

Polio and Its Eradication in the Western Pacific Region



Dr. Huong Tran
Division of Programmes for Disease Control
WHO Regional Office for the Western Pacific

Polio Eradication in the Western Pacific Region

Polio (Poliomyelitis)

Wild Polio Virus (WPV)

- Highly infectious
- Spread through person-to-person contact and rapidly through a community
- Can cause permanent paralysis and even death
- No cure, can be prevented by vaccination

Vaccine-Derived Polio Virus (VDPV)

- Excreted vaccine virus can continue to circulate in seriously under-immunized population with poor sanitation and high population density
- Spreads in those not vaccinated and can cause paralysis



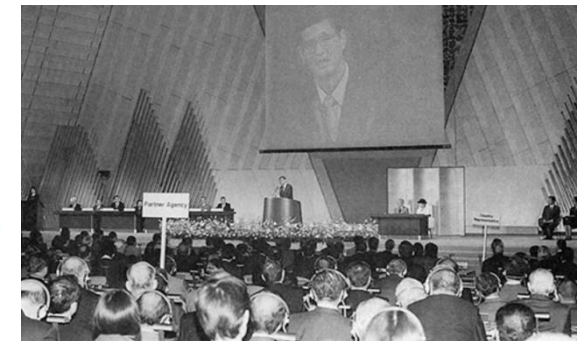
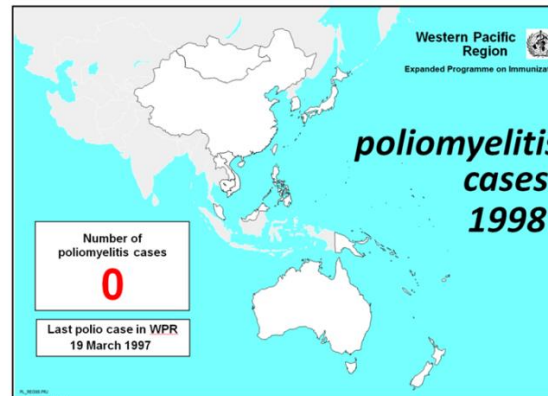
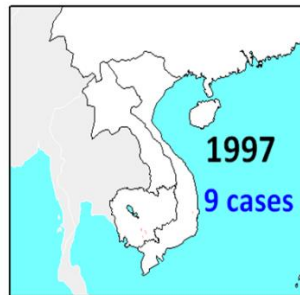
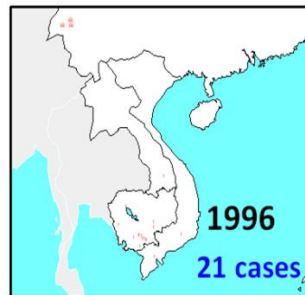
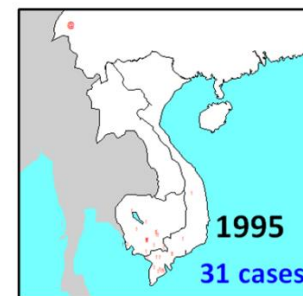
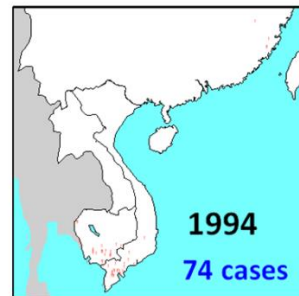
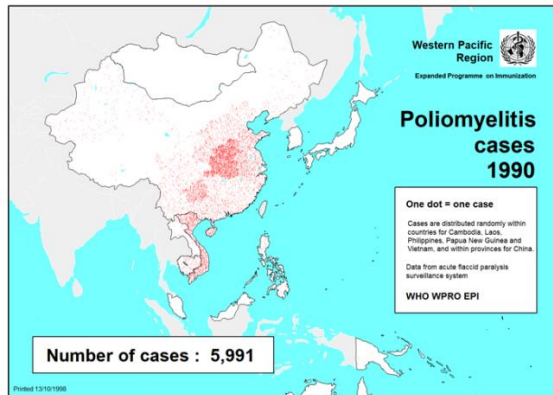
Karl is the last reported child with cVDPV1 in the outbreak in PNG, East Sepik province, Papua New Guinea, 2018



Gafo, a 6 year old boy. The first reported child with cVDPV1 Morobe province, Papua New Guinea, 2018

