



Polio Eradication Rotary's Commitment & Global Partnership

Carol Wells
District 6440
EPN Chair

Session Outline

- Background on the history of polio infection
- Current status of global polio eradication
- Legacy of Global Polio Eradication Initiative (GPEI) and End Polio Now (EPN)
- Final steps necessary to achieve polio eradication and how you can help



Stop the Transmission of Polio Program



Background – What is Poliomyelitis?

Virus

- Three Serotypes – Type 1, Type 2 and Type 3
- Affects mainly children under 5
- Transmitted through Fecal/Oral route
 - Requires a human host to replicate – can shed virus for days or weeks without knowing it
- High morbidity (diseased state or disability), low mortality (death rate)



Vaccine – Prevention But No Cure

- IPV (Salk – 1955) – Killed/Inactivated vaccine
 - Causes immune response, but no “gut” immunity
- OPV (Sabin – 1961) – Live attenuated vaccine (multiple doses required)
 - Provides better community based and site specific immunity
 - Effective, easy to administer & cheap

Background – History of Polio Infection



Believed to be the earliest documentation of Polio in Egyptian Hieroglyphs (1580-1350 BC)



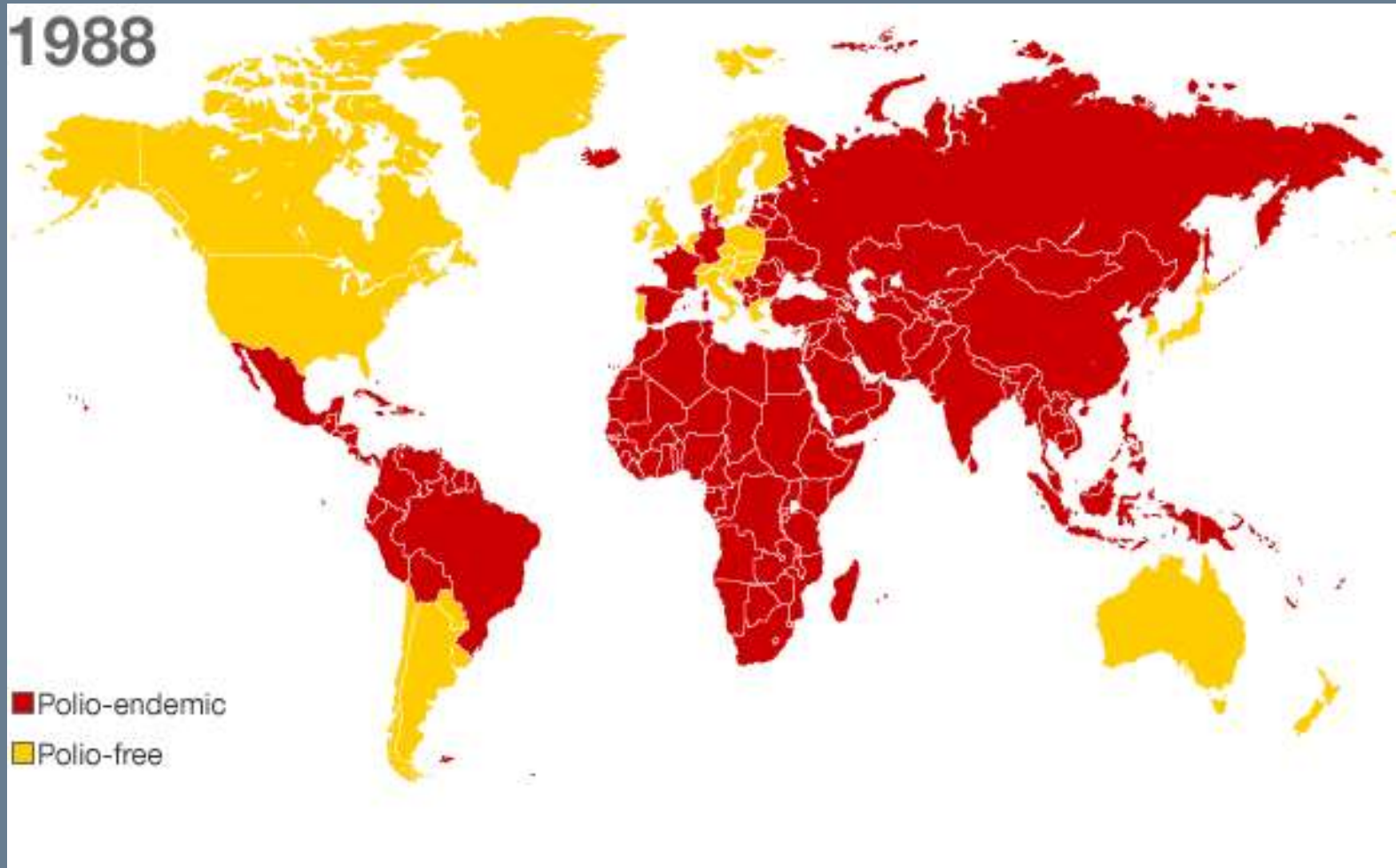
Polio ward at height of the epidemic in the US (1950s)

