

Vaccine-Derived Poliovirus Response in Indonesia

Situation report no.22
13 April – 3 May 2024



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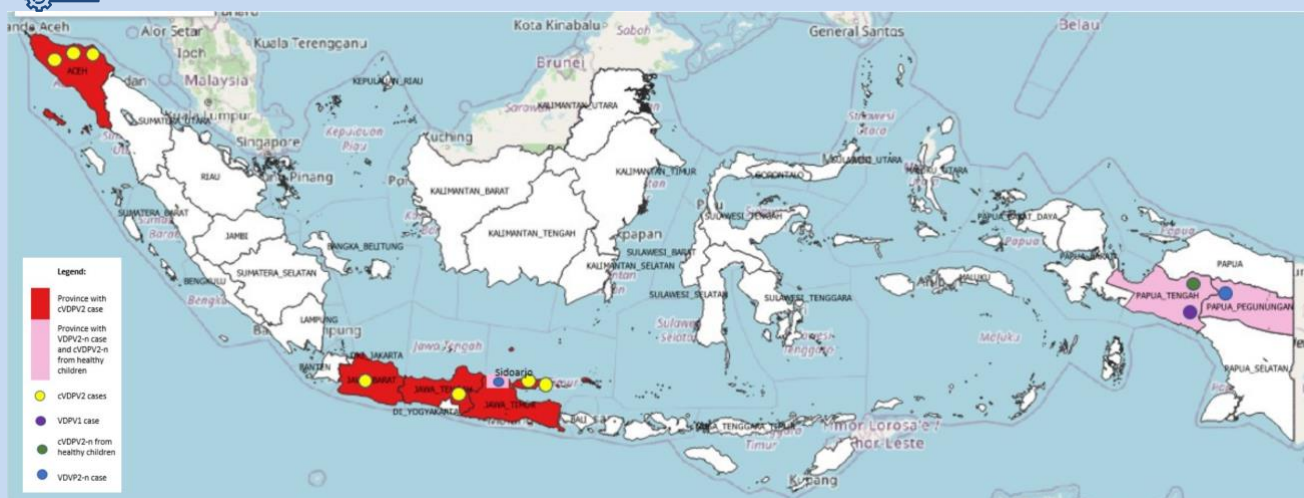


Page directory:

- [Situation update](#)
- [Planning and coordination](#)
- [Surveillance](#)
- [Logistics & vaccine management](#)



Confirmed cases in Indonesia (2022 - 2024) ¹



7 cases of cVDPV2

- **Aceh:**
 - 1 case with paralysis in Pidie
 - 1 case with paralysis in North Aceh
 - 1 case with paralysis in Bireuen
- **West Java:**
 - 1 case with paralysis in Purwakarta
- **Central Java:**
 - 1 case with paralysis in Klaten
- **East Java:**
 - 1 case with paralysis in Pamekasan
 - 1 case with paralysis in Sampang

Outbreak grade: **2**

Outbreak Response:

- East Java and Central Java: All children 0-7 years
- Sleman, Yogyakarta: All children 0-7 years

Outbreak confirmation:

- Total number of AFP cases with cVDPV2: 3
- Total number of healthy children with cVDPV2: 9

Greater Papua

1 case of VDPV1

- 1 case with paralysis in Mimika

8 cases of cVDPV2-n

- 8 healthy children positive in Mimika

4 cases of cVDPV2-n

- 1 case with paralysis in Nduga
- 3 healthy children positive

East Java

1 case of VDPV2-n

- 1 case with paralysis in Sidoarjo

¹ cVDPV2: Circulating Vaccine-Derived Poliovirus type 2.
cVDPV2-n: Circulating Vaccine-Derived Poliovirus type 2 from nOPV2 vaccine.
VDPV2-n: Vaccine-Derived Poliovirus type 2 from nOPV2 vaccine.
VDPV1: Vaccine-Derived Poliovirus type 1.

