



Communicable Diseases in the Western Pacific Region

**Inaugural Ceremony of the Scientific Advisory Structure of the
Centre for Health Protection, Department of Health, Hong Kong**

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WHO



Outline of the Presentation

1. **Current situation of communicable diseases in the Western Pacific Region**
 - HIV / AIDS
 - TB
 - Vaccine Preventable Diseases
 - Vector borne diseases
2. **New communicable diseases challenges in the Western Pacific Region**
 - SARS
 - Avian Influenza
 - Other emerging diseases
3. **Roles of Hong Kong SAR in regional and global efforts**

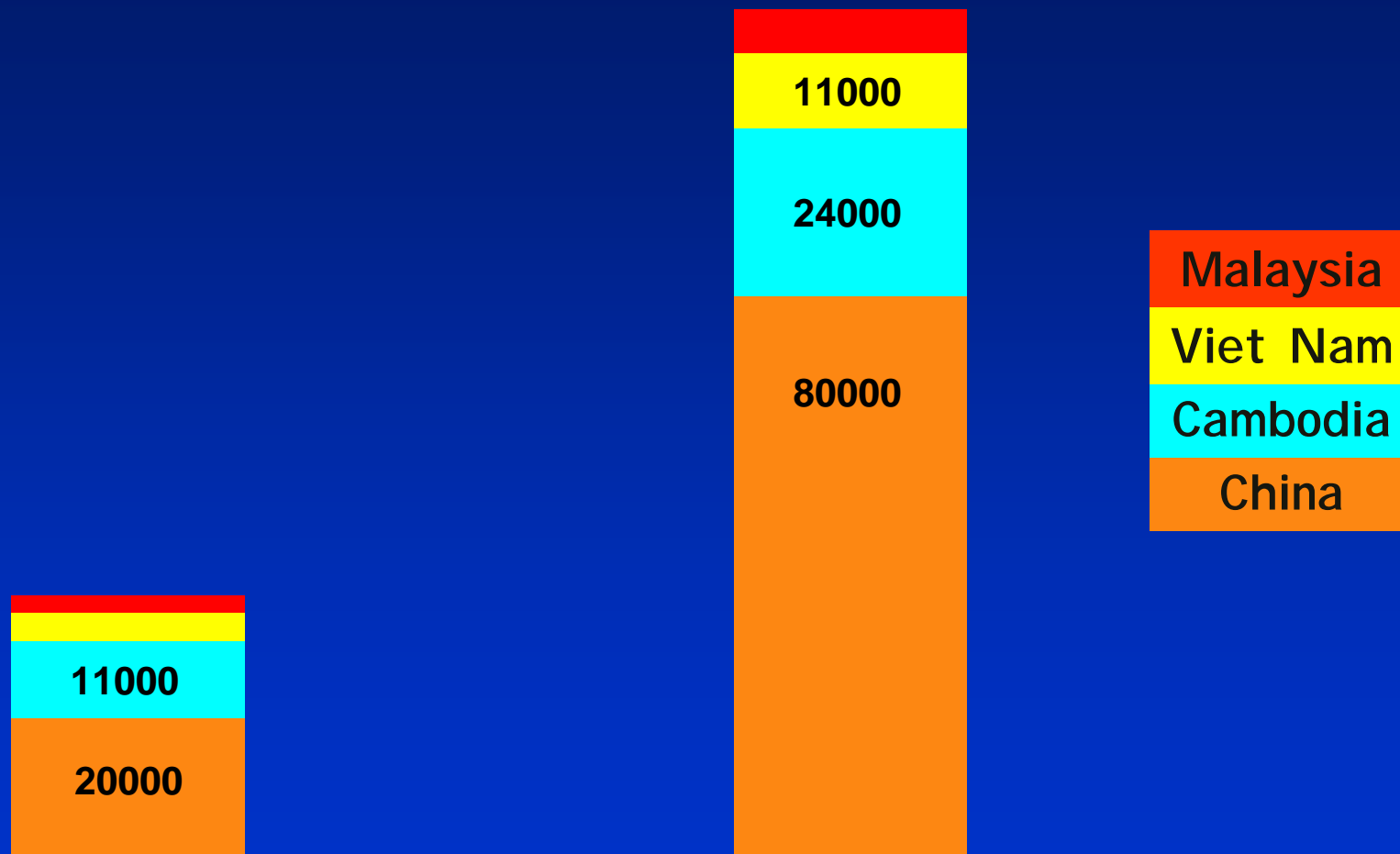


Western Pacific Region of WHO



* Associate member

Estimates of yearly AIDS deaths in 2000 & 2005 in 4 selected Western Pacific countries



35,000 deaths

120,000 deaths

What is the "3 by 5" Initiative?



