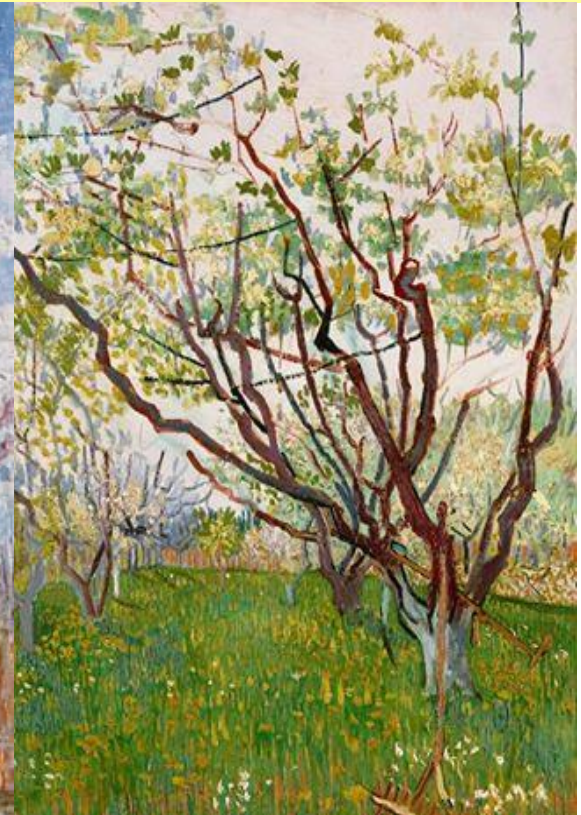
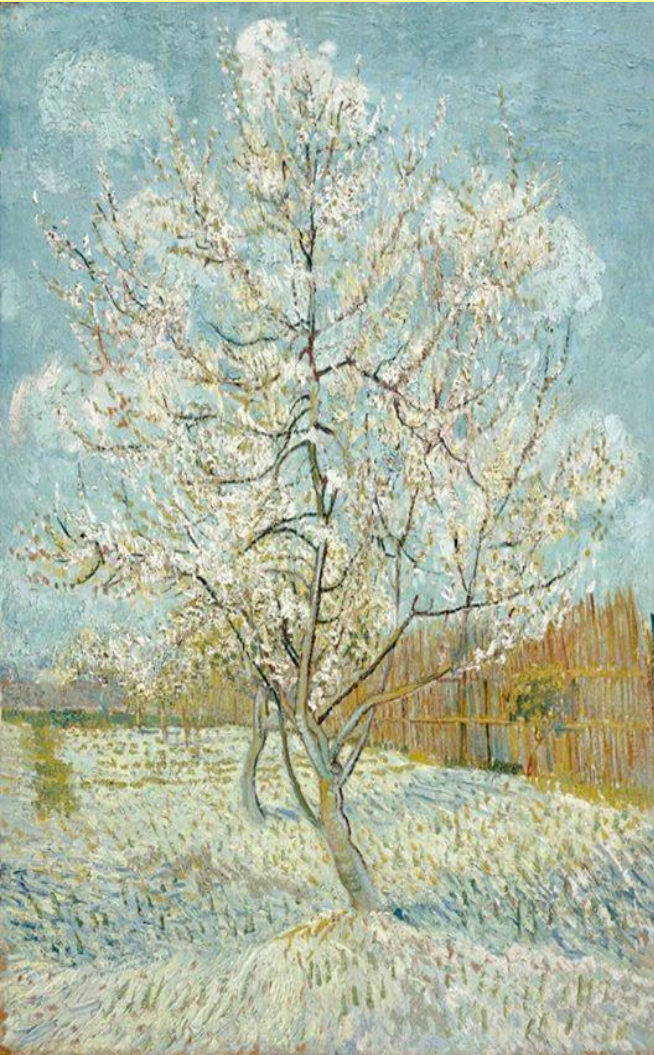


# Thailand: National Immunization Program (NIP)



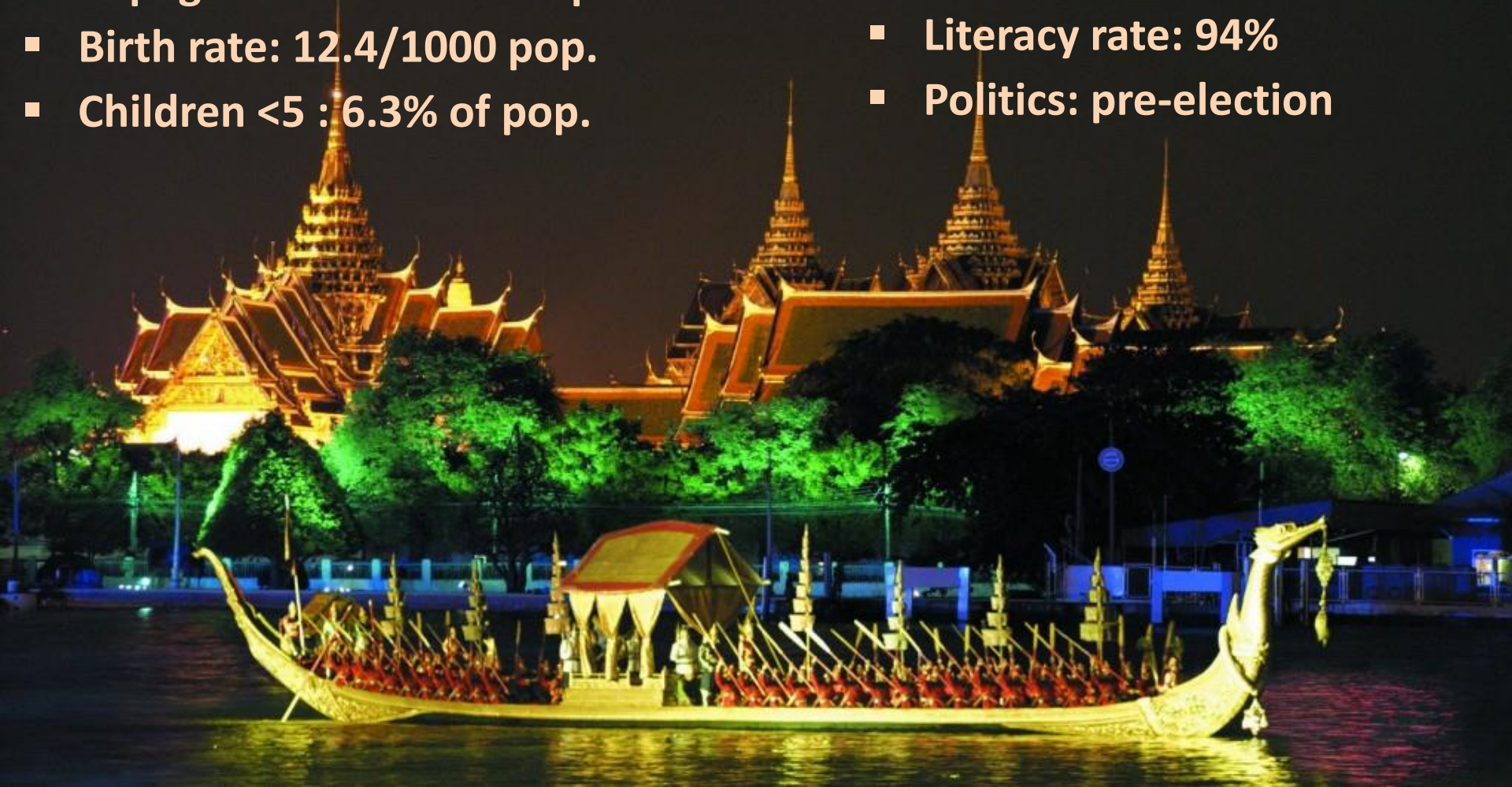
**Attaya Limwattanayingyong, MD, MSc**  
**2 November 2015**  
**Asian Pacific Vaccinology Meeting, BKK**





