Annual Update
National Documentation for Certification of Poliomyelitis Eradication

Name of Country: _____

Year: _____

Submitted to WHO/EMRO on: _____

Note: *This document is for submission of annual updates by the National Certification Committees (NCCs) of countries with accepted Basic National Documentation by the Regional Certification Commission (RCC) for Polio Eradication*

Eastern Mediterranean Region
World Health Organization
Cairo, Egypt

General instructions

Please complete the report in line with specific questions/instructions!

Double click check box ☒ if appropriate
Do not leave any cells blank
Please indicate "NA" if not applicable
Provide any supplementary documents/information in separate files
Add additional rows in tables, if necessary, but no change(s) in format and/or text, please.

Electronic copy of the annual progress report (including additional documents, if relevant) accompanied by the printed or scanned copy of signed **Executive Summary** and the **cover letter** to be submitted to the WHO Regional Office by **7th March 2021** to:

EMR Polio Secretariat

Ms Rasha Naguib
National Professional Officer, Polio Eradication Program
Email: naguibr@who.int

Dr Ashraf Wahdan
Medical Officer, Certificaiton, Polio Eradication Program
Email: wahdana@who.int

Dr Humayun Asghar
Coordinator, Polio Eradication Program
Email: humayuna@who.int

World Health Organization
Regional Office for the Eastern Mediterranean (EMRO)
P.O. Box 7608| Nasr City (11371) Cairo | Egypt
Telephone: +20 (0) 2 2276 5000
Fax: +20 (0) 2 2349 2092

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Abbreviations and Acronyms

AFP	Acute Flaccid Paralysis
CCS	GAPIII Containment Certification Scheme
CP	Certificate of Participation
GAPIII	Global Action Plan III for Poliovirus Containment
GCC	Global Commission for the Certification of the Eradication of Poliomyelitis
HC	Healthy Children
IM	Infectious material
ITD	Intratypic differentiation
MoH	Ministry of Health
NAC	National Authority for Containment
NAP	National Action Plan
NCC	National Certification Committee for Poliomyelitis Eradication
NEG	National Expert Group
NEV	Non-Enterovirus
NPAFP	Non-polio Acute flaccid paralysis rate
NPCC	National Poliovirus Containment Coordinator
NPEV	Non-Polio Enterovirus
NTFC	National Task Force for Containment
OBRA	Polio Outbreak Response Assessment
OPV	Oral Polio Vaccine
bOPV	Bivalent OPV (contain attenuated Sabin poliovirus type 1 and type 3)
mOPV	Monovalent OPV (containing one type of attenuated Sabin poliovirus)
mOPV1	Monovalent oral polio vaccine type 1
mOPV2	Monovalent oral polio vaccine type 2
mOPV3	Monovalent oral polio vaccine type 3
nOPV	Novel Oral Polio Vaccine
tOPV	Trivalent OPV (contain attenuated Sabin poliovirus type 1, 2 and 3)
PEF	Poliovirus-Essential Facility
PID	Primary Immunodeficiency
PIM	Potentially Infectious Material
PV	Poliovirus
PV1	Poliovirus type 1
PV2	Poliovirus type 2
PV3	Poliovirus type 3
RA	Risk Assessment
SIA	Supplementary Immunization Activities
SL	Sabin like poliovirus
SL1	Sabin like poliovirus type 1
SL2	Sabin like poliovirus type 2

SL3	Sabin like poliovirus type 3
UNICEF	United Nations Children's Fund
VAPP	Vaccine-associated paralytic polio
VDPV	Vaccine-derived poliovirus
VDPV1	Vaccine-derived poliovirus type 1
VDPV2	Vaccine-derived poliovirus type 2
VDPV3	Vaccine-derived poliovirus type 3
aVDPV	Ambiguous Vaccine Derived Poliovirus
cVDPV	Circulating Vaccine Derived Poliovirus
iVDPV	Immune-deficiency associated VDPV
WHO	World Health Organization
WPV	Wild poliovirus
WPV1	Wild poliovirus type 1
WPV2	Wild poliovirus type 2
WPV3	Wild Poliovirus type 3

Section 1: NATIONAL CERTIFICATION COMMITTEE:

1.1 Membership

The RCC emphasizes the importance that all Member States follow the guidelines provided on the composition and membership of national certification committees (NCCs) and avoid potential conflict of interest caused by employees of the national immunization programme, ministries of health or public health institutes serving as members of the NCC

	Name	NCC Status	Position	Organization	E-mail address	Telephone Number (Please include country and area code)
1		*Chairperson*				
2		*Member*				
3		*Member*				
4		*Member*				
5		*Member*				
6		*Member*				
7		*Member*				

1.1.1 Please provide current terms of reference (ToR) of the NCC in an attachment

1.1.2 Have there been any changes in the composition of the National Certification Committee?
Yes ☐ No ☐

1.1.2.1 If Yes, please provide name, title or position and area of expertise of each new member as well as each outgoing member during the reporting period:

	Name	NCC Status	New member	Outgoing member
1		*Chairperson*	☐	☐
2		*Member*	☐	☐
3		*Member*	☐	☐
4		*Member*	☐	☐

1.2 National staff involved in polio programme

	Name	Status/Position	Organization	E-mail address	Telephone Number (Please include country and area code)
1		*National Programme Coordinator*			
2		*EPI/Immunization Coordinator*			
3		*Surveillance Coordinator*			
4		*National Polio Lab*			

5		*National Polio Containment Coordinator*			
6		*Chairperson National Expert Review Group/Committee*			
7		*Head of the National Emergency Operations Center or Outbreak/Rapid Response Unit*			
8		*Other*			

Preface to the National Certification Committee Annual Report

The RCC requests NCC to declare whether the NCC members are firmly convinced that the country was polio-free during the reporting period: January-December 2020.

The NCC should provide supporting evidence by reviewing and assessing data presented by the National Health Authorities. The NCC can request any additional information, if required. The statement should be based on an evaluation and assessment of the following information:

1. The national surveillance for "paralytic poliomyelitis" including surveillance for Acute Flaccid Paralysis (AFP), enterovirus and environmental surveillance.
2. Population immunity against poliovirus including routine immunization coverage at the national and sub-national levels, coverage among known high risk sub-populations (if no high risk groups in country, indicate this in a statement); results of polio supplementary immunization activities (SIAs) targeting high-risk territories or high-risk sub-populations, when appropriate.
3. Performance of polio laboratory and containment activities.
4. The national plan of action (NAP) for outbreak preparedness and response and the quality of the Polio Outbreak Simulation Exercise (POSE) done within the past three years.
5. Results of National/Sub-national risk assessment.
6. Acknowledging a response to recommendations made by EM RCC, if applicable.

1.3 Activities conducted by the NCC

Please provide general information about NCC activities in 2020, including key issues addressed at the meetings and list any concerns that have arisen, including concerns from the NCC about the national programme, challenges in organizing and/or holding regular NCC meetings

NCC Meeting Date	Key issues discussed	Main concerns/challenges	Actions proposed	Status (e.g. implemented/in progress/not implemented)

1.3.1 Please attach minutes of the National Certification Committee (NCC) meetings.

Section 2: EXECUTIVE SUMMARY

The executive summary should comprehensively describe overall program performance related to certification and containment, functions of the NCC and most importantly basis of its conviction to endorse or reject risk assessment results and risk mitigation measures and plans presented to the NCC. **The NCC should take into account all the background information** related to:

1. Surveillance for detection of polioviruses
    a. The national acute flaccid paralysis (AFP) surveillance: Surveillance sensitive enough to rapidly and reliably detect imported wild poliovirus and Vaccine Derived Polio Virus (VDPV) should it emerge.
    b. Supplementary surveillance: environmental surveillance (where established): its appropriateness and monitoring to ensure proper sampling and transportation.
2. Polio immunization coverage and population immunity at the national and sub-national levels, including coverage among known high-risk populations;
    a. High enough to prevent imported wild poliovirus to circulate and emergence of VDPV.
    b. Response to detection of any WPV/VDPV in polio free country or area.
3. Polioviruses (PV) and potentially infectious materials containment activities in accordance with GAPIII with particular focus on national inventory, destruction/transfer of PV material, and national Polio Essential Facility (PEF) certification.
4. The national plan of action (NAP) for outbreak preparedness and response and the quality of the Polio Outbreak Simulation Exercise (POSE) done within the past three years;
5. **Important: The most critical component of the Executive Summary:** Results of risk assessment to certification at the national and sub- national levels should be thoroughly reviewed at the granular level after deep dive into data for each of the four components: surveillance, population immunity, containment of polioviruses and outbreak preparedness and response. Conclusive remarks of the NCC are needed over quality, thoroughness and relevance of both risk assessment as well as risk mitigation measures/plans for four aforesaid components. The NCC is encouraged to look for independent results and surveys and if appropriate mention these in support of the NCC final opinion.
6. Concerns about the gaps in all kinds of support (human, financial, administrative, managerial, and operational including access issues due to security/accessibility/conflict/law and order situation);
7. Additional relevant information that could have an impact on sustaining the polio free status and/or the process of poliomyelitis eradication;
    - Special vaccination plans: refugees, IDPs, migrant population, in emergency and conflict situation
8. Acknowledging the response to recommendations made by the EM RCC.

2.1 The executive summary

Type here

The Executive Summary should be essentially signed by the NCC members or at least by the NCC chairperson

2.2 Risk assessment (RA)

Please provide your opinion on the risk of poliovirus importation or emergence of VDPV based on risk assessment four components (surveillance, population immunity, containment of polioviruses and outbreak preparedness and response) carried out in your country.
Please tick in the appropriate cell for each category.

Risk Category	Surveillance	Population immunity	Containment of PV	Outbreak preparedness and response	Overall Risk
High					
Medium					
Low					

Brief description of levels and scores given for risk assessment can be found under item 15.1.1.2

2.2.1 Please add notes to support the above opinion

Please make notes with special reference to all the above components at the lowest admin. level available.

Type here

2.3 NCC findings / outcomes

The NCC members are firmly convinced that the country was polio-free during the reporting period

Yes ☐

No ☐

2.4 Conclusions and recommendations

Type here

NCC position	Signature
Chairperson	
Member	
Member	

* Electronic signature is also acceptable

Date of submission of Annual Report (dd/mm/yyyy): _____

Section 3: RESPONSE TO COMMENTS OF THE RCC ON THE PREVIOUS REPORT

3.1 Please attach a copy of the comments of the Regional Certification Commission on the previously submitted report and the response of the national EPI/Polio Eradication programme and NCC.

