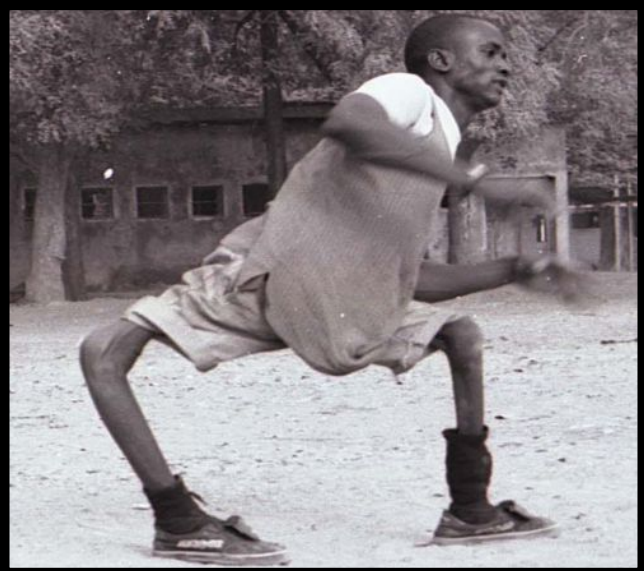


# *Eradicating Polio: Why and How?*

Dr Roland Sutter, World Health Organization  
20 September 2011



*Why?*



**Crippled for life**

# ***Polio***



**Primarily affects children**



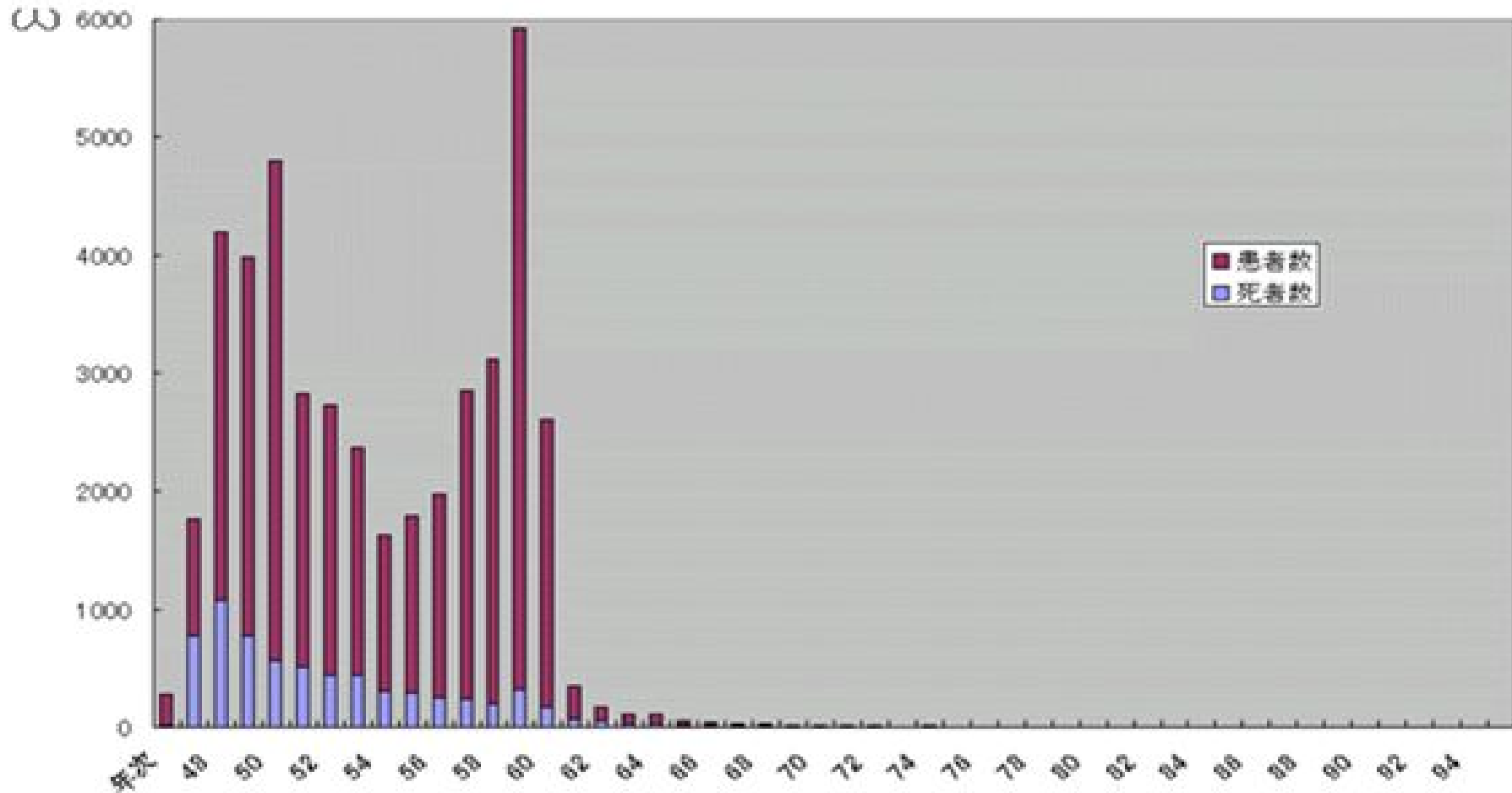
**Preventable with vaccine**

*We have a historic opportunity ....*

*1955: polio vaccine available –  
disease begins to disappear from industrialized countries*