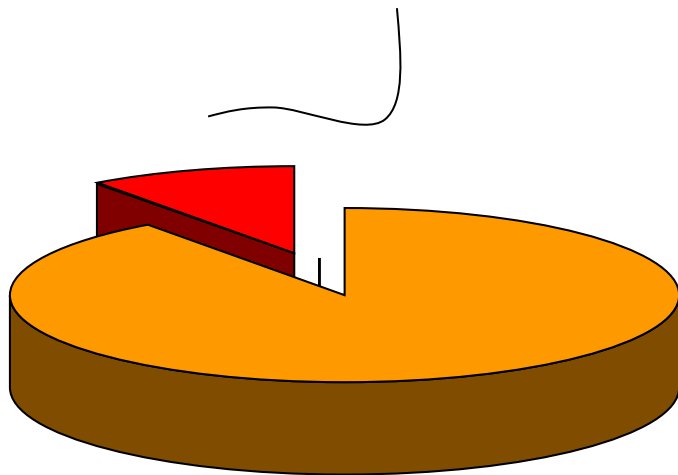
# Thailand

- Population: 68 mill.
- Pop. growth rate: 0.56% pa
- Birth rate: 12.4/1000 pop.
- Children <5 : 6.3% of pop.
- IMR: 11/1000 LB
- GDP: US\$ 16,081 pa
- Literacy rate: 94%
- Politics: pre-election



# Immunization in Thailand

## *Private sector immunization*



## *Public sector immunization*

### *Public sector immunization*

- Basic immunizations (EPI) for children, school, pregnant women and people of certain high risk groups
- Immunizations for specific purposes such as disease elimination and eradication, disease prevention for pilgrims on Hajj, and rabies post exposure prevention
- Asia: 90% volume through public program, In terms of value 70% in private sector

# Basic immunization - EPI



- Established since 1977
- Target populations:
  - New born babies & children
  - Pregnant women
  - High-risk groups
- Vaccines: BCG, DTP, dT, OPV, HBV, DTP-HB, M / MMR, JE, influenza, IPV
- Under technical and strategic advisory of the **National Advisory Committee on Immunization Practice (NACIP)**
- Fully subsidized in public sector
- Integrated in MCH services
- Over 90% coverage nationwide, except in border areas & high terrains.

# Thailand's Immunization policy

- **To provide immunizations to the whole population who are living in Thai soil**
- **As a basic health service**
- **As basic child right**
- **With equity, quality and safety**
- **Free of charge**





# Current immunization policy directions for Thai EPI

- **Introducing new vaccines (EVB)**
- **Revising vaccination schedule according to new knowledge and programmatic feasibility**
- **Quality & safety of vaccination**
- **Improving efficiency in vaccine use**
- **Ensuring vaccine financing**
- **Promoting public–private cooperation**
- **Extending scope of immunization**
- **Furthering Disease eradication/ elimination**

# Current EPI goals

- Maintain achievement of poliomyelitis free status and align with global eradication plan [in country context]
- Meet global and regional elimination targets (Measles, NT)
- Meet vaccination coverage targets in every region, country and community
- Introduce new and improved vaccines and technologies by Evidence informed policy
- Advance on post 2015 development agenda