WHO/UNAIDS global treatment initiative for AIDS
"Addressing a global public



An initiative to to make ARV treatment
available to 3 million people by 2005

400,000 people receive treatment today

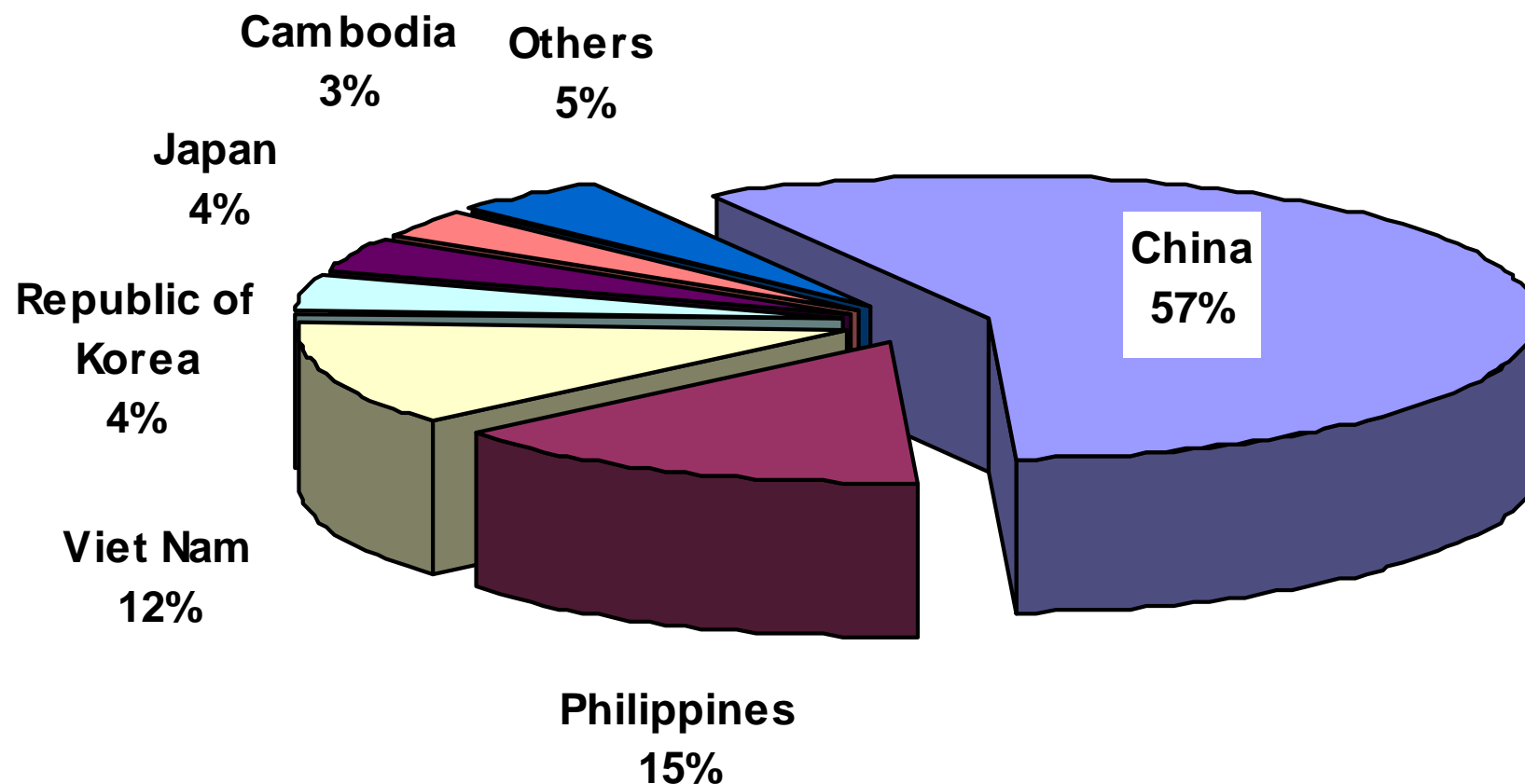


Measurable,
fixed target
towards
the goal
of universal
access to ART

A voluntary process

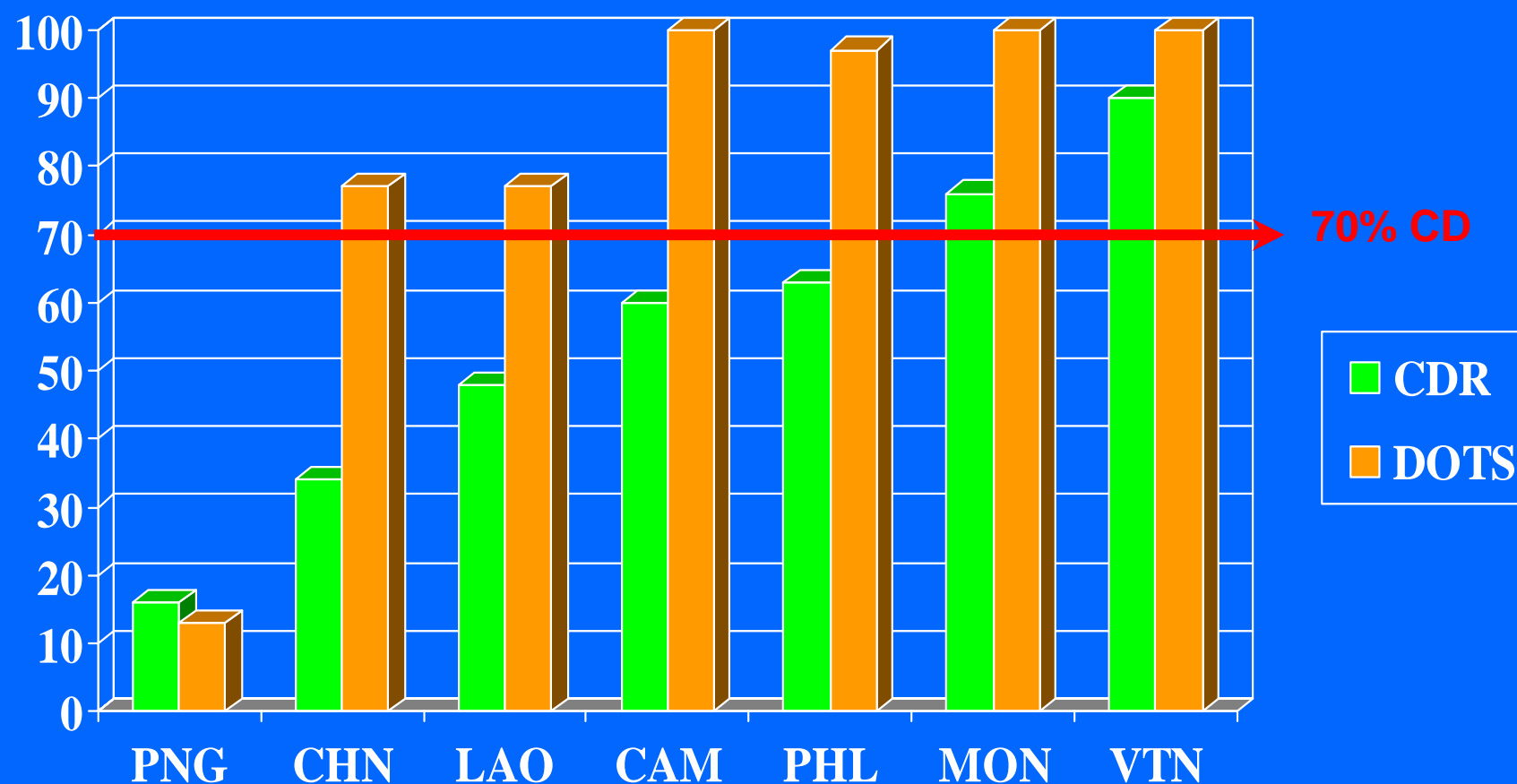
- driven by country
- supported
by regional offices
- with stewardship
of HQ

Distribution of notified TB cases in Western Pacific Region (2002)