3.2 Please present your response to this item in the form of an annotated table, given below:

Item number	RCC Comments	Response of the National Programme specific & brief	Problems or challenges encountered in responding to these recommendations

Section 4: BACKGROUND INFORMATION

4.1 Population data

Please indicate the most recent estimate of population in numbers including hard-to-reach populations of the year under review

YEAR _____

Age groups	Number	%
Children < 1 year of age		
Children < 5 years of age		
Children < 15 years of age		
Total population		

4.1.1 High risk areas, special populations

*Type of high risk area or population**	*Major Location(s)*	*Estimated population*			*Total Population*
		<1 Year	*<5 Years*	*<15 Years*	

NB: please add additional rows, if needed.
**High risk population may include: Minorities (religious or ethnic); Refugees / internally displaced; Migrants; Low Population Immunity; Low Surveillance Indicators; Difficult to access; Others (please specify)*

4.2 Poliovirus history

Please indicate the dates of **last detection of polioviruses (date of onset or detection)** by type of poliovirus surveillance. For wild poliovirus please provide information on both indigenous and imported cases

Poliovirus	AFP surveillance or notification of suspected poliomyelitis		Environmental surveillance	
	Indigenous	Imported	Indigenous	Imported
Wild poliovirus type 1				
Wild poliovirus type 2				
Wild poliovirus type 3				
VDPV1*				
VDPV2*				
VDPV3*				
Sabin poliovirus type 1				
Sabin poliovirus type 2				
Sabin poliovirus type 3				

* Please indicate a type of the last VDPV: (a) – ambiguous, (i) – immunodeficiency-related or (c) – circulating

Section 5: PERFORMANCES OF AFP SURVEILLANCE AND ANALYSIS

5.1 Type of surveillance for polioviruses

Check the appropriate box for each type of surveillance

Type of surveillance	YES	If YES, Please mention the year introduced	NO
AFP surveillance	☐		☐
Environmental surveillance	☐		☐
Healthy children surveillance	☐		☐
PV Surveillance among Primary immunodeficiency Children (PID)	☐		☐
Other, please specify	☐		☐

5.1.1 Please provide comments/discussion points/additional information, if any

Type here

5.1.2 Please attach a copy of the latest national surveillance guidelines

5.2 Routine reporting of AFP cases from health facilities during the year under review

YEAR _____

Reporting Frequency	Number of Reporting sites	Completeness of Routine Reporting		
		Number reports expected *	Number reports received	% reports received
Weekly				
Biweekly				
Monthly				
Other				
Total				

* Number of routine reporting sites x reporting frequency during the year
(i.e. if monthly reporting, frequency = 12; if weekly reporting, frequency = 52)

5.2.1 Comments and explanations concerning change(s) in the frequency of reporting and number of reporting sites in particular for poor performing areas (below 80% completeness) if any.

Type here

5.3 Active surveillance (Regular visits to health care facilities and sentinel sites to search for AFP cases) during the year under review

YEAR _____

Reporting Frequency	Number of Active Surveillance Sites	Completeness of Active Surveillance Visits		
		Number of visits expected *	Number of visits conducted	% of visits conducted
Daily				
Weekly				
Bimonthly				
Monthly				
Total				

* Number of active surveillance sites x number of visits in 1 year (i.e. if weekly, periods =52)

5.3.1 Comments and explanations concerning changes in the frequency of active surveillance visits and number of active surveillance sites in particular for poor active surveillance areas (below 80% completeness), if any.

Type here

5.4 Performance of AFP Surveillance, by first administrative level for the **YEAR** _____

1st Administrative Level (State, Province, or Governorate)	Population aged <15 years	Total 'non-polio' AFP cases reported <15 years	Non-polio AFP rate[a]	Total AFP cases with 2 adequate stool samples[b]	%AFP cases with adequate stool samples	%AFP cases with **ONE (1)** stool specimen
Total						

a. per 100,000 population aged less than 15 years
b. Two faecal specimen collected within 14 days of AFP onset at least 1 day apart

5.4.1 Please comment on:

5.4.1.1 Areas with low non-polio AFP rate like silent areas and with insecurity

Type here

5.4.1.2 Areas with exceptionally high non-polio AFP rate

Type here

5.4.2 Stool Specimen Shipment

1st Administrative Level (State, Province, or Governorate)	Number of Samples	Number of samples sent to the lab	Percentage of samples sent to the lab	Number of samples received in the lab within 3 days of sending	Percentage samples received in the lab within 3 days of sending
Total					

5.4.2.1 Please provide additional information on stool/ES Shipment rates by administrative level and timeliness of specimen shipment to the laboratory.

Type here

5.4.3 Please attach the following:

5.4.3.1 A map showing the non-polio AFP rate for the year under review at the 2nd administrative level.

5.4.3.2 A spot map showing the distribution of AFP cases with adequate stool specimens for the year under review at the second administrative level.

5.4.3.3 A map showing different level/categorization of access to districts for surveillance activities – fully accessible, partially accessible or inaccessible.

5.5 Independent review / assessment of AFP surveillance

5.5.1 Did an independent review / assessment of the national AFP surveillance system take place during the last 2 years?

Yes ☐ No ☐

5.5.1.1 If yes kindly attach the Executive Summary of the review reflecting:

5.5.1.2 When did the last surveillance review take place?
Date: _____

5.5.2 If yes; Does the report show convincing evidence of no poliovirus transmission in the country?

Yes ☐ No ☐

5.5.3 If yes; Does the report show that the surveillance system is sensitive enough and the quality is sufficiently high to detect poliovirus transmission at sub-national levels?

Yes ☐ No ☐

5.5.4 If yes; Was there an assessment of the recommendations with an account of specific steps being or already undertaken in response to the recommendations?

Yes ☐ No ☐

5.5.5 If yes; Summary of actions taken in response to recommendations

Type here

Section 6: CLASSIFICATION / FINAL DIAGNOSIS OF AFP CASES

6.1 National Expert Group (NEG)

6.1.1 Does a functional National Expert group (NEG) exist in the country?

Yes ☐ No ☐

6.1.1.1 If No; Please provide the reason for not having NEG and more information on who is responsible for classification of the AFP cases

Type here

6.1.2 Membership of NEG

The RCC emphasizes the importance of the composition and membership of NEG and avoid potential conflict of interest caused by employees of the national immunization programme, ministries of health or public health institutes serving as members of the NEG

	Name	NEG Status	Position	Organization	E-mail address	Telephone Number (Please include country and area code)
1		*Chairperson*				
2		*Member*				
3		*Member*				
4		*Member*				
5		*Member*				
6		*Member*				
7		*Member*				

6.1.3 Please provide the current terms of reference (ToR) of the NEG

Type here

6.1.4 Please provide the current protocol in use for presentation of cases to the NEG

Type here

6.1.5 Have there been any changes in the composition of the NEG?

Yes ☐ No ☐

6.1.6 If Yes, please provide name, title or position and area of expertise of each new member as well as each outgoing member during the reporting period in item 6.1.2:

	Name	NEG Status	New member	Outgoing member
1		*Chairperson*	☐	☐
2		*Member*	☐	☐
3		*Member*	☐	☐
4		*Member*	☐	☐

6.2 Final classification of AFP case

Please provide results of final classification of all reported AFP cases by the National Expert Committee (or equivalent)

No. of AFP cases		Final classification
2019	2020	
		Confirmed (wild) poliomyelitis
		Polio compatible
		VAPP
		VDPV
		Discarded as non-polio AFP
		Not an AFP
		Pending
		Other (please specify clinical diagnosis of these cases in 6.3.2)

6.3 Summary of the final diagnosis of AFP cases discarded as non-polio

Data by	GBS	Transverse Myelitis	Traumatic neuritis	VAPP	Other diagnoses (please specify and attach list in 6.3.2)	Unknown	Total AFP Cases discarded (non-polio)
Number							
Percentage							

6.3.1 GBS rate per 100,000 populations aged less than 15 years = _____

6.3.2. Final diagnosis of those classified as "Others". Please add additional rows, if needed:

Diagnosis	Number of cases
Total	

6.4 Summary of AFP Case Classification by the National Expert Group

Reason of presenting to NEG	Total cases eligible for review by NEG (reason specific)	AFP cases reviewed by the National Expert Group				**Number** of AFP cases with inadequate specimens **NOT** reviewed by the Expert Group*
		Total	Polio Compatible	VAPP	Discarded	

6.4.1 *Please provide more details and comments if any AFP case with inadequate specimens was not reviewed by the Expert Group

Type here

6.4.2 Polio compatible cases

6.4.2.1 Was there any AFP case(s) classified as Polio compatible during the year under review?

Yes ☐ No ☐

6.4.2.1.1 If yes, please give the following details:

EPID Code	Summary of actions taken in response to Polio compatible case/s (Field investigations, immunization activities and Conclusion) (please attach additional details, if needed)

6.4.2.1.2 Please provide comments/discussion points/additional information, if any

Type here

6.4.2.1.3 Spot map of compatible cases

Please attach a spot map showing the geographical location of Polio compatible cases, if any, for the year under review

6.4.3 Vaccine-associated paralytic polio (VAPP)

6.4.3.1 Was there any AFP case(s) classified as VAPP during the year under review?

Yes ☐ No ☐

6.4.3.2 Please present a line list and brief histories of all cases of vaccine associated paralytic polio (VAPP); make a separate attachment, if needed

Case EPID No.	Summary of investigation report (please provide full report in an attachment)

6.4.3.3 Please provide comments/discussion points/additional information, if any

Type here

6.4.4 Vaccine-derived poliovirus (VDPV)

***6.4.4.1 Was any vaccine-derived poliovirus (VDPV) detected in* the year under review?**

Yes ☐ No ☐

6.4.4.1.1 If yes, please give a summary of VDPV(s) isolated in the year under review

Type	No. of Isolates/Case			Source						Date of last isolate**	Comments
	P1	P2	P3	AFP	Contact	Healthy Child	PID	Sewage	Other		
cVDPV*											
iVDPV*											
aVDPV*											

* For definition, please see Glossary pages (61-62);
** By date of specimen collection for Healthy Child, Sewage and Other.

6.4.4.1.2 Spot map of Polio VDPVs Cases

Please attach a spot map showing the geographical location of all VDPVs cases at the first administrative level, if any, for the year under review

6.4.5 Sabin Like type 2 (SL2)

6.4.5.1 Was any Sabin-Like type 2 (SL2) isolated from AFP case(s), contact, healthy child (HC), Primary Immunodeficiency (PID) or through environmental surveillance (ES) during the year under review?