High infection rates within the general population in the US drove the commitment to develop a viable polio vaccine, and having an efficient and cost effective vaccine ensured that polio could one day be eradicated

Background - Timeline

- **1952** – Worst year of polio infections with 57,000 cases in the US (3000 deaths)
- **1979** – **Smallpox** is eradicated worldwide & Rotary starts an international project to buy & deliver Polio vaccine to 6 million in the Philippines (Seed of an idea is born!)
- **1985** - Rotary pledges 120 million to eradicate Polio – Largest coordinated support of a Public Health Initiative
- **1988** – Rotary, WHO, UNICEF and the CDC launch the Global Polio Eradication Initiative
- **2003/2008** – 1st & 2nd spillover of poliovirus from Nigeria into surrounding countries
- **2014** – India declared as polio free
- **2015** – Nigeria declared as polio free
- **2016** – 3 cases of Wild Polio Virus (WPV) reported in Borno State of northern Nigeria

Status of Endemic Polio at Beginning of GPEI

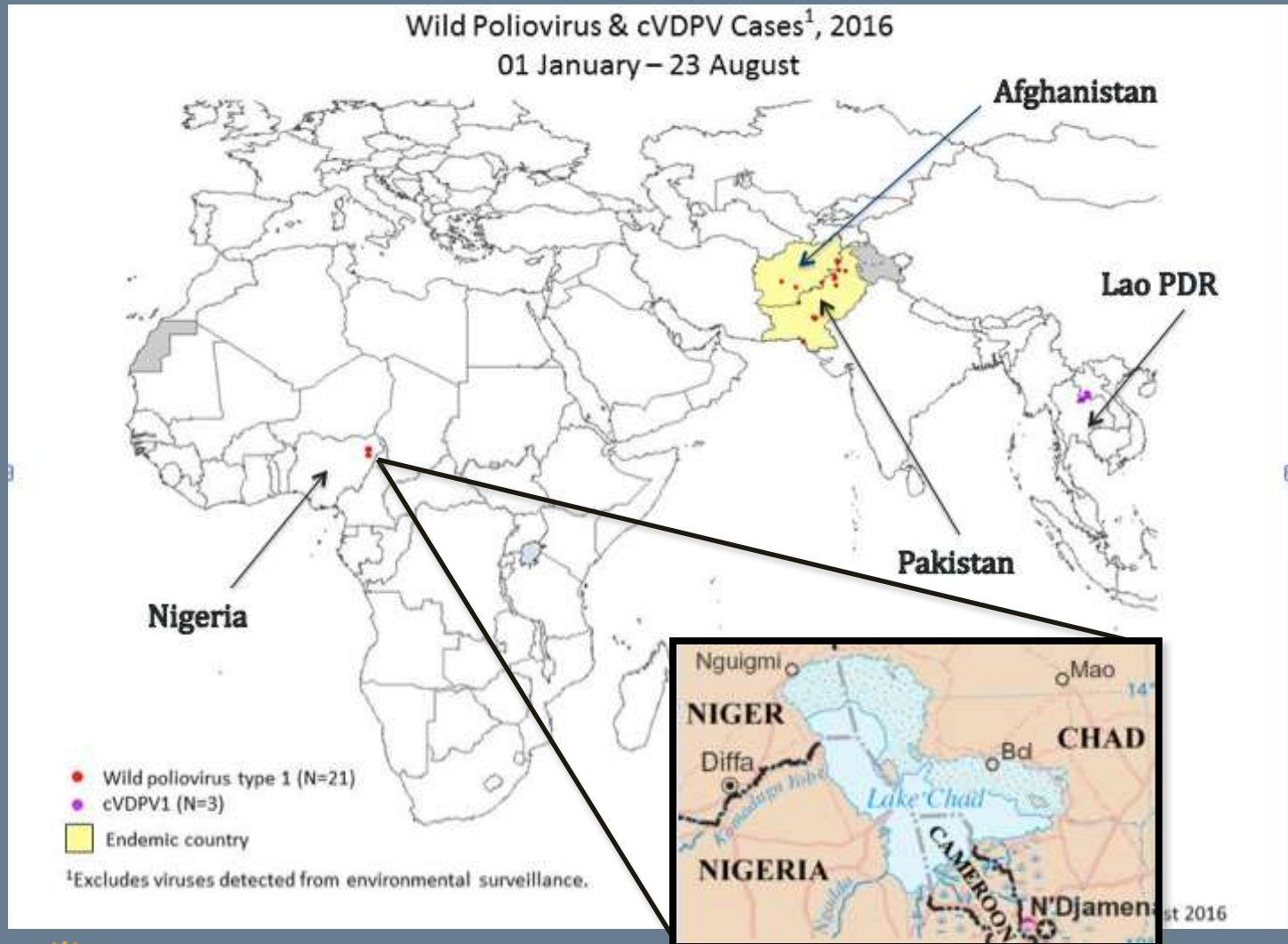


Current Status of Global Polio Eradication

- Endemic Countries
 - Pakistan - 85% of new cases globally originate here
 - Afghanistan – most new cases have been imported by refugees from Pakistan
 - Nigeria – 3 WPV cases detected in the Lake Chad region in 2016
- Circulating Vaccine Derived Polio Virus (cVDPV) – Lao PDR
 - Persistent low vaccination coverage
 - Response effort as if WPV
- The Switch in April 2016
 - tOPV → bOPV
 - Largest synchronized public health event
- IPV Introduction Worldwide



Status of Endemic Polio as of August 31, 2016



Polio Legacy

