concerned partners

# Acknowledgments

- WHO leadership
- Countries and vaccines industries
- Development partners