

# **Antimicrobial Resistance (AMR) : An Urgent Global Concern**

## **National Context**

### **“AMR Containment & Prevention in Thailand”**

*Professor Visanu Thamlikitkul, MD*

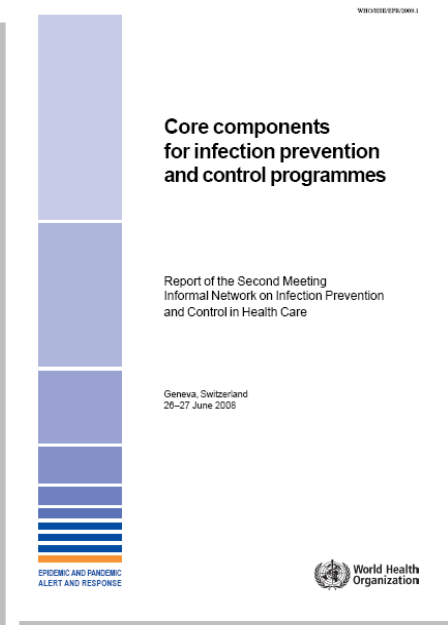
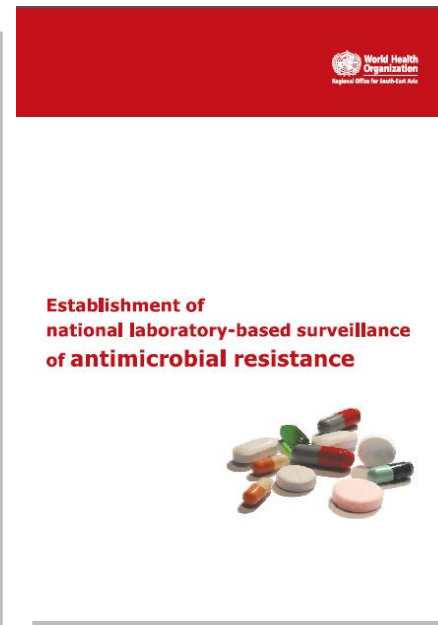
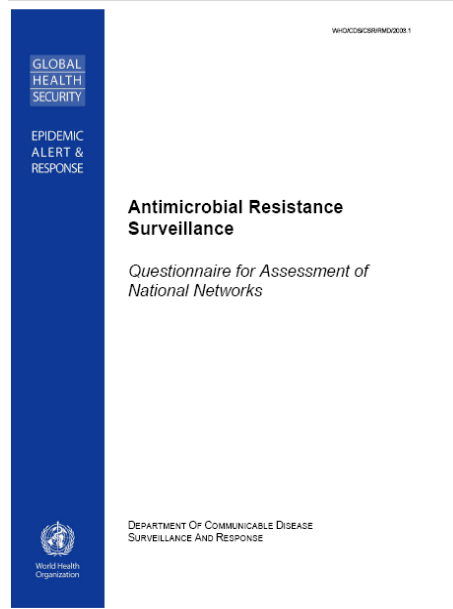
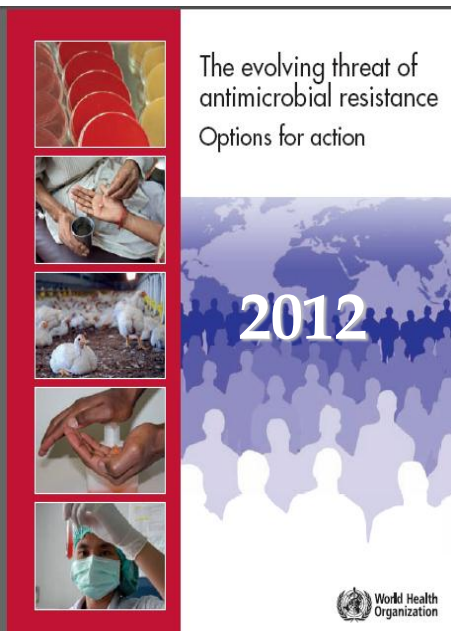
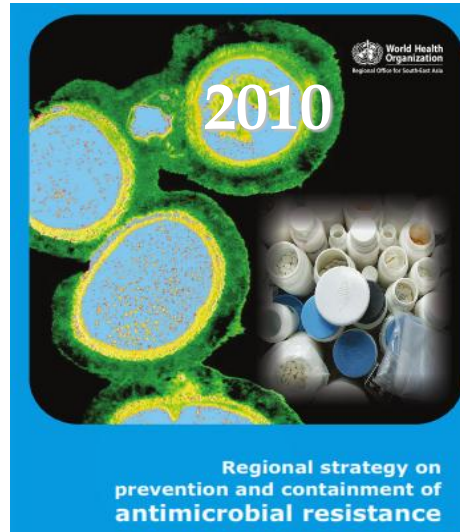
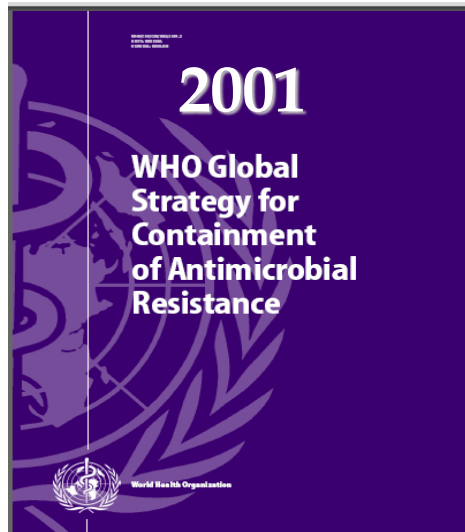
*AMR Containment & Prevention Program in Thailand*