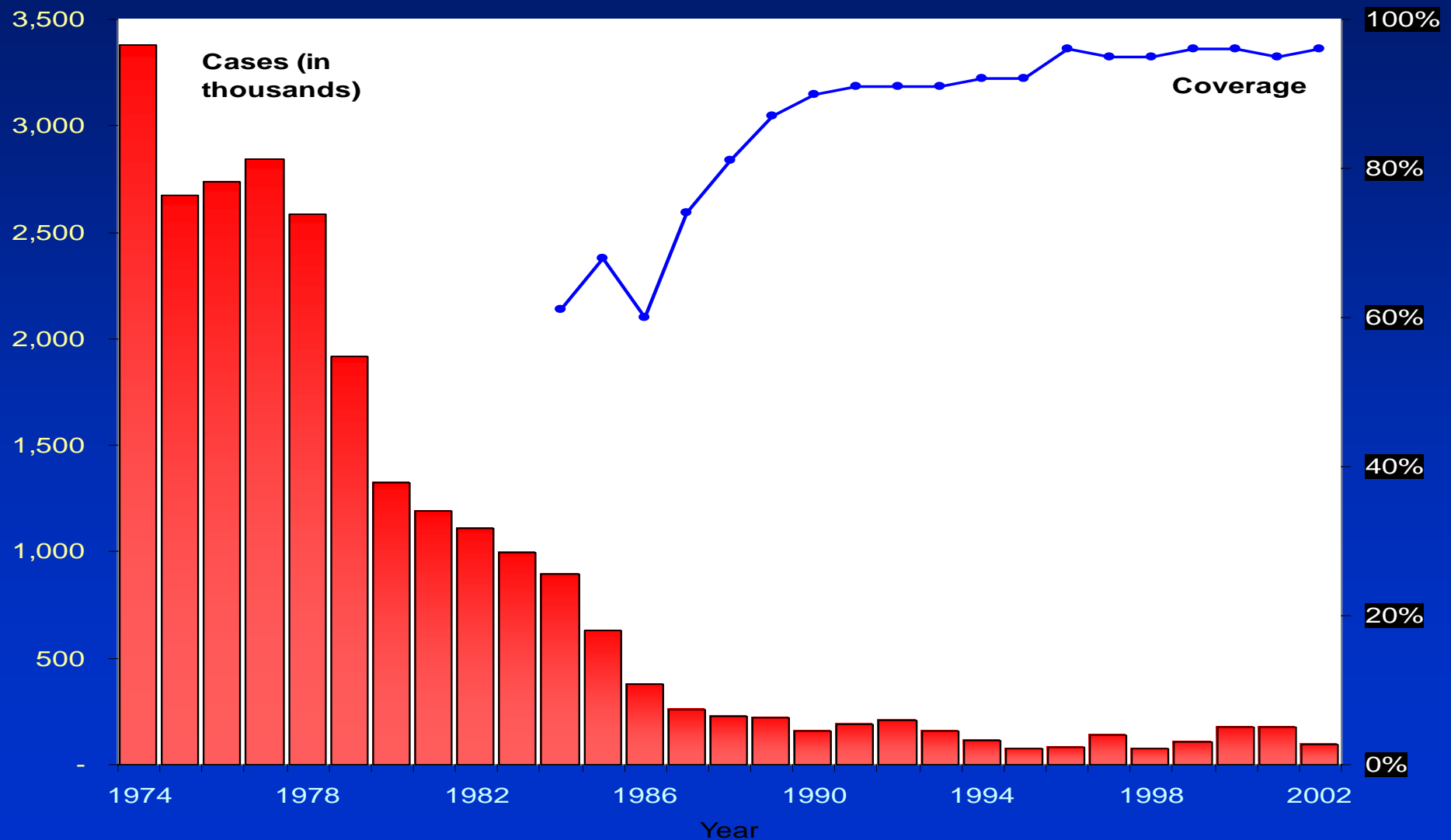




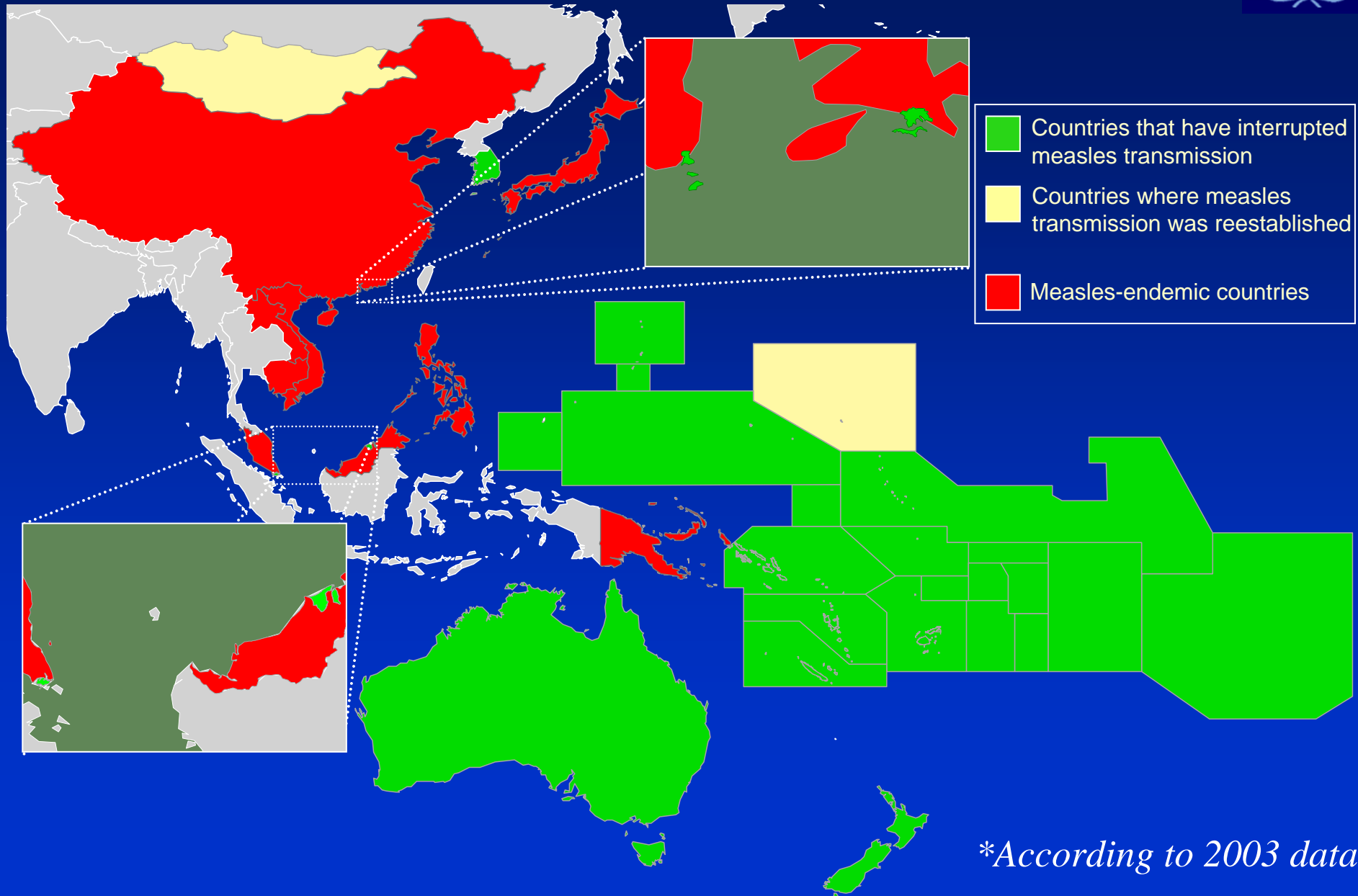
Case Detection Rate (CDR) and DOTS coverage in 7 High Burden Countries in WPR



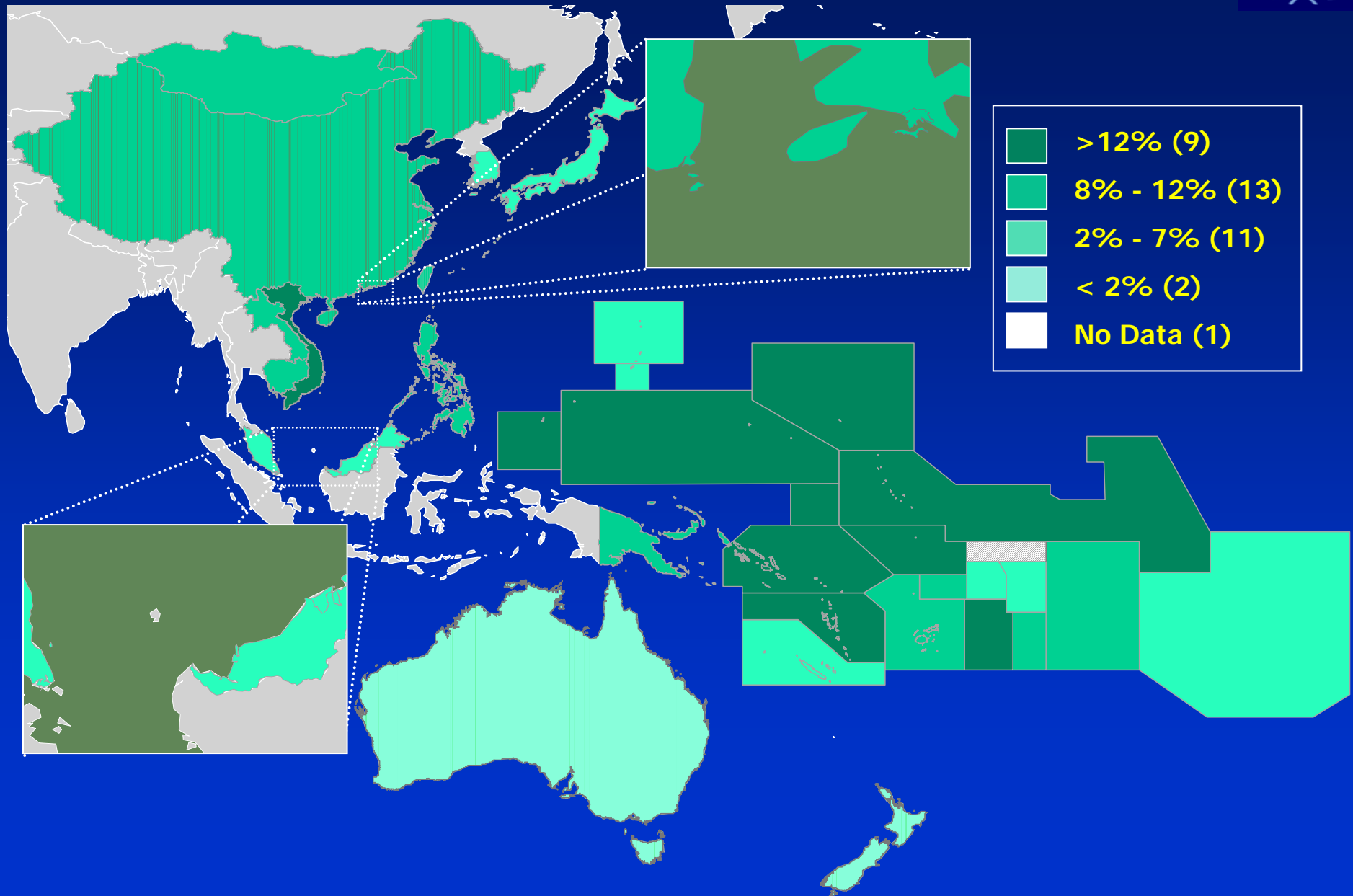
Measles cases and coverage WPR 1974-2002