- What is the legacy of the polio eradication?
 - Polio Infrastructure
 - Outbreak Response
 - Strengthened Routine Immunization Systems
 - Surveillance
 - Improved Supply and Cold Chain
 - Global Laboratory Network
 - Trained Workforce
 - Global Partnerships (Diplomacy with local governments)
- What is polio legacy planning?
 - Planning the transition of polio assets into ongoing national and institutional structures
- Why is polio legacy planning necessary?
 - To ensure long developed polio investments are maintained post eradication

Why Does Legacy Planning Matter?

Negative Example: The Olympic Games in Athens



Athens, Greece
Summer Olympics Arena
2004



Athens, Greece
Summer Olympics Arena
2016

Why Does Legacy Planning Matter?

Positive Example: The Olympic Games in London



London, UK
Summer Olympic Games
Arena
2012 and 2016

Key Components of Polio Legacy Planning

1. Maintaining and mainstreaming essential polio functions (e.g., immunization, surveillance)
2. Sharing knowledge and lessons learned from GPEI to improve child health globally
3. Transitioning polio capacities, infrastructure, and assets to support other public health priorities, where appropriate



How Can You Help?

- Continued funding is essential to attain and ensure polio eradication
- Rotary is asking for \$60 per year from each Rotarian (Gates 2:1 match)
- To donate, go to:
 - <http://www.endpolio.org/>
 - <http://www.polioeradication.org/Financing/Donate.aspx>



**Polio Eradication is Rotary's Legacy
This is Your Legacy**

Help Ensure this Legacy Endures by Supporting End Polio Now Today

Thank You for Your Continued Support!



Questions?