*Faculty of Medicine Siriraj Hospital*

*Mahidol University, Bangkok, Thailand*

# AMR Containment & Prevention in Thailand

## Existing Global and Regional Strategy & Recommendations



## AMR Containment & Prevention in Thailand

- ❖ Thailand has committed to AMR Containment
  - *Global Level*
    - ✓ World Health Assembly Resolutions, 1998/2001/2005/2007
    - ✓ Global Hand Hygiene Promotion, 2008
  - *Regional Level*
    - ✓ WHO South-East Asia Regional Strategy on AMR Prevention and Containment 2010 – 2015
    - ✓ Jaipur Declaration on AMR Containment, WHO South-East Asia, 2011
  - *National Level*
    - ✓ Thai National Policy for Rational Drug Use, 2011
    - ✓ Thai National Strategy for EID (including AMR), 2012
- ❖ No systems and holistic actions to combat AMR in Thailand

## AMR Containment & Prevention in Thailand

- ❖ Appoint a committee on AMR containment in 2012
- ❖ Set up the goals of AMR containment
  - *Process Goals*
    - ✓ Develop official national infrastructure, strategy, systems and measures on AMR containment & prevention
    - ✓ Implement AMR containment & prevention measures
  - *Expected Output & Outcome Goals*
    - ✓ AMR is delayed, reduced or eliminated
    - ✓ Health and economic AMR burdens are minimized

