

# POLIO STOP

Quarterly Newsletter of the Nigeria National PolioPlus Committee



National PolioPlus Committee: PDG Joshua Hassan - Chairman, PDG Yomi Adewunmi - Vice Chairman, PDG Charles Femi Lawani - Vice Chairman, PDG Kazeem Mustapha - Vice Chairman, PAG Yakubu Ndanusa - Vice Chairman, PDG Obafunso Ogunkeye - Secretary, PDG Remi Bello - Treasurer, PDG Tolu Omatsola-Member, PDG Ijeoma Okoro- Member, PRIVP Yinka Babalola - Adviser, PDG Tunji Funsho-Adviser, PRIP Jon.B.Majiyagbe-Patron

#### **CHAIRMAN'S REMARK**



#### A legacy worth leaving

The Bob Keegan Polio Eradication Heroes Fund was created to recognize health workers and volunteers who incur serious injury or lost their lives as a direct consequence of their participation in polio eradication activities. The families of the workers, who have been the victims of automobile crashes. military conflicts and other life-threatening events, receive a certificate recognizing the victim's heroic commitment to polio eradication and a cash tribute. The fund and the Award was established in June 2000 by the US CDC, Rotary International, WHO, UNICEF and later the Gates Foundation who are the major Global Polio Eradication Initiative (GPEI) partners.

The award was named after Robert "Bob" Keegan who was the first contributor to the fund when he donated the money he received after being recognized with CDC's distinguished William C. Watson Jr. Medal of Excellence. Bob Keegan was someone who walked his talk by not only advocating for this fund to be made available for persons who lost their lives or suffered serious injury while on polio eradication duties but also donated and helped to raise money for the fund. After he retired from the CDC in 2007, he rode a bike from Oregon to Virginia in the U.S. completing a journey of 4,165 miles - to raise awareness and dollars for the polio eradication initiatives of the CDC Foundation and Rotary International. It was only apt that when he died in January 2012 after a long illness, the fund be renamed in his honour. What an outstanding legacy!

Bob Keegan's life should serve as motivation for all of us, especially those of us in the Rotary Family to strive to make meaningful contributions to the eradication of polio. Our contributions of time, talent, treasures and thought are still in high demand within the Polio Eradication Initiative. Rather than tire and lose courage, we must remember the sacrifices of those we have lost in this fight and the contributions of people like Bob Keegan. We only have to do this for just a little while longer until we rid the world completely of polio. And that-to me, is a legacy worth leaving.

It's always sad when people die but often we find that the pain of loss is made easier to bear when they have left a good legacy behind. In the course of the effort to eradicate polio from the world, we have had to say goodbye to many of our friends from all across the world. Some were lost in very unfortunate circumstances like the tragic incident that took place in Alimosho LGA of Lagos State in January 2023 during the outbreak response vaccination activity in that LGA. On behalf of Rotary International, I led a team to visit the families of the persons affected by that tragedy in February to commiserate with them and share with them our sincere regrets for their loss. We also gave a token gift to help the families assuage the hardship brought upon them by the unfortunate events.

Recently too, the Federal Government through the NPHCDA and the Global Polio Eradication Initiative partners presented support to these families and special recognition awards called the Bob Keegan Polio Heroes Award which recognizes their sacrifices and makes a small cash donation to their families. These awards will never replace what they have lost but they will serve as a tribute to the departed and a testament to the legacy of being part of making the world polio-free when that eventually happens. That is a good legacy and something worth leaving behind which takes me to the origin of the awards and the man after whom they were named.

