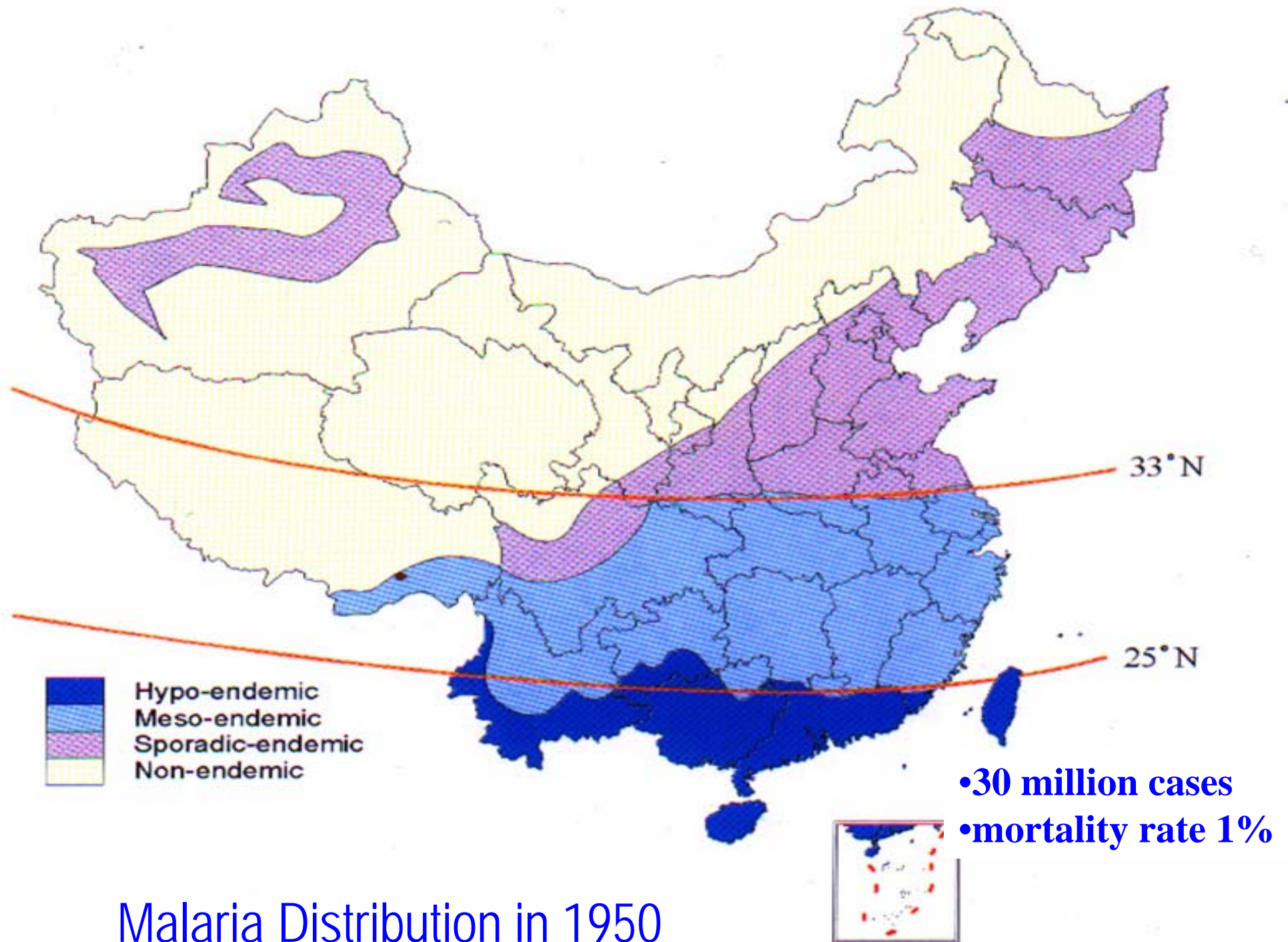


# International Malaria Colloquium 2010

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## Elimination of *P. vivax* from PR China