Outbreak response cVDPV2-n and VDPV2-n

Mimika and Nduga, Central Papua and Sidoarjo, East Java

Coordination and planning

The Ministry of Health (MOH) is coordinating and leading the national immunization day (NID) in Greater Papua, with WHO, UNICEF and other partners. A preparation meeting for outbreaks response and distribution of funds were conducted. Key MOH stakeholders from directorate of immunization management, the directorate of pharmaceutical and medical devices, and the planning and financial bureau of the ministry of health CHAI, UNDP and Biofarma were involved for a comprehensive outbreak response.



Polio NID implementation coordination and preparation meeting in Teluk Bintuni. Credit: Firman/UNICEF

Surveillance

Epidemiological investigations of a VDPV2-n case were completed, with findings submitted to MOH and WHO headquarters to determine outbreak response plan. A survey was collected from 200 houses and identified vaccination gaps among children and an AFP case. A coordination meeting with several city DHOs focused on AFP surveillance and hospital record reviews in priority hospitals. In Greater Papua, WHO led advocacy efforts with Raja Ampat General Hospital to strengthen AFP surveillance, involving key staff to ensure comprehensive case identification and reporting.

Key issues

- **Coordination:** challenges persist due to unreported incidents of AFP and other VPD surveillance from puskesmas.
- **Transportation and communication:** limited infrastructure greatly affect the coordination and preparation for implementing NID in Greater Papua.
- **Local commitment:** Four out of six provinces in Papua Island have recently been established. High readiness and commitment are crucial in addressing the outbreak response.
- **AFP surveillance:** a need to improve understanding of AFP surveillance among health workers within hospital settings in Sidoarjo.

Next steps

- MOH is conducting advocacy to organize Polio NID preparedness and implementation
- DHO, hospitals, and puskesmas are improving their cooperation and coordination to strengthen AFP surveillance performance
- MOH and partners are conducting advocacy to secure local government commitments.
- A coordination meeting is scheduled with the highest priority hospitals in Sidoarjo regarding AFP surveillance on 8 May 2024.

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Situation Update

- The non-polio acute flaccid paralysis (NPAFP) rate – an indication for polio occurrence – should be above 3/100 000 population under 15 years of age during an outbreak. The NPAFP rate indicates high surveillance sensitivity and reduced risk of missing polio transmission. Indonesia achieved a NPAFP rate of 6.42/100 000 in 2023. In 2024, MOH set targets for finding and reporting AFP cases, which are mandatory for targeted provinces. The following table shows progress made for targeted provinces experiencing outbreaks and event response in Q2 2024.

Province	Target for AFP Case Finding 2024	Q2 Target for AFP Case Finding (2024)	AFP Case Reported	Annual NPAFP rate per 100 000 population under 15 years old (target ≥ 3)
Central Java	488	244	156	3.50
DIY	54	27	13	2.64
East Java	530	265	174	2.84
Central Papua	22	11	5	1.30
Highland Papua	26	13	1	0.00
South Papua	14	7	3	1.26
Papua	22	11	3	1.79
West Papua	16	8	6	0.82
Southwest Papua	16	8	0	0.00
Indonesia	4 448	2 224	781	2.38