#### FROM EDITOR'S DESK



#### For those we lost

One of the first things I learned when I joined the Polio Eradication Initiative (PEI) was how important the people who work on this program are to us. To get to the point where we have a realistic prospect of a world that is free of poliomyelitis we have had to rely on the efforts of millions of individuals who have helped to convey the vaccines into our communities and our homes for very little compensation. We are heavily dependent on our volunteers and ad hoc staff to help us achieve programme success. They are the real heroes of this fight against polio. I was told then and it remains true today that their safety is of the highest importance to us in this programme and as such every programme manager has to ensure that their lives and limbs were not to come to any unnecessary harm. It is understood by everyone in the programme that our workers at every level were not to be put in unnecessary danger under any circumstances and we all must ensure that no one comes to any harm.

In spite of this, danger on the frontlines of polio eradication remains very real. As much as we try to avoid it, what we do is often really dangerous work. Danger is indeed an ever present part of the work we do and many have made sacrifices and even paid the ultimate price to ensure that we are able to take these lifesaving vaccines across different terrains to really difficult places and ensure that no child is missed by these vaccines. This edition of PolioStop recognizes and celebrates their sacrifice.

The latest iteration of this sacrifice within our programme came during the last outbreak response (OBR) activity to the circulating vaccine derived poliovirus in communities of southwest Nigeria and the analogous states of Kogi, Kwara and Edo. Some of our people were

taken away from us under tragic circumstances in Lagos and Oyo State while others were injured. It was painful and it was tough to accept but in our usual Rotary manner we stood up to be counted and supported the affected persons and their families as much as we could. Rotary never abandons her own. We are grateful for the sacrifice of these people and the eventual eradication of poliomyelitis from our world will be their legacy.

In spite of these unfortunate and sad events, we recorded some of the best campaign performances during the outbreak response as shown by the Lot Quality Assurance Sampling (LQAS) surveys conducted after the OBR. We must commend the efforts of the state and local government teams who ensured that morale was not lost and that teams continued to give their best performances in spite of these sad and unfortunate events.

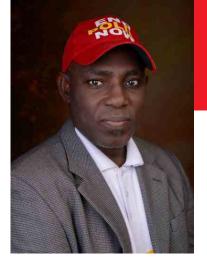
Our programme's success is dependent on strong routine immunization, excellent disease surveillance and quality supplemental immunization activities and mop up. Too many people have given us their resources, time and talents and too many people have sacrificed lives and limbs to get us to the edge of a truly historic achievement. We cannot afford to fail them,

We must continue to ensure that our campaigns are of the highest standards even as we continue to strengthen and improve the performance of our routine immunization services. That is the only way we can keep polio and other vaccine preventable diseases from afflicting our children. It is the only way we are going to eradicate polio from our world and give the ultimate tribute to everyone who has suffered or has been lost in our quest. We owe them that much.

Rtn Olugbenga Olayiwole Editor PolioStop







## Nigeria Polio Update and the Remaining Challenges

Nigeria has remained free of indigenous wild polio virus (WPV), a feat that has led to WPV certification of the African region in August 2020. In 2016, the last WPV was isolated from an insecure area in Kumaila Ward of Monguno LGA in Borno State.

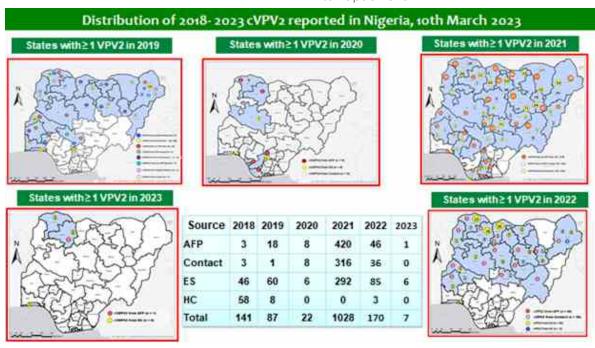
The historical record of the number of circulating variant poliovirus type 2 (cVPV2) isolates in Nigeria in 2019, 2020 and 2021 were 18, 7 and 1028 respectively. The number of states involved in the 2021 cVPV2 outbreaks was 31. The explosion of cVPV2 experienced in Nigeria 2021 subsided in 2022 with fewer cases detected. In 2022, the country recorded 162 cVPV2 cases from 58 LGAs across 17 states representing an 85 per cent decrease in the intensity of the outbreak. The viruses were recorded in Acute Flaccid Paralysis (AFP) cases, contacts to cases, environmental samples and healthy children as 42, 34, 83 and 3 respectively. There were 8 cVPV2 lineages in 2021 but only 2 recorded in 2022. This shows that we are making some progress. The Nigeria surveillance has since then reported a total of 7 cVPV2 cases from 4 LGA across 3 states from 1291 AFPs detected across the country.