# AMR Containment & Prevention in Thailand

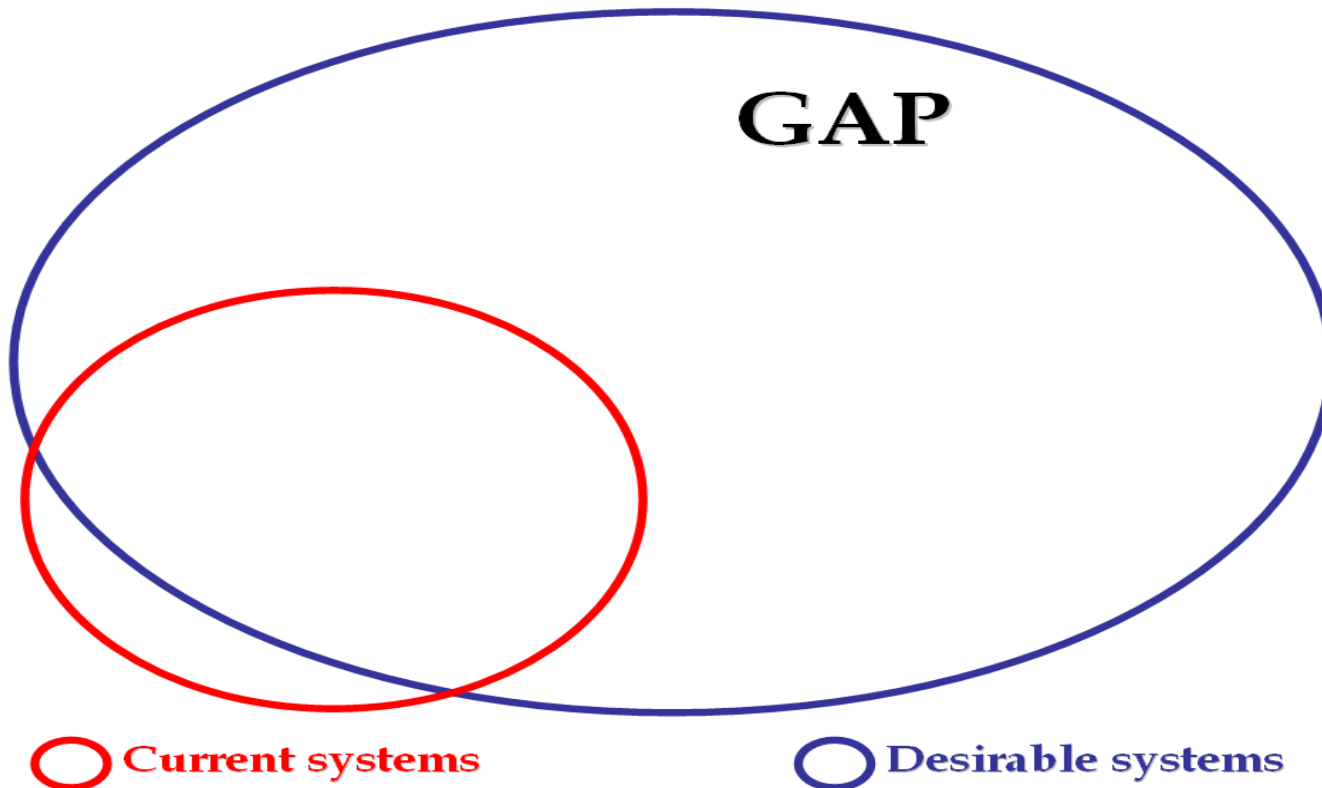
- ❖ Appoint a committee on AMR containment in 2012
- ❖ Set up the goals of AMR containment
- ❖ Estimate AMR Burden in Thailand\*
  - *Health Burden*
    - ✓ AMR Infections ~ 90,000 cases
    - ✓ Mortality due to AMR infections > 30,000 cases
  - *Economic Burden*
    - ✓ Antibiotic consumption for AMR > 200 million \$US
    - ✓ Economic loss due to AMR > 1,000 million \$US

\* *Journal of Health System Research 2012;6:352-60.*

- AMR burden is more than many burdens listed in the top 10 health burdens in Thailand

# AMR Containment & Prevention in Thailand

- ❖ Appoint a committee on AMR containment in 2012
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- ❖ Estimate AMR Burden in Thailand
- ❖ Propose roadmap of actions on AMR containment
  - Identify GAP of AMR containment systems in Thailand





## AMR Containment & Prevention in Thailand

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- ❖ Set up the goals of AMR containment
- ❖ Estimate AMR Burden in Thailand
- ❖ Propose roadmap of actions on AMR containment
  - Identify GAP of AMR containment systems in Thailand
  - Organize public hearing
- ✓ National workshop on AMR in May 2012
- ✓ Inputs on proposed desirable AMR containment systems from all relevant stakeholders