**A well baby clinic, children attending vaccination**





# Shifts in EPI management



EPI was born

1<sup>st</sup> HS reform, NHSA 2002

Key

- UHC covered P&P and curative
- Provider and purchaser split

Area Health based, effective mx of the resource at regional level

2<sup>nd</sup> HS reform

Flu

LA, JE

HPV

Rota

1977

2000

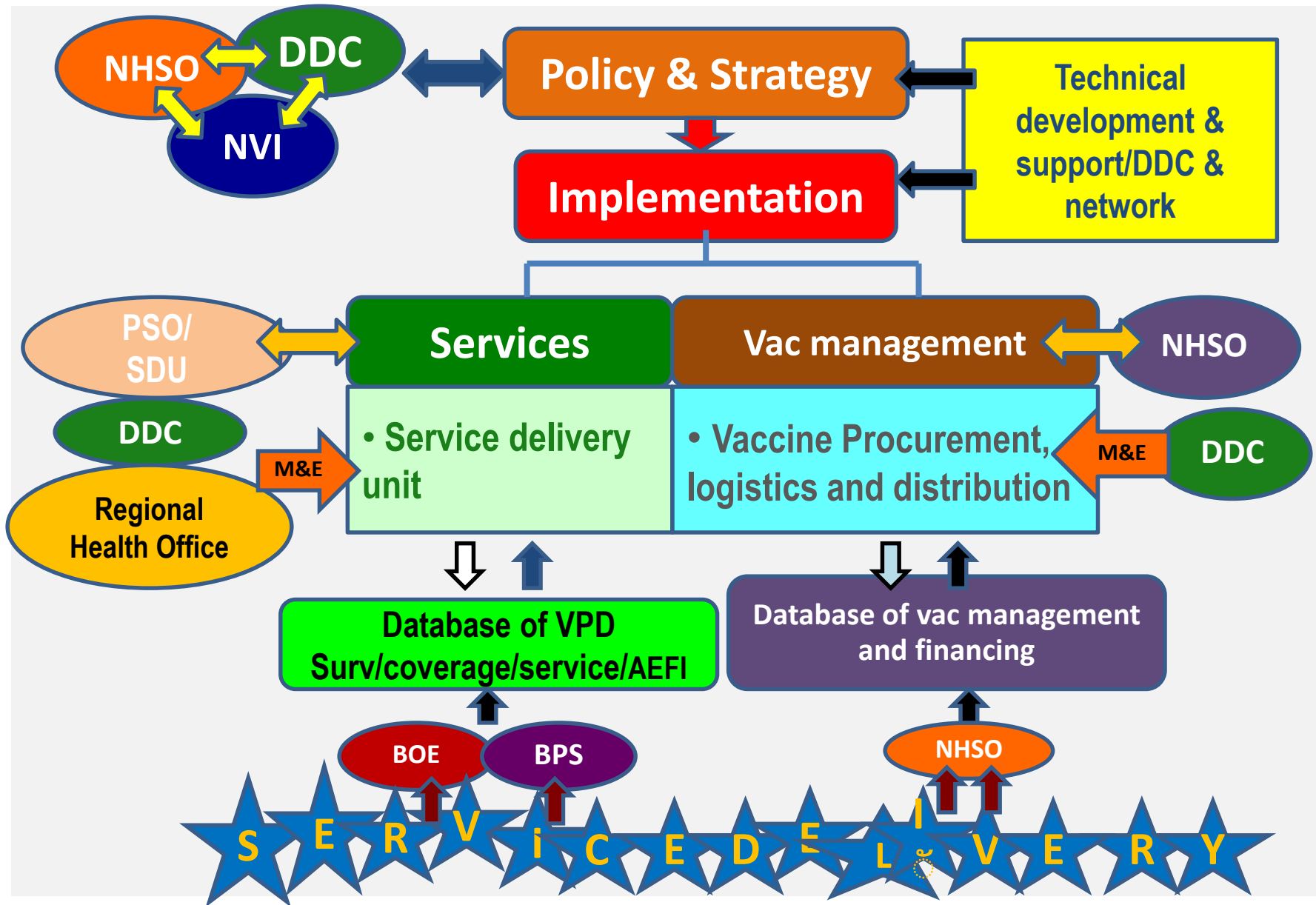
2014

EPI was managed by the MOPH from

- policy to technical support
- vaccine logistics and supply, vaccine deliver
- to monitoring and evaluation.

- NHSO : financing for vaccines and vaccine delivery, including procurement and supply of vaccines to all health care providers.