Measles control status by country

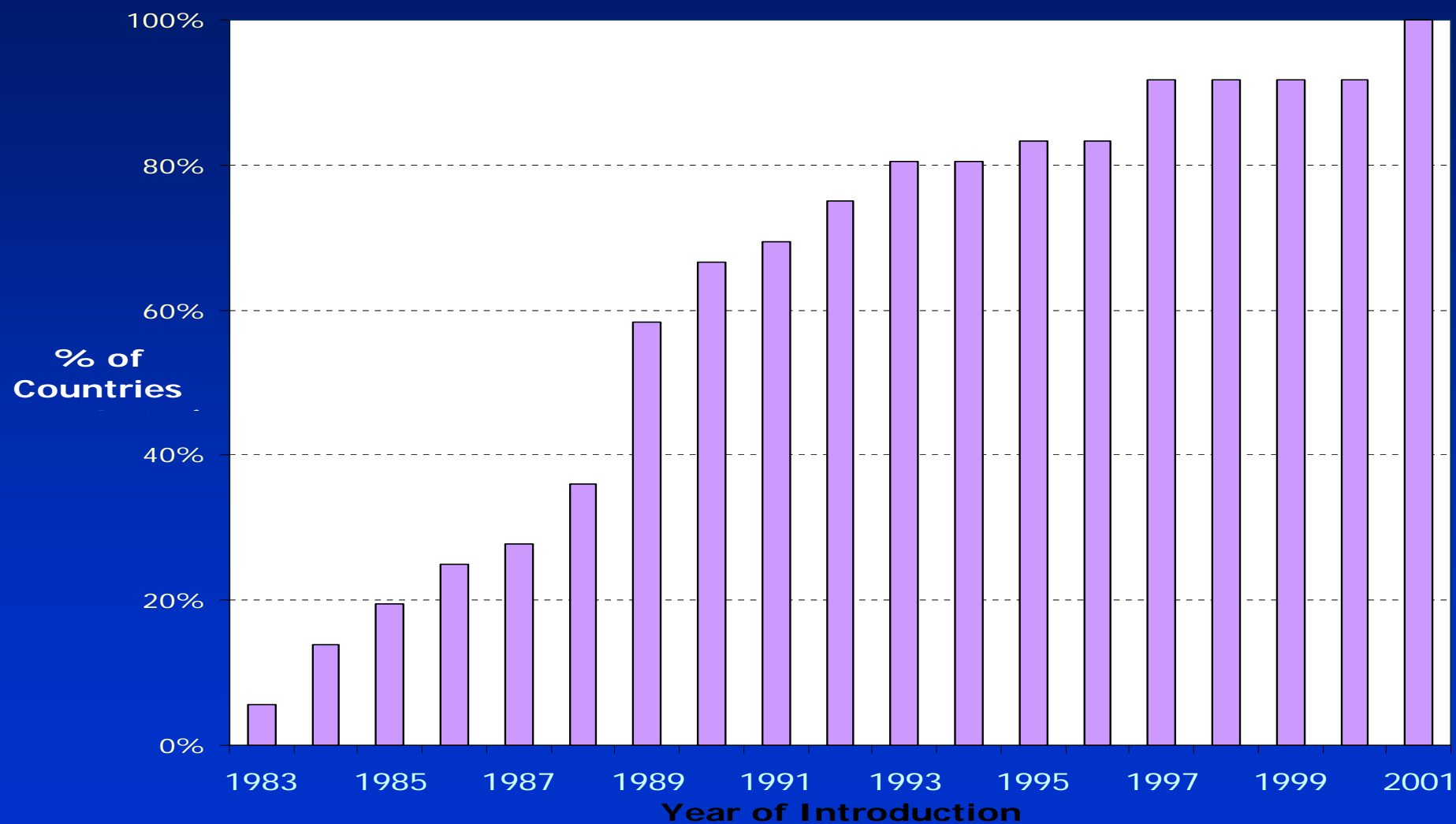


HBV Carriage Rate (pre-vaccine)