NP-AFP rate achieved



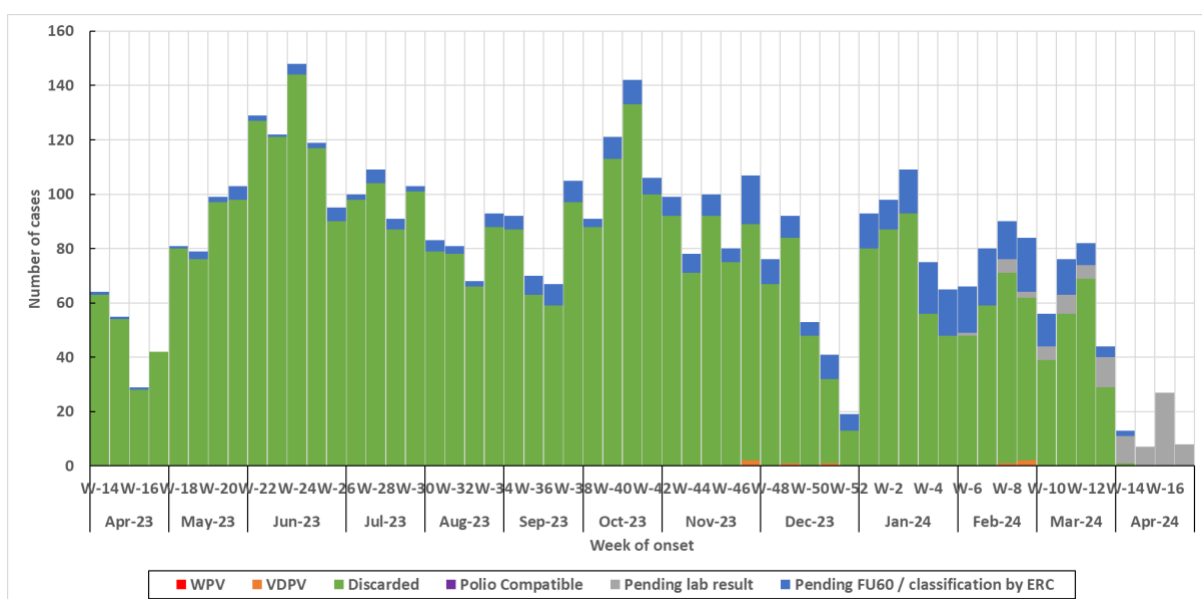
Major challenges



Challenges remains

- On 16 April 2024, the MOH issued the International Health Regulations (IHR) (2005) notification on the detection of a VDPV2-n isolate of a six-year-old boy presented with acute flaccid paralysis (AFP) in Sidoarjo, East Java. Based on the results of consultation with the national expert committee on VPD surveillance, it was concluded that the paralysis of the case was not related to the results of the polio lab examination. The notification was shared with the WHO Southeast Asia Regional Office (SEARO) and further with Global Polio Eradication Initiative (GPEI).
- On 29 April 2024, MOH conducted meeting online as a first step for advocating stakeholders and training health workers from districts in Greater Papua. The advocacy meetings aim to secure commitment and improve awareness among local officials and relevant stakeholders to support the national immunization days (NID) for polio. As for the orientation, the objective is to equip health workers with the necessary knowledge and skills to carry out polio outbreak response immunization effectively.
- The NID for cVDPV2 outbreak has concluded in East Java, Central Java, and Sleman, DI Yogyakarta. MOH encouraged the provincial health office (PHO) and local authorities to maintain AFP surveillance and routine immunization.
- As a follow-up response to VDPV1 case in Central Papua, the Mimika DHO attempted to bolster routine immunization through catch-up immunization training and desk reviews. Now, efforts are concentrated to implement a catch-up immunization strategy and strengthen AFP surveillance.

- The case detection for this month compared to previous months has seen a significant decrease, this decline is evident from the data depicted in Figure 1. Despite setting a target of 781 cases for case detection in the second quarter of 2024, this objective remains unmet thus far. To tackle this issue, several strategies are being implemented. These strategies encompass conducting thorough desk checks, offering constructive feedback to health facility administrators to ensure they engage in proactive reporting, and encouraging active participation from the community in reporting cases of AFP. MOH, PHO, and DHO are all actively engaged in monitoring and enhancing detection efforts.



WPV: Wild Poliovirus; VDPV: Vaccine-Derived Poliovirus;

Discarded:

- Cases adequately investigated with no laboratory evidence of WPV or VDPV infection, OR
- Cases with inadequate specimens resolved within 60 days of paralysis onset or deemed not compatible with poliomyelitis by the national ERC.

Compatible: A suspected case lacking adequate specimens with no WPV or VDPV isolation in stool, with residual paralysis after 60 days, deemed compatible with poliomyelitis by the national ERC.

Pending Lab Result: A suspected case with collected specimens awaiting lab results.

Pending FU60: A suspected case with inadequate specimens awaiting a follow-up visit 60 days after paralysis onset.

Pending Classification by ERC: A suspected case with inadequate stool samples, residual paralysis, lost to follow-up, or deceased, requiring ERC classification.