- MOPH is responsible for:
  - Policy / strategy development and guidance, as well as technical support to health care providers
  - Vaccination service

# Current EPI structure



# Current EPI Schedule

Age	Vaccine
New born	BCG, HB
2 Months	OPV1, DTP1 - HB1
4 months	IPV, OPV2, DTP2 - HB2
6 months	OPV3, DTP3 - HB3
9 months	MMR1
12 months	LAJE1
18 months	OPV4, DTP4
30 months	LAJE2, MMR2
4 years	OPV5, DTP5
12-16 years	dT
Pregnancy	dT 3 doses

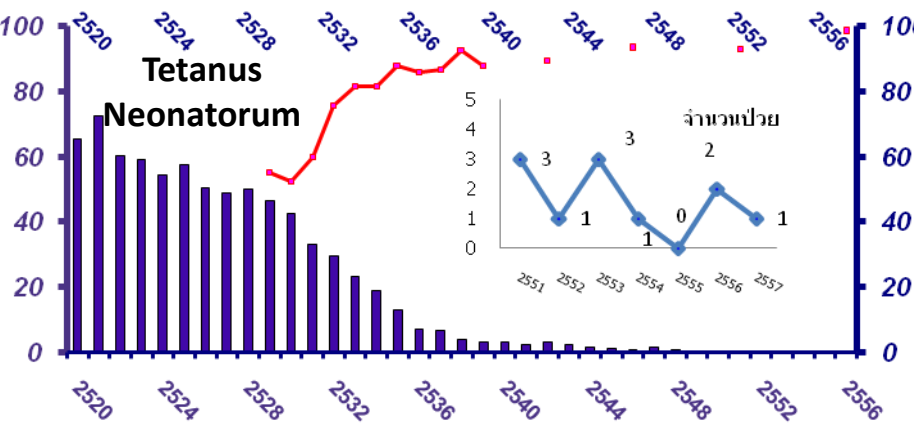
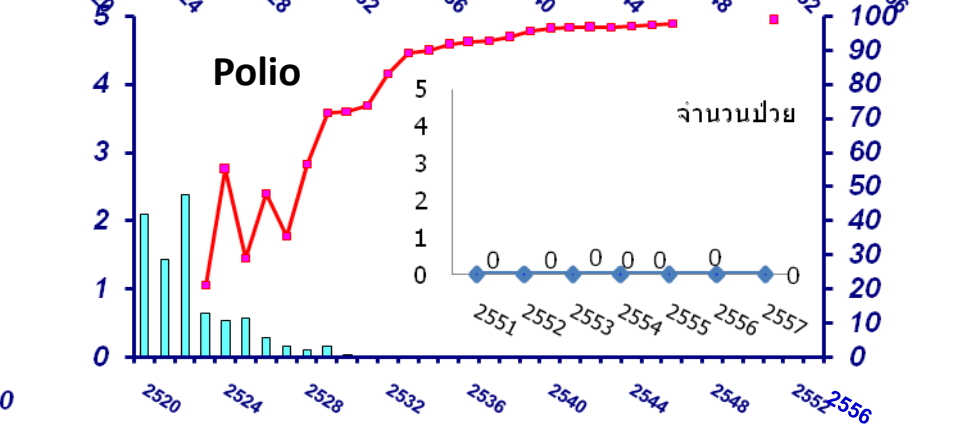
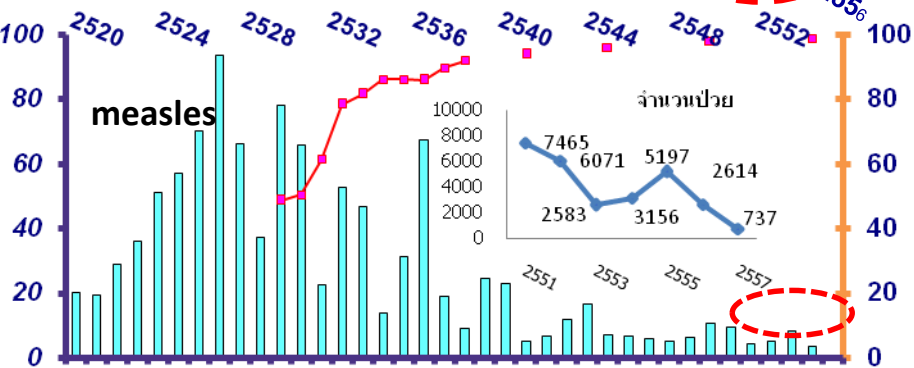
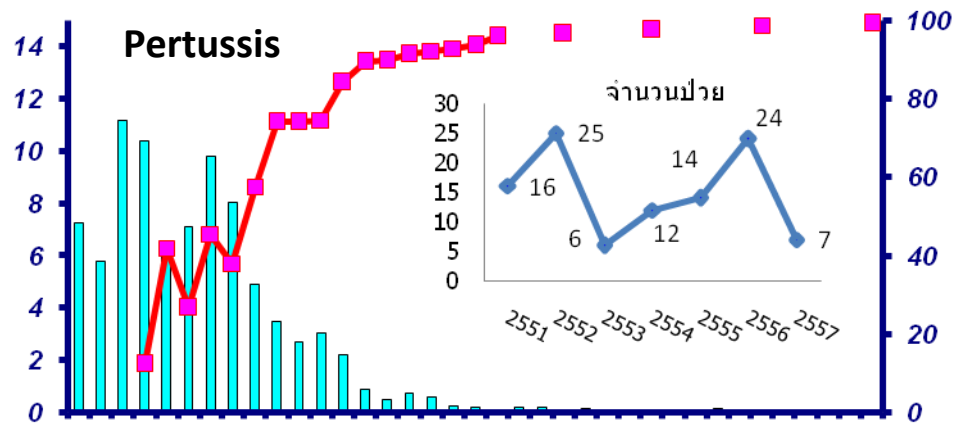
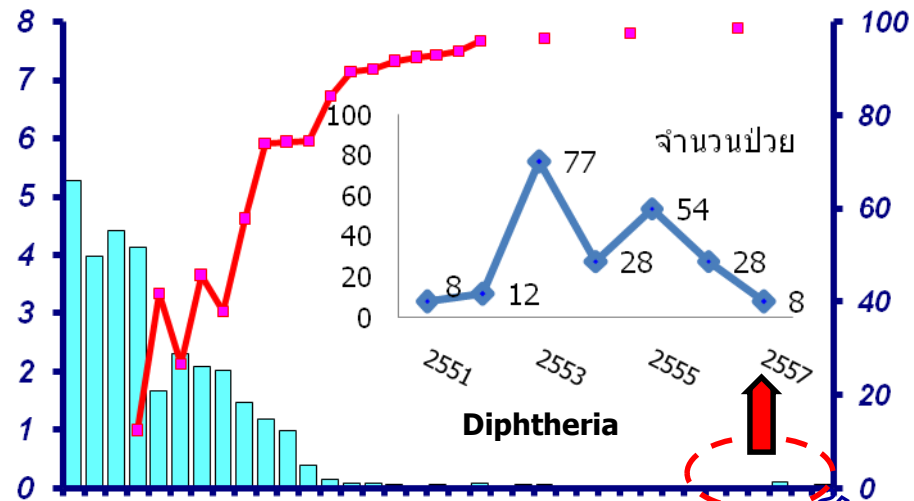