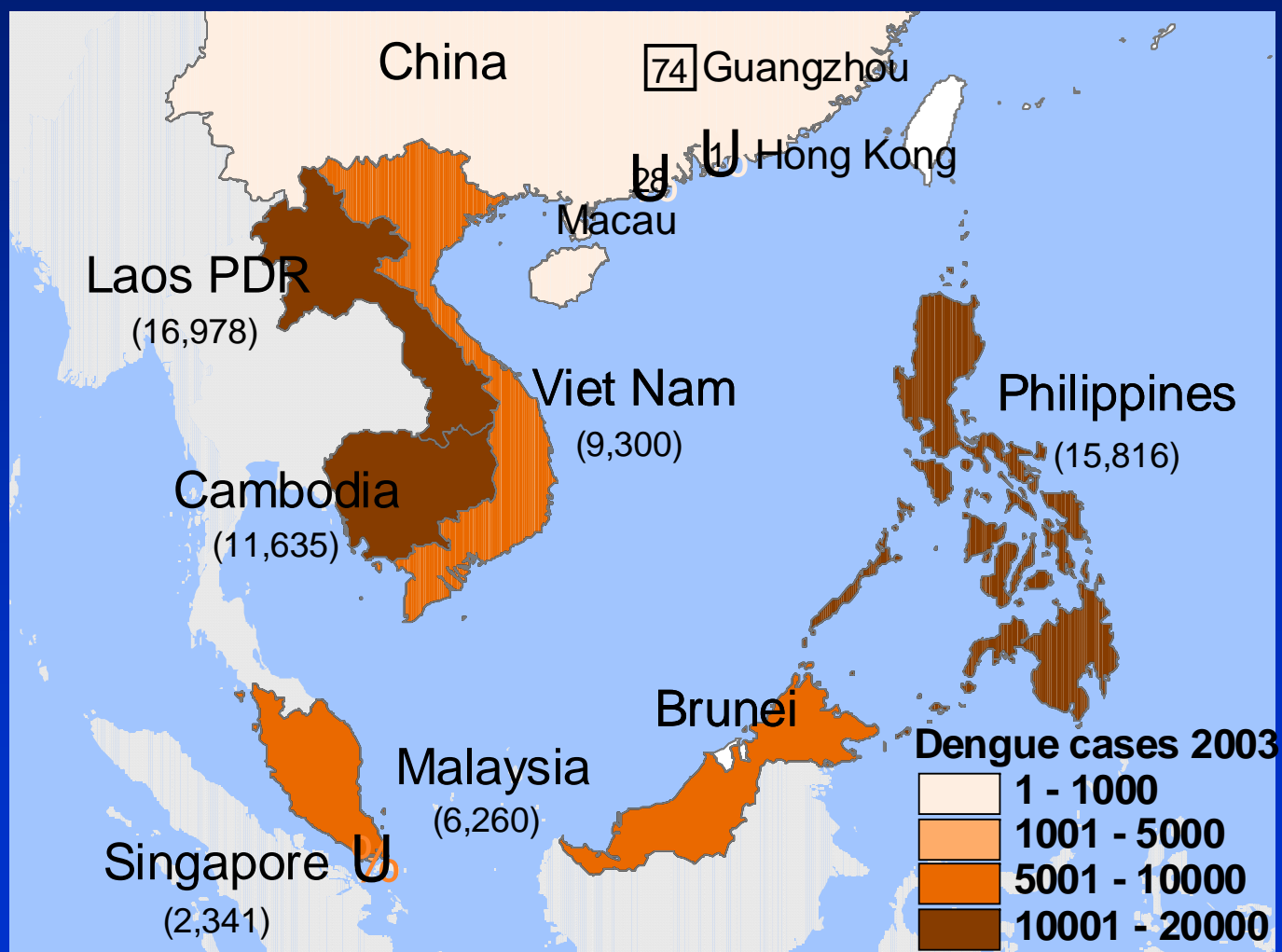


Introduction of Hep B vaccine





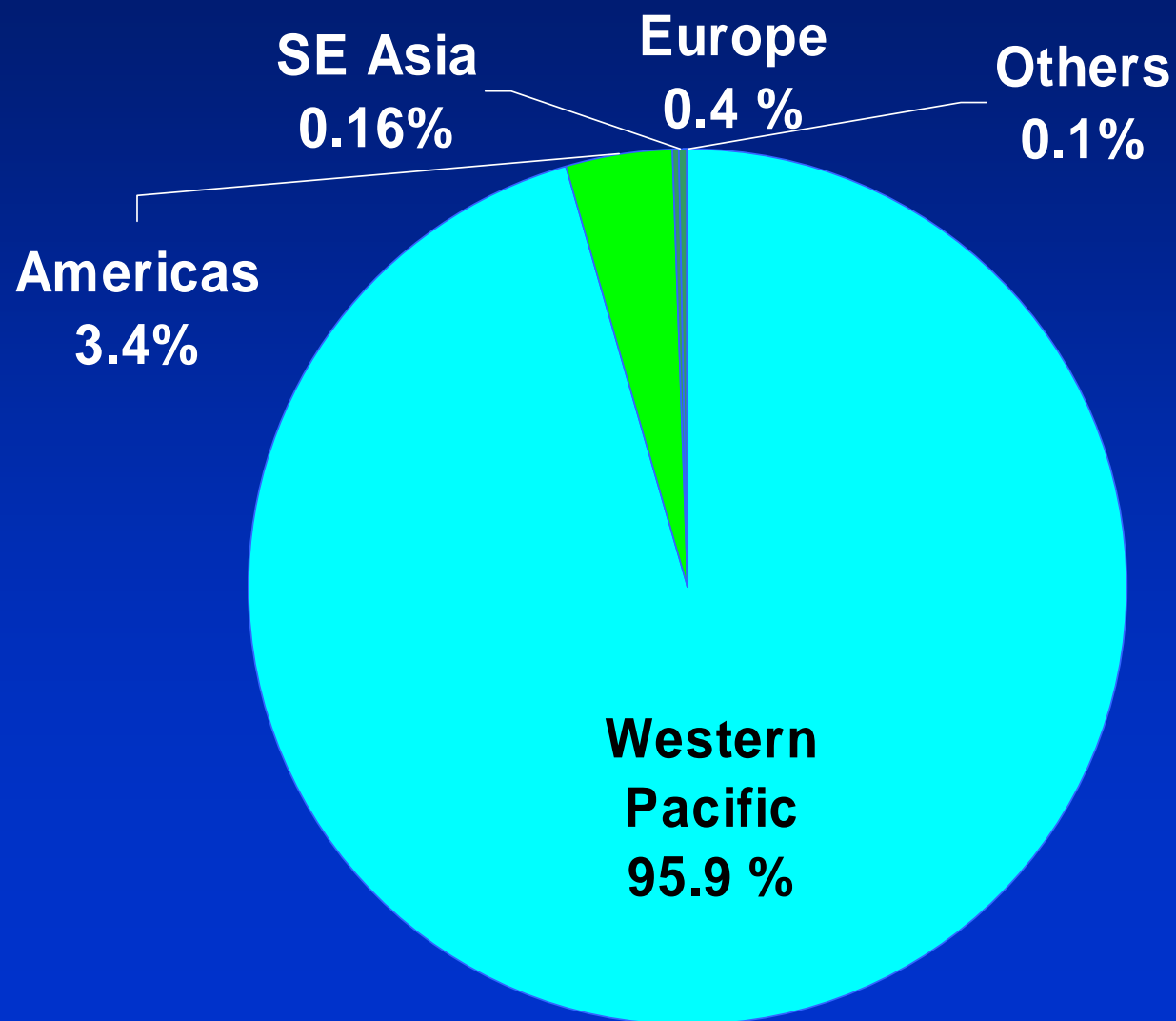
Number of reported dengue cases 2003





SARS cases by region

1 November 2002 – 7 August 2003



Global Total:

8096 cases

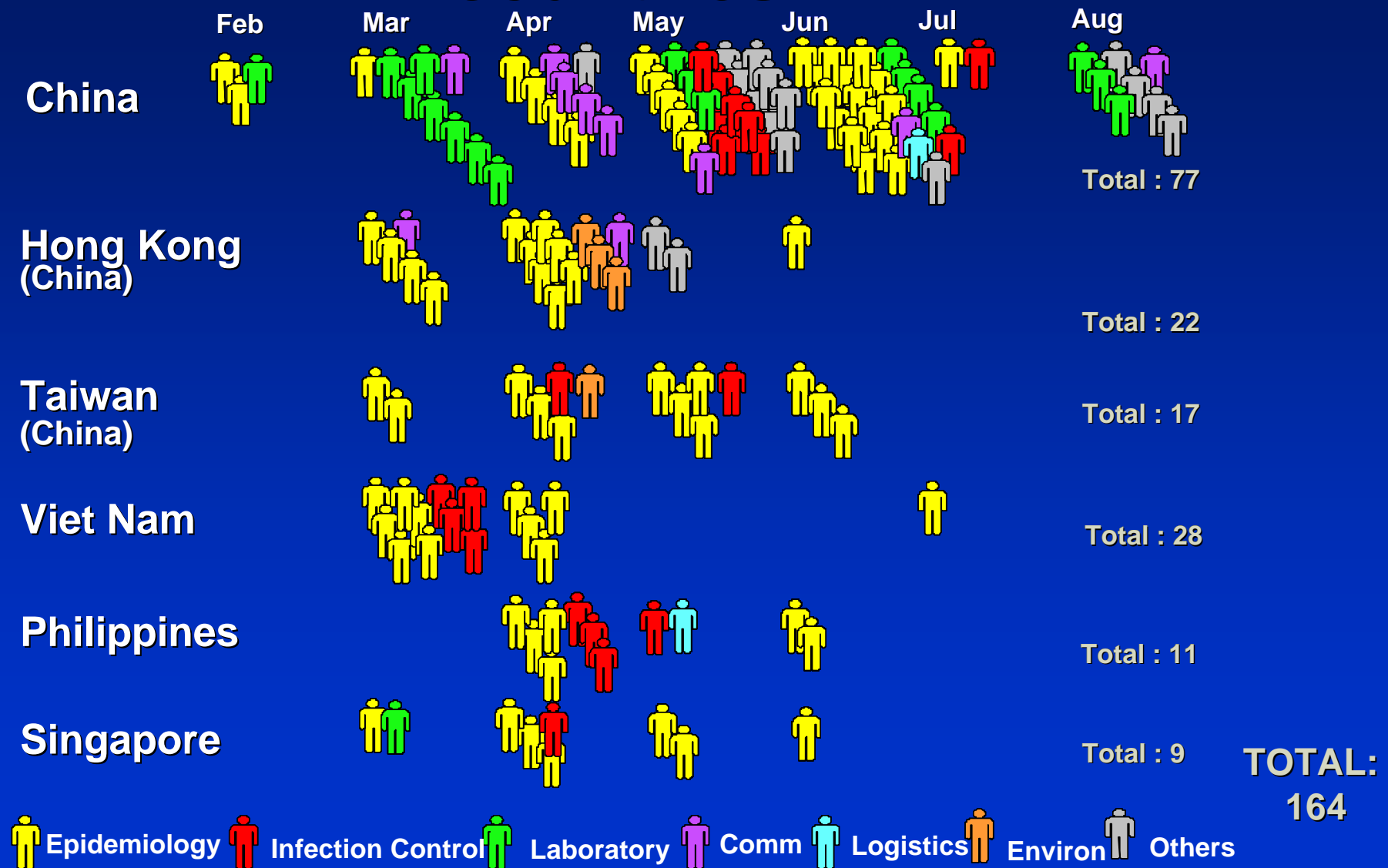
774 deaths

WPR Total:

