

Poliomyelitis Eradication Endgame strategies

tOPV-bOPV Switch

Epidemiology Unit

Ministry of Health

Sri Lanka

Background for polio Endgame

- World Health Assembly resolution [65.5] (May 2012)
- Declared polio eradication a programmatic emergency for global public health
- developed and finalized polio endgame plans
- informed Member States - the potential timing of a switch (April 2016) from trivalent to bivalent OPV in routine immunization programmes



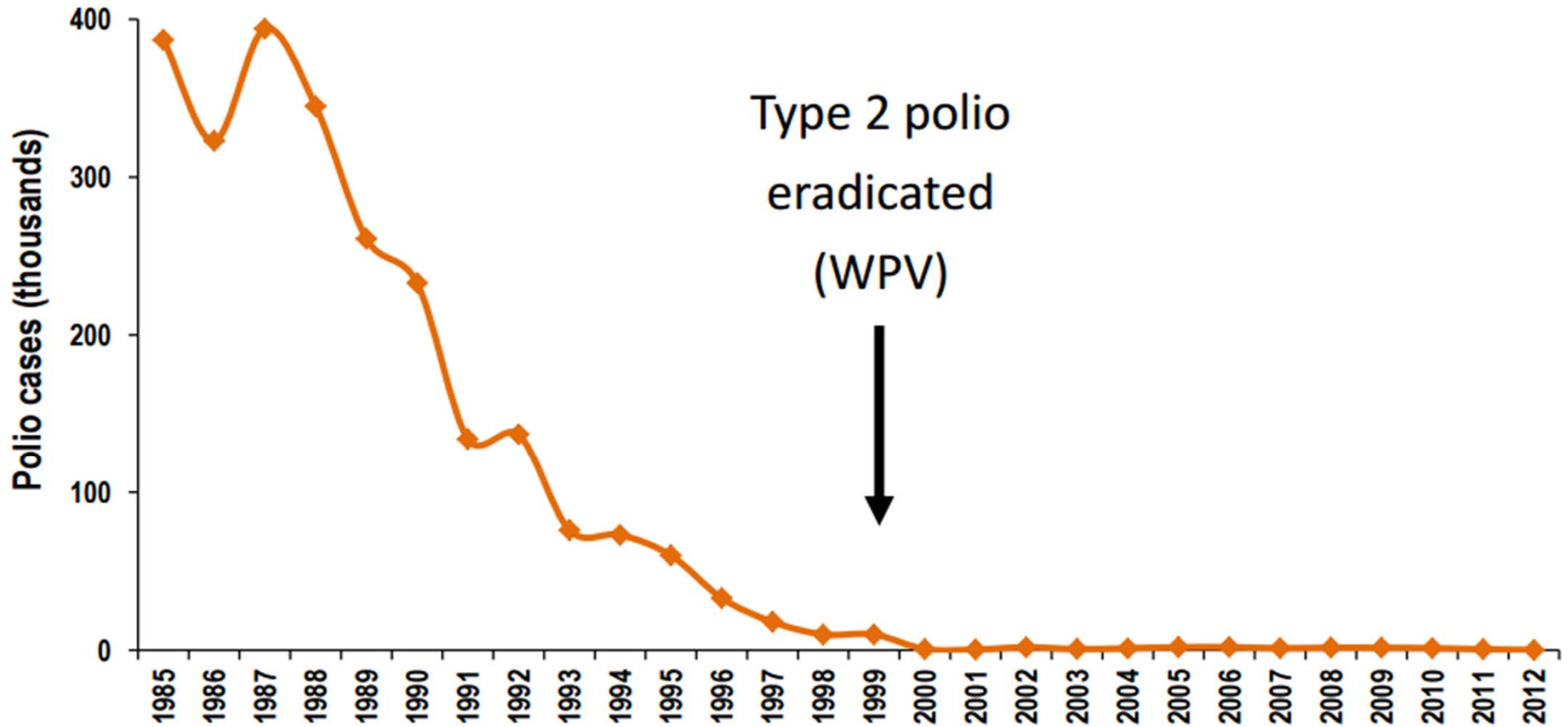
- Detect and interrupt all poliovirus transmission
- Strengthen immunization systems and withdraw oral polio vaccine
- Contain poliovirus and certify interruption of transmission
- Plan polio's legacy