Yes ☐ No ☐

6.4.5.1.1 Please present a line list and brief histories of all cases - make a separate attachment, if needed

Source (AFP/Contact /HC/PID/ES)	EPID No. or ID Code)	Summary of investigation report and response (please provide full report in an attachment)

6.4.5.1.2 Please provide comments/discussion points/additional information, if any

Type here

Table 6.5 Line list of AFP cases reviewed and classified by the National Expert Group / Committee YEAR_____

The National programme should at minimum refer to the NEG all cases with inadequate stools and residual paralysis, lost for follow-up or died. It is also recommended to refer all cases of inadequate stools and 5-10% of AFP cases discarded by the programme. If the total number of AFP cases is small (less than 20) they should **ALL** be referred to the NEG

Please add below the AFP cases reviewed and classified by the NEG

AFP Case Findings											No. Stool Specimens			Probable Clinical Diagnosis	Contact sampling of inadequate AFP cases		NEG Decision		Diagnosis of the Case if NEG Discarded the Case
Sr. No.	EPID No.	Age in month	Onset Date*	OPV Doses	Reason(s) Reviewed **	Fever at Onset (Yes/No)	Asymmetric Paralysis (Yes/No)	Rapid Progression of Paralysis <4 days (Yes/No)	Other Investigation	Residual Paralysis (60 days Follow-up) Yes/No	Total	Adequate	NPEV (Y/N)		Y/N	If (Y) then No. with results	Compatible	Discarded	
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

***dd/mm/yyyy** ** Reasons reviewed may include: inadequate AFP cases, AFP cases with residual paralysis, 5-10% discarded cases, Program interest, and any other reasons as per country guidelines.*

6.5.1 Please attach minutes of the NEG meetings conducted during the year under review

6.6 Actions to improve AFP surveillance

Please provide updates on any special actions taken to enhance AFP surveillance, with particular emphasize on high risk subpopulations and/or territories: please include any integrated surveillance or community outreach activities, as well as special supervisory activities such as mobile teams

Type here

Section 7: SUPPLEMENTARY SURVEILLANCE ACTIVITIES

7.1 Has there been any supplemental surveillance activities during the year under review?

Yes ☐ No ☐

7.1.1 If yes, please give the following details:

7.1.2 Was a stool survey conducted? Yes ☐ No ☐

7.1.2.1 If yes, please provide details on methodology and results:

Type here

7.1.3 Was environmental surveillance conducted? Yes ☐ No ☐

7.1.3.1 If yes, please provide details as follows:

Province / District / Region	Number of sampling collection sites	Date started	Total population within catchment area	Frequency of sampling[1]	Total number of samples collected in 2019	Total number of samples collected in 2020	Total Number positive for any virus*	Total Number negative for any virus

*WPV, VDPV, SL or NPEV
Please provide more information in tables 8.3

7.1.3.2 Please provide information about virus isolation.

Province / District / Region	Names of sample collection sites	No. Positive for WPV		No. Positive for VDPV Total Number positive for any virus			No. Positive for SL2	No. negative poliovirus but positive for NPEV or NEV		No. negative for any virus
		Type1	Type3	Type1	Type2	Type3		NPEV	NEV	

GPEI Guidelines for Environmental Surveillance of Poliovirus circulation http://polioeradication.org/wp-content/uploads/2016/07/WHO_V-B_03.03_eng.pdf

7.1.3.3 Spot map of WPV, VDPV, SL2 from ES sites

Please attach a spot map showing the geographical location with differentiation between serotypes detected

[1] Weekly (W), Biweekly (BW), Monthly (M), Bimonthly (BM), Other (please specify)

7.1.3.4 Please provide comments/discussion points/additional information, if any

Type here

7.1.4 Is Primary Immunodeficiency (PID) surveillance established?

Yes ☐ No ☐

7.1.4.1 Is PID surveillance integrated into AFP surveillance? Yes ☐ No ☐

7.1.4.1.1 If Yes, No. AFP cases having iVDPVs - _____

7.1.4.2 If yes, please provide information in below table

No. of Patients enrolled	No. of patients positive for iVDPV	No. iVDPV1	No. iVDPV2	No. iVDPV3	No. of patients alive (Chronic Excertors)	No. of patients died

7.1.4.3 Is there any PID excreting VDPV/SL2? Yes ☐ No ☐

7.1.4.3.1 If Yes, please provide data:

Year	Name of chronic excretor	& EPID No. / ID Coder	Number of samples positive for VDPV types			SL2 excretion	Chronic Excretor (Yes/No)	Patient Alive (Yes/No)	Date of first sample positive	Date of last sample positive
			iVDPV 1	iVDPV 2	iVDPV 3					

7.1.4.4 Did any PID Patient stop excreting poliovirus? Yes ☐ No ☐

7.1.4.4.1 If Yes, please provide data:

Year	Name of chronic excretor	& EPID No. / ID Coder	Number of samples positive for VDPV types			SL2 excretion	Was the patient a chronic Excretor (Yes/No)	Patient Alive (Yes/No)	Date of first sample positive	Date of last sample positive
			iVDPV 1	iVDPV 2	iVDPV 3					

Section 8: LABORATORY ACTIVITIES FOR POLIO ERADICATION

8.1 Which Poliovirus laboratory tests stool/ES samples for your country (primary poliovirus isolation, intratypic differentiation (ITD), nucleotide sequencing, serology)?

type here

8.1.1 Poliovirus laboratory functions (please mention the name of the laboratory performing different tests below for your country in the below matrix)

Laboratories carrying out diagnostic analysis	National Poliovirus Laboratory	Polio Regional Reference Laboratory	Global Specialized Laboratory
Virus Isolation			
ITD - RT-PCR			
Nucleotide Sequencing			
Environmental Sewage Water Testing			
Primary Immunodeficiency Surveillance			
Serology			
Other (please specify)			

8.1.2 Please provide any comments/discussion points/additional information, if any

type here

8.2 Were all polio isolates, regardless of source[2], sent to a WHO accredited laboratory for intratypic differentiation (ITD)?

☐ Yes ☐ No

8.2.1 If No, please explain which isolates were not sent and why:

type here

[2] Polio isolates from non-AFP sources (e.g. contact stools, environmental samples, etc) must also be submitted for intra-typic differentiation.

8.3 Summary of laboratory investigations for poliovirus 2020

Please fill in the table below and do not leave any blank cells.

Type of surveillance and source of specimens	Total number (For ES mention number of sites)	*Specimen Based Analysis*														
		Total samples	Samples positive for wild type PV			Samples positive for Sabin PV			Samples positive for VDPV			NPEV typed Samples	Non-type able / NEV Samples	Negative	Completeness of stool/ES samples analysis	
			Type 1	Type 2	Type 3	Type 1	Type 2	Type 3	Type 1	Type 2	Type 3				Number Processed	Percentage Processed
AFP cases																
Contacts of AFP cases																
Environmental Surveillance																
Primary Immunodeficiency Patients (PID)																
Other (specify here)																

- PV – poliovirus; NPEV – non-polio enterovirus; NEV – non-enterovirus; VDPV – vaccine-derived poliovirus; AFP – acute flaccid paralysis;
- actual numbers from 0 to infinity
- NA – data not available
- ND – not done

Poliovirus must be excluded from a possible mixture

8.4 Summary of polioviruses samples processed for ITD (Please include data for the country under review only)

Please fill in the table below and do not leave any blank cells.
Please provide isolate based analysis
Please consider counting any PV mixtures under their specific types

Total polioviruses isolated	Source of Poliovirus isolates No.	Number of PV isolates	Number of isolates sent for ITD	Intratypic differentiation (ITD) results								
				Sabin like			Wild			VDPV		
				Type 1	Type 2	Type 3	Type 1	Type 2	Type 3	Type 1	Type 2	Type 3
	AFP cases											
	Contacts											
	ES											
	PID											
	Other (specify here)											

8.4.1 Please mention the number of PV mixtures with details (if any identified from table 8.4)

type here

8.5 For countries with a national polio laboratory, please enter data of last WHO Accreditation review

Type of Lab	Date last WHO Accreditation	Annual **number** of specimens processed	Results reported on time (%)*	NPEV isolation rate (%)	Correct polio typing result (%)	Proficiency test panel score (%)	Score of onsite review	Fully accredited (yes / no)
Virus Isolation								
ITD								
Nucleotide Sequencing								
Env. Surveillance								

For countries with no WHO accredited laboratory, please enter the information if available, otherwise indicate NA)
**Percent specimen having primary culture results reported within 14 days of receipt in the laboratory*

Section 9: ROUTINE POLIO IMMUNIZATION COVERAGE

9.1 Immunization policy

9.1.1 Has there been any change in the type of vaccine used in SIAs/routine immunization or in the schedule during the year under review?

Yes ☐ No ☐

9.1.1.1 If yes, please specify this <u>any changes</u> (e.g. vaccines, vaccination schedule etc.) in the national immunization policy related to polio vaccination in 2019-2020

Type here

9.1.2 Current polio vaccination schedule (2019-2020)

Please indicate age in days for 0 dose only, weeks, months and years of the correspondent dose (e.g. D-01; W-12; M-03; Y-02)

Vaccine	Dose Zero*	Dose 1	Dose 2	Dose 3	Dose 4	Dose 5	Dose 6	Other doses
Bivalent OPV (bOPV)								
IPV (standalone or any combination**)								
Novel OPV (nOPV)								
If IPV is given as Combo Vaccine, please name other antigen(s)	*Type here*							

* Birth (zero) dose of polio vaccine given within first 24 hours of life or as soon as possible after birth

9.1.3 Please complete following table

Vaccine	Year introduced	Year ceased
tOPV		
bOPV		
IPV (standalone)		
IPV (any combination) Please specify here the type of combination used (Hexa, Penta,….)		
nOPV		
Other (please specify)		

9.2 ***Routine immunization Coverage of infants with polio vaccine (OPV3 or else) by 1st Administrative Level: i.e. state, province, or governorate, for the year under review***

YEAR: _____

Immunization polio vaccine (OPV3 or else) Coverage (%)		
1st Admin. Level	**% Coverage***	**Remarks**
Total		

9.2.1 *Please specify indicate the source of the above coverage (e.g. Administrative, surveys, WHO/UNICEF joint review, … etc): _____

9.2.2 Please comment on areas with low OPV3 coverage (less than 80%) with special reference to any recommendations, plans, actions taken for improvement with timelines coverage during the year under review

Type here

9.2.3 Attach a map showing the districts which had less than 80% routine OPV3 coverage during the year under review

9.3 ***Routine immunization Coverage of infants with inactivated polio vaccine (IPV) by 1st Administrative Level: i.e. state, province, or governorate, for the year under review***

YEAR: _____

Immunization polio vaccine (IPV) Coverage (%)		
1st Admin. Level	**% Coverage***	**Remarks**
Total		

9.3.1 *Please specify indicate the source of the above coverage (e.g. Administrative, surveys, WHO/UNICEF joint review, … etc): _____

9.3.2 Please comment on areas with low IPV coverage (less than 80%) with special reference to any recommendations, plans, actions taken for improvement with timelines coverage during the year under review