# Vaccine coverage in < 5 years Thailand

## 1998, 2003, 2008, 2013

Vaccine	1998	2003	2008	2013
BCG	98	99	99.9	100
DTP3	97	98	98.7	99.4
OPV3	97	98	98.7	99.4
HB3	95	96	98.4	99.4
Measles	94	96	98.1	98.7
JE2	84	87	94.6	96.1
JE3	-	62	89.3	91.9
DTP4	90	93	96.5	97.8
DTP5	-	54	79.4	90.3
T2 (or booster)	90	93	93	98.4

# EPI vaccine coverage rates and disease incidences, Thailand 1977-2014



- Case rate per 100,000
- Case rate per 100,000 live birth
- Vaccine coverage(%)

Source: National Immunization Program

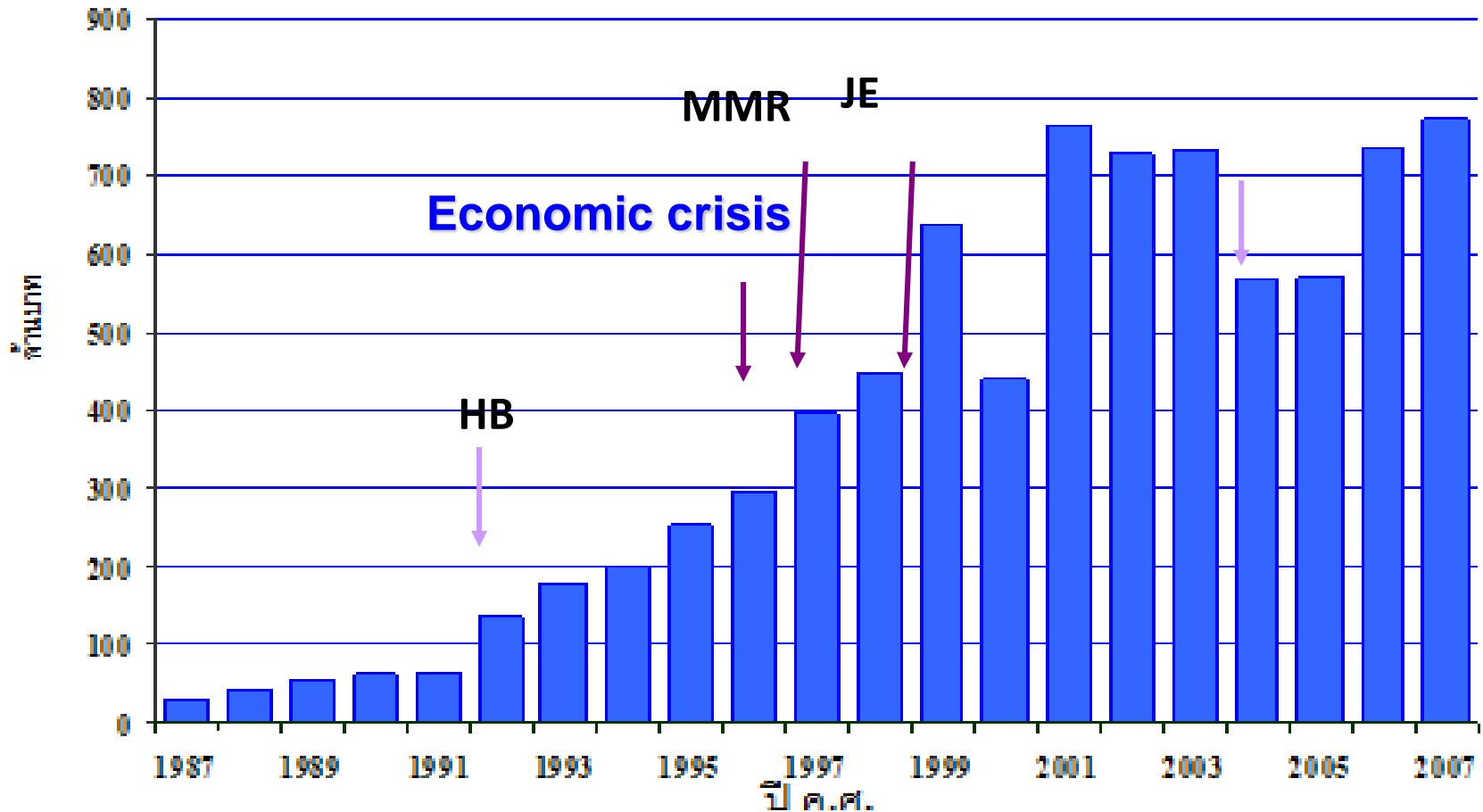
# Prospects for program sustainability



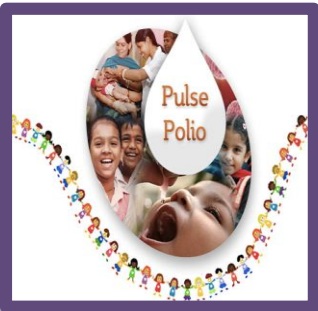
- Disease prevention is stipulated as basic right of the citizens.
- Basic immunization is always ranked among high priority national health programs
- NHSO's UC financing promises higher ceiling and flexibility for immunization.
- Under government's populist policy, financial sustainability of national immunization program, as a UC component, is reasonably secure.