Figure 11. Final classification of AFP cases in Indonesia over the last 12 months, data as of 02 May 2024

Outbreak response cVDPV2-n and VDPV2-n

Planning and coordination

NATIONAL SUPPORT		
Date	Place	Activity
17 April 2024	MOH	MOH's supplementary and special immunization team convened a coordination meeting with WHO and UNICEF to prepare for a NID in Greater Papua. This included discussions on preparing for outbreaks response plan and ensuring a robust response. UNICEF has committed to allocate funds for advocacy efforts in Jayapura. Similarly, WHO has pledged support for both advocacy and orientation sessions in Sorong and Jayapura.
21-22 April 2024		MOH held a coordination meeting with key stakeholders from directors from directorate of immunization management, the directorate of pharmaceutical and medical devices, and the planning and financial bureau of the ministry of health and representatives of

		WHO, UNICEF, CHAI, UNDP, and Biofarma, to develop a comprehensive outbreak response plan. Key actions agreed upon include conducting polio NID excluding certain regions; preparing a national logistic plan, risk assessment, and vaccine request form; revising the NID timeline; assessing the availability of nOPV2 vaccine stock; and facilitating direct processing of bank accounts by the finance secretariat.
29 April 2024		MOH disseminated information regarding the Polio NID implementation plan to various stakeholders including local government health, education, and religious affairs offices at provincial and district level; family welfare empowerment officers; and representatives of WHO, UNICEF, CHAI, and UNDP. The plan entails implementing NID with the nOPV2 and bOPV vaccines, targeting all children aged 0–7 years. Health offices and puskesmas have begun microplanning activities, which includes advocating efforts with local governments, implementing awareness-raising activities, continuing coordination among stakeholders, and identifying the resources required to support NID implementation.
EAST JAVA		
Date	Place	Activity
18 April 2024	Sidoarjo, East Java	WHO, East Java PHO, and Sidoarjo DHO conducted a coordination meeting regarding the VDPV2-n response. The response will include epidemiological investigation, specimen collection in 20 healthy children, contact specimen collection in three children, and door-to-door surveys. Strengthening AFP surveillance and routine immunization were emphasized. Case investigation should be conducted within 24 hours of reports.
GREATER PAPUA		
Date	Place	Activity
18 April 2024	Nabire, Central Papua	In response to the outbreak, WHO and PHO organized an advocacy meeting with the governor of Central Papua to officially declare a polio outbreak and establish a multisectoral team. The team consists of representatives of local offices: the Ministry of Religious Affairs office, regional disaster management agency, department of communication and informatics, department of population and family planning control, department of education, agency for community empowerment and village development, and church association. These are essential to ensure smooth implementation for polio NID.
25–26 April 2024	Nabire and Mimika, Central Papua Sarmi, Papua	UNICEF and the provincial immunization coordination team (<i>Tim Papua Juara</i>) contributed technical expertise to polio NID microplanning and implementation plan development in 18 puskesmas in Nabire, 18 in Mimika, and two in Sarmi. In this activity, WHO and UNICEF conducted microplanning workshops with these puskesmas.
24 April 2024	Teluk Bintuni, West Papua	UNICEF assisted Teluk Bintuni DHO in developing their microplan and strengthening multisectoral collaboration to prepare the polio NID implementation. The DHO expressed willingness to provide funding support for the NID, once the declaration letter of polio outbreak is issued by the regent.
24 April 2024		UNICEF and the district offices of health and education met to coordinate polio NID implementation. The education office pledged to promote and support NID, including collection of student data.

30 April 2024	Manokwari, West Papua	WHO and DHO prepared NID targets at each immunization post at Puskesmas level. In addition, DHO will communicate with the education office about targets in each school. The student data would be used by Puskesmas in developing accurate microplans and vaccine management to avoid high vaccine waste rate.
2 May 2024	West Papua PHO	WHO coordinated with the head of immunization and surveillance in West Papua PHO concerning preparation of polio NID and AFP surveillance in silent districts. As a result, PHO will conduct capacity building of vaccine-preventable diseases (VPD) surveillance and NID for seven districts ² in May 2024.
3 May 2024	Southwest PHO	WHO held a coordination meeting with the surveillance and immunization manager of Southwest Papua PHO to discuss polio NID preparation. The manager promised to follow up with the planning unit on the funding allocation for outbreak response. In addition, on 14–16 May 2024, PHO will convene an inaugural virtual meeting with all DHOs and Puskesmas to prepare data for microplanning.