Rationale for switch

- tOPV.....risks associated with the type 2 component - outweigh benefits

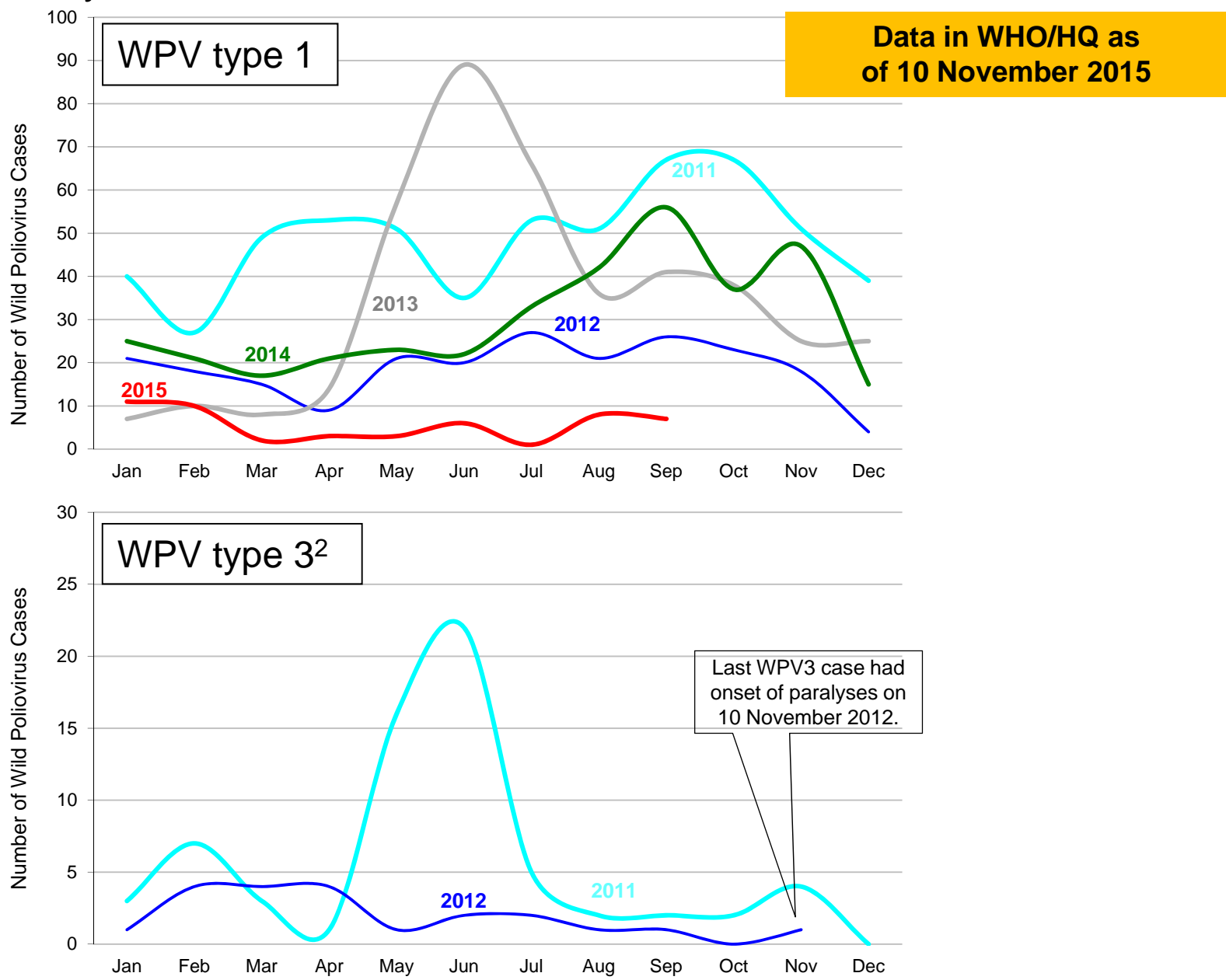
Why?

Children paralyzed by polio



Source WHO

Monthly Distribution of Wild Poliovirus Cases¹, 2011-2015



¹By date of onset of paralysis. WPV type 1 includes 1 case in 2012 with a mixture of W1W3 virus. Cases with onset in October 2015 will be reflected in the next update. ²No WPV3 case reported in 2013 - 2015.

Why ?

- Since 1999, type 2 wild poliovirus has not been detected : global eradication has been verified in 2015
- type 2 component of tOPV
 - >90% of vaccine-derived polio viruses (VDPVs)
 - Nearly 40% of vaccine associated paralytic polio (VAPP) cases
 - Interferes with the immune response to poliovirus types 1 and 3 in tOPV

What is Switch?

&

Why?