# Polio Cases & Deaths in Japan, 1948-1994



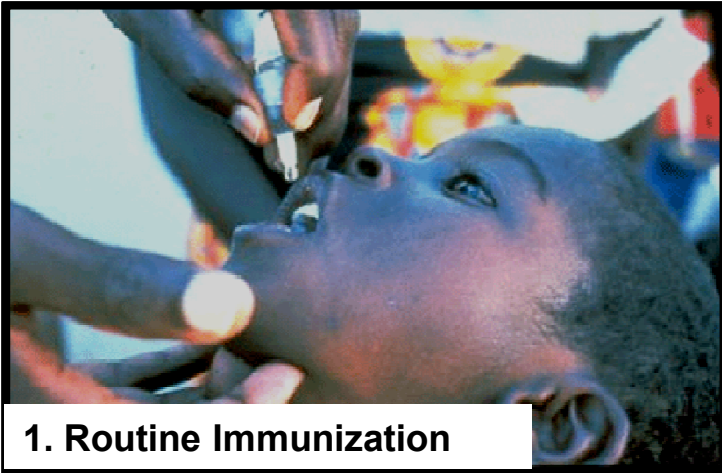
Japan's last case of polio was in 1980

# *Scientific basis for polio eradication*

- *Three types of poliovirus (types 1, 2 and 3)*
- *Paralysed children indicate where polio is circulating*
- *No natural reservoir*
- *Effective and easy to administer vaccine*
- *Time-limited infectiousness*
- *Feasibility of eradication proven*
  - *Type 2 wild poliovirus already eradicated*