Figure 2. Polio NID coordination and preparation in Nabire (left) and Papua PHO (right). Credit: Okta/Papua PHO and Kornelius/WHO

Surveillance

EAST JAVA		
Date	Place	Activity
17 April 2024	Sidoarjo	East Java PHO and WHO organized an orientation session on close contact and specimen collection from healthy children. Midwives and DHO and Puskesmas surveillance officers attended this session. Following the orientation, Sidoarjo DHO and all Puskesmas conducted further investigation by collecting samples from 20 healthy children and three close contacts, which were sent to Surabaya Public Health Laboratory (BBLKM) for analysis on 19–20 April 2024.
17 April 2024		WHO, East Java PHO, and a Sidoarjo Puskesmas have completed the detailed epidemiological investigation of VDPV2-n case. The finding has been submitted to MOH and WHO headquarters to discuss the need for additional response activity. With laboratory results of specimens of healthy individuals and case contacts pending, WHO and MOH recommends routine immunization strengthening and catch-up immunization, particularly with bOPV and IPV.
18 April 2024		WHO, Sidoarjo Puskesmas, Sidoarjo DHO, and East Java PHO conducted a survey of 200 houses. Of the 149 children under five surveyed, 24 had not received bOPV, and 51 had not received IPV. The survey revealed that potential side effects and children's illnesses

² Manokwari, Manokwari Selatan, Pegunungan Arfak, Kaimana, Fakfak, Teluk Wondama, and Teluk Bintuni

		during the vaccination period have an impact on whether parents want to take their children to be immunized. All households reported no practice of open defecation. The survey identified one case of AFP in a 4-year-old child, currently treated at Sidoarjo General Hospital. In response, Sidoarjo DHO has coordinated with the hospital and Tanggulangin Puskesmas for further investigation.
24 and 25 April, 2 May 2024	Gresik, Trenggalek, Kediri, Blitar	WHO, East Java PHO, and the DHOs of Gresik, Trenggalek, Kota Kediri, and Blitar attended a coordination meeting and discussed AFP surveillance strengthening and monthly hospital record reviews (HRR) in major hospitals: Semen Gresik Hospital, Ibnu Sina Hospital, Soedomo hospital, Gambiran hospital, and Ngudi Waluyo Hospital.
CENTRAL JAVA		
Date	Place	Activity
17 April 2024	Central Java PHO	The Central Java PHO held a meeting to assess the immunization program with all Health Offices, including validation of immunization coverage data. The latest data must be submitted to the Provincial Health Service by April 22, 2024. In addition to the assessment, the Health Service is required to collect all documentation regarding the polio response, which includes planning, immunization strategies, increased surveillance efforts, advocacy, communication, and vaccine management. This document, along with all implementation steps, will be evaluated after six months from the discovery of the last polio case. The primary objective is to assess the effectiveness and impact of outbreak response strategies including determine of strengths and weaknesses of the measures implemented, identify areas for improvement, and ultimately increase the capacity to respond quickly and effectively to future polio outbreaks.
GREATER PAPUA		
Date	Place	Activity
2 May 2024	Raja Ampat	WHO organized an advocacy meeting with the director of Raja Ampat General Hospital to help improve the capacity of the hospital's surveillance team. Key personnel also attended this meeting, such as paediatricians, medical record officers, laboratory officers, paediatric ward focal point, and paediatric out-patient focal point. The advocacy focused on identifying AFP cases at hospital during outbreak response. As a result, the hospital will assign surveillance officers to different units and DHO surveillance officers will conduct weekly visits to the hospital.