**7768 cases
(95.9. %)**

**727 deaths
(93.9 %)**

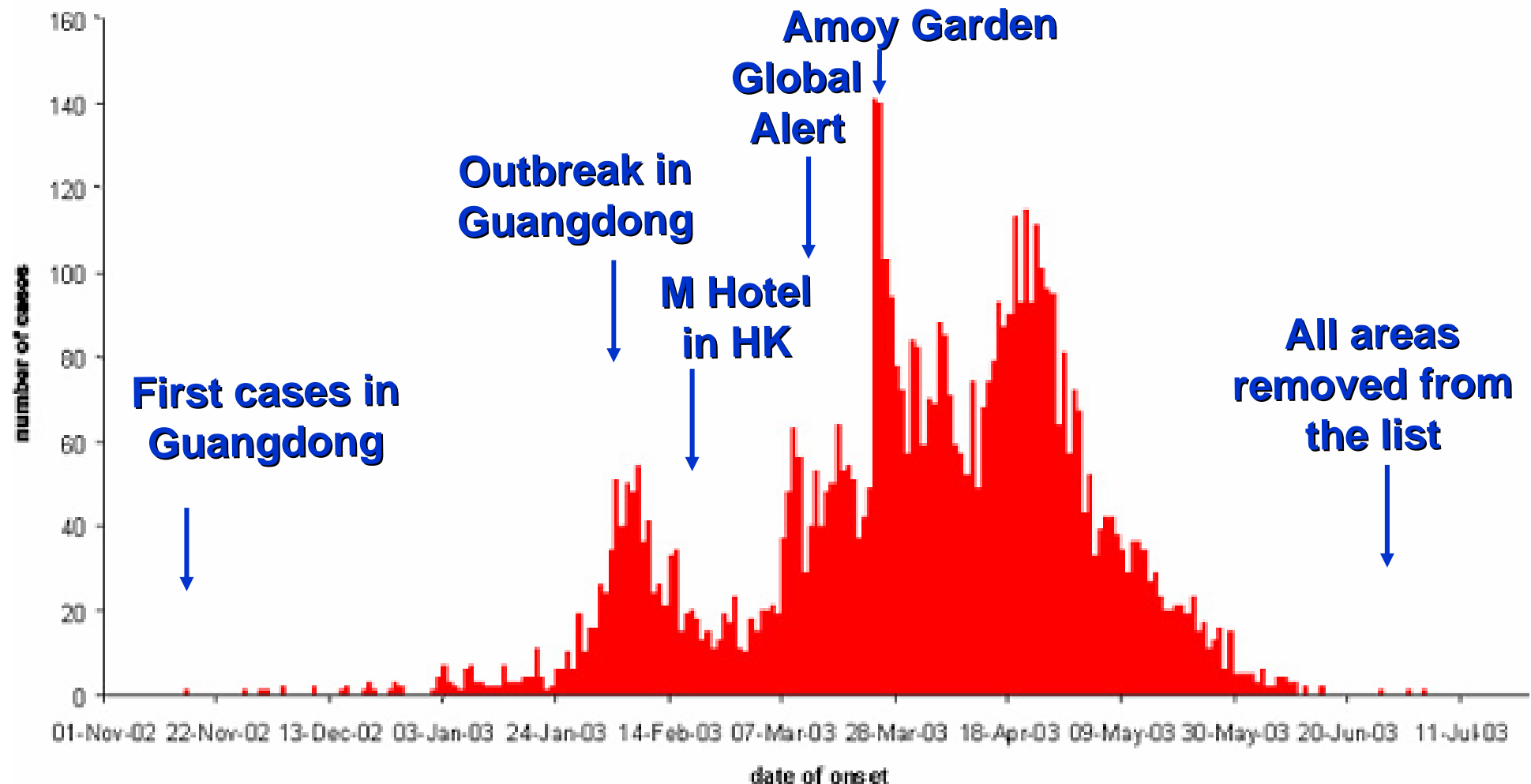
WHO consultants for affected countries



SARS cases by week of onset



Multi-country Outbreaks





Lessons learned from SARS

- **Timely and transparent information sharing**
- **National sovereignty and protection of global public health**
- **Economic impact**
- **Lack of surge capacity at country and regional level**
- **Poor public health infrastructure**
- **Inadequate infection control practices in health care settings**
- **Multi-sectoral coordination**
- **Risk communication**

Key elements for success in global containment of SARS



- High level of leadership and commitment
- The dedication and hard work of public health staff
- Unprecedented worldwide collaboration among governments and the scientific community

However, there are still issues that need to be addressed...



One year after SARS outbreak

■ Remaining issues

- Ecology of SARS CoV in environment (natural reservoir)
- Vaccine and antiviral development
- Diagnostic kits

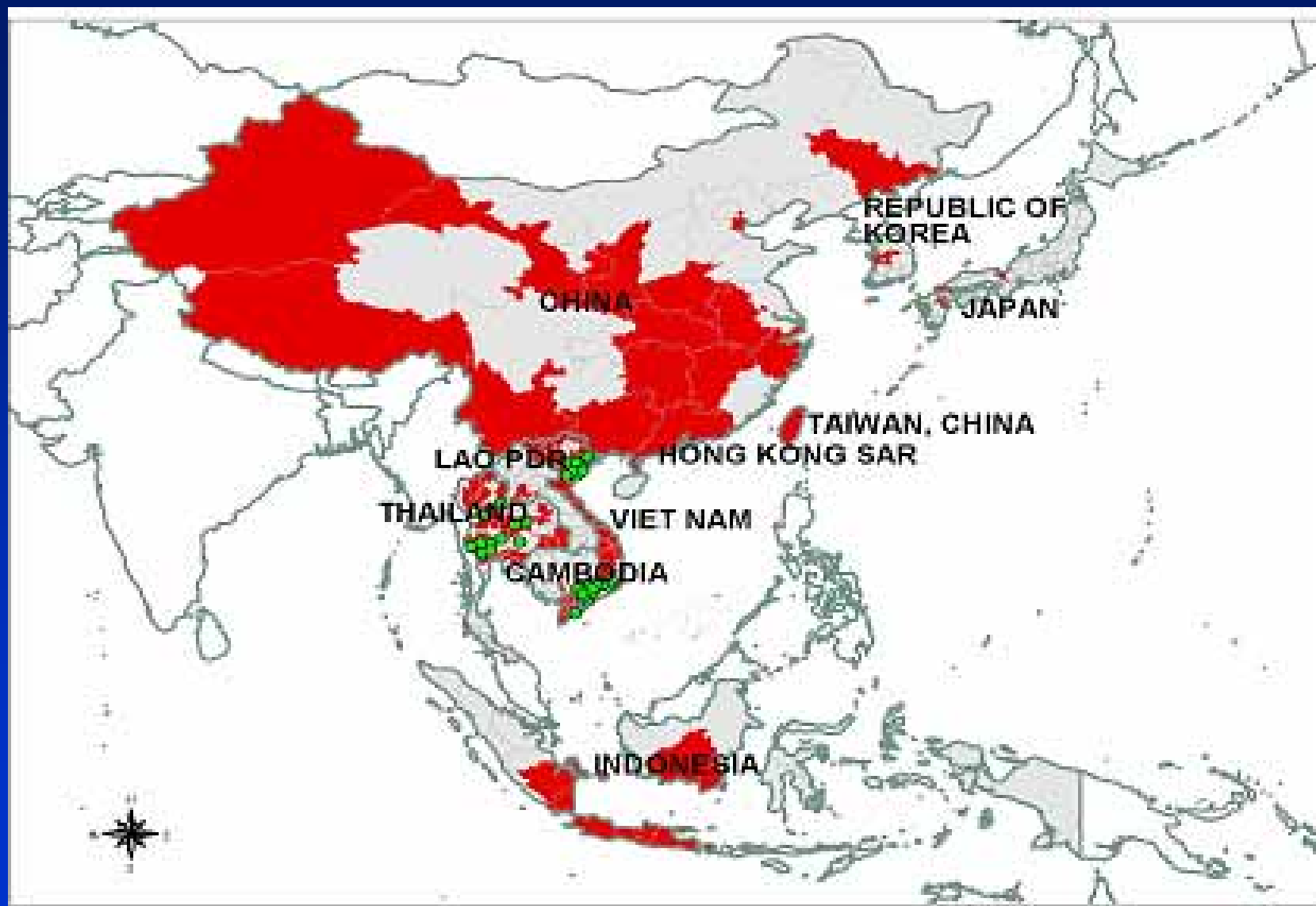


■ New issues

- Laboratory safety and containment
 - Laboratory acquired cases in Singapore, Taiwan, Beijing