*How?*

# *Eradication Strategies*



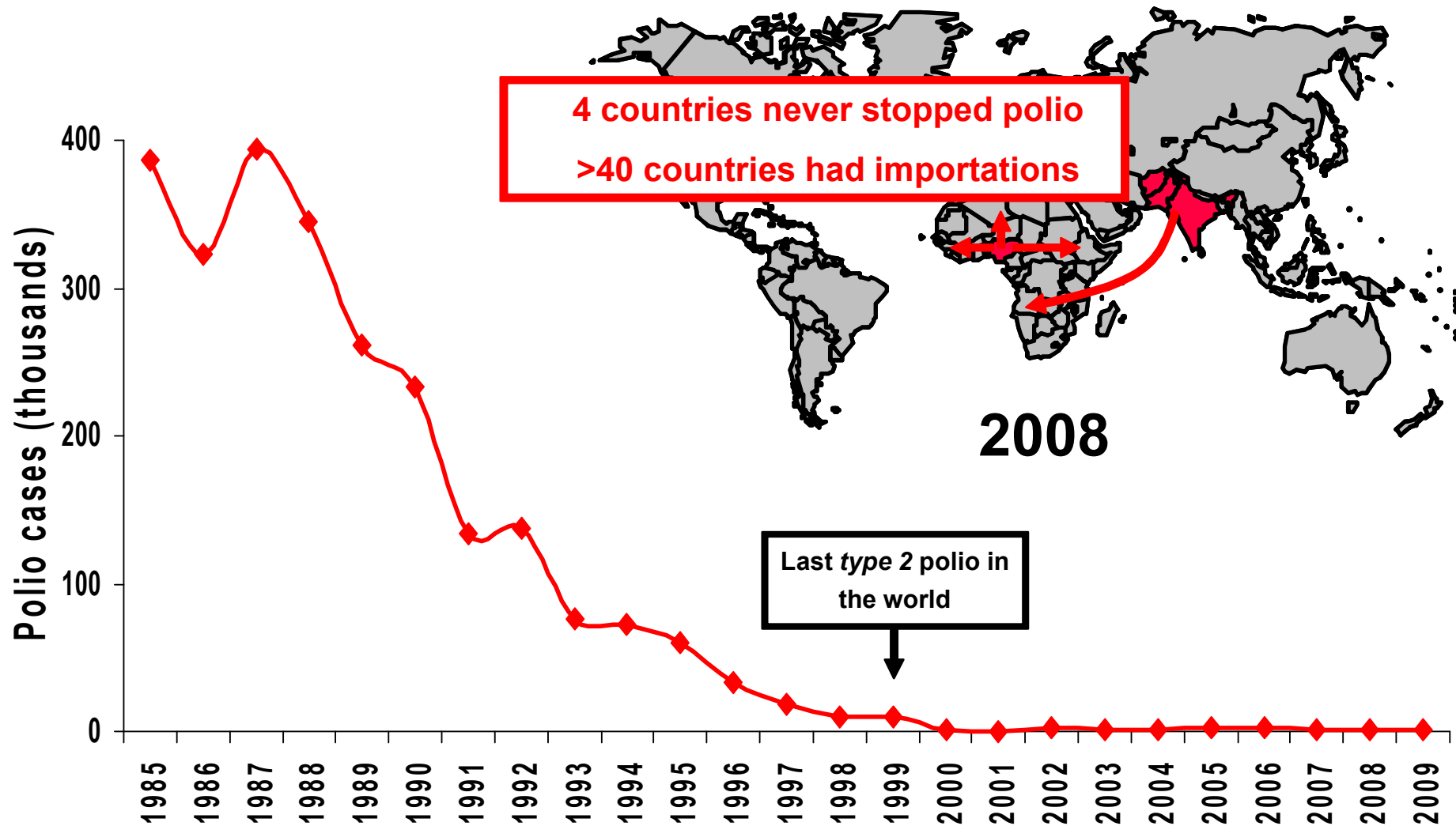




September 2011

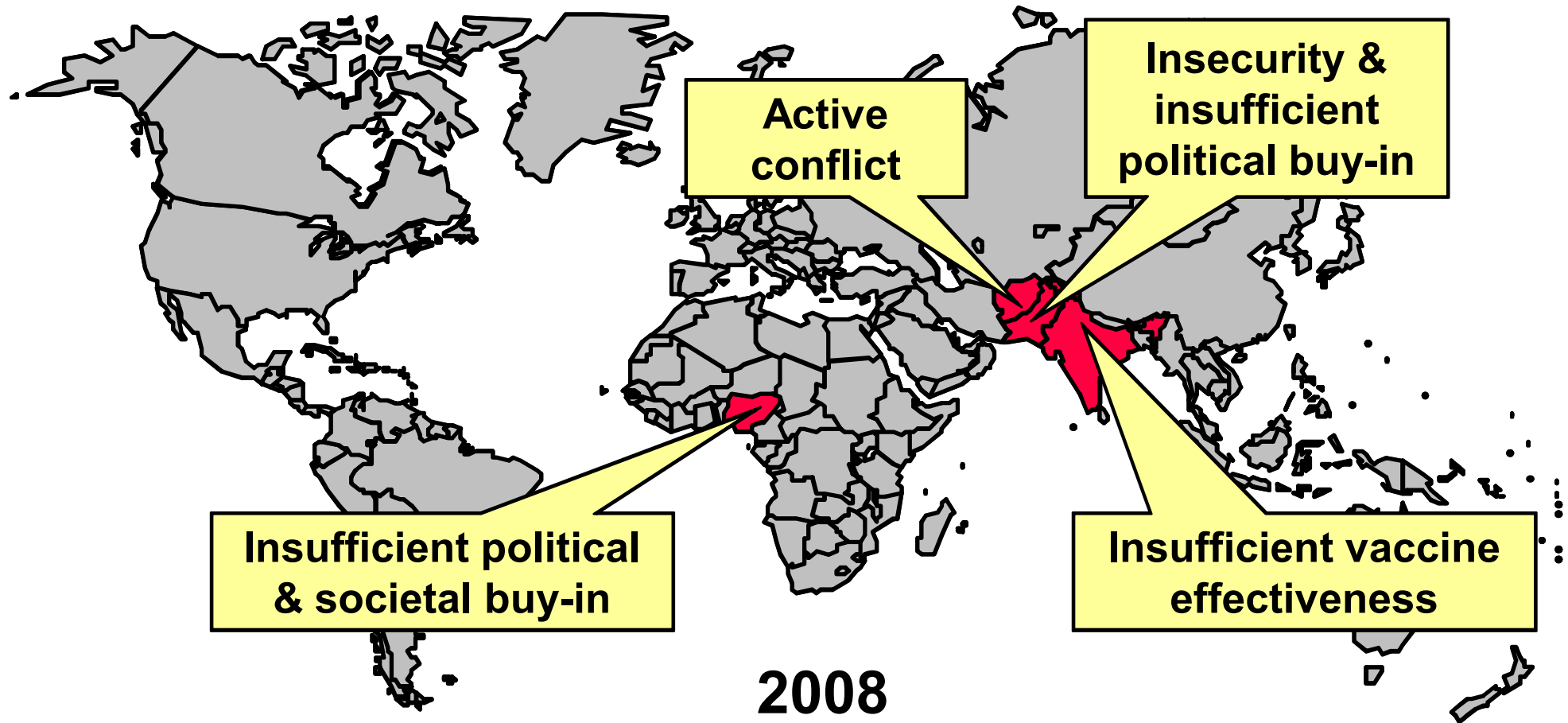
*What was the progress?*

# Polio Eradication: Progress Since 1988



# *2008: stalled progress in endemic areas*

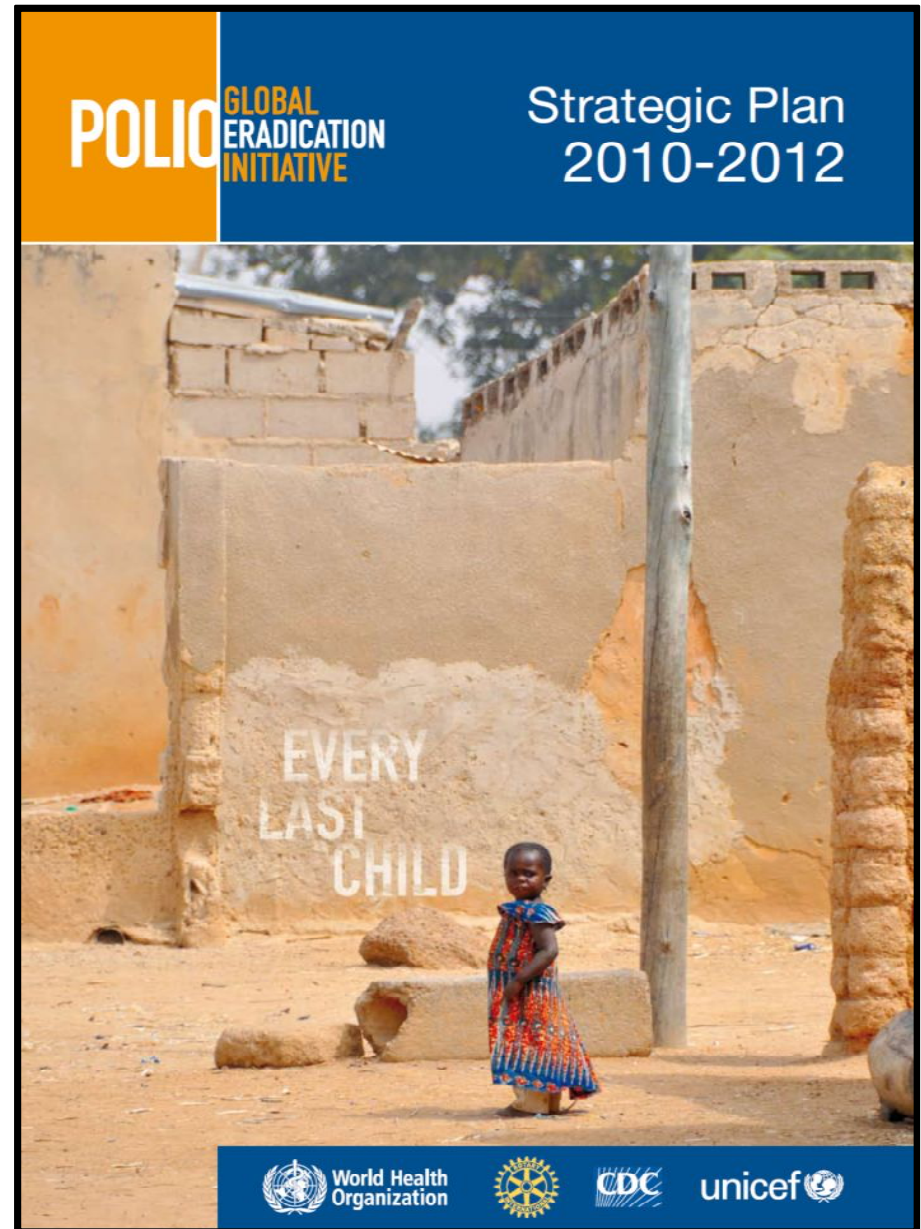
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*How did the initiative respond?*