Type here

9.3.3 Attach a map showing the districts which had less than 80% IPV coverage during the year under review

9.4 Validation of the coverage data

9.4.1 Has there been any validation done for coverage survey during the year under review?

Yes ☐ No ☐

9.4.2 Was this validation done independent of the EPI program?

Yes ☐ No ☐

9.4.3 Please explain how coverage data were validated (ex. through coverage survey, serosurveys, data quality assessments, special studies) and provide validation method and results in the space below (if applicable)

Type here

Section 10: SUPPLEMENTARY IMMUNIZATION ACTIVITIES FOR POLIO ERADICATION

10.1 Specify any supplementary immunization activities (SIA) conducted for polio eradication during the year under review

Type of SIA	Number conducted	Date(s) conducted	Mention the type of antigen used (bOPV, IPV, mOPV (1,2,3), nOPV, …. etc)	Comments
a) National Immunization Days (NIDs)				
b) Sub-national Immunization Days (SNIDs)				
c) 'Mopping-up' activities				
d) Other (specify):				

10.1.1 Please attach SIA plan for the year under review

10.1.2 Summary of ALL National and Sub-national supplementary OPV immunization activities (SIAs such as NIDs, SNIDs, SIADs, Mopping up and Other e.g. response to cVDPV … etc) during the year under review

Type of SIA	Target age group	Number of children targeted	Round number	Date	Vaccine Type*	Coverage by (%)	Vaccination Rates by Finger Marking**	Please mention if SIA is in response to (WPV, cVDPV, SL2)	Comments

Please add rows for different round in the round number in case responses
* Vaccine Type (tOPV / bOPV / mOPV (1,2,3) / IPV / nOPV)
** If applicable

10.1.2.1 SIA Coverage

10.1.2.1.1 Please attach a table with the SIA coverage by 1st administrative level (i.e. province, state, etc.) for each campaign round during the year under review

10.1.2.1.2 Please attach a map showing the districts which had less than 80% coverage during any one of the rounds during the period under review

10.1.3 If 'Mopping up was conducted during the year under review, please state the criteria used for deciding the areas to be included in 'Mopping-up' activities

a) _____

b) _____

c) _____

d) _____

10.1.3.1 Summary of 'Mopping-up' activities during the year under review

Reason for 'Mopping-up'	Geographic Area Included	Round Number (1,2,3 …)	Vaccine Type *	Age Group	Target Pop. Size	Number of households visited	Average number of children immunized per household	Date	Number immunized	Coverage by (%)	Vaccination Rates by Finger Marking **

Please add rows for different round in the round number in case responses
* Vaccine Type (tOPV / bOPV / mOPV (1,2,3) / IPV / nOPV)
** If applicable

10.1.3.2 Please provide a map of the areas targeted by 'mopping-up' activities for each round separately

10.1.3.3 If active case search was conducted at the same time, please provide details below.

Type here

10.1.4 Validation of the coverage data

10.1.4.1 Was vaccination coverage data validated for 'mopping-up' activities?

Yes ☐ No ☐

10.1.4.2 If Yes; Was this validation done independent of the Polio program?

Yes ☐ No ☐

10.1.4.3 If yes; Please explain how coverage data were validated (ex. Post campaign monitoring, Lot Quality Assurance survey, …..) and provide validation method and results in the space below (if applicable)

Type here

Section 11: IMMUNITY PROFILE

11.1 Polio Vaccination status of AFP cases

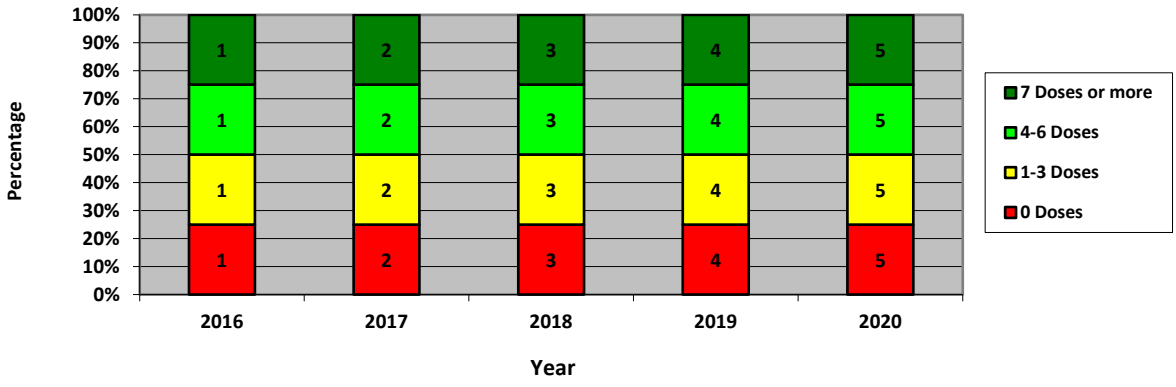
Please present in the table below polio vaccination status of AFP cases detected in 2020

	0 doses	1-3 doses	4-6	7+	Un-known	Total
0 – 5 months						
6 – 59 months						
5 years and older						
Total						

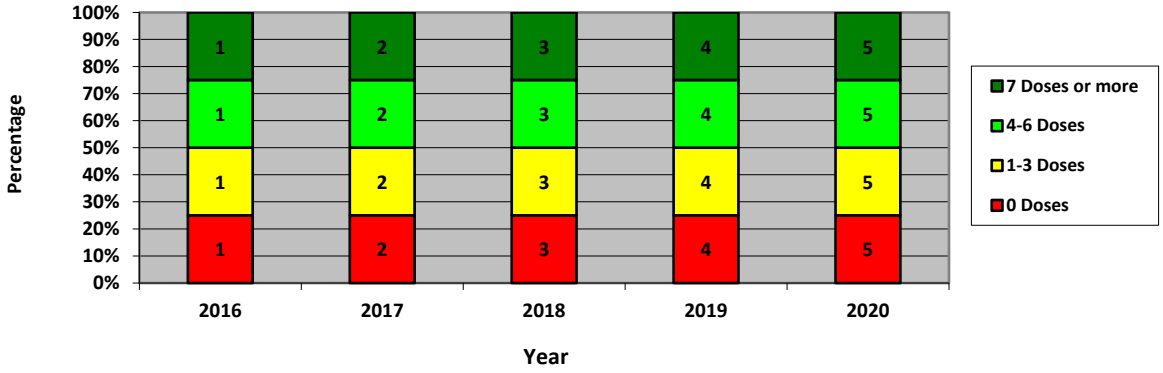
11.2 Please draw the profile for the last 5 years obtained from the number of polio vaccine doses received by the non-polio AFP cases 6-59 months in the form of a bar chart in which the number of doses are categorized to 4 categories: 0 doses, 1-3 doses, 4-6 doses and 7 doses or more.

Should the number of AFP cases 6-59 months be ten or more, please make two profiles one for cases aged 6-23 months and the other for cases aged 6-59 months.
Please use the below template for each

Distribution of Immunity profile for Non-Polio AFP cases aged 6-59 months for the years 2016-2020



Distribution of Immunity profile for Non-Polio AFP cases aged 6-23 months for the years 2016-2020



Section 12: UPDATE ON 'HIGH-RISK' POPULATIONS/AREAS

12.1 List of known special population groups or areas at high-risk for Poliovirus introduction or circulation

Name of area	Risk Category	Estimated population	Total Population < 15 years	Quality of AFP Surveillance		Coverage		Comments on quality / any epidemiologic change
				NPAFP rate	Stool adequacy %	Routine	SIA	
	Minorities (religious or ethnic)							
	Refugees / internally displaced (list the districts by name)							
	Migrants (list the districts by name)							
	Low *Population Immunity*							
	Low *Surveillance Indicators*							
	*Difficult to access**							
	Others (please specify here)							

**** Please specify type of access issue(s) and list districts by name.***

12.2 Was any specific / targeted surveys and/or studies regardless of its magnitude done?

Yes ☐ No ☐

12.3 Please provide information on the above targeted activities with focus on risk category of population, presence or absence of the program's effective reach in this community for surveillance, routine, and supplementary vaccination activities.

Type here

Section 13: WILD POLIOVIRUS IMPORTATION

13.1 Has there been any importation of wild poliovirus into the country during the period under review?

Yes ☐ No ☐

13.1.1 Please mention type: WPV1 ☐ WPV2 ☐ WPV3 ☐

13.1.2 If yes, for each introduction please provide the following details for the event/outbreak.

Date of identification	Source if importation (if applicable) *	Type of Polio Virus**	Location of outbreak or importation	Geographic area affected	Date of last virus isolation	Number of polio cases related to the importation	Number of virus isolates related to this importation

* Please provide details on the source of importation in table 13.1.2
** WPV1,2,3

13.1.3 If yes, for each introduction please provide details about the source of importation:

Details of the cases identified in the country under review				Details of the source			
ID Code of imported case/ES	Index / Secondary cases	Cluster	Percent Divergence	Country	Source (AFP case / Contact / PID / ENV / Healthy Child (HC), etc)	ID Code	Date of onset for AFP case / Date of sample collection in ES/PID/HC

Please list the index case as well as secondary cases related to the same importation
Please add more tables if more than one importation during the year under review

13.1.4 If yes, for each event/outbreak, please provide the below information about the response:

Outbreak identifier (if multiple)	Geographic Area Included in response	Round Number (1,2,3…)	Vaccine Type*	Age Group	Target Pop. Size	Number of households visited	Average number of children immunized per household	Date	Number immunized	Coverage by (%)	Vaccination Rates by Finger Marking**

Please add rows for different round in the round number in case responses
* Vaccine Type (tOPV / bOPV / mOPV (1,2,3) / IPV / nOPV)
** If applicable

13.1.4.1 Please provide a map of the areas targeted by 'event/outbreak response' activities for each round separately

13.1.4.2 Were any supplementary activities conducted as a response to the virus isolation?

Yes ☐ No ☐

13.1.4.2.1 If yes, please specify below as well as in the relevant sections according to the conducted activity.

Type here

13.1.4.3 Validation of the coverage data

13.1.4.3.1 Was vaccination coverage data validated for 'Event/outbreak response' activities?

Yes ☐ No ☐

13.1.4.3.2 If yes; Was this validation done independent of the Polio program?

Yes ☐ No ☐

13.1.4.3.3 If yes; Please explain how coverage data were validated (ex. Post campaign monitoring, Lot Quality Assurance survey, …..) and provide validation method and results in the space below (if applicable)

Type here

13.2 If yes; Please provide evidence showing that poliovirus circulation has been interrupted. Please attach Outbreak Response Assessment (OBRA) report.