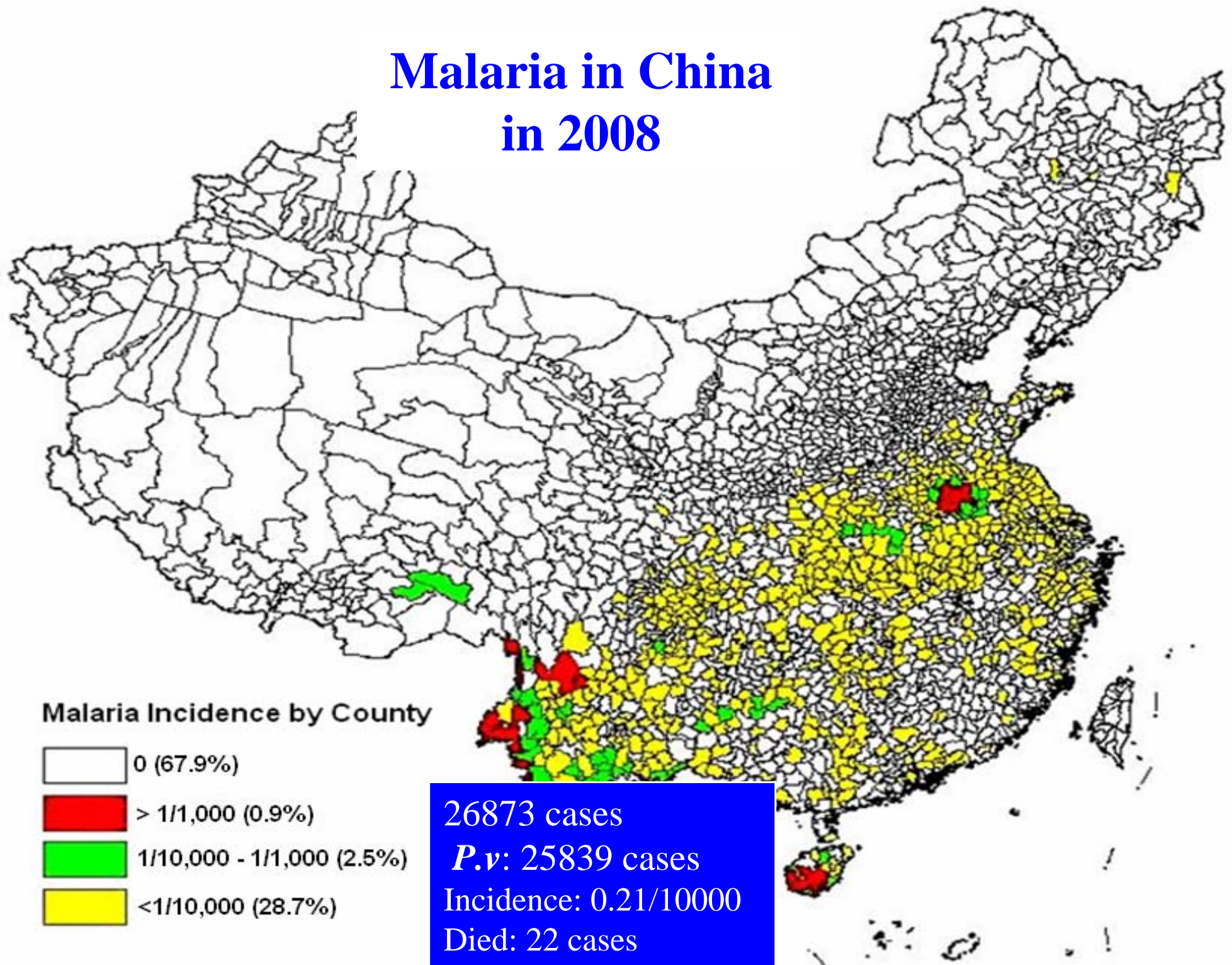
Prof. TANG Linhua  
National Institute of Parasitic Diseases  
China CDC  
Dec. 3, 2010 Bangkok, Thailand