## *World Health Assembly Polio Resolution, 2008*

*'Requests the Director General  
to develop a new strategy to  
eradicate poliomyelitis...'*

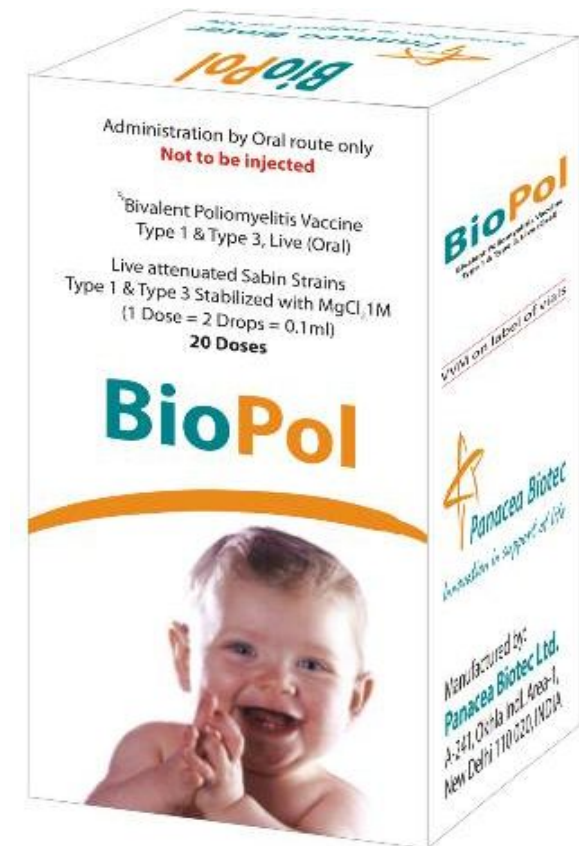


# Rapid development of new bivalent OPV (types 1 & 3)



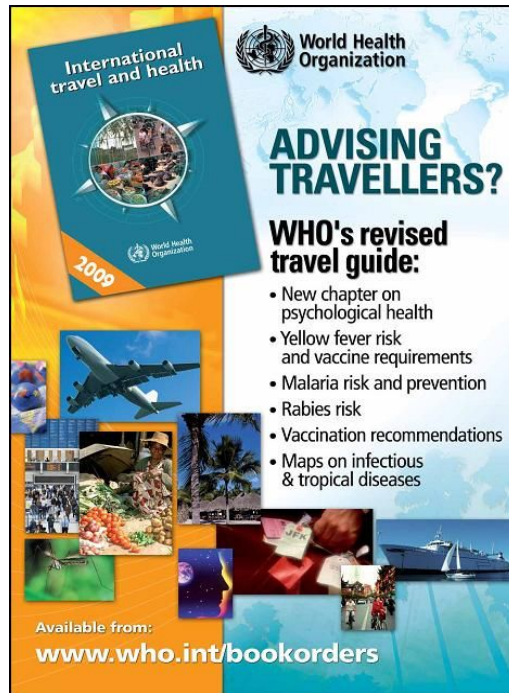
**Filling line for new bivalent OPV**

## New bivalent OPV



# International Travel & Health, 2009

November 2009



"Travellers who are resident in a polio-infected country or area should have a full course of OPV before leaving to reduce the risk of international spread."