Avian influenza (H5N1) in Asia as of 10 March 2004



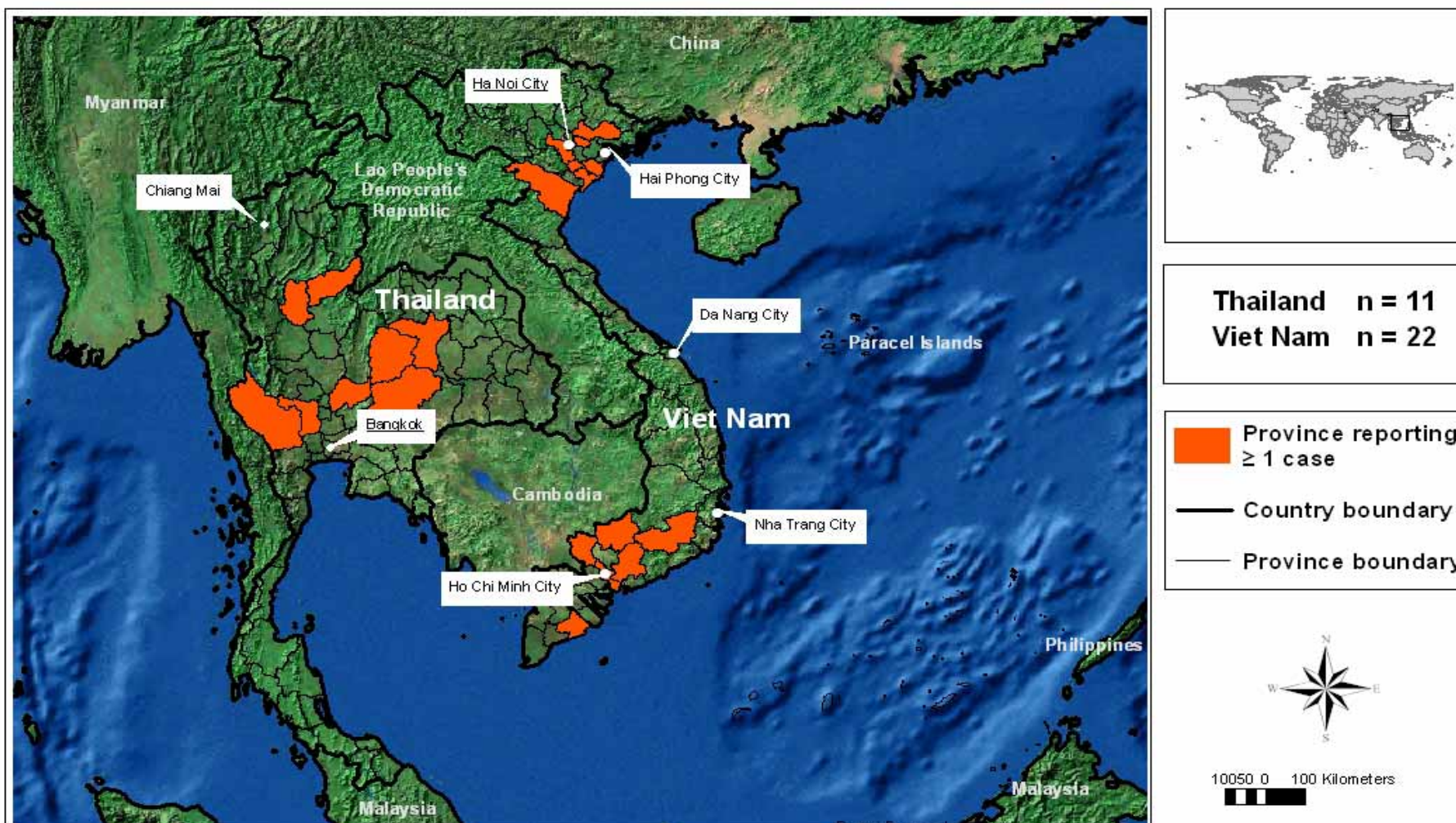


Confirmed human cases of avian influenza A(H5N1) as of 17 March 2004

| | Cases | Deaths |
|-----------------|--------------|---------------|
| Thailand | 12 | 8 |
| Viet Nam | 22 | 15 |
| Total | 34 | 23 |



**Laboratory confirmed human cases of influenza A/H5N1 infection in Thailand and Viet Nam by province (N=33)
(as of 9 March 2004)**

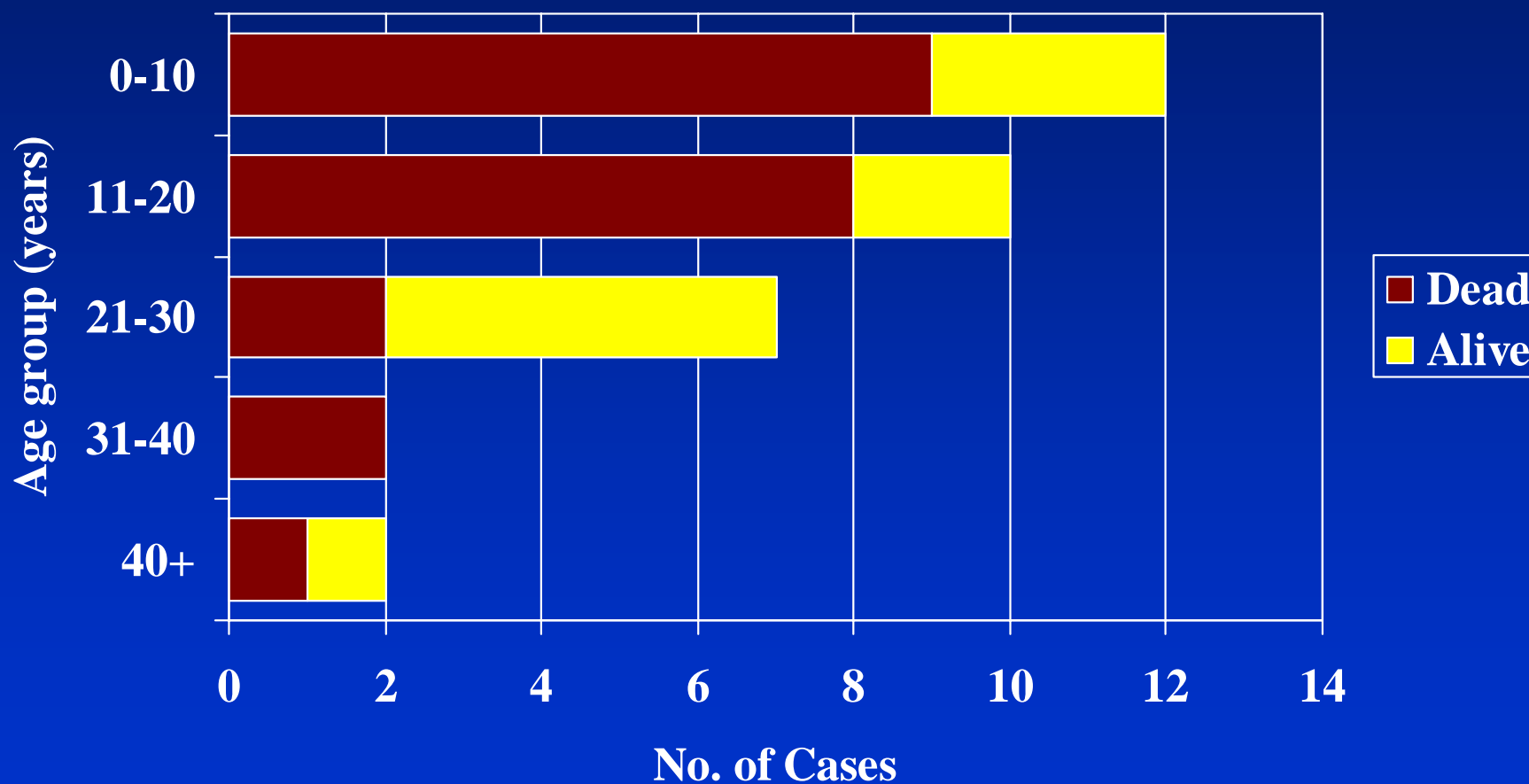


The presentation of material on the maps contained herein does not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or areas or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Data Source: WHO
Map Production: Public Health Mapping Team
Communicable Diseases (CDS)
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Status of H5N1 cases by age group Thailand and Viet Nam (N= 34)





Human Public Health Risk

- **Human cases in affected areas**
 - Still small number of confirmed cases
 - Not enough information to assess public health impact
- **Emergence of a new influenza virus**
 - Efficient human to human transmission
 - Vast majority of people no immunity to H5
 - Pandemic with huge morbidity and mortality impact

Lessons learned from avian influenza outbreak in Asia



- **Need to strengthen surveillance capacities**
 - Human
 - Animal
- **Better coordination between human public health and agriculture sectors**
 - National Level
 - Regional / Global Levels
- **Human public health vs impact on economy**
 - Reluctance to report poultry outbreak



Other emerging disease threats

- **Nipah / Hendra**
- **Enterovirus 71**
- **West Nile Virus**
- **Hantavirus**
- **Other zoonoses**
- **Antimicrobial resistance**
- **Newly emerging diseases**

Emerging communicable diseases

Why now?