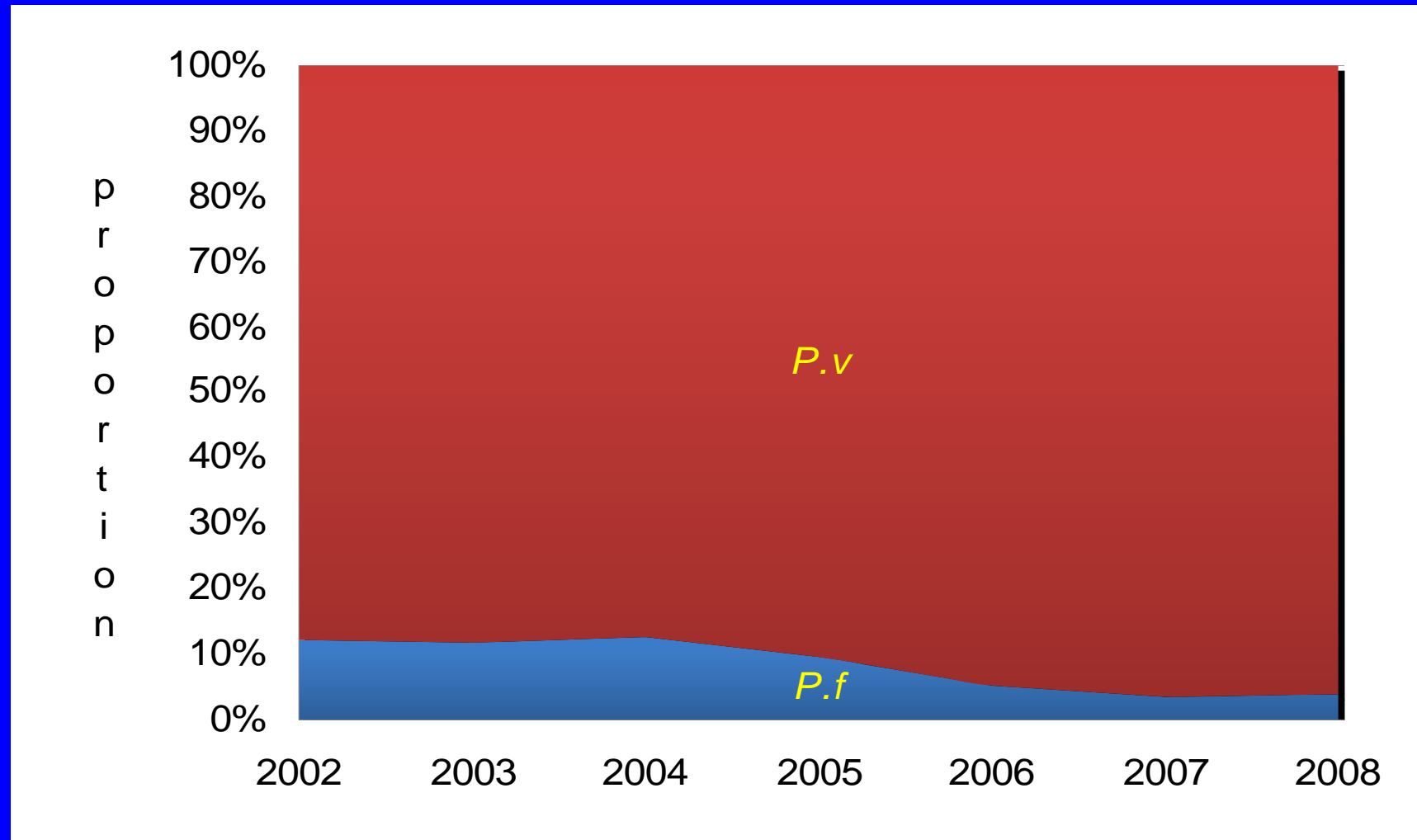
Malaria Distribution in 1950



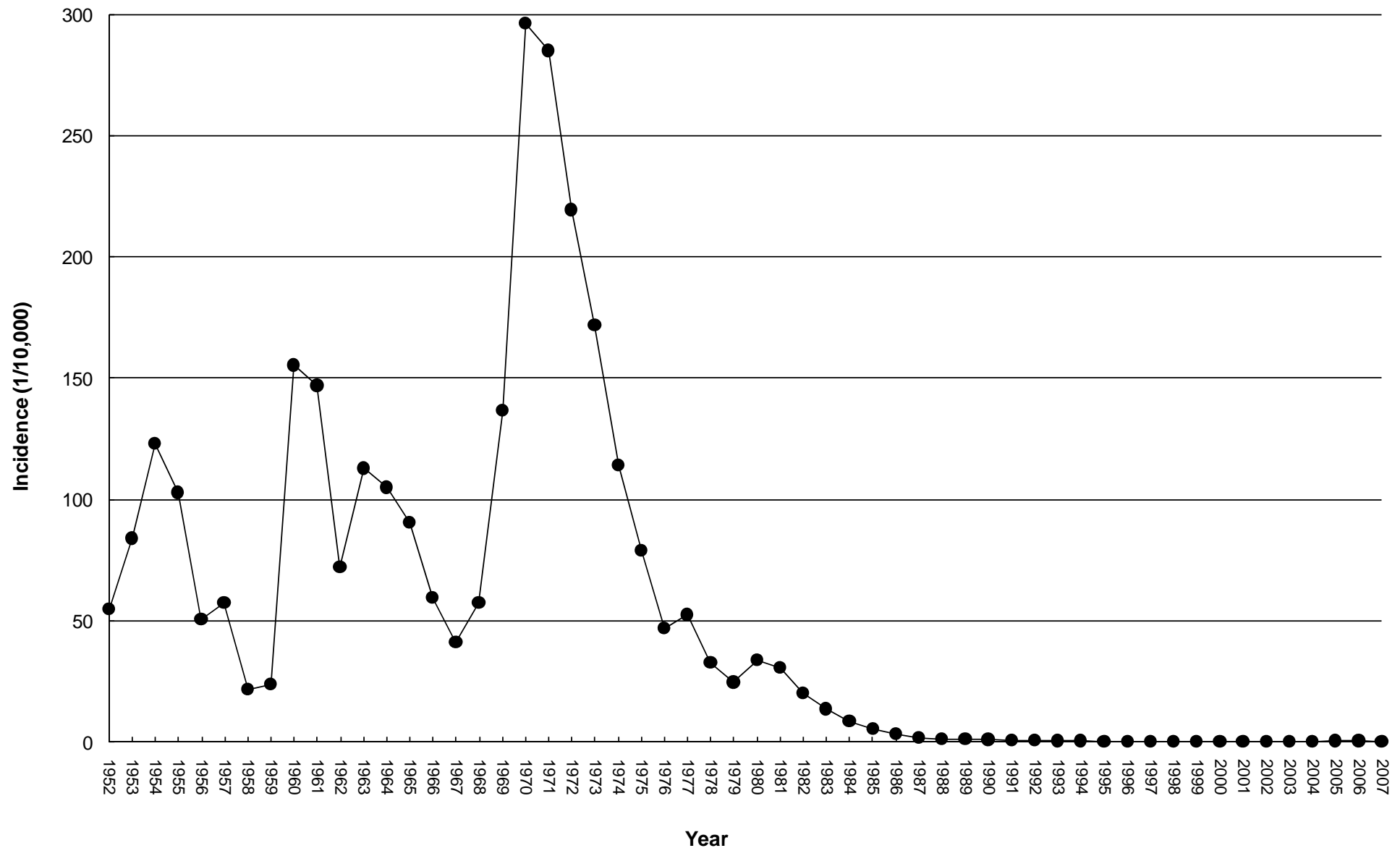
# Malaria in China in 2008



## Parasite species proportion from 2002 to 2008 in China



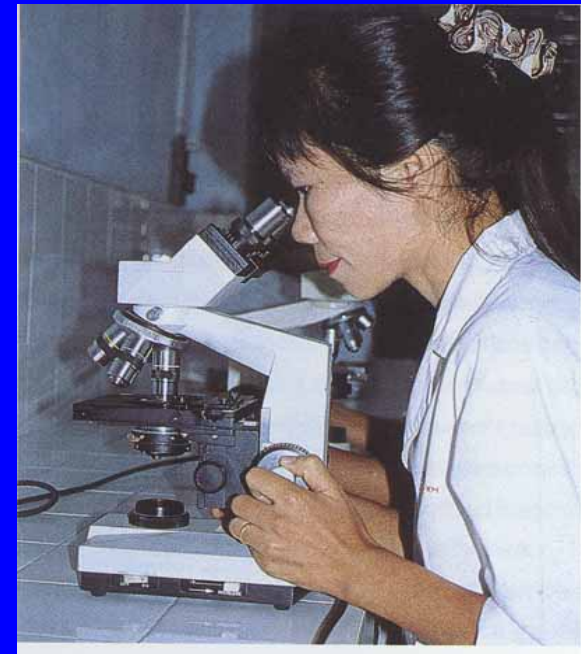
# Malaria in China (1952 - 2008)



# Malaria control program

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- ◆ National malaria control program in China since 1955
- ◆ Relying on primary health care networks
- ◆ Community participation
- ◆ Integrated measures
- ◆ Development of new antimalarial drugs
- ◆ Pilot field study and research.