Type here

Section 14: EMERGENCE OF VDPV

14.1 Has there been any emergence of VDPV in the country during the period under review?

Yes ☐ No ☐

14.1.1 Please mention type: VDPV1 ☐ VDPV2 ☐ VDPV3 ☐

14.1.2 If yes, for each VDPV type please provide the following details:

Date of identification	*Type of VDPV	Location of case / outbreak or importation	Number of VDPV cases	In cases of iVDPV, how many samples are positive	Date of last VDPV isolation	Source (indigenous, importation, immunodeficiency, Env Surv (ES))	Geographic area affected (for cVDPV only)

* cVDPV 1,2,3 / iVDPV 1,2,3/aVDPV 1,2,3

14.1.3 If yes, for each VDPV type please provide details:

Details of the cases identified in the country under review						
Index cVDPV or iVDPV or aVDPV	ID Code	(AFP case / Contact / PID / ENV / Healthy Child (HC), etc	Date of onset for AFP case / Date of sample collection in ES/PID/HC	Linked to another Country (for cVDPV2)	Percent Divergence	Cluster

Please list the index case as well as secondary cases related to the same importation
Please add more tables if more than one importation during the year under review

14.1.4 If yes, for each event/outbreak, please provide the below information about the response:

Outbreak identifier (if multiple)	Geographic Area Included in response	Round Number (1,2,3…)	Vaccine Type*	Age Group	Target Pop. Size	Number of households visited	Average number of children immunized per household	Date	Number immunized	Coverage by (%)	Vaccination Rates by Finger Marking**

Please add rows for different round in the round number in case responses
* Vaccine Type (tOPV / bOPV / mOPV (1,2,3) / IPV / nOPV)
** If applicable

14.1.4.1 Please provide a map of the areas targeted by 'Event/outbreak response' activities for each round separately

14.1.4.2 Were any supplementary activities conducted as a response to the virus isolation?

Yes ☐ No ☐

14.1.4.2.1 If yes, please specify below as well as in the relevant sections according to the conducted activity.

Type here

14.1.4.3 Validation of the coverage data

14.1.4.3.1 Was vaccination coverage data validated for 'Event/outbreak response' activities?

Yes ☐ No ☐

14.1.4.3.2 If yes; Was this validation done independent of the Polio program?

Yes ☐ No ☐

14.1.4.3.3 If yes; Please explain how coverage data were validated (ex. Post campaign monitoring, Lot Quality Assurance survey, …..) and provide validation method and results in the space below (if applicable)

Type here

14.2 Vaccine Management (in case of mOPV2 use)

Please provide details on the mOPV used in the country for any purpose, this section is restricted to mOPV2 use and later will include mOPV3 (in case of switch to mOPV1 at later stages).

14.2.1 Please indicate in the table below all campaign types including NID, sNID, mop-up, case responses, and others which have used any of the stated vaccine types above. Please mention NA in case mOPV2 was not used.

Type of SIA	Date of Campaign	Round No.	Target age group	Antigen type (mOPV2, mOPV3)	Number of children targeted	Number of vials received from Global stock	Number of vials distributed to the field	Total vials returned			Total Vials missed		
								Empty	Partial	Full	Empty	Partial	Full

14.2.2 If mOPV2 was used; Please provide details in table below on the vaccine management adopted for mOPV campaigns to ensure that all vials are well managed?

Total number for all campaigns by type of vial	Total number of vials			
	National			Returned to global stock
	Destructed (National/Sub national)	Place of destruction	Kept in national Store	
Empty				
Partial				
Full				

Please add a separate table for each type of vaccine used

14.2.3 If mOPV2 was used; Please attach certificate of destruction, return to global stocks

14.2.4 If mOPV2 was used; Please provide comments/discussion points/additional information, on the detailed description of mOPV vaccine management activities including any faced challenges. Please provide the country plans and prospective dates of mOPV destruction in case any balance is remaining within the country

Type here

GPEI Technical Guidance mOPV2 vaccine management, monitoring, removal and validation http://polioeradication.org/wp-content/uploads/2016/11/Technical-guidance-mOPV2-management-monitoring-removal-and-validation_Oct2016_EN.pdf

14.3 If mOPV2 was used; Please provide evidence showing that VDPV circulation has been interrupted. Please attach Outbreak Response Assessment (OBRA) report.

Type here

Section 15: RISK ASSESSMENT (RA) AND OUTBREAK PREPAREDNESS AND RESPONSE

15.1 Was a risk assessment made for the year under review?

Yes ☐ No ☐

15.1.1 If yes; Was the RA done within by the country through National IFA?

Yes ☐ No ☐

15.1.1.1 If No, please mention why?

Type here

15.1.1.2 If RA was conducted or communicated; Please mention the scores given for risk assessment by province in the following parameters for the year under review

YEAR	PROVINCE	Susceptibility %	Surveillance %	Additional factors %	Total Weighted Score %
2020	National total				

- Susceptibility (50% of the total score) and include: OPV3 Routine coverage >=90%, 90% Districts with OPV3 coverage>=80%, No emergence of cVDPV during last 3 years, At least one Zero dose NP AFP (aged 6-59 months), and % non-polio AFP cases with >=3 OPV doses (aged 6-59 months).
- Surveillance (30% of the total score) and include: Non-polio AFP Rate, % AFP cases with adequate specimens, 100% districts achieved target of non-Polio AFP Rate (2.0) and Stool adequacy (>=80%), Lab results available within 31 days, availability of environmental surveillance, and % Isolation of non-polio Enterovirus
- Additional factors (20% of the total score) and include: vulnerable/High risk population, Sanitation Disease Outbreaks, Shared borders with WPV/cVDPV during last 3 years, Insecurity Unrest (military or civil), and Geographic accessibility.
- Score are categorized as follow: Low (85% or more), Medium (75%-84%), High (50%-74%), and Very High (< 50%).

15.1.2 Please elaborate methodology used for risk assessment, different criteria/variables and frequency (if different from the above mentioned in 15.4.1.2)

Type here

15.1.3 Please specify identified high-risk districts, provinces or subset of the population (scoring less than 75%) and elaborate why are they categorized as high-risk?

Type here

15.1.4 Please mention overall impression of the NCC on the RA at the national and sub-national levels

Low	☐
Medium	☐
High	☐
Very High	☐

15.1.4.1 What actions are proposed/implemented for areas categorized as medium, high and very high risk?

Type here

15.1.5 Please elaborate on the risks for un-detected poliovirus transmission, risk of WPV importation or emergence of VDPVs and capacity of the country / program to conduct a rapid response

Type here

15.2 Risk mitigation activities

In the table below, please provide a list of programme–related activities planned to mitigate risk of poliovirus transmission. This may include supplementary immunization activities, surveillance reviews/assessments, coverage or seroprevalence studies, meetings or any other relevant activities you may consider important to downgrade a risk.

Area of work	Responsibility	Tentative time frame (month/year)	Activities	Status of implementation (planned in Italics and implemented in Bold)
Immunization				
Surveillance (including laboratory network)				
Capacity building				
Risk assessment/analysis				
Poliovirus containment				
Outbreak preparedness plan				
Other				

15.3 Has the National Plan of Action for Preparedness for wild poliovirus importation been updated during the year under review?

Yes ☐ No ☐

15.3.1 Please submit your most recent version of the polio outbreak preparedness and response plan along with this report in an attachment

15.3.2 Please indicate below whether below criteria have been considered in your preparedness plan

Criteria	Description	Yes	No
Definitions	Essential terms – such as "wild poliovirus", "circulating vaccine-derived poliovirus", "poliovirus event", "poliovirus outbreak", "acute flaccid paralysis (AFP)", "hot AFP case", etc. - have been considered to ensure a common understanding.	☐	☐
Notification	The national government will notify it to WHO as an Public Health Emergency of International Concern (PHEIC) in accordance with IHR, wherever relevant	☐	☐
Surveillance	Methods and strategies to strengthen the ability to detect wild poliovirus or circulating vaccine-derived poliovirus in a poliovirus event or poliovirus outbreak (e.g. environmental) are presented in the plan.	☐	☐
Immunization response	Upon confirmation of a poliovirus outbreak, a country will plan a coordinated immunization response; first SIA will be launched within 14 days from confirmation of the poliovirus outbreak	☐	☐
Internal communication	Formal, informal, and instrumental communication within the structures of an organisational system is considered to share information and coordinate actions (e.g. advocacy activities, informing UN agencies, meetings with key-stakeholder, social mobilization, etc.)	☐	☐
External communication	Providing the public with information about the ongoing situation and the (expected) outcome of poliovirus event or outbreak (e.g. mass media communication, online communication activities, interpersonal communication, media response plan, media focal person, etc.) is considered	☐	☐
Vaccine regulation	Regulative aspects – such as licensure of vaccines, availability of vaccines, legal framework for importation (particularly for mOPV2), procurement of vaccines – are considered in order to respond to a poliovirus event or outbreak.	☐	☐
Funding	Availability of budget and structures of cash-flow for financing the response to a poliovirus event or outbreak, such as paying for equipment, human resources and other financial expenses are considered.	☐	☐
Management	Process is described in a specific, achievable and time-bond way, with regards to the respective responsibilities of the key stakeholders.	☐	☐

15.4 ***Was the plan tested in a simulation exercise to assess national capabilities to implement the plan?***

Yes ☐ No ☐

15.4.1 If yes, please mention date (dd/mm/yyyy): _____

15.4.2 Please provide summary conclusions and recommendations from testing your plan

Type here

GPEI standard operating procedures (SOPs): responding to a poliovirus event and outbreak:
General SOPs - **http://polioeradication.org/wp-content/uploads/2018/01/pol-sop-responding-polio-event-outbreak-part1-20180117.pdf**

GPEI Guideline for developing a national preparedness plan for a polio outbreak - http://polioeradication.org/wp-content/uploads/2016/09/Guideline-for-developing-a-National-Preparedness-Plan-for-a-Polio-Outbreak_Dec2015_EN.doc

Outbreak Response Plan Template - http://polioeradication.org/wp-content/uploads/2017/01/Outbreak-Response-Plan-Template_20Jan2017_ENG.doc

Section 16: UPDATE ON CONTAINMENT OF POLIOVIRUSES

The Global Commission for the Certification of the Eradication of Poliomyelitis (GCC) made the following recommendations in October 2017
(http://polioeradication.org/wp-content/uploads/2018/03/polio-global-certification-commission-report-2017-10-20180314-en.pdf)

- NCC/RCC reports need to clearly indicate where and when activities in Phase I have been completed, based on a standardized data collection and verification mechanism, so that, on the basis of equivalent data quality between regions, the GCC can declare global completion of Phase I.

- The members of the GCC have concluded on 20th September 2015 that indigenous wild poliovirus type 2 has been eradicated worldwide. In April 2016, switch from tOPV into bOPV thus removing type 2 attenuated virus from the vaccine and necessitated speeding up of the containment activities.

