



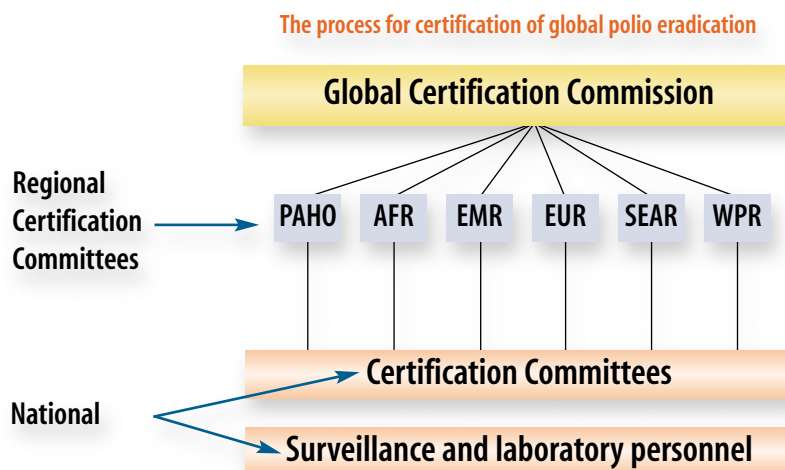
Certification of global polio eradication

The purpose

“Certification” is the independent verification of wild poliovirus eradication. The Global Polio Eradication Initiative aims to certify the world polio-free by the end of 2005. Certification of global polio eradication will be possible only when all regions have been certified polio-free and all pre- and post-eradication wild poliovirus containment tasks have been completed (see fact sheet on *Containment of wild poliovirus stocks*). Global certification will be an important milestone in the development of post-eradication immunization policy for polio.

The process

The Global Certification Commission (GCC), established by the Director-General of WHO in 1995, is responsible for setting the process and criteria for certification and ultimately deciding whether to certify global polio eradication. This requires at least three years of zero polio cases due to wild poliovirus in the presence of certification-standard surveillance in all six regions. The GCC also requires all six regions to provide data demonstrating full implementation of the pre- and post-eradication containment activities outlined in the *WHO global action plan for the containment of wild polioviruses*¹ prior to global certification.



In contrast to individual countries being certified free of smallpox, an entire WHO region must be certified polio-free. For this to happen, every country and area in a region must provide evidence consistent with there being no indigenous wild poliovirus cases for at least three years, under conditions of certification-standard surveillance for the virus. Surveillance for acute flaccid paralysis (AFP) is the gold standard for certification, though other surveillance strategies have been accepted for some countries that have long been polio-free and have high levels of sanitation and strong health systems. The capacity of a country to detect and investigate sufficient AFP cases in the absence of polio demonstrates that the poliovirus would be found if it were present.

This certification documentation is collected and verified by national certification committees (NCCs) and provided to a regional certification commission (RCC), which then decides on the basis of the data whether the region can be certified. The RCCs are independent panels of 8 – 10 internationally recognized experts in public health, epidemiology, virology and/or clinical medicine. The finalization of documentation is a multi-year, iterative process involving dialogue between the NCCs and the RCC. The documentation must also illustrate the capacity to detect, report and respond to “imported” polio cases.

Once a region is certified polio-free, and before global certification can be considered, all countries within the region must maintain certification-standard surveillance and implement post-eradication containment measures.



Poliovirus importations do not affect certification status if they are dealt with promptly and do not establish prolonged or extensive circulation of poliovirus (e.g. less than one year with limited geographic spread).

After global certification, stopping polio immunization will additionally require that vaccine-derived polioviruses do not continue to circulate and that a global stockpile of vaccine is available if needed (see fact sheet on *Post-eradication immunization policy for poliomyelitis*).

The progress

Meeting annually since 1995, the GCC has established the process and criteria for certification as outlined above. Polio-free status has been certified by RCCs in the WHO Region of the Americas in September 1994 and the WHO Western Pacific Region in October 2000. No indigenous wild poliovirus has been found in either region subsequently, validating the process and criteria for certification. As no indigenous wild poliovirus has been isolated under conditions of certification-standard surveillance in any Member State of the WHO European Region since November 1998, that Region is on track for certification in 2002.

The WHO African Region, Eastern Mediterranean Region and South-East Asia Region have made excellent progress towards the target of stopping wild poliovirus circulation by the end of 2002, with only four countries, five countries, and one country reporting confirmed indigenous wild poliovirus circulation, respectively, as of 20 January 2002.

All regions have established RCCs, which report and raise issues to the GCC annually.

The challenges

National certification committees – NCCs must be established in all countries, with UN-supported data collection and verification mechanisms for areas without recognized national governments.

Timely completion of the pre- and post-eradication phases of the WHO global action plan for laboratory containment of wild polioviruses – the laboratory containment programme must be accelerated, especially in industrialized countries, if global certification is to be achieved on time (see fact sheet on *Containment of wild poliovirus stocks*).

Surveillance in conflict-affected areas – achieving certification-standard surveillance in areas affected by conflict, particularly parts of Angola, remains a challenge. Certification cannot be achieved until there is confidence that circulation of wild poliovirus in these areas has been stopped.

Sustaining the surveillance infrastructure – this infrastructure will need to be sustained in all countries through global certification and beyond. Thus sufficient financial, human and technical resources will be needed for the foreseeable future to reap the full benefits of polio eradication.

Circulation of vaccine-derived poliovirus (VDPV) – prolonged or extensive VDPV circulation may postpone regional certification (in regions not yet certified) or require re-evaluation of regional certification status (in certified regions). Recognizing that VDPVs can rarely cause polio outbreaks, a process is being developed for verifying the absence of VDPV circulation in the post-eradication era.

Maintaining high polio immunization coverage – it is vital that all countries maintain childhood immunization coverage of more than 80% through routine immunization services, supplementary immunization activities or a combination of both.

**For more information on certification, please contact Dr Rudi Tangermann (WHO/Geneva),
Tel: +41 22 791 4358, email tangermannr@who.int**

Further reading

Report of the second meeting of the Global Commission for the Certification of the Eradication of Poliomyelitis, Geneva, 1 May 1997, WHO/EPI/GEN/98.03.

Report of the sixth meeting of the Global Commission for the Certification of the Eradication of Poliomyelitis, Washington DC, 28–29 March 2001, WHO/V&B/01.15.

Report of the sixth meeting of the Global Technical Consultative Group for Poliomyelitis Eradication, Geneva, 7–10 May 2001, WHO/V&B/01.32.

WHO global action plan for laboratory containment of wild polioviruses, WHO/V&B/99.32.

The GCC has highlighted the importance of three acute flaccid paralysis (AFP) performance indicators in particular for demonstrating the interruption of wild poliovirus circulation². Even in the absence of wild poliovirus circulation, surveillance systems should:

- detect at least one case of non-polio AFP per 100 000 population aged less than 15 years annually;
- collect adequate stool specimens from at least 80% of AFP cases; and
- test all specimens at a WHO-accredited laboratory.

² For certification-standard criteria, see *Report of the second meeting of the Global Commission for the Certification of the Eradication of Poliomyelitis*, Geneva, 1 May 1997, WHO/EPI/GEN/98.03.