September 2011

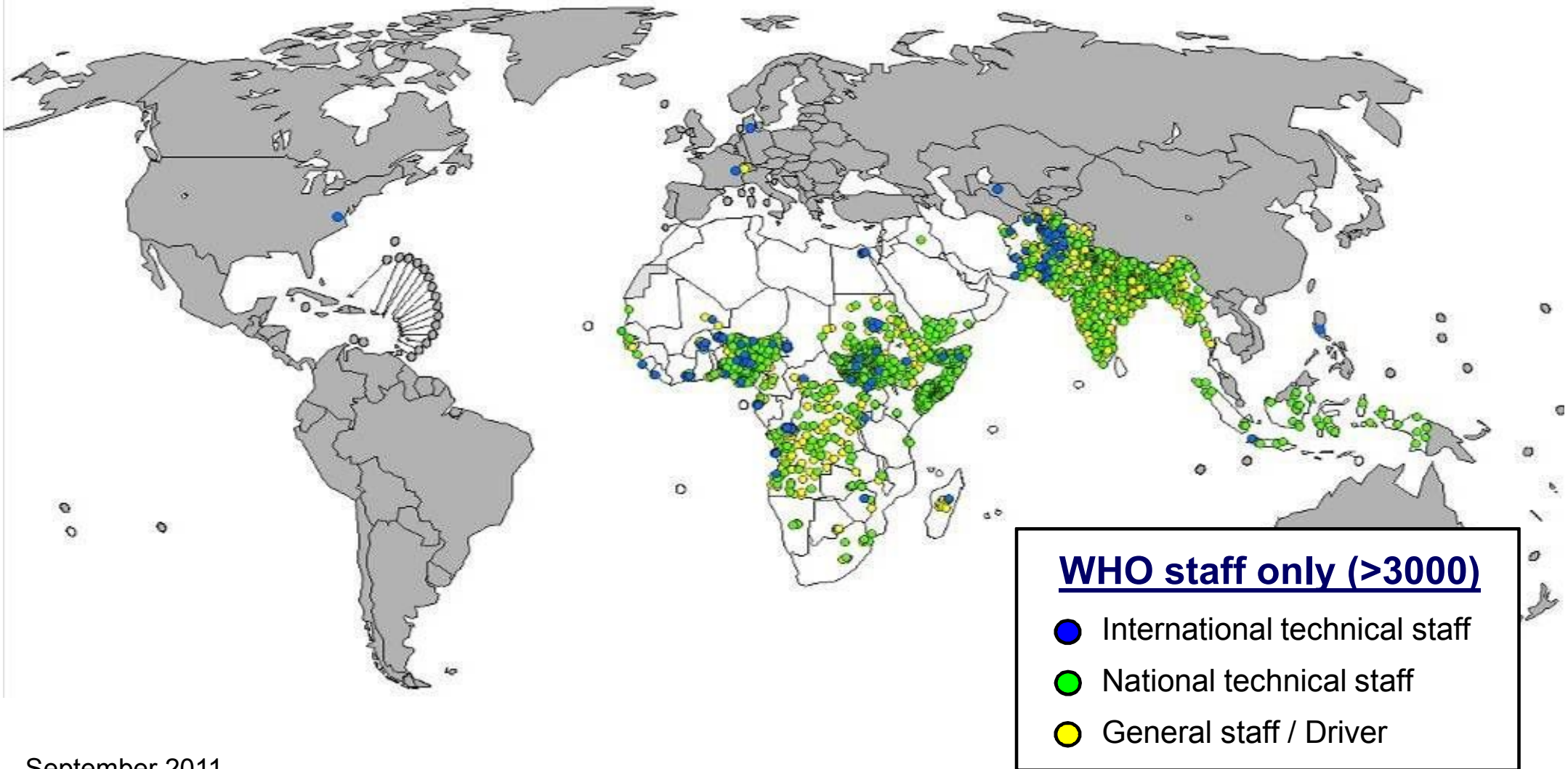


Saudi Arabia: new vaccination requirements for Hajj

\* published 20 March 2009

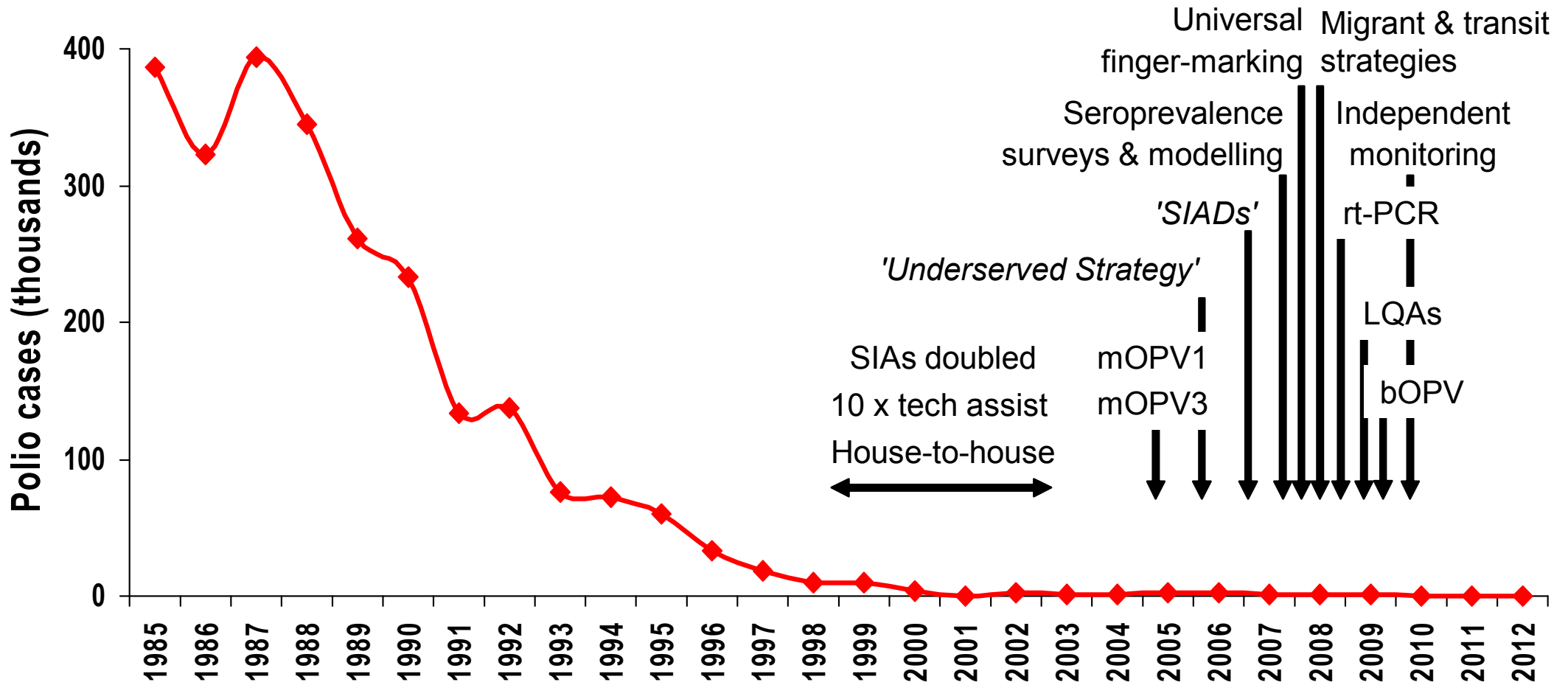


# *Massive Technical Assistance*



September 2011  
Data in HQ as of January 2009

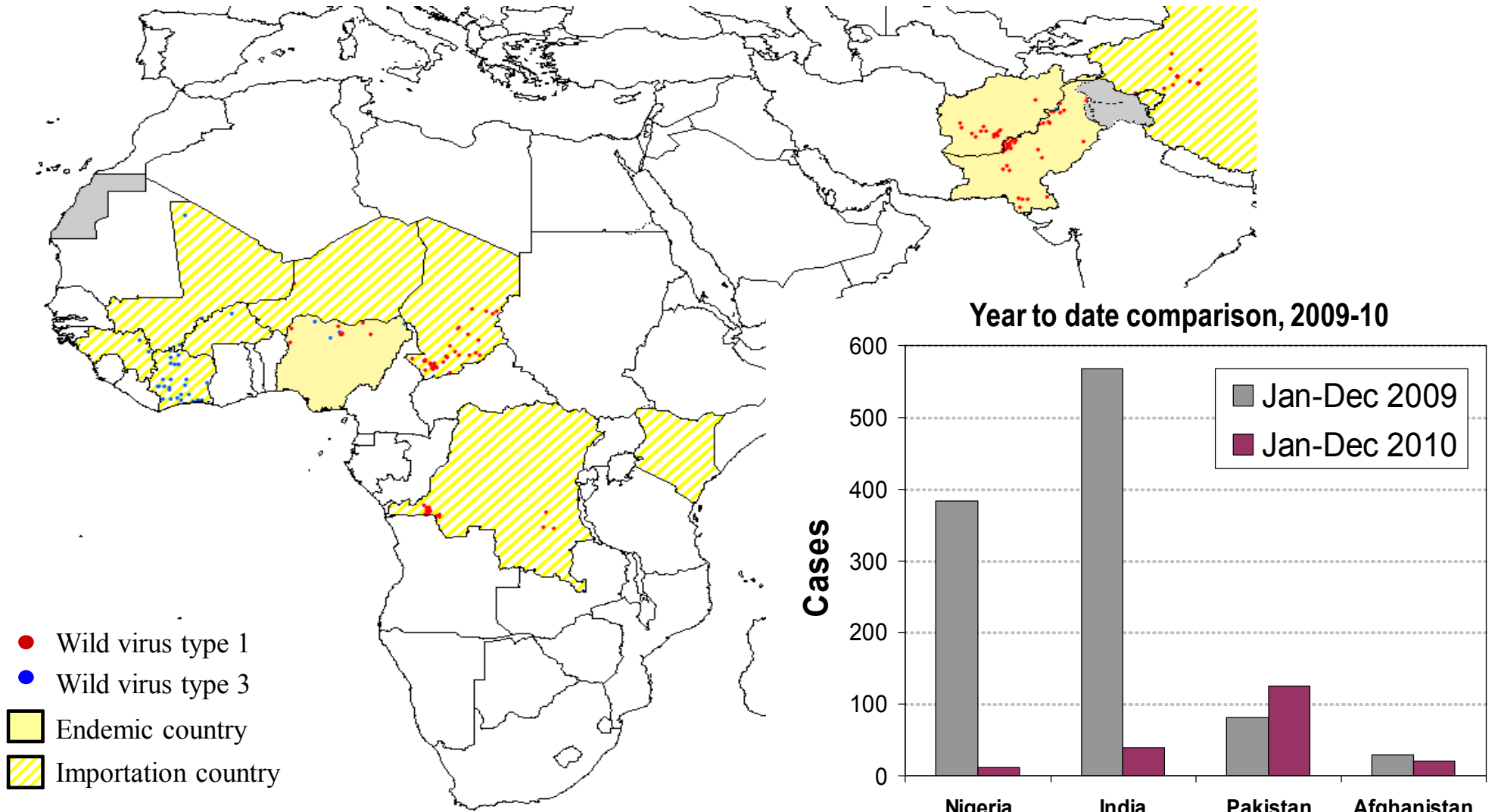
# Continual Research & Innovation\*



\* selected examples since the year 2000 only  
September 2011

*What is the impact of the new strategies?*

# Wild Poliovirus, Last 4 Months

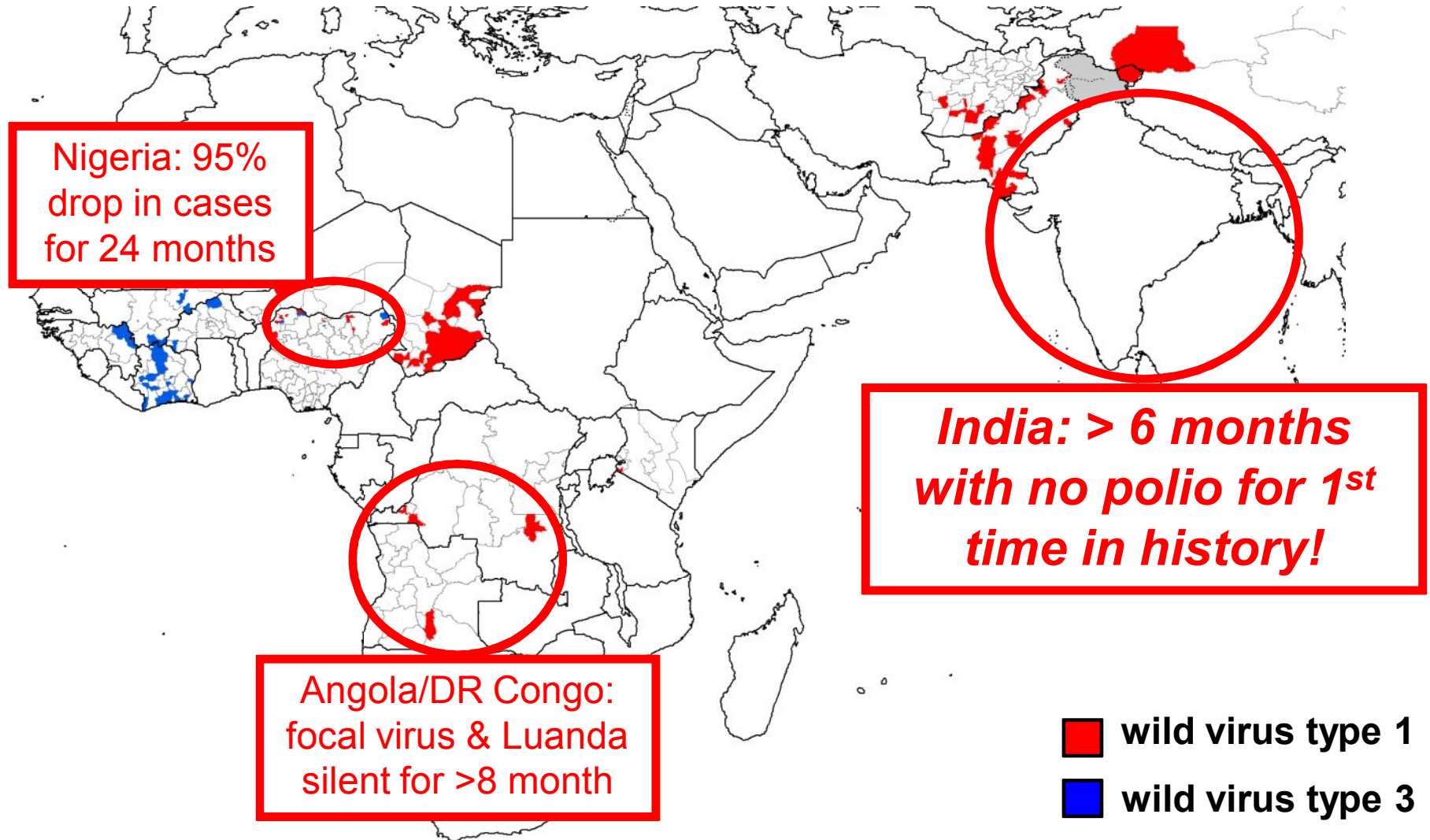


September 2011

20

# Key Developments – Type 1 Poliovirus

*Polio-infected districts, last 6 Months*