Polio Eradication in the Western Pacific Region

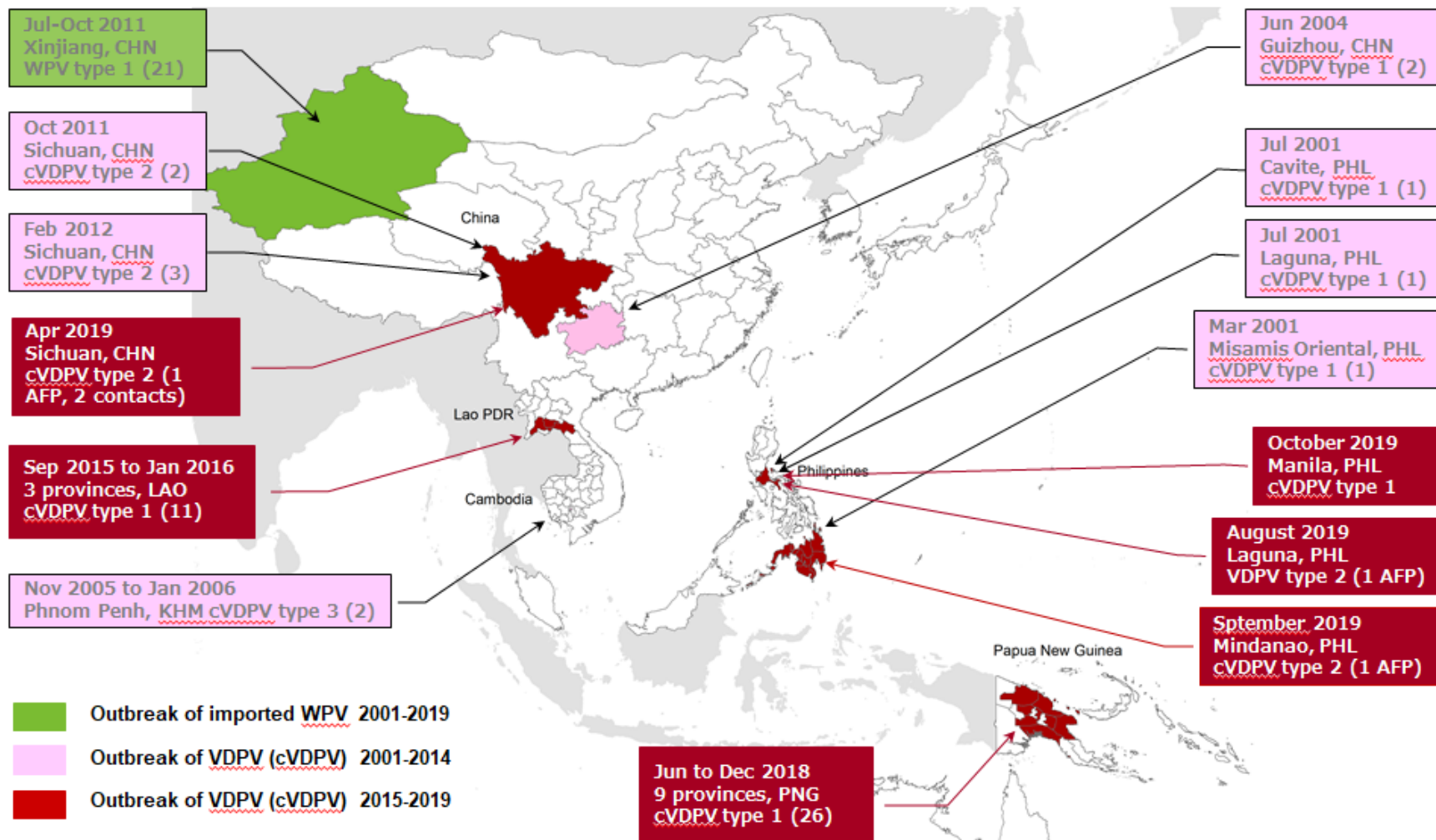
Eradication of Polio due to **WPV** in the WPR, 1988-2000



RCC declared the Western Pacific Region had achieved regional polio eradication (2000, Kyoto)