# Integrated antimalarial measures

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- ❖ In areas with *An. sinensis*:
  - emphasis on elimination of infection source and mosquito control, supplemented with reducing mosquito breeding in and around the villages;
- ❖ In areas with *An. minimus* or *An. anthropophagus*:
  - emphasis on mosquito control and elimination of infection source;

# Integrated antimalarial measures

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- ❖ In areas with *An. dirus*:
  - the main measure is to change the ecological environment for mosquito control, in combination with control of infection source.



# Evidence-base malaria control : successful stories

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- ◆ In 2008: 96.5% of population (2,787 counties with 1.2billion population) in areas of malaria basic elimination.
- ◆ Since 1993, no indigenous *P.f* case occurred in central part of China (5 provinces).
- ◆ Based on studies on vector biology: *Anopheles antropophagus*, *An.sinensis* and *An.dirus*, malaria transmission was controlled effectively in 10 provinces).

# Successful stories

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- ❖ IRS +improve environment to reduce vector breeding place: in Hainan Province, effective control *An. minimus*.

# **China: Malaria elimination program**

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## **(Year 2010 - 2020)**

- ◆ **By the year 2015: malaria elimination in the country except Yunnan border.**
- ◆ **By the year 2020: whole country will reach the criteria of malaria elimination.**

# Malaria Profile in China

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Local transmission  
with higher incidence

**8 Provinces:**  
Yunnan, Hainan,  
Anhui, Hubei,  
Jiangsu, Henan,  
Tibet, Guizhou

**Class I**

Local transmission  
with dispersed foci

**11 provinces:**  
Shandong, Guangxi,  
Guangdong, Jiangxi,  
Zhejiang, Sichuan,  
Hunan, Chongqing,  
Liaoning, Shanghai,  
Shannxi

