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Certification of Polio
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Certification of Polio Eradication



Declaration

We, the members of the Global Commission for the Certification of Poliomyelitis Eradication, conclude today, 20th September 2015, that indigenous wild poliovirus type 2 has been eradicated worldwide.

Anthony Adams, Chair

Supamit Chunsuttiwat

Rose Gana F. Leke

Arlene King

Yagob Al Mazrou

David M. Salisbury

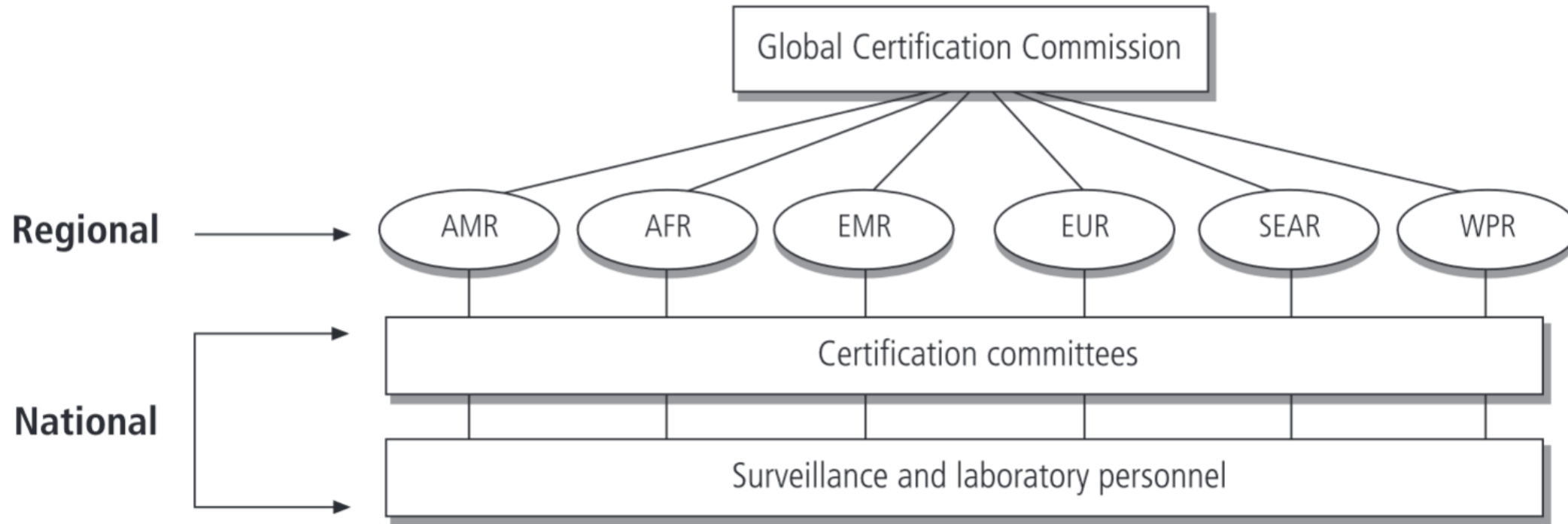
Bali, Indonesia

The main criteria set by the GCC (in 2004) as prerequisites for global polio-free certification were to show:

1. The absence of wild poliovirus, isolated from cases of acute flaccid paralysis (AFP) (suspect polio), healthy individuals, or environmental samples, in all WHO regions for a period of at least three years in the presence of high- quality, certification-standard surveillance;

2. The containment of all wild poliovirus stocks in laboratories through completion of the requirements of the WHO global action plan for laboratory containment of wild polioviruses

Hierarchy of Certification of Eradication



WHO 03.220

AMRCC 1994	WPRCC 2000	EURCC 2002	SEARCC 2014	AFRCC 2020?	EMRO 2022?
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Final National Certification reports and Annual Updates*

- Country background information (demography, population distribution, high-risk groups, migration patterns, health care systems, etc.);
- Structure and responsibilities of national units concerned with polio eradication;
- History of confirmed polio cases and polio-compatible cases;
- Surveillance activities, including AFP surveillance quality*;
- Information about the polio laboratories serving the country, including documentation of the results of WHO accreditation*;
- Progress towards laboratory containment*;
- Plan of action for handling wild poliovirus importations, including their detection, investigation, and intended response procedures*;
- Routine and supplementary immunization activities*.

Background - GCC Meeting February 2018

- The GCC decided to consider further the value of certifying the eradication WPV3, and/or undertaking a simulation exercise around the certification of WPV3 eradication.
- The secretariat should begin exploring the feasibility of certifying eradication of WPV3, including as a simulation exercise or 'pilot run' of WPV certification.

The Global Certification Commission is asked to recommend one of:

- ① **Sequential Certification:** Certification of wPV3 in 2019, followed by Certification of wPV1 three years after the last case or environmental virus identification of wPV1. The absence of Circulating Vaccine Derived Polioviruses would be 'confirmed' after appropriate lengths of time (to be defined).
- ② **Joint Certification** of wPV3 and wPV1 three years after the last wPV1 case or environmental positive, with certification of cVDP 2, 3 and 1 either together or sequentially after appropriate lengths of time (to be defined).
- ③ **Single Certification** of all polioviruses (wPV3, wPV1, cVDPV 2, 3 and 1) after an appropriate length of time (to be defined) following the last cVDPV case or environmental virus identification of any of the vaccine derived strains.