Polio Eradication in the Western Pacific Region

Outbreaks of WPV and VDPV in the WPR, 2001-2019*



Polio Eradication in the Western Pacific Region

Issues and Challenges

Favorable conditions for VDPV emergence and circulation in some Member States

- OPV use in countries with low vaccination coverage
- Immunity gaps at sub-national levels as a result of inadequate routine immunization in some Member States
- Decreased performance of polio surveillance
- Insufficient expansion of environmental surveillance
- Insufficient capacities for outbreak preparedness and response

Polio Eradication in the Western Pacific Region

WHO Responses and Plan of Actions

- Proactive risk assessment and national consultations
- Planning, preparation for and implementation of outbreak response
- Resource mobilization and expert deployment
- Cross-regional and cross-country collaboration
- Partner coordination
- Expansion of environmental surveillance
- Strengthen outbreak preparedness and response capacities
- Support OPV cessation and switch to IPV-only schedule

Polio Eradication in the Western Pacific Region

Recommendation to Member States

Member States that are currently affected by cVDPV outbreaks

- Conduct risk assessment and identify high-risk communities (e.g. urban poor, ethnic minorities) to address immunity gap with routine immunization
- Mass vaccination campaigns with >95% coverage
- Detect all polio virus transmissions by enhanced surveillance
- Strengthen routine immunization

Member States at risk of emergence, circulation and importation of VDPV

- Strengthen polio surveillance and environmental surveillance
- Identify high-risk areas and populations
- Conduct supplementary immunization activities (SIAs) to fill immunity gap
- Improve routine immunization
- Prepared for emergence, circulation and importation of VDPV

Measles and Its Elimination in the Western Pacific Region



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Measles Eradication in the Western Pacific Region

Measles

- Most contagious
- Most devastating infectious diseases (mortality rates as high as 2% to 15% in developing countries)
- Deaths
 - Western Pacific: 30,000 in 2002 (estimate)
 - Mongolia: 121 in January to May 2016
 - Philippines: 556 in January to September 2019
- Intervention
 - No specific treatment
 - Prevention through immunization



A Khmer girl aged 9 years. She lost her sight when she contracted measles at 9 months of her age
Kampong Thom, Cambodia, 2013



Hmong girls aged 3 years with measles pneumonia and conjunctivitis, Lao PDR, 2019

Measles Elimination in the Western Pacific Region

Progress

68th Session of Regional Committee, 9-13 Oct 2017

The Regional Committee, ...

1. DECIDES that all Member States in the Region aim to eliminate rubella as soon as possible and establish a target year for each country or area, based on country or area context;
2. ENDORSES *Measles and Rubella Elimination in the Western Pacific: Regional Strategy and Plan of Action*;
3. URGES Member States:
 - (1) to develop or update national strategies and plans of action relating to measles and rubella elimination, in accordance with the Regional Strategy and Plan of Action, taking into consideration individual country contexts;

Measles Elimination in the Western Pacific Region

Achievements

- In September 2019, 9 countries and areas were verified as having eliminated measles
- In September 2019, 5 countries and areas were also verified as having eliminated rubella
- As of the end of 2018, China has achieved a historical low incidence of measles
- Outbreak response capacity continues to be strengthened, allowing measles outbreaks to be rapidly contained
- Preventive mass vaccination campaign was successfully carried out

Measles Elimination in the Western Pacific Region

Measles Resurgence within and out of the Region, 2018-2019

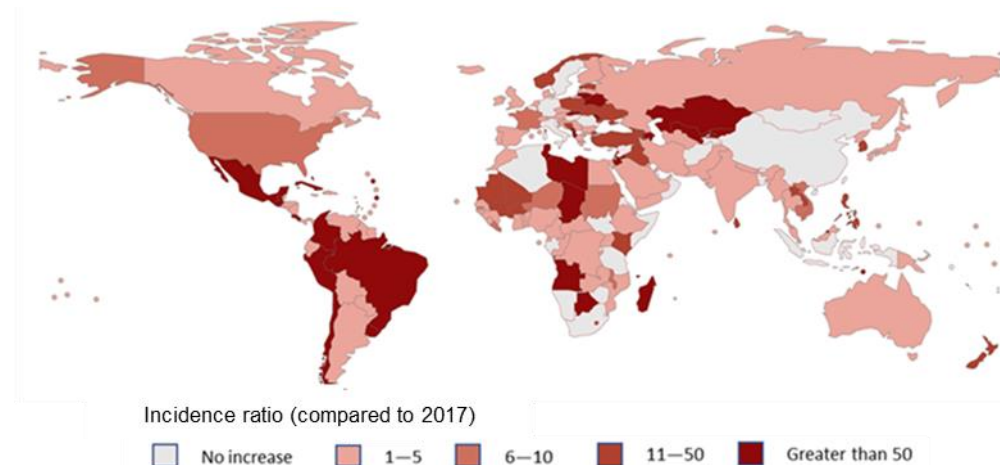
Importation-related measles outbreaks in measles-eliminated and low-incidence Member States