■ Globalization

- Mass movement of people and goods

■ Rapid development

- Urbanization (ex. TB)
- Deforestation (ex. Ebola)

■ Over-consumption of animal products

- Animal husbandry practices – intensive farming
- Wild animal markets

■ Failure of health systems

- Heavy focus on curative care
- Neglect of public health
- Excessive antibiotic use



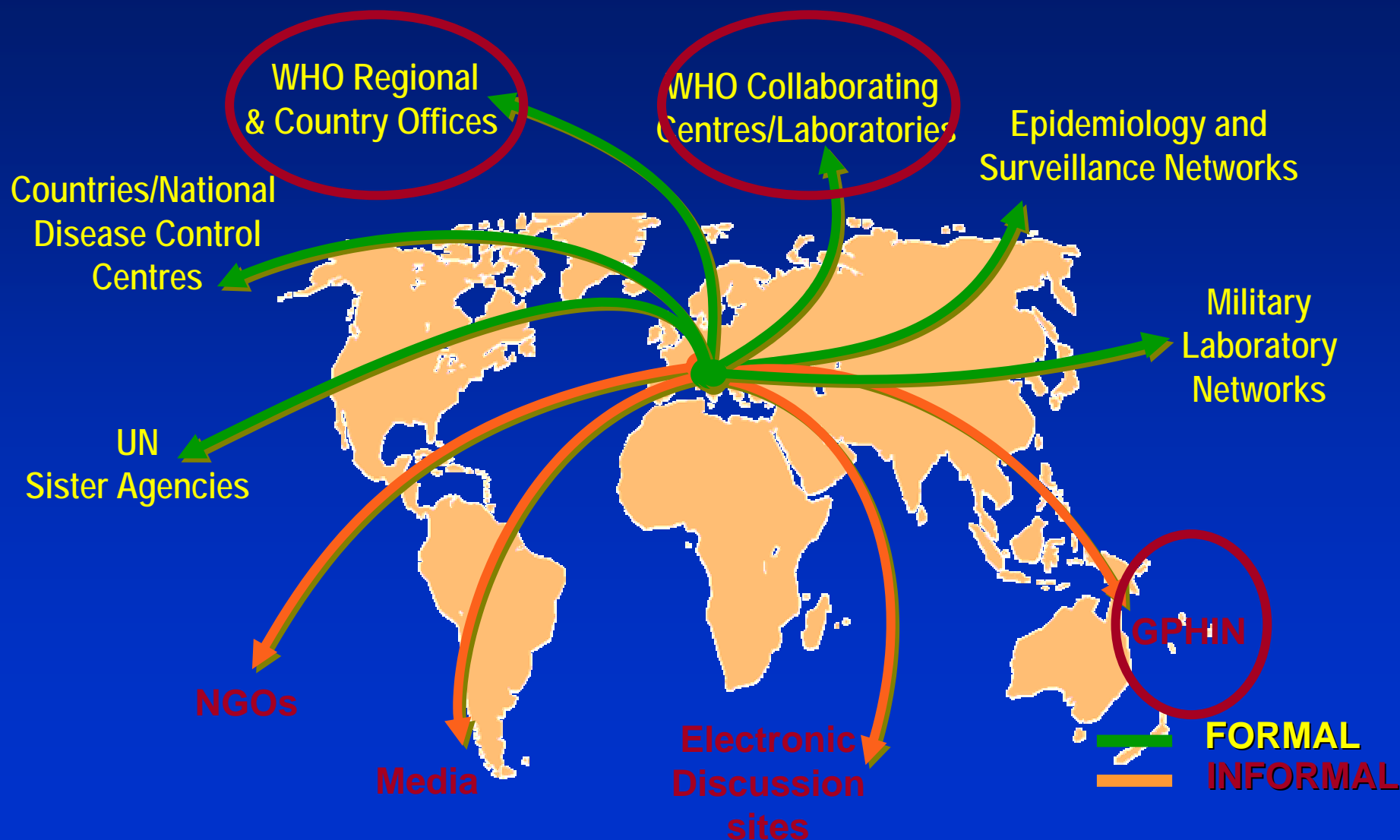
Global and Regional Alert and Response Networks

■ Rational

- None of countries and areas has all necessary expertise / capacity to respond to public health emergencies like SARS
- Gaps between developed and developing countries: e.g. laboratory, epidemiology etc.
- Rapid and transparent information exchange is critical to prevent international spread of disease



Global Outbreak Alert and Response Network



Epidemic Alert and Response

GLOBAL
HEALTH
SECURITY



Protect the world ...

الوائح الصحية الدولية

国际卫生条例

International Health Regulations

Règlement sanitaire international

Международные медико-санитарные правила

Reglamento Sanitario Internacional



World Health Organization

International
Health
Regulations =
Global legal
framework to
protect the world
from public
health threats



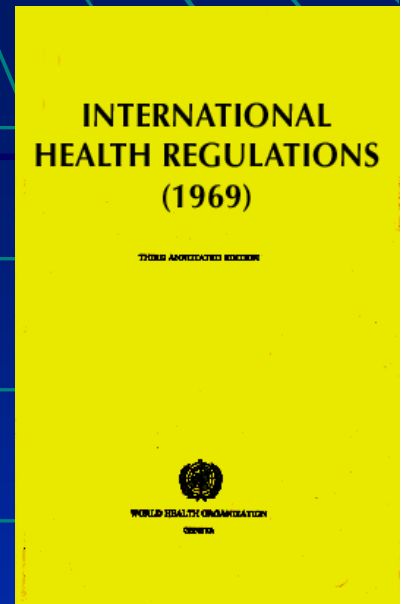
Why have IHR?

- **Serious and unusual disease events are inevitable**
- **Globalisation - problem in one location is everybody's problem**
- **An agreed code of conduct PROTECTS against:**
 - 1. the spread of serious risks to public health**
 - 2. the unnecessary or excessive use of restrictions in traffic or trade for public health purposes**



IHR are not new

- Notification: to WHO, of a case of cholera, plague or yellow fever, notify WHO when the area is free from infection - narrow focus
 - Health Organization: ports, airports and frontier posts are adequately equipped to apply the IHR measures - again focussed on 3 diseases and outdated
 - Health Measures: The maximum measures applicable to international traffic, which a state may require for the protection of its territory against cholera, plague and yellow fever - rigid and punitive
- In revising we needed to overcome these limitations**





The Proposed Revision

- **Notification: Public health emergency of international concern**
- **Use information coming from sources other than official member state notifications**
- **Temporary recommendations**
 - IHR emergency committee
 - Based on risk assessment
- **National focal point**
- **Minimum core capacity**
 - Capacity building





Major milestones in the revision

2004



- report to EB 113 - green light
- Regional Consultation Meetings (WPRO: April 28-30)
- Amended draft revision proposals
- Intergovernmental Working Group (Nov 2004)
- Final regulatory draft

2005

 **report to EB 115**
 **W H A**

Roles of Hong Kong in global & regional effort



- **Participation in global and regional networks**
 - Surveillance
 - Laboratory
 - On-site support
- **Capacity building in neighbouring countries**
 - Training

Roles of Hong Kong in global & regional effort



■ Surveillance

- **Rapid dissemination of information on CD from Hong Kong**
- **Initiate discussions and information sharing with the region**

Roles of Hong Kong in global & regional effort



■ Laboratory networks

- **Laboratories in Hong Kong play critical roles as regional and global reference laboratories**
 - **SARS (3 / 11: Hong Kong labs)**
 - **Influenza H5N1 (2/6: Hong Kong labs)**
 - **Specimens were sent to labs in Hong Kong for:**
 - SARS (Mainland China, Jan 2004)
 - H5N1 (Human, Viet Nam, Jan 2004)
 - H5N1 (Animal, Viet Nam, Feb 2004)
 - H5N1 (Animal, Mainland China, Apr 2004)
 - SARS (Mainland China, Apr 2004)



Roles of Hong Kong in global & regional effort

■ On-site Support

- Clinical team to Viet Nam on H5N1 (Feb 2004)
- More potential
 - Various expertise in Hong Kong
 - Practical experience



Roles of Hong Kong in global & regional effort

■ Capacity building

- Each country should have core capacity to contain disease in early stage
- Training
 - Laboratory
 - Epidemiology
 - Infection control etc.

Thank you