- The members of the GCC in their last meeting conducted in Geneva 17-18 October 2019 have concluded that "With no wild poliovirus type 3 detected anywhere in the world since 2012, the GCC has officially declared this strain as globally eradicated".

- The deadline for completion of Phase I for all PV2 is set at one year after the publication of the WHO *Guidance to Minimize Risk for Facilities Collecting, Handing, Or Storing Materials Potentially Infectious for Polioviruses i.e. end April 2019*.

- GCC requests RCCs to urge countries to complete the identification, destruction, transfer or containment (Phase I) of WPV1 and WPV3 materials by the end of Phase II (before global certification of wild poliovirus eradication).

- GCC urges countries planning to designate facilities for the retention of WPV1 and WPV3 materials to weigh the risks and benefits of having such facilities and the commitments that will be required to comply with the primary (facility), secondary (population immunity) and tertiary (sanitation and hygiene) safeguards.

16.1 Progress in containment

16.1.1 Composition of NTF for containment

	Name	NPCC/NTF Status	Position	Organization	E-mail address	Telephone Number (Please include country and area code)	Comment if not nominated
1		*Chairperson*					
2		*Member*					
3		*Member*					
4		*Member*					
5		*Member*					
6		*Member*					
7		*Member*					

16.1.2 Please provide current terms of reference (ToR) of the NPCC and NTF in an attachment

16.1.3 Have there been any changes in the composition of the NPCC/NTF?

Yes ☐ No ☐

16.1.4 If Yes, please provide name, title or position and area of expertise of each new member as well as each outgoing member during the reporting period:

	Name	NPCC/NTF Status	New member	Outgoing member
1		*Chairperson*	☐	☐
2		*Member*	☐	☐
3		*Member*	☐	☐
4		*Member*	☐	☐

16.1.5 Please attach minutes of the National Task force meetings.

16.2 National Plan of Action (NAP) for containment of polioviruses and potentially infectious material for completion of Phase 1 of the GAPIII:

16.2.1 Has a NAP been developed/revised for the year under review?

☐ Yes ☐ No

16.2.2 If "NO" please explain why?

Type here

16.2.3 If yes: Please indicate the date: _____

16.2.4 If yes: Please attach a copy of the NAP

16.2.5 Has a NAP been implemented for the year under review?

☐ Yes ☐ No

16.2.6 If "NO" please explain why?

Type here

16.3 Identification of facilities

16.3.1 List of all facilities in the country/territory

A current, exhaustive and comprehensive list of **all** facilities in the country/territory is established and available		☐ Yes ☐ No ☐ Other If other, please specify:
If **yes**, how many facilities in total are there in the country/territory?		
If **no**:	By when is the comprehensive list of facilities expected to be completed?	Expected date:
	By whom is the comprehensive list of facilities expected to be completed?	

NOTE 1[3]: GCC set the deadline for completion of Phase I for all PV2 at one year after the publication of the *Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses* (i.e. by 10 April 2019), and for WPV1 & WPV3 before the global declaration of WPV eradication.

NOTE 2[4]: GCC requested RCCs to urge countries to complete the identification, destruction, transfer or containment (Phase I) of WPV1 and WPV3 materials by the end of Phase II.

[3] Report of the special meeting of the Global Commission for the Certification of the Eradication of Poliomyelitis on poliovirus containment, Geneva, Switzerland, 23-25 October 2017 (http://polioeradication.org/wp-content/uploads/2018/03/polio-global-certification-commission-report-2017-10-20180314-en.pdf)

NOTE 3[4]: GCC recommended that at the time of WPV eradication, all facilities retaining WPVs should have a certificate of containment (CC), and if not, have a time-limited interim certificate of containment (ICC), with a clear end point for obtaining a CC agreed with the GCC.

NOTE 4[4]: Certification of WPV eradication should only occur when all WPV materials, in facilities designated for retaining them, are safely and securely contained.

16.4 Survey of facilities

16.4.1 Has a national survey of laboratories been completed in order to identify all those laboratories in the country with wild poliovirus type 2 and 3, vaccine derived poliovirus type 2 and/or potential infectious material?

☐ Yes ☐ No

16.4.1.1 If "NO" please explain why?

Type here

16.4.1.2 If yes, describe details of the survey

Type here

[4] Report from the Seventeenth Meeting Global Commission for the Certification of the Eradication of Poliomyelitis, Geneva, Switzerland, 26-27 February 2018 (http://polioeradication.org/wp-content/uploads/2018/04/polio-eradication-certification-17th-meeting-global-commission-for-certification-of-poliomyelitis-eradication-20180412.pdf)

16.4.1.3 If yes, Facilities surveyed during the current reporting period

Reporting period (dd/mm/yyyy – dd/mm/yyyy):	
FORM 1[5] (or an equivalent questionnaire) has been supplied to **all** facilities in the country/territory:	☐ Yes ☐ No ☐ Other If other, please specify:
N° of facilities that received FORM 1 (or an equivalent questionnaire):	
N° of complete responses obtained from these facilities:	
N° of facilities that sent in an incomplete response:	
N° of facilities that did not respond:	
PV types addressed in this reporting period:	☐ PV1 ☐ PV2 ☐ PV3

16.5 Facilities that do not retain any PV

A detailed list of facilities that never possessed, destroyed, inactivated or transferred to a PEF their poliovirus infectious or potentially infectious materials (PV IM or PIM) should be maintained as a national inventory and be made available to the RCC upon request.

N° of facilities that never had any PV IM or PIM:	
N° of facilities that have destroyed, inactivated or transferred to a PEF all their PV IM or PIM:	
Total N° of facilities that **do not retain** any PV IM or PIM:	

16.6 Is NCC involved in the process of implementation of NAP for implementation of Phase 1 of GAPIII?

☐ Yes ☐ No

16.6.1 If "NO" please explain why?

Type here

[5] FORM 1: Facility reporting form and other resources can be found in the resources using the below link (https://polmis.emro.who.int/containment/page/resources)

16.7 ***Has a national inventory of laboratories holding poliovirus (WPV2, WPV3, VDPV2) and Potentially infectious material been established?***

☐ Yes ☐ No

16.7.1 If "YES" please attach National Inventory of PV material

16.7.2 If "YES" please indicate whether all PV2 materials were properly contained, transferred or destroyed by end of July 2016 as requested[6]?

Poliovirus type 2 (WPV, VDPV, Sabin)	**YES (please mention the date)**	**NO (please explain why?)***
PV2 materials contained and PEF designated		
PV2 materials transferred. If yes please indicate where		
PV2 materials destroyed with official record		

16.8 ***Has the national inventory of laboratories holding poliovirus type 2 material conducted risk assessment during the year under review?***

☐ Yes ☐ No

16.8.1 If "NO" please mention the last date risk assessment was conducted if applicable?

16.8.2 If "NO" please explain why?

Type here

16.8.3 If "YES" please mention any gaps identified and mitigation measures

Type here

[6] WHO letter to all Member States on 9 April 2015

16.9 Polio Essential Facility (PEF)

16.9.1 Is any of the facilities in your country designated as Polio Essential Facility?

☐ Yes ☐ No

16.9.2 If yes; Please report the current progress in containment certification for every designated Poliovirus-essential facility (PEF) in the country. If there is no PEF in the country please skip this question:

Designated PEF (Name)	Current progress with containment certification (please indicate dates, even if approximate, for all positive answers)			
	If CP application has not been submitted (please indicate planned date of submission)	Application for a CP has been submitted to (NAC) (Please mention the date)	Application is under review of GCC (Please mention the date of submission to GCC)	CP is issued by GCC (Please mention the date)

*CP – certificate of participation[7] is issued by National Authority for Containment (NAC)

16.9.3 Please provide comments, if any

Type here

[7] A certificate that can only be awarded to facilities in countries that have demonstrated compliance with the required secondary and tertiary safeguards described in GAPIII. A CP indicates that the national authority for containment, in consultation with the GCC, has recognized a facility as a suitable candidate to become a poliovirus-essential facility. A CP formalizes the eligibility of the facility to engage in the GAPIII CCS process and its commitment to achieve an interim certificate of containment/certificate of containment. A GCC-endorsed CP bears the signature of the GCC and a unique certificate of containment number

16.10 Has a National Authority for Containment (NAC) been nominated? (only for countries with PEF).

☐ Yes ☐ No Not Applicable ☐

16.10.1 If "Yes" please provide details of the chairperson and members in the table below:

	Name	NAC Status	Position	Organization	E-mail address	Telephone Number (Please include country and area code)	Comment if not nominated
1		*Chairperson*					
2		*Member*					
3		*Member*					
4		*Member*					
5		*Member*					
6		*Member*					
7		*Member*					

16.10.2 Please provide current terms of reference (ToR) of the NAC in an attachment

Glossary:

Active Surveillance: defined as regular visits (i.e. weekly/biweekly/or monthly) to principal / prioritized reporting health care facilities that are most likely to admit or attend acute flaccid paralysis patients. The purpose is to search for and investigate unreported AFP cases. It is carried out through review of admission records, physicians' interviews in pediatric and other wards/departments (like neurological ward; physiotherapy department). It has to be timely, complete and accurate.

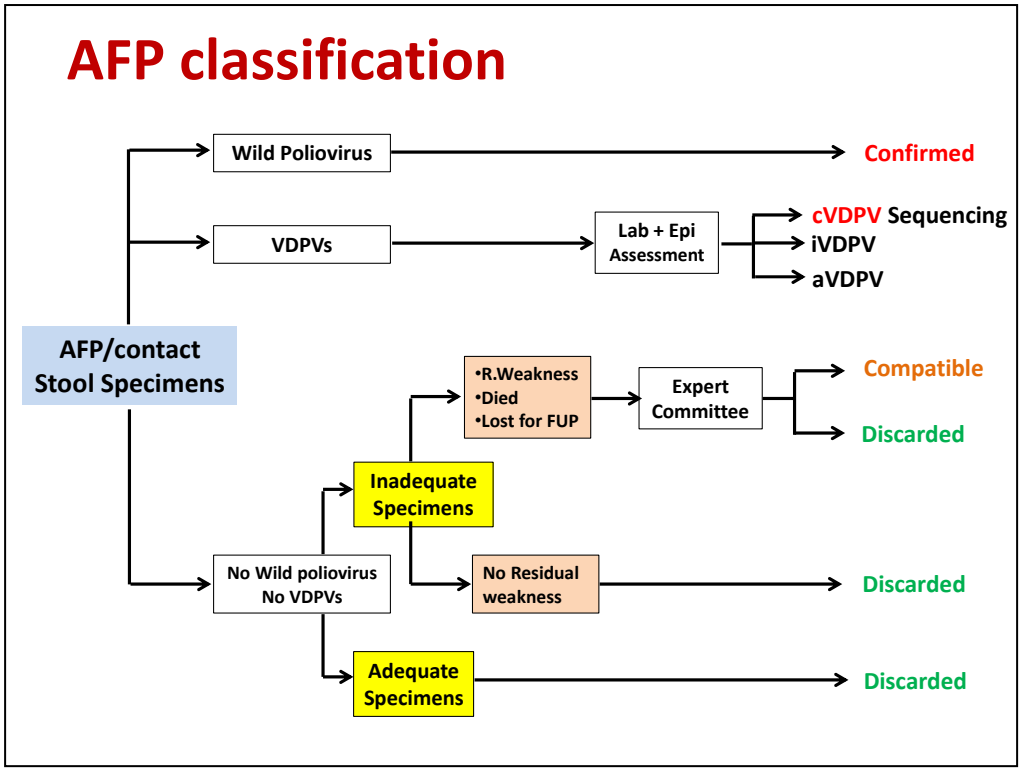
Acute Flaccid Paralysis Case (AFP case): Acute flaccid paralysis is defined as sudden onset of weakness/floppiness in any part of the body in a child <15 years of age or paralysis in a person of any age in whom polio is suspected. AFP is a syndromic notification, as there are many diseases that can cause AFP including Guillain Barre Syndrome, traumatic neuritis, transverse myelitis or any other event or disease presented with sign and symptoms matching AFP case definition should be included, thoroughly investigated irrespective of the cause.