# *How has Japan contributed?*

# *G8 Summit, Toyako, Japan*



"To maintain momentum towards the historical achievement of eradicating polio, we will meet our previous commitments to maintain or increase financial contributions to support the Global Polio Eradication Initiative."  
G8 Heads of State

# *Japan is one of the oldest and most significant supporters of the GPEI*

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## Funding

- Contributed ~\$350 M to the initiative to date, **the 3<sup>rd</sup> largest public sector contributor**
  - Strengthening routine immunization, including polio
  - Support for polio campaigns during humanitarian emergencies to prevent outbreak (e.g., West Africa)

## Technical

- Provides laboratory capacity to the global laboratory network (NIID)
- Transferred vaccine production technology to e.g., Indonesia, Vietnam (JPRI/JICA)
- Sent volunteers and experts to support immunization activities and train local health service managers in Asia and Africa (JICA/ACIH\*)
- Generated new technology and knowledge (e.g., transgenic mice, inactivated poliovirus vaccine from Sabin strain)

## Political

- Supported global advocacy for completing polio eradication in various international meetings (e.g., G8 summit, TICAD)

\* Agency for Cooperation in International Health



# Japan's support remains strong

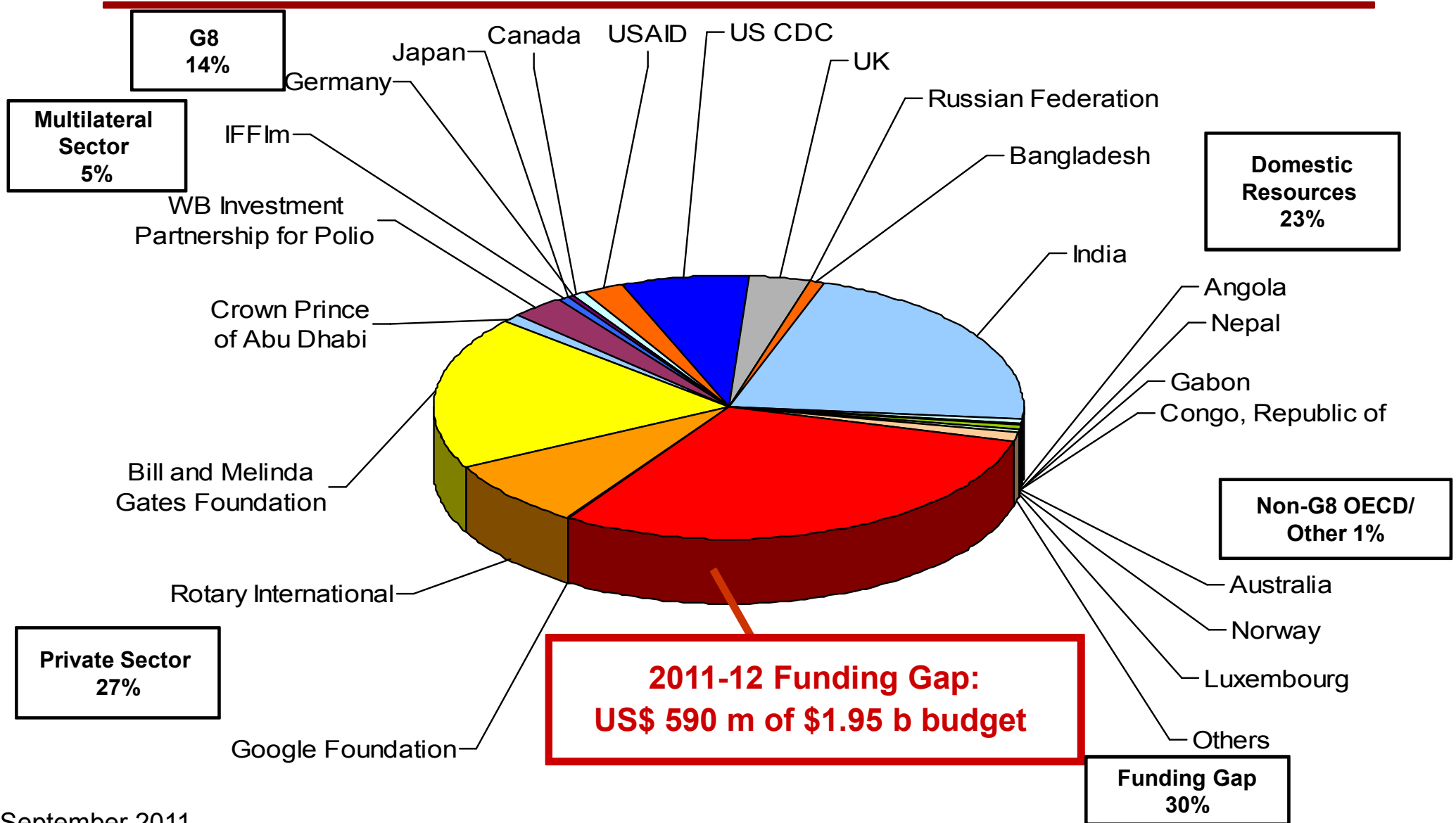
Japan's contribution to the polio program (millions)