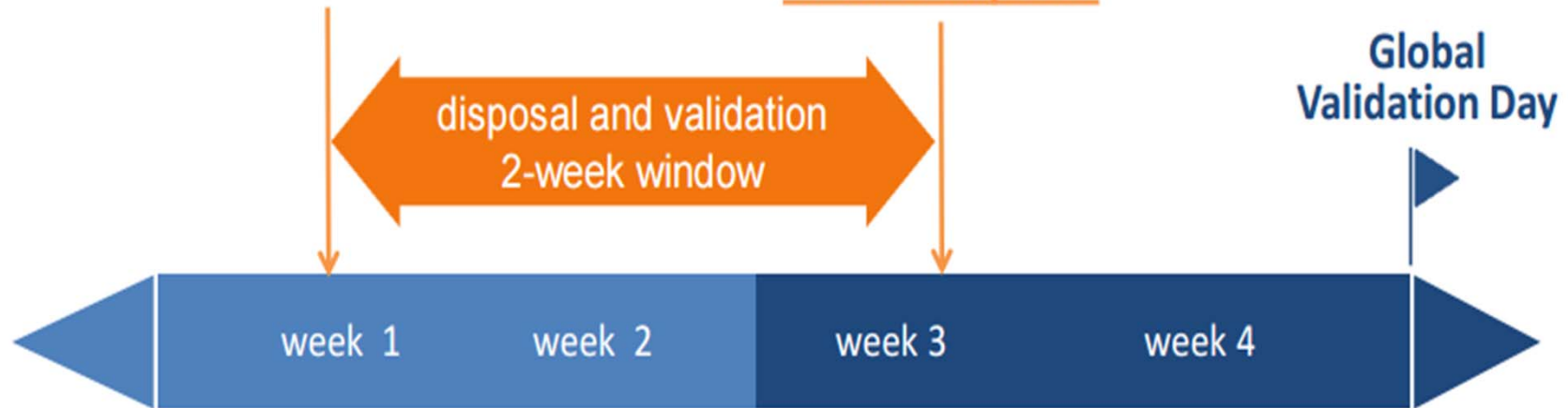
- **Switch** : refers to replacement of all tOPV with bOPV (Routine Immunization, SIA in all OPV using countries)
- Switch within 2 week time frame
- All tOPV stocks to be removed after switch within 2 weeks of switch day
 - Globally coordinated synchronized process
- National validation starts in 2 weeks after switch
- If use tOPV after switch : risk of cVDPV : **Why.....?**

April 2016 in a country

30th April 2016

e.g. National
Switch Day:
stop tOPV use

e.g. National
Validation Day:
all tOPV disposed



Global switch
2-week window

Global validation
2-week window

The country selects a 'National Switch Day' from this window

Source WHO

- Total tOPV stocks have been received
- tOPV Stock inventories
 - 1st : 31st August 2015
 - 2nd : 31st December 2015
 - 3rd : 31st March 2016

Regional Epidemiologists' responsibility
excel sheet format will be sending

tOPV withdrawal and validation

- **National Switch coordination Committee :**
 - Epidemiology Unit,
 - Family Health Bureau,
 - Health Education Bureau,
 - Director/Private Health Sector Development,
 - National Medicinal Drug Regulatory Authority,
 - Medical Supplies Division
 - State Pharmaceutical Cooperation
- District switch committee

District switch committee [DSC]

District Operation Centre : RDHS office

- Provincial Director of Health Services
- Regional Director of Health Services
- Provincial Consultant Community Physician
- Regional Epidemiologist (coordinating officer)
- Medical Officer/ Maternal and Child Health (MO/MCH)
- Medical Officer/Planning
- OIC/RMSD
- FDI
- SPHID, RSPHNO

What do you do as the DSC ?

- Chairperson and a Secretary : appoint for each DSC
- Frequency of meeting: Monthly in Jan, Feb, 2weekly in March, more frequently in April
- Responsible :
 - **coordinate with NSCC** : implementation of switch at district level until assuring the district is free of the use of tOPV and continue polio vaccination with bOPV
 - follow , supervise and monitor guidelines issued by the NSCC on switch
 - **Responsible to coordinate and monitor private sector health care institutions in the district & all hospitals**

- tOPV collection with the switch date from all centres involved in vaccine storage
- temporarily store at RMSD until stocks will be collected by the Epidemiology Unit

- 2 weeks after switch day: Switch Validation
- National Switch Validation Committee (National Certification committee for Polio Eradication and Measles, Rubella, CRS elimination will function as NSVC)
- **District Switch Validation Committee** [should be an independent committee: switch monitors]
 - Microbiologists
 - Community Physicians
 - Paediatricians

- RMSD and 10% of MOH offices & 10% of vaccine storing hospitals : include in validation procedure
- If any remaining tOPV identified during validation an additional 10% to be reviewed

Laboratory containment of type 2

- After 2 months of validation: Lab containment procedure
 - All hazardous materials for Sabin type 2, will be identified and destroyed
 - Verification by July 2016
 - REE need to assist in coordinating this at district level