Possible accelerated process for WPV3 certification

- Last WPV3 in northeast Nigeria, possibly the highest risk area for missed WPV transmission
- Once Nigeria and African Region certified WPV3 free, only additional work to certify WPV3 globally would be in Eastern Mediterranean Region
- Sufficient data to certify EMR WPV3 eradication with AFR?
- Process could follow WPV2 certification
 - include Member States' verifications

Consequences / Issues

- Clear measure of progress and demonstrates again feasibility of WPV eradication
- Motivation for program including resource mobilization
- Interval between WPV3 and WPV1 certification could be used to verify cessation of cVDPV2 while structures still in place
- Cessation of OPV3 use becomes possible*
 - reducing risk of VAPP due to type 3 (~67% of VAPP cases after OPV2 cessation).
 - reducing risk of cVDPV3 and creation of iVDPV3 cases.
 - Potential to verify cessation of cVDPV3 (interval to be defined).

*Recommendation would be made by SAGE not GCC.

Last WPV3 detections

- **No WPV3 cases have been detected globally since November 2012**
- Latest WPV3 in **EMR** was isolated from a child aged 1 year in the Federally Administered Tribal Area of Pakistan who had onset of AFP on April 18, 2012
- The latest environmental WPV3 isolate in **EMR** was from a sample collected in Karachi, Pakistan, on October 7, 2010.
- The latest **WPV3** in **AFR** was isolated from an infant aged 11 months in Yobe, Nigeria, who had onset of paralysis on November 10, 2012
- The latest **environmental WPV3** isolate in **AFR** was from a sample collected in Lagos, Nigeria, on November 11, 2012.

African Region - testing for WPV, Dec 2012 – Feb 2019

- Since the last detected WPV3 case, over 160,000 AFP cases have tested negative for WPV3 across the African Region
- **All WPVs detected have been type 1**

Area	No. +ve WPV (%)	No. of AFP cases tested
African Region	103 (0.06%)	160,936
Nigeria	71 (0.08%)	78,432
- Borno	27 (0.9%)	3,006
- Yobe	9 (0.5%)	1923
		No. of env. spec. tested
Nigeria	5 (0.09%)	5500

Eastern Mediterranean Region - testing for WPV, May 2012 – Feb 2019

- Since the last detected WPV3 case, over 102,672 AFP cases have tested negative for WPV3 across the Eastern Mediterranean Region
- **All WPVs detected have been type 1**

Area	No. +ve WPV (%)	No. of AFP cases tested
EM Region	926 (0.9%)	102,672
Pakistan	543 (1.2%)	44,439
FATA	284 (11%)	2587
		No. of env. spec. tested
Pakistan	666 (20.6%)	3227
FATA	7 (30%)	23

South East Asian Region - testing for WPV, Nov 2010 – Feb 2019

- Last detected WPV3 case in SEAR was in India in Oct 2010
- Since then over 446,000 AFP cases have tested negative for WPV3 across the South East Asian Region
- **Both WPVs detected were type 1**

WPV detection rates, Nov 2010
– 10 Feb 2019

Area	No. +ve WPV (%)	No. of AFP cases tested
SEA Region	2 (<0.001%)	446,846
India	2 (<0.001%)	410,164
Jharkhand	0	10,138

Aggregate Global Data of specimens (AFP, environmental and enterovirus surveillance) testing NEGATIVE since last wPV3 identified.

REGION	NUMBER OF PV TESTS*
WPRO	82,514
PAHO	10,628
EURO	39,262
SEARO	602,886
EMRO	289,964
AFRO	166,436
TOTAL	1,191,690

Global overview of WPV3

No WPV3 cases have been detected globally since November 2012

- Last case of WPV3 in November 2012
 - now >6 years of no detected events
 - Over 1 million AFP cases and env specimens tested negative for WPV3 since then
- Modeling suggests well over 95% confidence of no undetected circulation
- Longer delays in WPV3 certification will not significantly increase confidence
- Modeling and surveillance data provide justification to certify WPV3 now

Process of Implementation of Certification of wPV3 Eradication

- Certified regions (PAHO, WPRO, EURO, SEARO) confirm that they remain free of **all** WPV based on existing robust annual RCC meeting reports since regional certification
 - PAHO RCC lapsed until 2016, however based on review of previous five years data, reconfirmed polio free status in 2018
 - Post certification WPV1 outbreaks have occurred in EUR and WPR but did not lead to re-established endemic transmission.
- Uncertified regions (AFR and EMR) will seek member state verification of available WPV3 data before RCC confirms WPV3 status.
- GCC will consider these reports, and other available data, at next meeting 17 - 18 Oct 2019 and, if satisfied, certify WPV3 eradication.
- Possible announcement at World Polio Day or similar event.

Opportunities and Challenges

- WPV3 certification will be a valuable opportunity to communicate progress.
- Timing of an announcement is critical, to ensure maximum participation of all stakeholders
- Messaging will be critical to ensure challenging aspects are adequately managed (eg concurrent outbreaks of cVDPV2 especially)
- Certification of WPV3 could impact the process of containment of polioviruses, but these impacts must be addressed regardless of the timing of the certification.
- African Region had concerns about the timing of certification of WPV3 eradication with respect to African Regional certification:
 - eg. perception of pre-empting the RCC, complicates communication