\*Committed so far this year

# *Challenges*

# Global Polio Eradication Initiative Financing, 2011-2012



September 2011

'Other' includes: the Governments of Finland, Italy, Monaco, Nigeria, Nepal, Romania, and Spain; Unicef Regular and Other Resources, ECHO, CERF, Islamic Development Bank, Shinnyo-en  
As of 24 June 2011

# *Importation & Outbreak, China, 2011*

*Hotan prefecture*  
*Xinjiang province*  
*Western China*



*Genetic sequencing shows virus  
originated in Pakistan*

*Known contacts with Pakistan along  
Karakoram Highway*



# Importation & Outbreak, China, 2011

## Outbreak

11 cases to date

2 July to 2 September

4 months to > 25 years

## Response

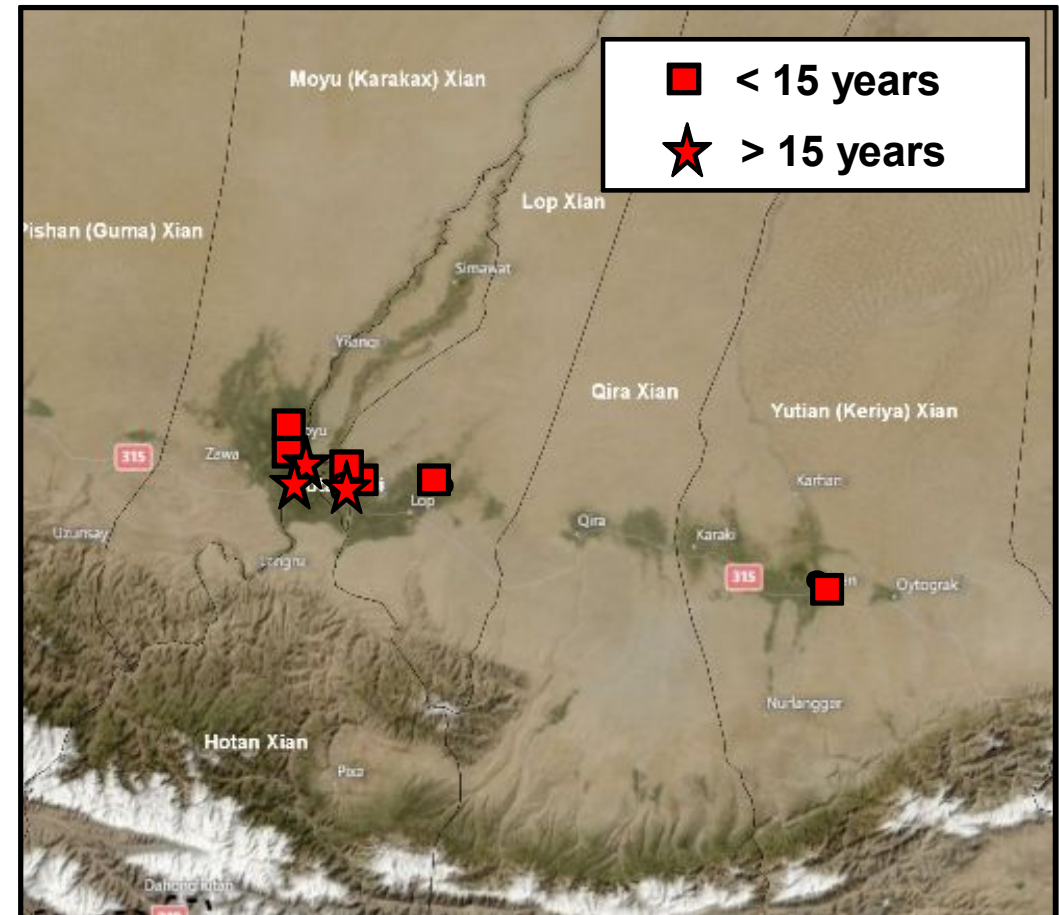
Led by Minister of Health

>400 C/CDC staff mobilized

8 Sept & 8 Oct rounds (Xinjiang)

2 add'l rounds in planning

Expanded age group in Hotan



# *Summary*

# Polio eradication: Summary

- > 20 years
- > 200 countries
- > 20 million volunteers
- > 2.5 billion children immunized
- 5 million people walking
- US\$ 50 billion will be saved



# *The Global Polio Partnership*

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**UN Foundation  
OPV Producers,  
Bill & Melinda Gates  
Foundation**

**World Bank  
ADB, IsDB, EC**

**Australia, Austria,  
Belgium, Canada, Denmark,  
Finland, France, Germany, Ireland,  
Italy, Japan, Luxembourg, Malaysia,  
Netherlands, New Zealand, Norway,  
Portugal, Russian Federation, Saudi  
Arabia, Spain, Sweden,  
U.A.E., U.K., USA**

**WHO, Rotary,  
CDC, UNICEF**

**Govt Health  
Ministries**

**Political Bodies  
UN, OIC, AU, G8,  
Commonwealth,  
SAARC, EU**

**Red Crescent  
& Red Cross  
Societies**

**NGOs  
e.g. MSF, CPHA,  
CARE, CORE**

**Technical Agencies  
CDC, ERC, NIV, RIVM  
NIID, NIBSC, KTL**





[www.polioeradication.org](http://www.polioeradication.org)