**Class II**

Potential  
transmission area  
without local case in  
3 years

**4 provinces:**  
Fujian, Hebei,  
Shanxi, Xinjiang

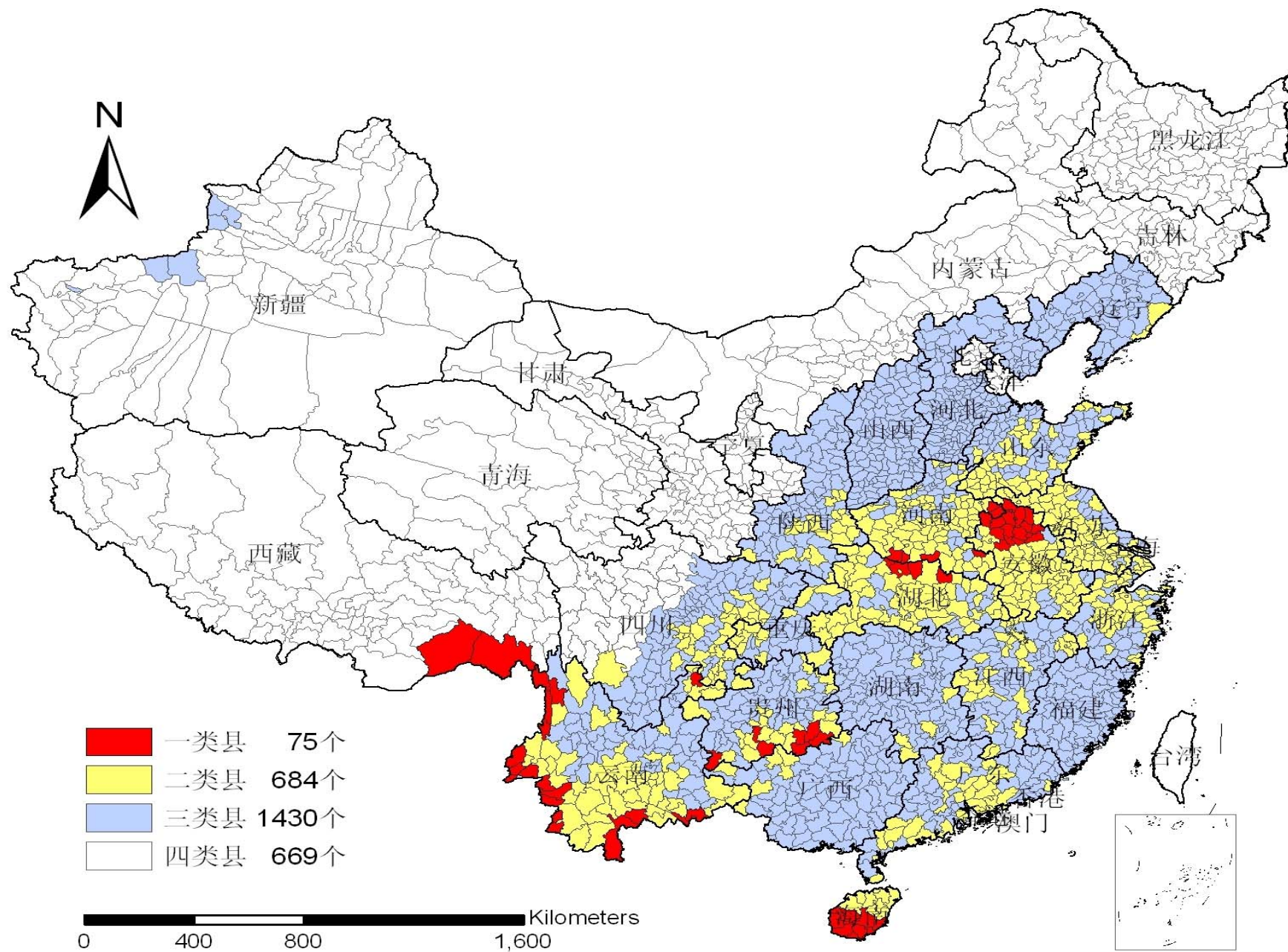
**Class III**

Malaria free areas

**8 provinces:**  
Heilongjiang, Gansu,  
Qinghai, Neimeng,  
Ningxia, Beijing,  
Tianjin, Jilin

**Class IV**

# National Malaria Elimination Plan





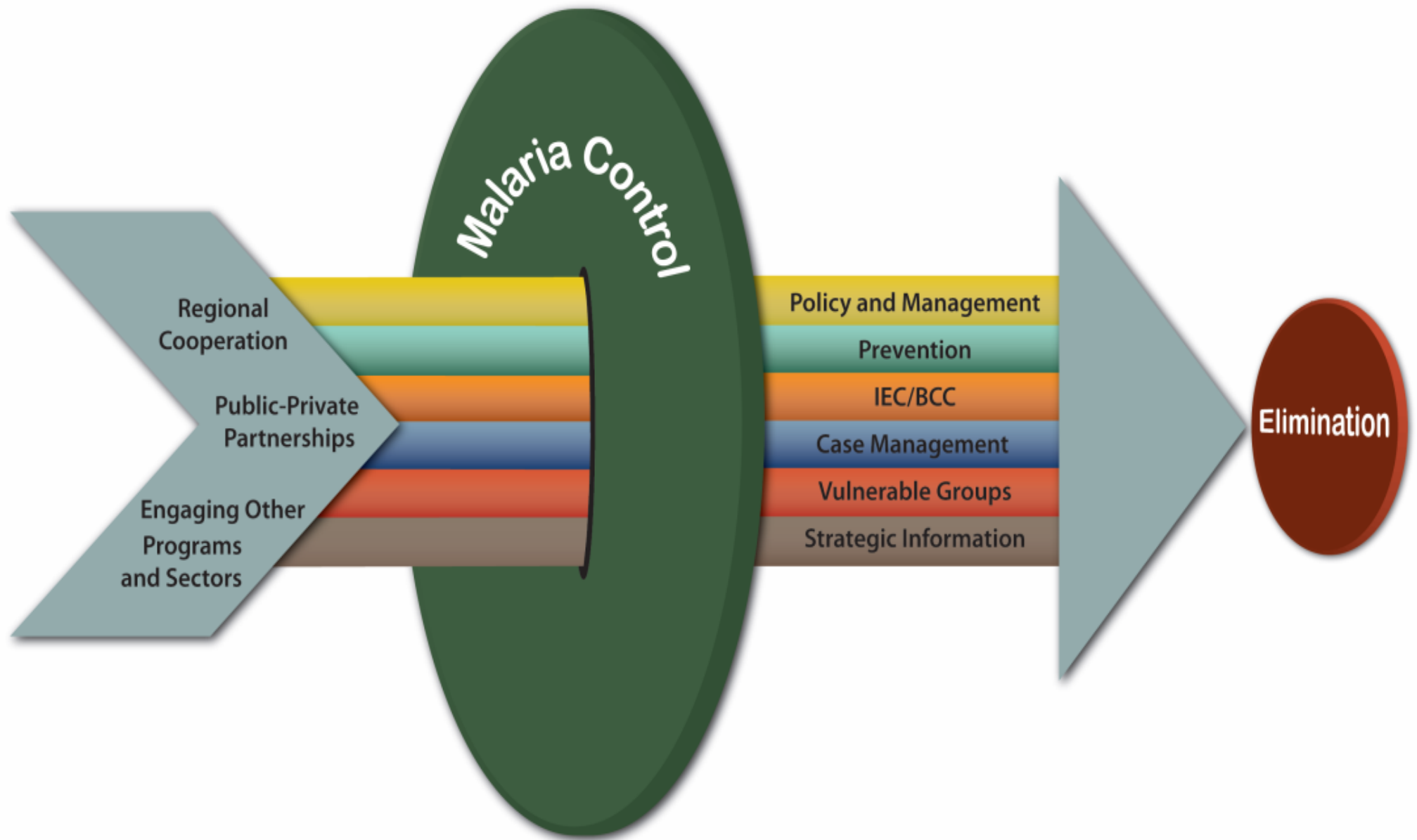
# Main strategies/activities

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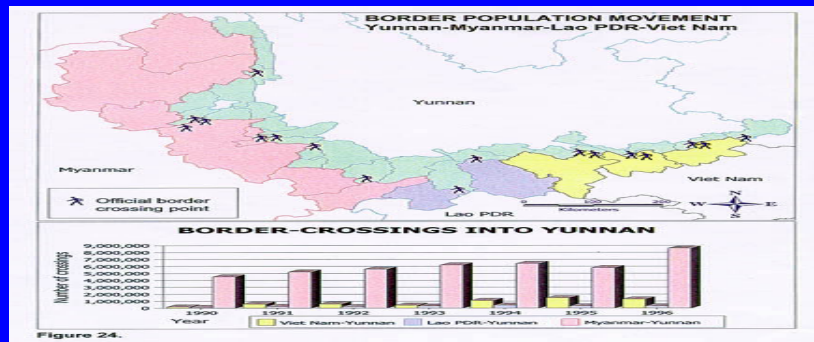
- ◆ Strategy 1—Early diagnosis and prompt treatment
- ◆ Strategy 2—Full coverage of population at risk with appropriate measures for vector management
- ◆ Strategy 3—IEC/BCC and social mobilization

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- ◆ **Strategy 4—Comprehensive malaria control coverage for vulnerable, poor and marginalized populations at high risk of malaria**
  - ◆ **Strategy 5—Surveillance and response to malaria hot spots**
  - ◆ **Strategy 6—Governmental commitment and management**