# Thai EPI vaccine budget & new vaccine introduction



# ***Major Achievements in EPI and VPD Control***



**Polio free, elimination of tetanus neonatorum,  
marked reduction in VPDs**



**Strong support from the government,  
immunization is a basic right for all**



**HS is in place including  
human resource in immunization**

# ***Major Achievements in EPI and VPD Control***



**Community engagement, VHV, strong school program**



**proven ability to detect and respond to VPD outbreaks, SRRTs (80% completeness, timeliness)**



**WHO-assessed functional NRA, viable domestic vaccine production facilities, and vaccine research and development**

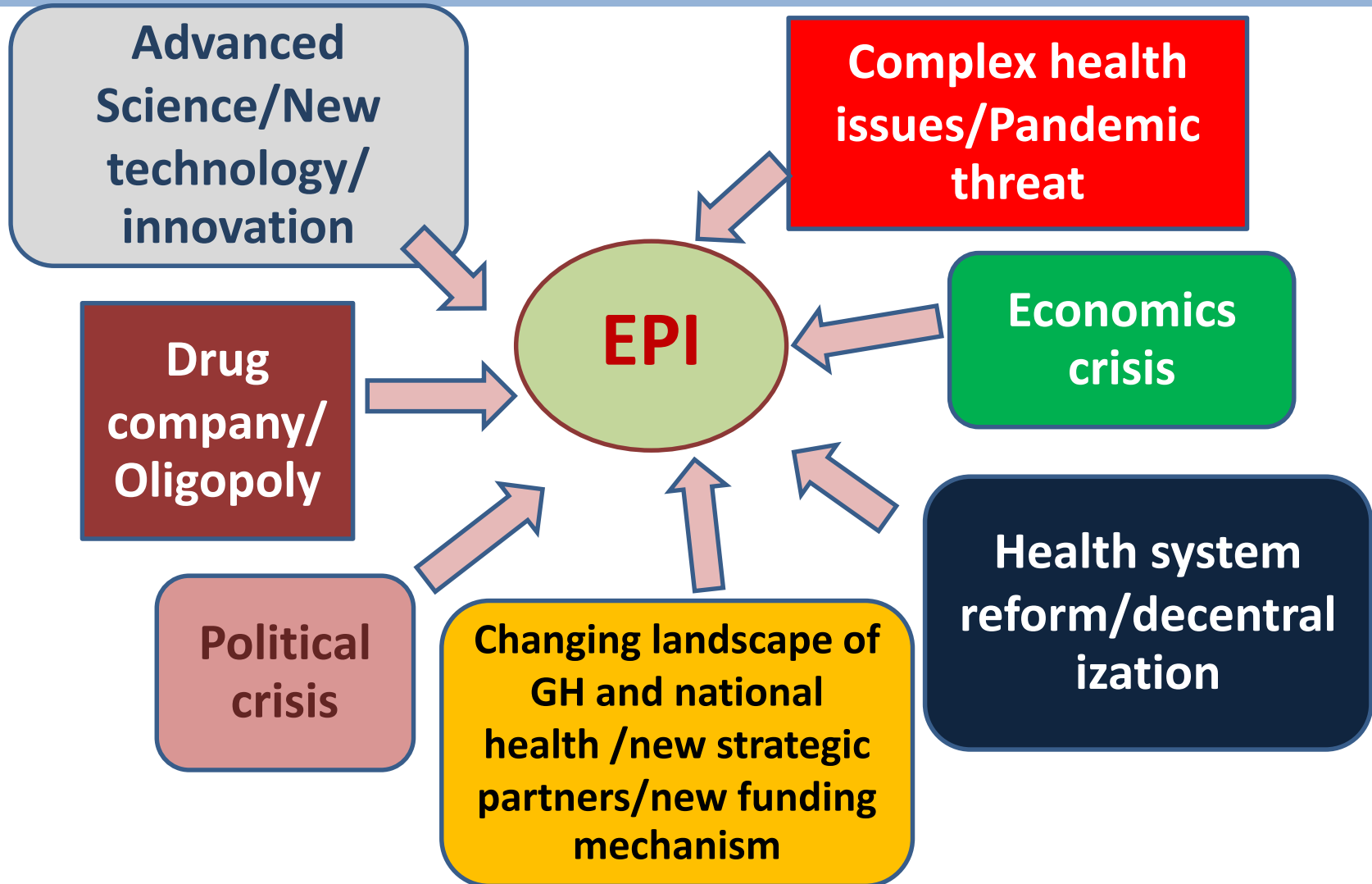




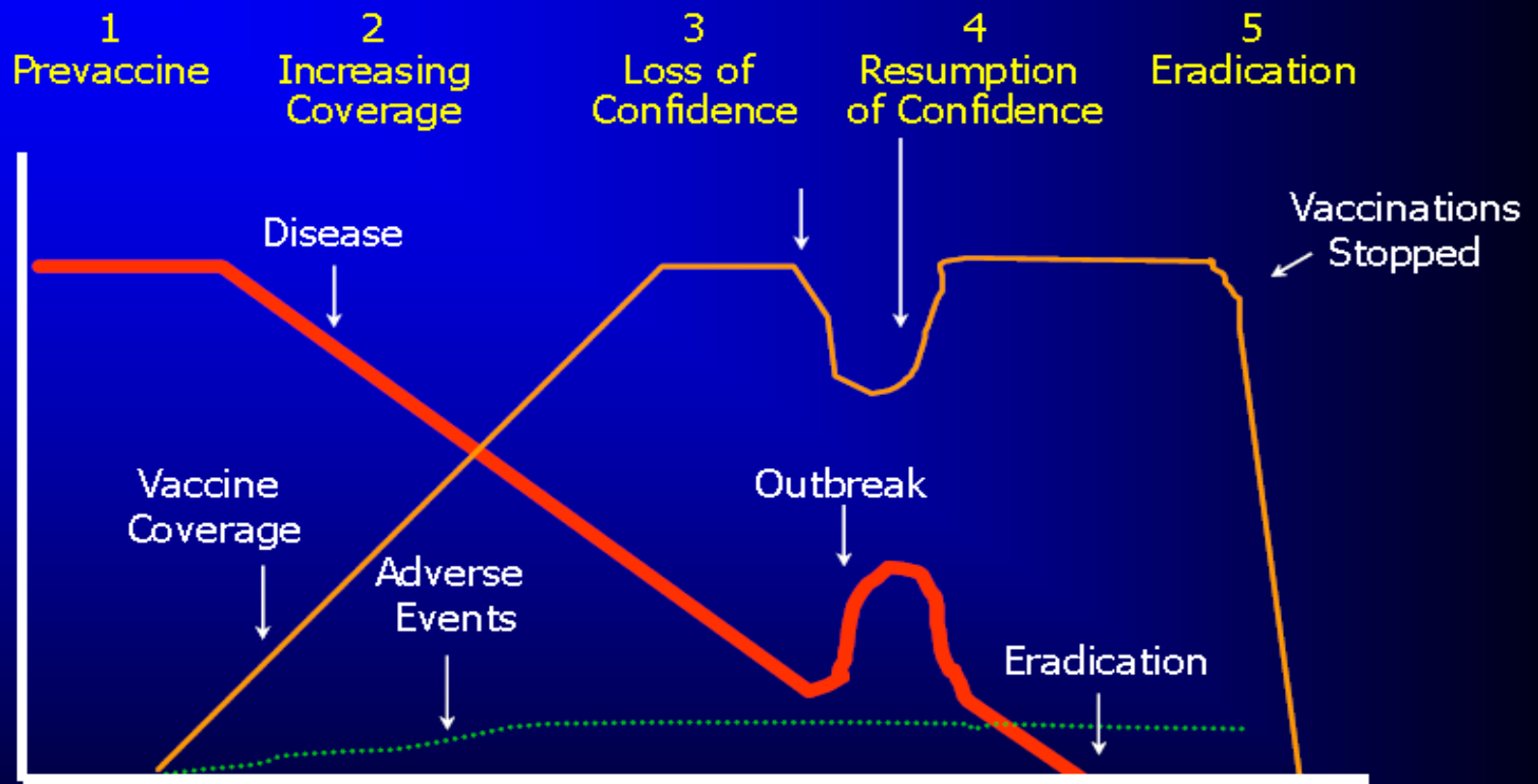
**Why? To adapt  
NIP in the changing world**

**Global game changers in immunization  
Middle Income Countries**

# EPI in the changing world



# Natural history of vaccination programs



Chen, Davis, Sheedy Chapter 61 Safety of Immunizations (pg. 1558),  
Vaccines, Plotkin and Orenstein Eds 4th Edition.

**Victims of success**

# Major Challenges



Remaining endemic VPDs and missed populations



Limitation on availability and quality of VPD surveillance and EPI performance data



Immunization workforce (high turn over rate, lack of task transfer)



# MEDIA BEHAVIOUR vs. RESPONSIBILITY

## Flu shot not necessary and not most effective

Dear Editor,

The latter two ingredients are toxic heavy metals that have been linked to an increase in Alzheimer's disease (and they're injecting this in to the elderly!).

Are you too going to panic and jump on the "there's a flu out-break get a vaccination" bandwagon?

In Patter Sound saying effect za."

I s breaks vaccin by th ings nursir

### More parents refusing vaccinations

HALIFAX (CP) — Public health officials are worried about a growing trend: parents who refuse to get their children vaccinated.

The refusal, based on what officials say are myths about the dangers of vaccines, is putting children at risk of brain damage and complications associated with disease whooping cough, measles, and hepatitis disease experts say.

"Many parents have a poor unders

sylvania school of medicine.

Offit was the keynote speaker at a Department of Health immunization conference, attended by more than 200 of the province's front-line public health workers.

## Vaccination lecture sparks community debate

Continued from PAGE A10

## Doctors, government won't tell the truth about vaccination

I wasn't surprised to read the conservative tone in your Insight feature on the vaccination controversy and the accompanying editorial (Immunization: the best information - March 4).

After all your paper is owned by that famous "progressive" thinker Conrad Black s

ord, Brant County h a provincial ap- biodati accountable me into a commu- ts, leave and never equences of her ac- eals with a variety

Some parents will simply take their doctor's advice and have their children immunized. Others will want to know what the risks of vaccination are and still others will want even more detailed information.

### People have a choice

Dr. Stephen Barker believes all people should have as much detailed information as they can possibly get to make an informed decision about vaccination.

## INSIGHT

SATURDAY, MARCH 4, 2000

THE EXPOSITOR

PAGE A10

# Taking a shot at vaccination

## Mandatory immunization wrong

### Your Opinion

SIR: With immunization in the news again recently, I would like to add my feelings on this very controversial subject.

I think it is wrong for any institution and especially the government, our government, to even consider requiring legislation mandating

control? Is this why the risks are kept hidden? We are encouraged to eat right, to get enough calcium, vitamins and minerals and to do everything we can to be healthy.

Well, watching what goes into our bodies is obviously very important. The risks of the

the information so they can make an informed choice," Barker said. "Without the information there isn't an informed choice."