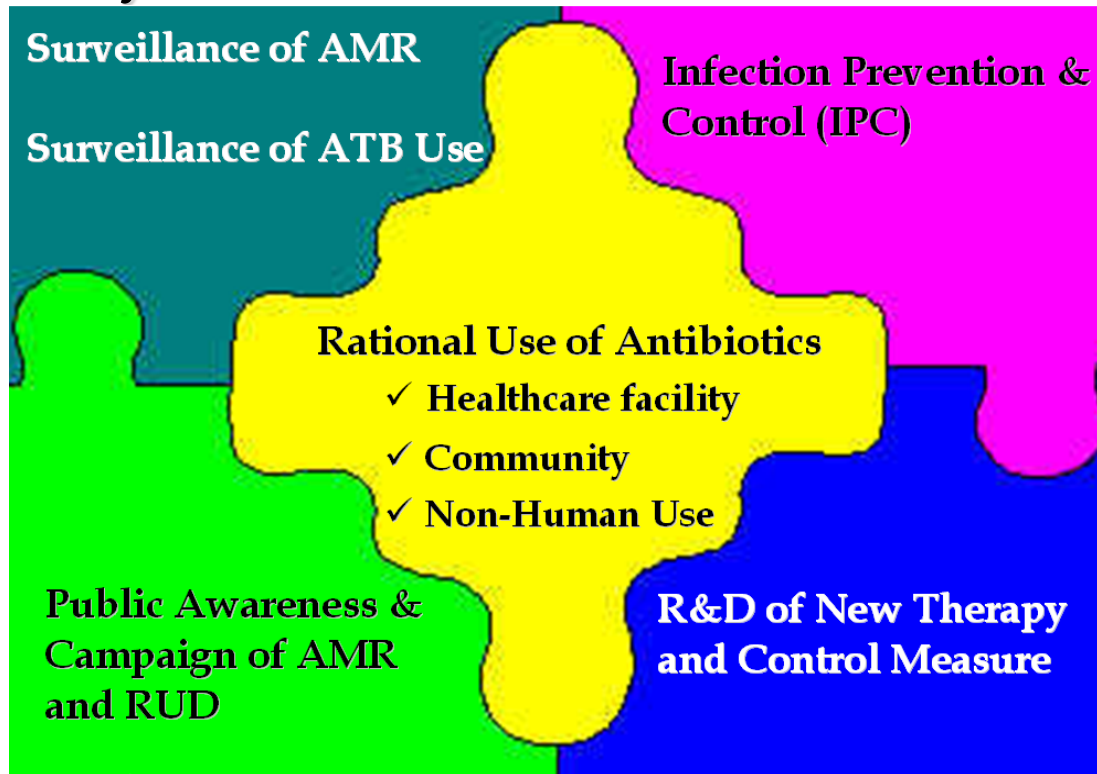
# AMR Containment & Prevention in Thailand

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- ❖ Set up the goals of AMR containment
- ❖ Estimate AMR Burden in Thailand
- ❖ Propose roadmap of actions on AMR containment
  - Identify GAP of AMR containment systems in Thailand
  - Organize public hearing
  - Prepare AMR containment package to fill the GAP



# Thailand AMR Containment Package, 2013 - 2016

- 5 Systems



- 4 Measures

- ✓ Regulatory & Administrative Measures
- ✓ Educational & Promotional Measures
- ✓ Incentive & Sanction Measures
- ✓ Social & Behavioral Measures

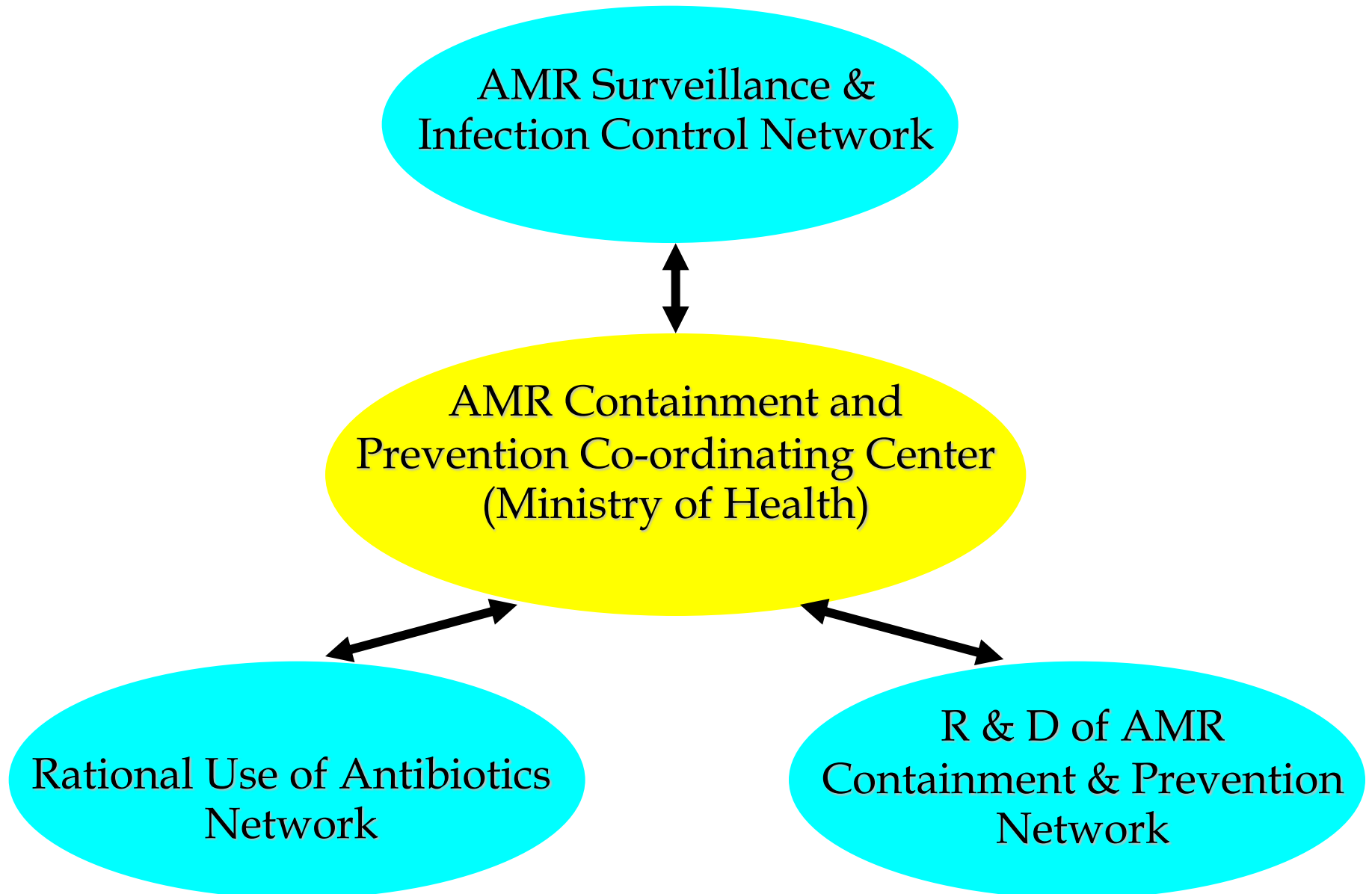
## **Thailand AMR Containment Package, 2013 - 2016**