- Australia, Brunei Darussalam, Cambodia, Hong Kong SAR (China), Japan, Lao PDR, Macau SAR (China), Mongolia, New Zealand, Samoa, Singapore and the Republic of Korea

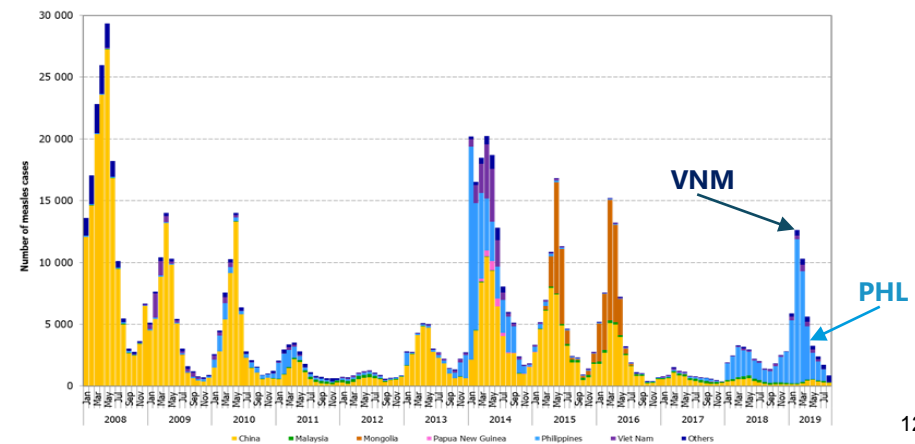
Resurgence and increased measles transmission in endemic Member States

- Large nationwide measles resurgence in the Philippines
- Increased endemic transmission in Viet Nam

Increased measles incidence worldwide, 2018-2019



Measles cases, WPR, 2008–2019



Measles Elimination in the Western Pacific Region

Issues and Challenges

Repeated resurgence and ongoing endemic transmission

- Lack of national strategy and plan of action (e.g. no preventive supplemental immunization activities in a pre-resurgence period)
- Large immunity gaps due to chronically poor routine vaccination coverage, especially MCV2
- Sub-groups consistently under-served by immunization (e.g. ethnic minorities, migrants, urban poor, etc.)
- Insufficient prevention of nosocomial transmission
- Vaccine hesitancy

Risk for importation-related outbreaks in eliminated countries

- Repeated importation causing high health system burden of outbreak response
- Immunity gaps among adolescents and young adults

Measles Elimination in the Western Pacific Region

WHO Responses and Plan of Actions

- Supporting priority Member States to develop or update national action plans for measles and rubella elimination
- Supporting preventive supplemental immunization activities
- Strengthening outbreak preparedness
- Supporting outbreak investigation and response
- Supporting Member States to ensure access to sufficient vaccine stock during outbreaks
- Supporting countries in the Greater Mekong Delta Sub-region to promote collaboration across borders and between WHO Regions

Measles Elimination in the Western Pacific Region

Recommendations to Member States

Member States with repeated resurgence or endemic of measles transmission

- Strengthen routine immunization programmes to close immunity gap
- Conduct high-quality preventive mass vaccination campaigns before large outbreaks and resurgence occur
- Improve surveillance to identify risk populations and fill immunity gap
- Prevent healthcare-associated transmission

Member States verified or approaching elimination

- Fill remaining immunity gap (e.g. adolescent, young adult, minority groups, etc.) before outbreaks occur
- Prepared for, timely detect and rapidly respond to outbreaks
- Use IHR mechanisms to share information about imported cases



World Health
Organization

Western Pacific Region



“Reaching the Unreached”
THANK YOU