And, he added, whatever the choice, he and other medical professionals should and will respect it.

He acknowledged that the booklet *Your Child's Best Shot* does address questions concerning the risks associated with vaccinations.

But the publication of the book was sponsored by pharmaceutical companies which, for him, renders it suspect at best. Moreover, the information concerning the risks is limited

### READERS' OPINIONS

## Informed parents deciding against inoculations

The story, *More parents choose not to vaccinate: study* (SP Dec. 4), indicated concern about the chapter of Vaccination Risk Awareness Network, a national organization. Our mandate is to be aware of adverse reactions to vaccines. Our mandate is to be aware of adverse reactions to vaccines. Our mandate is to be aware of adverse reactions to vaccines. Our mandate is to be aware of adverse reactions to vaccines.

# The media debate vaccination risks

# Challenge : Fear of Adverse Events

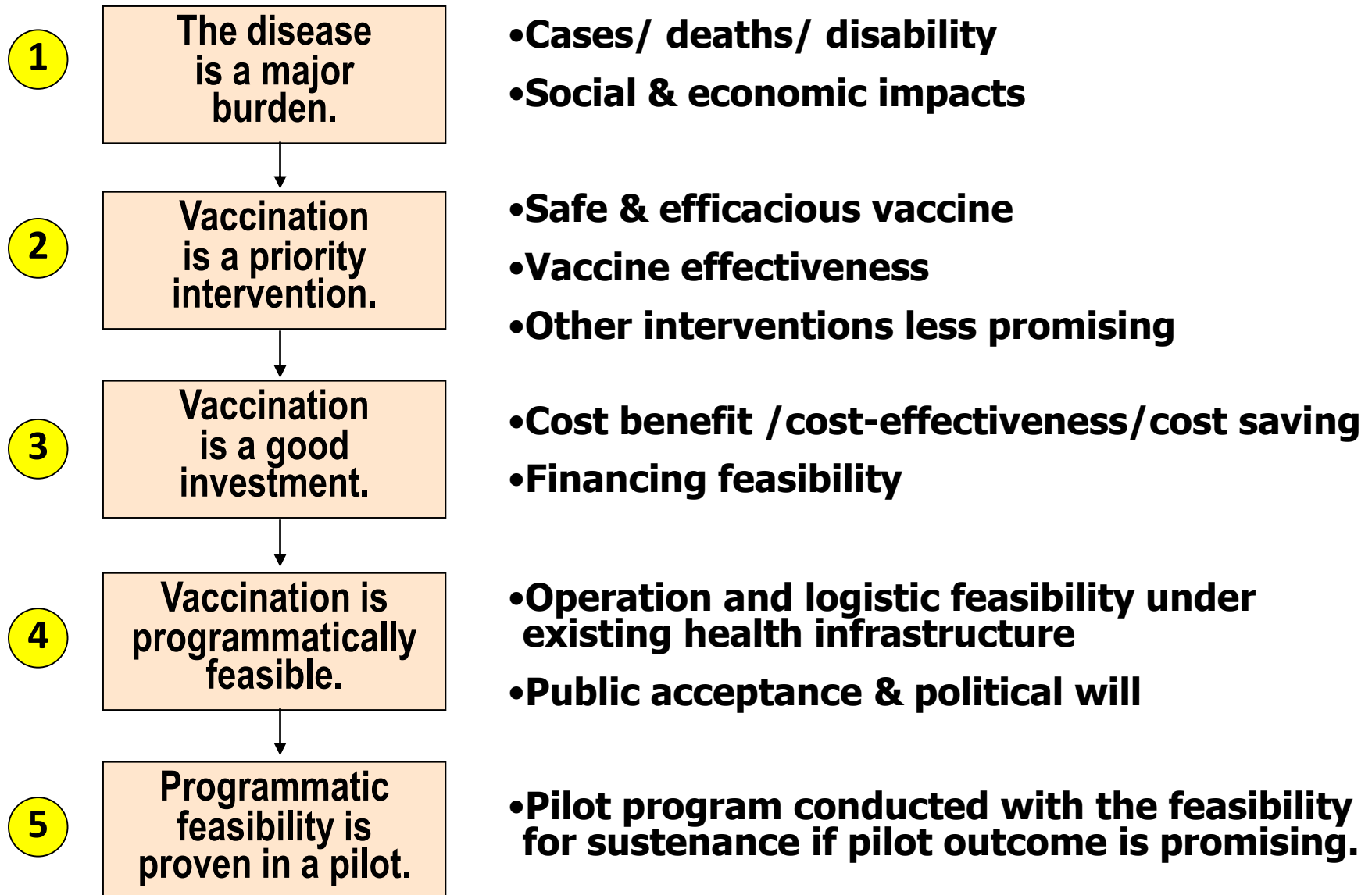
- **Concerns about adverse effects of vaccination tend to rise as incidence of the disease itself declines**
- **Ineffective official PR in dealing with media coverage of adverse effects**
- **Rapid growth of medical negligence litigation in Thailand in recent years**

# Challenge of vaccine introduction

- a high-cost and high-impact endeavor; therefore, requires careful policy and financial scrutiny.
- Policy on vaccine introduction is developed by MOPH, under the advice of NACIP. Main decision criteria include disease burden, public health impact, vaccine safety and efficacy; although with the consideration of cost implications.
- Decision on financing is made by NHSO, whose main decision criteria include cost-benefit, cost effectiveness and budget burden.
- Harmonized decision is crucial. This depends on the agreement on authorities / roles, and the procedures and parameters for decision making.