Adequate Stool Specimen: 2 stool specimens collected (not by rectal swab) at least 24 hours apart, and within 14 days of the onset of paralysis; arriving in the laboratory in good condition within 72 hours of collection; with proper documentation; temperature below 8ºC or ice or cold ice packs present; sufficient quantity for laboratory analysis – at least 8 grams; and without drying or leakage.

Blind Area: are geographic areas (usually inaccessible due to conflict and insecurity) with lower than expected or no reporting of AFP cases. These areas prevent or limit the ability of AFP surveillance to be conducted. These blinds spots are a threat to polio eradication efforts as they undermine a precise understanding of ongoing virus transmission and hinder the programme's ability to confidently conclude when virus transmission has ceased.

Clinically Confirmed Poliomyelitis Case: A case that meets the above definition of AFP case clinical classification scheme for AFP cases (This is no more applicable).

Confirmed Poliomyelitis Case: A case that meets the WHO virologic classification scheme for AFP cases (see AFP classification figure)



Cluster: The unusual occurrence of diseased individuals compared with expected in given locality in a short period of time. For standardization purposes, Polio Eradication Program considers that a cluster of AFP cases occurs when the number of AFP cases reported in a specific geographic location is more than the expected AFP cases for that month or any point in time.

Compatible Case (Poliomyelitis Compatible Case): A case of AFP that cannot be confirmed with contacts and with no or inadequate specimen and presence of residual weakness on 60-day follow up examination (or died before 60-day follow up examination or lost for follow up), in which diagnosis of poliomyelitis cannot be excluded with confidence based on all available information.

Endemic: The constant presence of a disease or infectious agent within a given geographic area or population group.

Environmental Specimens: Samples collected (Not from cases) for virologic analysis; e.g. sewage, soil, dirt, or water samples that might be contaminated with virus.

Facility-based Record Review: Inspection of a health facility such as neurology wards, pediatric hospitals, or rehabilitation centers as part of a retrospective record review for AFP surveillance.

Feedback: The regular process of sending results of data analysis and surveillance reports through all levels of the surveillance system so that all participants can be informed of trends and performance.

Immediately Notifiable Disease: Any disease that is required by law to be reported immediately to government authorities. Usually these are public health emergencies and require immediate action. The collation of information allows the authorities to monitor the disease, and provides early warning of possible outbreaks

Imported Case of Poliomyelitis: Detection of WPV in AFP case/contact genetically related with transmission outside the country of detection. Onset of paralysis may occur outside or inside the country which reports.

Indigenous Case of Poliomyelitis: Detection of WPV in AFP case/contact genetically related with transmission within the country. Exposure and onset of paralysis is within the country, even if virus was recently imported.

Intratypic Differentiation: It is a Laboratory method use to characterize/differentiate Poliovirus strains into wild or vaccine types.

Line Listing: Inventory of cases organized so that each row contains all the appropriate clinical, epidemiological and viral data about one case.

Mopping-up: Refers to very high quality house-to-house immunization usually using oral polio vaccine (OPV), targeting all children in a specified age group in a carefully selected localized area in which the polio virus is where the virus is expected or suspected to still be circulating. These campaigns are carried out in areas where the virus was last recorded and where access to health care services is difficult or in areas which are densely populated with poor sanitation and low routine immunization levels. These campaigns aim to interrupt the last foci of wild poliovirus transmission.

National Discharge Diagnosis: Database of final diagnosis of patients when released from health facilities.

NIDs: National Immunization Days. A Mass Campaign conducted over a short period (days) in which two drops of OPV are administered to all children in the target age group (usually less than 5 years) regardless of previous vaccination history.

Outbreak: Reporting of at least one case of WPV in a polio free given area or among a specific group of people in a particular period of time.

Potentially Infectious Material: all clinical and biological materials collected for any purpose in a time and geographic area where WPV and/or VDPV is circulating. It includes working with WPV viruses for diagnostic and research purposes: clinical materials such as

feces, intestinal contents, central nervous system, and respiratory secretions collected for other purposes, such as clinical trials, epidemiological studies, and diagnoses of other diseases. Consideration must be given to the country, the year, the last wild indigenous poliovirus isolates in the country, type of specimen (whether feces, respiratory secretions, or cell cultured fluid or animal tissues) and laboratory of origin. Stool samples would likely contain the highest levels of infectious polioviruses.

Potentially infectious experimental animals: any experimental animal infected with a strain containing capsid sequences derived from a wild poliovirus, especially CD 155 transgenic mice infected with wild poliovirus.

Reporting Completeness: is an indicator of surveillance performance and is calculated as a proportion of all expected monthly or weekly reports that were actually received (usually stated as "% completeness for a certain period").

Reporting Timeliness: is an indicator of surveillance performance and is calculated as proportion of all expected reports that were actually received by the specified due date (usually stated as "% timeliness for a certain period").

Routine Disease Surveillance: The ongoing collection of information on health events and usually includes number of health events by district by months. It sometimes also includes health events by age group and/or immunization status.

Rumor Registry: This is a registry (or a log) maintained at different levels (federal/regional/provincial/district) to document rumors suggesting occurrence of polio cases and outcome of investigation(s). This is practiced in areas with long established polio-free period, especially in sparse populated areas or populations.

Sensitivity of Surveillance: The ability of the surveillance system to detect all cases of a disease, an epidemic or other changes in disease.

Sentinel Surveillance: The ongoing collection of information on health events from a limited number of selected reporting sites. Although these data are not representative of the entire country, they indicate trends and facilitate monitoring of severe diseases. More detailed data is often collected from sentinel surveillance sites than is possible form routine surveillance sites.

Spot Map: A map that indicates the location of each case of a disease by showing places that are potentially relevant to the health event being investigated, such as where the case lived, worked, or became ill.

Supplementary Surveillance Activities for Poliomyelitis: Ongoing collection of information (other than from AFP cases) to demonstrate both the absence of wild poliovirus and the increase the sensitivity of existing surveillance systems to detect both paralytic poliomyelitis cases and wild poliovirus.

Vaccine-associated Paralytic Poliomyelitis: Any case of AFP with onset of paralysis 4-30 days following receipt of OPV and the presence of neurological sequelae compatible with poliomyelitis after 60 days follow up from the onset of paralysis, isolation of vaccine poliovirus (Sabin Like virus) from the adequate stools tested in WHO accredited laboratory (for polioviruses) and negative for wild poliovirus. For criteria and further information **see attached Regional Guidelines on VAPP (page 65).**

Vaccine-derived polioviruses (VDPVs):

- VDPVs are genetic variance of the oral polio vaccine viruses that develops and can cause paralysis indistinguishable from WPV disease in un-immunized or under immunized populations. If the sequence diversity in the VP1 of poliovirus genome is >1% compared with the corresponding parent Sabin strain i.e. more than 10 nucleotide change, classifies the type 1 and type 3 Sabin virus as VDPV of the same serotype. While for type 2 VDPV it is more than 0.6% i.e ≥6 nucleotide change in in VP1 of polio-virus genome.

VDPVs can be classified further based on epidemiological grounds, as:

1. Circulating VDPV (cVDPV): VDPV isolates for which there is evidence of person-to-person transmission in the community.

VDPVs will be called as cVDPVs when there are genetically linked VDPVs: i) from at least two individuals (not necessarily AFP cases), who are not household contacts; or ii) from one individual and one or more environmental surveillance (ES) samples, or iii) from two or more ES samples if they were collected at more than one distinct ES collection site (no overlapping of catchment areas), or iv) from one site if collection was more than two months apart, or v) a single VDPV isolate, with genetic features indicating prolonged circulation (i.e. a number of nucleotide changes suggesting > 1.5 years of independent circulation).

2. Immune-deficiency associated VDPV (iVDPV): VDPVs isolated from persons with primary immune-deficiencies.

3. Ambiguous VDPV (aVDPV): VDPV isolated from individuals with or without AFP and with no known immunodeficiency, or from environmental samples, without evidence for circulation. A VDPV classified as “ambiguous” may need to be reclassified as “c” or “i”, if there is subsequent evidence of circulation or of derivation from an immune-deficient individual.

A VDPV isolate should only be classified as 'ambiguous' if additional investigations have excluded that it is derived from an immunodeficient individual ('iVDPV') or that it is part of an ongoing chain of transmission, i.e. a 'circulating VDPV' ('cVDPV').

Virologically Confirmed Poliomyelitis Case: A case of Poliomyelitis confirmed by isolation of wild poliovirus from stool specimen of an AFP case or from a close contact of an AFP case and tested positive for Wild Poliovirus in WHO accredited laboratory.

Zero Reporting: Designated reporting sites at all levels should report at a specific frequency (usually weekly or monthly) even if there are zero (no) AFP cases; and therefore, often referred to as "zero reporting". A report of zero cases is to be submitted to the surveillance unit . Zero reporting is often required for diseases in the weekly and monthly reporting system.

Polio Event: denotes that here is isolation of either WPV in a single EV sample with no evidence of local transmission or detection of VDPV in an AFP case, EV sample or other sample; *but* with no further detection of a related virus or other evidence suggesting established community – level circulation. See Table 1 below.