- 5 Systems and 4 Measures
- One Health Concept – Human, Animal, Environment
- 3 Major Projects
- ✓ Implementation of AMR Containment Bundles
- ✓ Fundamental AMR Containment Systems Development
- ✓ Basic & Innovation Research and Development on AMR Containment and Prevention

# AMR Containment & Prevention in Thailand

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- ❖ Set up the goals of AMR containment
- ❖ Estimate AMR Burden in Thailand
- ❖ Propose roadmap of actions on AMR containment
  - Identify GAP of AMR containment systems in Thailand
  - Organize public hearing
  - Prepare AMR containment package
  - Establish infrastructure of AMR containment

# National Alliance for AMR Prevention & Control



# AMR Containment & Prevention in Thailand

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- ❖ Estimate AMR Burden in Thailand
- ❖ Propose roadmap of actions on AMR containment
  - Identify GAP of AMR containment systems in Thailand
  - Organize public hearing
  - Prepare AMR containment package
  - Establish infrastructure of AMR containment
  - Solicit support from donors
- ✓ 1.2 million \$US
- ✓ 3 national agencies
- ✓ 3 international agencies

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  - Identify GAP of AMR containment systems in Thailand
  - Organize public hearing
  - Prepare AMR containment package
  - Establish infrastructure of AMR containment
  - Solicit support from donors
  - Link with international projects
- ✓ Asian Network for Surveillance of Resistant Pathogens (ANSORP)
- ✓ Campaign 4 in Asia



# Thailand AMR Containment Package, 2013 - 2016

- 5 Systems and 4 Measures
- One Health Concept – Human, Animal, Environment
- 3 Major Projects
- ✓ Implementation of AMR Containment Bundle
- ✓ Fundamental AMR Containment Systems Development
- ✓ Basic & Innovation Research and Development on AMR Containment and Prevention
- AMR package has been deployed since March 2013
- ✓ Several outputs have implications on national policy
- ✓ A long way to go

## **AMR Containment & Prevention in Thailand**

- *Lessons Learned & Critical (potential) Success Factors*

- ✓ Prime movers with motives, academic/social credits, leadership

- ✓ Critical mass with shared vision

- ✓ Political commitment and support

- ✓ Resources

- *Barriers*

- ✓ Political commitment and support

- ✓ Resources

- ✓ Bureaucracy of government (MOH)

- ✓ Unawareness of AMR problems of many sectors

- *Major Challenges*

- ✓ Success and sustainability of the programs

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