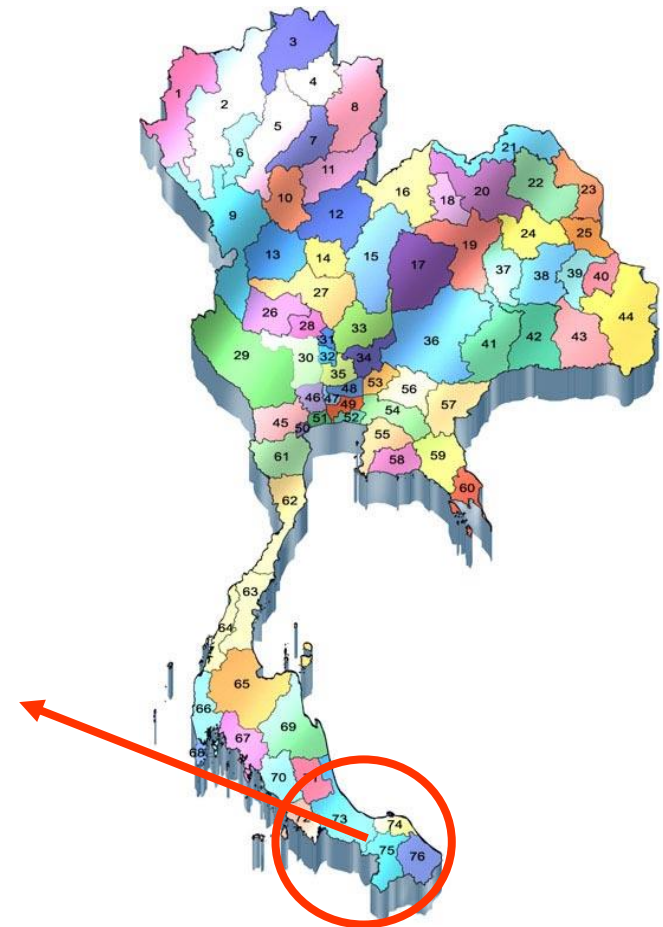
# Decision making process for introduction of new vaccines in Thai EPI





# Challenge: Pocket population and migrants

- Mobile population  
(workers in construction sites)
- Stateless person
- Hard to reach area/far off area
- Deep South area (civil unrest)
- migrants



## In summary

- Thailand has a well-functioning EPI program.
- However, the risk remains for periodic outbreaks and this possibility is likely to increase in the future.
- Further efforts are needed to improve vaccine coverage in some pocket populations including the large migrant population.
- Data to identify current gaps and anticipate future demands is insufficient.
- Attaining a sustainable supply of vaccines at affordable prices will require careful planning, innovative policies, and hard choices

# What have been done?

## Policy

- New vaccine introduction system
- Policy link with NHSO in cooperating areas

## Pocket pop

- High risk population (survey and intervention)
  - strengthen local authority to be able to tackle the risk pop (deep south, mobile pop, migrants)
  - Work with private company, BMA, CSR (model development)
  - Urban setting

## Information

- Explore new strategy for vaccine coverage (telephone survey)
- Assess current data system by MR campaign monitoring

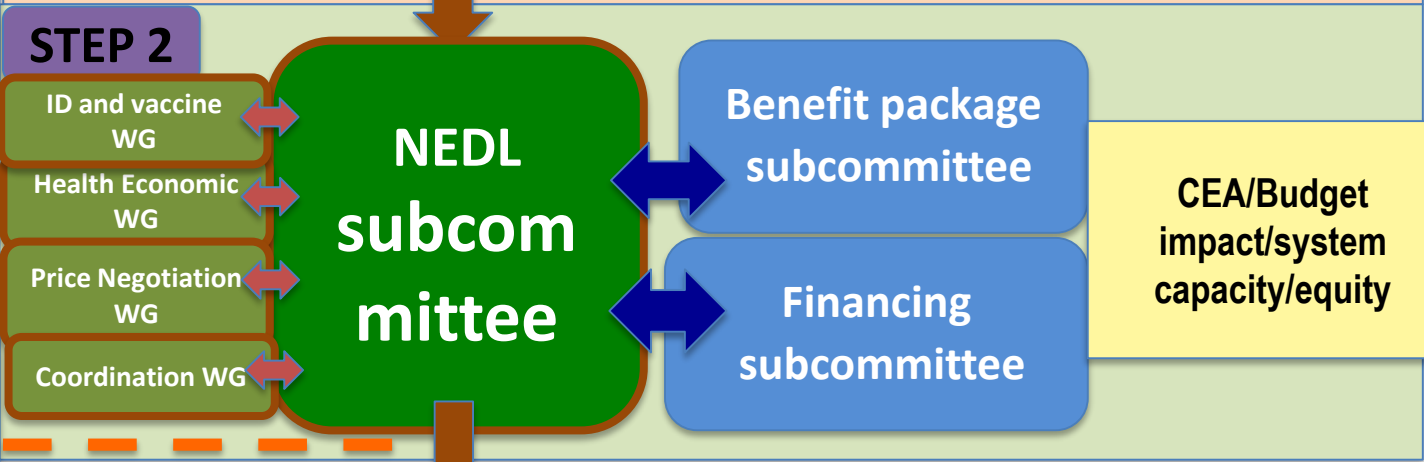
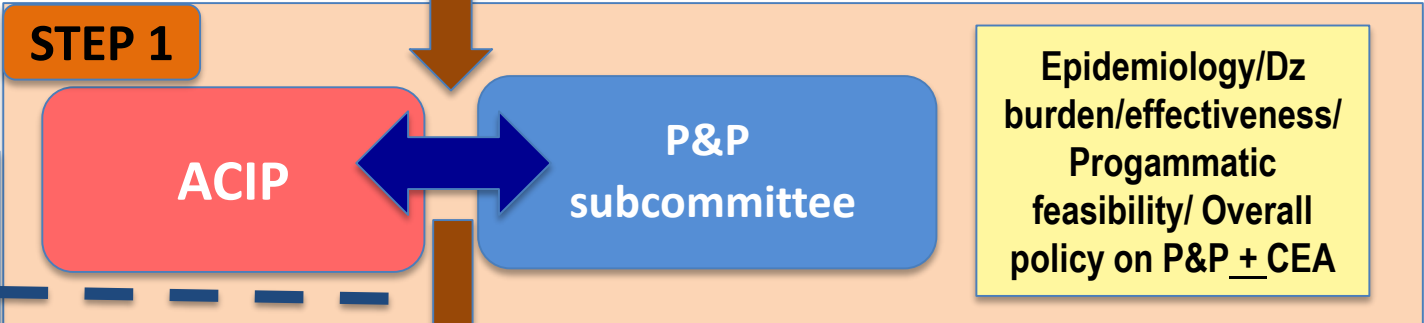
## Program strengthening/HRD

- TOT (Training of the Trainer)
- Successor plan
- Mentoring culture

▪ strengthen EPI program management team



New licensed vaccine



Full clearance of all criteria and final approval by the NEDL subcom

Royal Thai Government Gazette



**Rota Vaccine Pilot and decide on Go-No go by the results**

**MMR Fill gaps**

**dT Campaign Pilot in MDH and then in NE**

**dT Campaign Country wide**



**2014**

**2015**

**2016**

**2017**

**2018**

**2019**

**LA JEV Pilot in 8 Northern provinces**

**LA JEV, expansion**

**IPV at least 1 dose and b-OPV**

**HPV Pilot in Ayudhya**

**Country wide**

Coming together is a beginning;  
keeping together is progress;  
working **together** is success