# On Track to the Target



# Main challenge for elimination



Cross border malaria



Malaria in migrant population

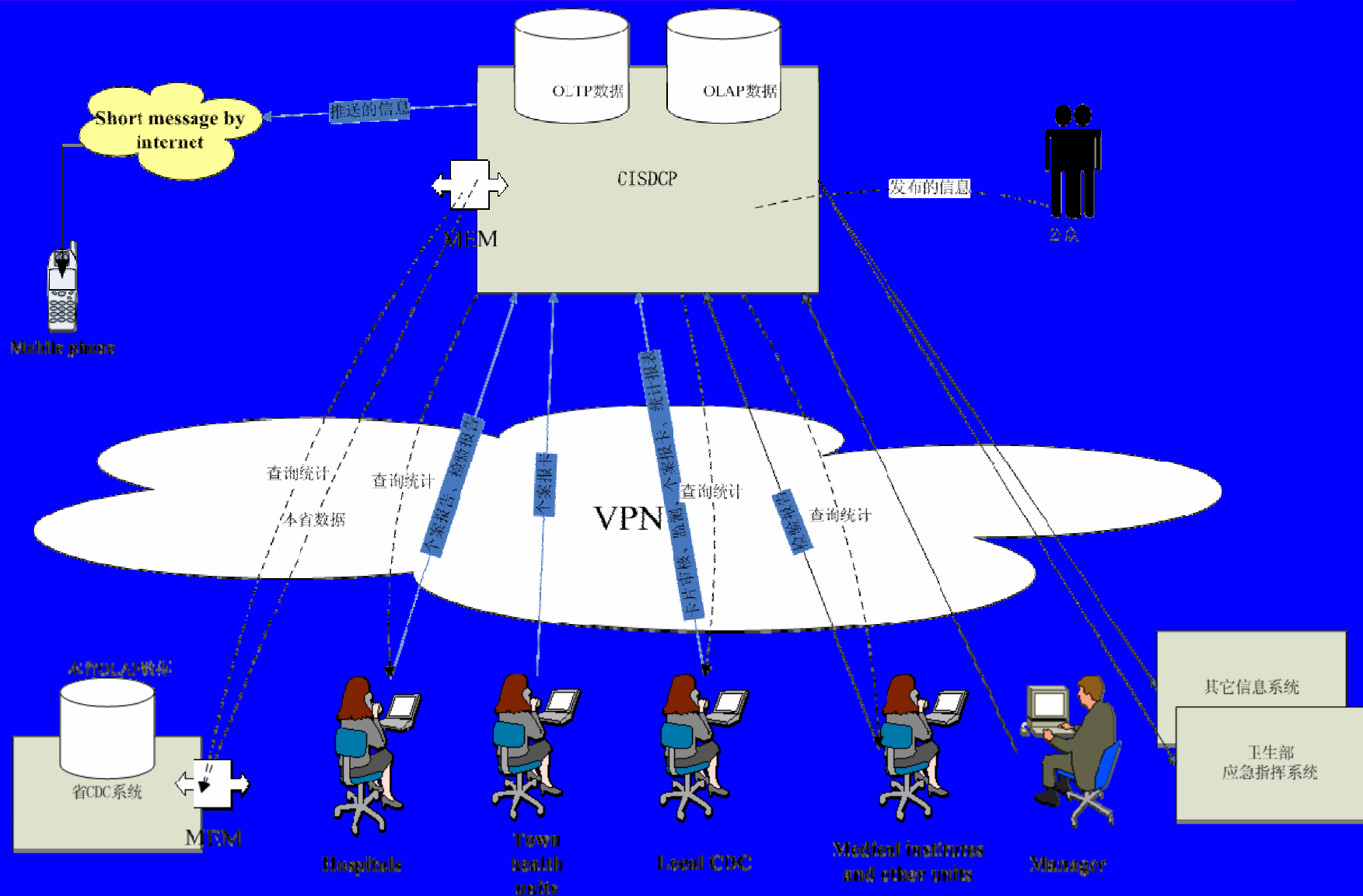


Radical treatment for G6PD deficiency



Weak in Surveillance and early warning (antimalarial drug resistance)

# Strengthen case report and surveillance system from central to rural areas





# Research priorities for malaria elimination

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- ◆ Monitor and respond to resurgence risks in areas where low- endemic control has been achieved, but where potential for transmission remains high.
- ◆ Sensitive and rapid technique for malaria diagnosis.
- ◆ Radical treatment for G6PD deficiency *vivax* cases

# China: Political support

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- ◆ **The National Action Plan for Malaria Elimination in 2010-2020 in China**
- ◆ **The National Guidelines on Malaria Surveillance and Epidemic Response**
- ◆ **Strengthen health system and capacity building in remote areas**
- ◆ **The government improve the invested fund for malaria control and elimination**
- ◆ **International and regional collaboration on networks for control and elimination malaria.**

# thank you