TABLE 1: Definitions of poliovirus events and outbreaks

Typology	Definition
Event (as yet, no evidence of transmission)	*Human* Detection of • **VDPV** in: – single AFP case or asymptomatic person (e.g. contact), or – one or more persons,[a] with no evidence of further community-level circulation (**iVDPV** or an **aVDPV** isolates) OR • **Sabin like 2** isolate from individual sample(s) OR • **WPV2** infected individual **with** documented type 2 virus exposure in a laboratory or vaccine production facility
	Environmental Detection of • **WPV** single environmental sample **without** follow-up evidence of virus excretion,[b] OR • **VDPV without** evidence of further transmission, such as – single environmental sample without evidence of prolonged circulation of >1.5 years, or – an aVDPV OR • **Sabin like 2** isolate from environmental sample(s)

Polio Outbreak: is considered: a) if there is a single or multiple case (s) due to WPV or cVDPV, OR b) a positive EV sample for WPV/cVDPV given that i) Two or more separate samples contain WPV/VDPV with genetic sequencing information that indicates sustained local transmission or, ii) a single sample is positive for WPV/cVDPV and follow-up investigation identifies polio compatible cases or WPV/VDPV infected persons. See tables below

Typology	Definition
Outbreak (evidence of transmission)	*Human* Detection of • any **WPV** infected individual(s)[a] (in addition for type 2: "without documented exposure to a type 2 virus in a laboratory or vaccine production facility") OR • any **cVDPV** infected individual(s)[a]
	Environmental Detection of • two or more separate[c] environmental samples positive for **WPV with** genetic sequencing information indicating sustained local transmission OR • a single environmental sample positive for **WPV with** follow-up evidence of virus excretion[b] (in addition for type 2: "no documented exposure in a laboratory or vaccine production facility") OR • any **cVDPV** positive environmental sample(s)

a Infected person can be an AFP case or an asymptomatic/healthy person.

b Evidence of virus excretion is defined by identification during follow-up investigation of WPV or VDPV infected individual(s).

c "separate" means that: samples were collected at more than one distinct environmental surveillance collection site (no overlapping of catchment areas), OR samples were collected from one site, but collection was more than two months apart.

aVDPV: ambiguous vaccine-derived poliovirus; cVDPV: circulating vaccine-derived poliovirus; iVDPV: immunodeficiency-associated vaccine-derived poliovirus.

TABLE 7: Polio outbreak grades and definitions

Grading	Criteria	Definition
Grade 1	Potential for transmission and international spread	Low-to-medium risk of transmission including international spread due to good population immunity and no major vulnerable population cluster
	Strength of country capacity	Strong to moderate country response capacity due to robust health infrastructure and no security threat or access challenges
Grade 2	Potential for transmission and international spread	Low-to-high risk of transmission including international spread
	Strength of country capacity	Strong-to-weak country response capacity
Grade 3	Potential for transmission and international spread	Medium-to-high risk of transmission including international spread due to significant gaps in population immunity, history of multi-country/cross-border propagation and major vulnerable population clusters
	Strength of country capacity	Moderate-to-weak country response capacity due to serious deficiencies in local in-country health infrastructure, high security threats and access challenges, or a complex humanitarian emergency

Regional Guidelines for Diagnosis and Reporting of Vaccine Associated Paralytic Poliomyelitis (VAPP) Cases

Background

Countries in the EMR have relied primarily on OPV for control and eradication of poliomyelitis through routine and supplementary immunization. However, one disadvantage associated with OPV is the rare occurrence of VAPP. The overall risk of VAPP has been estimated at 1 case per 2.5 million doses of OPV distributed in the U.S.A and 1 case per 1.4 million doses administered in England and Wales.

In countries of Central and South America that have conducted mass immunization campaigns with OPV, the estimated overall risk for VAPP was not different from that reported from U.S.A, England, and Wales, and ranged from 1 case per 1.5-2.2 million doses of OPV administered.

The best strategy to prevent VAPP is to eradicate wild poliovirus globally and eventually stop immunization against polio. However, until we reach that goal, cases of VAPP are expected to occur in some countries of the Region. The purpose of this document is to:

- Provide a case definition for VAPP with minimum criteria that must be fulfilled for establishing diagnosis
- Describe issues related to the process of establishing diagnosis and reporting of VAPP cases in EMR.
- Provide background information about VAPP.

Case Definition and Criteria for Diagnosis of VAPP

Recipient VAPP: Any case of AFP with onset of paralysis 4-30 days following receipt of OPV and the presence of neurological sequel compatible with poliomyelitis after 60 days follow up from the date of onset, isolation of vaccine poliovirus (Sabin Like virus) from the stools and negative for wild poliovirus

The following criteria must be fulfilled before a diagnosis of VAPP is established:

1. The paralytic illness should be clinically compatible with poliomyelitis with residual paralysis at 60 days after paralysis onset and there should be no epidemiological links with wild virus confirmed or outbreak associated cases of poliomyelitis.
2. Adequate[12] stool specimens test negative for wild poliovirus in a WHO-accredited laboratory but positive for vaccine-related virus.
3. Other illnesses, which can cause flaccid paralysis, such as Guillain-Barre syndrome (GBS), transverse myelitis, neuritis, tumor, and trauma, have been ruled out.

[12] adequate specimens: 2 stool specimens collected at least 24 hours apart, within 14 days of the onset of paralysis and arriving at the laboratory with adequate volume and in good condition. Good condition = no desiccation, adequate documentation and evidence that the cold chain was maintained.

4. The patient is evaluated by an expert committee, which considers additional information, including exposure history, clinical and virological data, and potential epidemiological links to confirmed poliomyelitis cases. The diagnosis must be established or endorsed by the National Expert Committee for Final Classification of AFP cases.

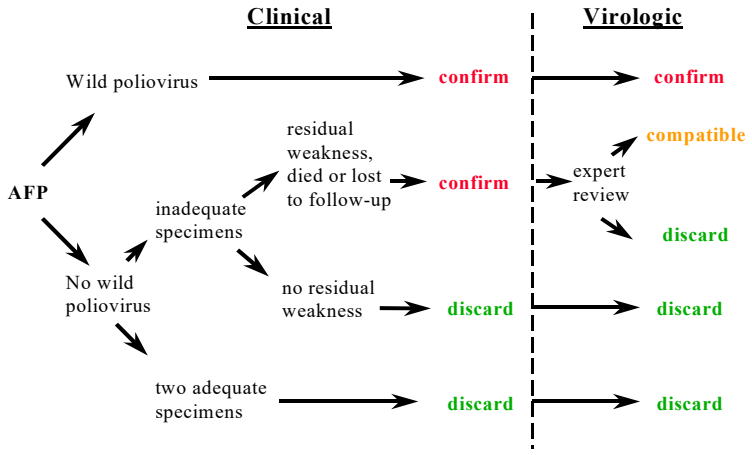
Process of establishing diagnosis of VAPP and reporting cases in EMR

The diagnosis of VAPP must be endorsed by the National Expert Committee for Final Classification of AFP cases. Optimally, the expert committee should include among its members a pediatrician, a neurologist, a virologist, and an epidemiologist or public health professional.

Detailed information related to the case should be made available to the expert committee. This should include an adequate history of exposure to OPV before paralysis onset, clinical findings and course of illness, neurological sequelae, investigations undertaken to rule out other diagnoses, virological findings, and findings of epidemiological investigations.

Reporting a case of VAPP: Since the objective of the polio eradication initiative is to eradicate wild poliovirus, under the WHO AFP Classification System (see Figure), VAPP cases should not be counted as 'confirmed due to wild poliovirus'. For the purpose of standardizing data management and reporting, cases diagnosed as VAPP should be included under the category of 'Discarded Cases'. VAPP should be reported under the final diagnosis of the AFP case.

Classification of AFP Cases



Background information on VAPP

Wild poliovirus and VAPP: Clinically VAPP is indistinguishable from wild virus confirmed poliomyelitis. The priority during evaluation of cases suspected of VAPP is to rule out wild poliovirus as the possible etiologic agent. This is best achieved by testing of adequate stool specimens in WHO accredited laboratories. Moreover, the possibility of an epidemiological link with wild virus confirmed or outbreak-associated cases of polio should be thoroughly investigated.

Incidence of VAPP: A number of studies have described the risk of VAPP in a variety of epidemiological settings. When adjusted for study methodology and system of disease reporting, the estimated risk is remarkably constant in all settings. The table below shows the risk of VAPP reported in various studies in 1: (x) million doses of OPV

Study	1st dose	Recipient	Contact	Overall
Canada	--	1:9.5	1:3.2	--
England	1:0.7	1:2.0	1:4.5	1:1.4
Germany	--	1:4.4	1:15.5	1:3.4
Italy	--	1:8.1	1:4.1	1:2.7
Latin Am	1:1.2	1:3.6	1:5.6	1:2.2
U.S.	1:0.7	1:6.8	1:4.1	1:2.5
WHO		1:5.9	1:6.7	1:3.2

Risk of VAPP by OPV dose number: The risk of VAPP is highest following the first OPV dose and declines sharply with each subsequent dose. The risk following the first dose was estimated at 1 case per 700,000 doses of OPV administered in U.S.A and England and 1 case per 1.2 million doses administered in Central and South America. The risk following subsequent doses declined to 1:6.8 million doses administered in the U.S.A and to 1:3.2 million doses administered in Central and South America.

Contact VAPP and AFP surveillance: Approximately half the cases of VAPP reported from Americas are among contacts of vaccinated children. However, data collected in the AFP surveillance system in the region do not permit an adequate assessment of contact history between a case of AFP and an OPV recipient. Since cases of VAPP among contacts of OPV recipients are likely to be detected as AFP in the surveillance system, the minimum criteria for diagnosis of recipient VAPP also apply to the diagnosis of contact VAPP. However, a case of contact VAPP should have had a known contact with a person that received OPV 7-70 days before onset of paralysis of the patient and the contact between the patient and the vaccinee should have occurred 4-30 days before paralysis onset.

Poliovirus Serotypes and VAPP: Serotype 3 is the most frequently isolated poliovirus from patients with VAPP (60%-90% of cases), whereas serotype 1 poliovirus is rarely isolated from VAPP cases.

Other epidemiological features of VAPP: There are no secondary cases of VAPP and thus there is no clustering of VAPP cases. There is generally no seasonality to the occurrence of cases. The age distribution varies, but recipient VAPP occurs most frequently among infants and young children receiving their first dose of OPV.

VAPP in immuno-deficient persons: The risk of VAPP is greatly increased among persons with conditions associated with immuno-deficiency. However, not all immuno-deficient states appear to be associated with increased risk. For example there is no increased risk among persons with HIV infection whereas the risk appears to be highest in patients with agammaglobulinemia.

Risk of VAPP following NIDs: The risk is mainly determined by the number of children receiving their first OPV dose during the campaign. Since most children have usually already received OPV doses through the routine program and other supplementary mass campaigns, the risk of VAPP from during NIDs is much lower.