Figure 3. HRR at Ngudi Waluyo Hospital, Blitar and AFP surveillance orientation (left). Credit: Martina/WHO (left) and Socialization about AFP surveillance and HRR at Sidoarjo Puskesmas in Sidoarjo District, East Java (right)

Logistic and vaccine management

The logistics report detailing vaccine usage during SIA in East Java, Central Java, and Sleman, DI Yogyakarta is nearing completion, with provincial authorities notified of its finalization in May 2024. Learning from the response to the VDPV1 case, UNICEF has been actively monitoring vaccine storage and availability using the effective vaccine management (EVM) assessment and the cold chain equipment inventory gap analysis tool (CIGAT) to guarantee high-quality immunization services. Collaborating with the local immunization team, UNICEF supported targeted evaluations in Nabire, Mimika, and Sarmi districts, vaccination warehouses and three puskesmas, which is being analysed. The comprehensive assessment will extend to more five districts: Yapen, Asmat, Biak, Bovendigul, and Mappi, and is scheduled to wrap up in May 2024. The assessment results are still being analyzed, and the assessment outcomes are under review. The strategy plan based on the assessment results will be developed once the scores are released.

Key Issues

- Coordination issues: challenges persist in investigating additional AFP cases due to unreported incidents from puskesmas.
- Limited transportation and lack of communication infrastructure: the coordination and preparation for implementing NID in Papua becomes ineffective, as most areas are difficult to access.
- Commitment and strong political will from local government: four of six provinces in Papua are newly established, requiring a strong commitment to respond the polio outbreak.
- Lack of understanding of AFP surveillance: a need to improve understanding of AFP surveillance among health workers within hospital settings in Sidoarjo.

Next Steps

- MOH is actively coordinating and promoting awareness, which must be supported and followed up by local governments in preparation for the NID.
- DHO, hospitals, and puskesmas are encouraged to improve their cooperation and coordination for future investigations and the AFP case reporting as part of AFP surveillance strengthening.
- MOH and partners are continuing to conduct advocacy activities to secure local government's commitment, i.e. health, education, and others, for polio outbreak response. The advocacy meeting which inviting key persons and all stakeholders from all districts in Greater Papua will be implemented on 13 May 2024.
- A coordination meeting is scheduled with the highest priority hospitals in Sidoarjo regarding AFP surveillance on 8 May 2024.

Surge Support

MOH

- **Coordinated** partners: WHO and UNICEF to plan NID implementation in Greater Papua and simultaneously, seek assistance to handle any outbreaks.
- **Planned and advocated** distribute funding support and conduct raise awareness activities in priority locations with WHO and UNICEF. In doing so, outbreak response and NID implementation plan were made and now is on the preparation phase for administration and logistics.
- **Organized stakeholder engagement** meetings with various ministries and partners to plan, update deadlines, assess vaccine availability, and optimize financial processes.
- **Disseminated NID plan** to local health, education, and religious affairs offices at provincial and district

level, as well as family welfare programmes, and international organisations, ensuring key stakeholders are well-informed and actively engaged in supporting the NID implementation.

WHO

- **Supported epidemiological investigation and surveillance response** with PHOs, DHOs, and healthcare facilities to enhance case detection of VDPV2-n and AFP. This includes orientation sessions on specimen collection and house-to-house surveys to detect potential outbreak.
- **Conducted capacity building activities** with Raja Ampat Hospital to improve AFP surveillance for hospital staff. Following up the session, recommendations were issued to strengthen AFP surveillance.
- **Coordinated advocacy meetings** with PHOs, DHOs, and healthcare facilities to enhance AFP surveillance and introduce hospital record review procedures, which include reporting and monitoring cases.

UNICEF

- **Provided technical assistance** to local immunisation coordination team (Tim Imunisasi Papua Juara) in priority districts: Nabire, Mimika, and Sarmi, with microplanning and polio NID implementation plan, by conducting training and providing resources to healthcare facilities.
- **Assisted** Teluk Bintuni DHO in preparation for polio NID by promoting multisectoral collaboration and microplanning development, collaborating with district offices from other sectors to ensure readiness for NID implementation
- **Advocated** with district health, education, and other offices to raise awareness for polio NID implementation

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