The Nigerian programme has succeeded in responding to cVPV2 outbreaks from 2022 to date. All the 36 states and FCT have completed at least four outbreak responses using the nOPV2. Four states had 8 outbreak responses with nOPV2, seven states had 7 outbreak responses with nOPV2, thirteen states had 6 outbreak responses with nOPV2, and four states had 5 outbreak responses with nOPV2 while nine states had 4 outbreak responses with nOPV2.

The major programme challenges remain the waning political support due to distractions of the 2023 general elections and general insecurity across the country such as the Boko Haram insurgency in the northeast, kidnapping and armed banditry in the northwest and the south as well as armed robbery and the IPOB unrest in the east.

The way forward as recommended by the Expert Review Committee (ERC) is for the government and partners to continue funding support for in-between- round activities, including partnership with and engagement of security forces to reach security-compromised areas across the country as well as improving government oversight of PEI activities especially in the timely release of funds, providing leadership through the states' taskforces on immunization and applying accountability through rewards and sanctions.

All partners and stakeholders are being called to action to sustain the gains made in polio eradication and to ensure the scaling up of the implementation of innovations to improve SIA quality given the impact of cVPV2 over the last few years, there should be limited room for complacency to reach the finish line for the interruption of cVPV2.





### SUSTAINING PEI THROUGH RI IN **BORNO STATE**

Borno State remains the last epicentre of the wild poliovirus (WPV) in Nigeria with the last case in Monguno in August 2016. Since that time however, the state has remained wild poliovirus free and has managed to remain so by implementing many strategies to ensure that every child is vaccinated. These strategies include Supplemental Immunization Activities (SIA), Reaching Every Settlement (RES) with support of Civilian Joint Task Force (CJTF), Reaching Inaccessible Settlements (RIC) supported by the military, and Community Informants in inaccessible Areas (CIIA) who are mainly for disease surveillance but are opportune to go into inaccessible communities with polio vaccine and vaccinate children. Other strategies include vaccination in Internally Displaced Persons (IDP) camps, market vaccination, nomadic vaccination and transit vaccination. These strategies have continued over time after the certification of Africa as polio-free in August, 2020, tracking both the accessible, partially accessible and inaccessible settlements.

With the ramp down of Polio Eradication Initiative (PEI) activities in 2021, and relocation of IDPs in their ancestral homes in 2022, some of the strategies and their frequencies were reduced.

The State through the EOC continues to strengthen Routine Immunization (RI) in order to sustain the gains that have been made against polio in the state. With funding from the tripartite Memorandum of Understanding (MoU) with the Bill and Melinda Gates Foundation, Dangote Foundation and UNICEF as well as other human and material support from Polio Eradication Initiative (PEI) partners, the State continues to explore the strategy of avoiding "missed opportunities" by ensuring that children born at all health facilities are immunized immediately with OPV, BCG and Hepatitis vaccines.

As the trapped communities in security compromised areas begin to open up, Borno State Primary Health Care Development Agency (BOSPHCDA) is deploying various routine immunization (RI) interventions based on the classification of the accessibility of these settlements into accessible, partially accessible and inaccessible settlements in order to improve immunization coverage



Almai Some Field Coordinator, Borno State

The RI expansion intervention was introduced to reach and administer RI antigens to eligible children across partially accessible settlements with support of CJTF and recently, the intervention was expanded to provide additional primary healthcare services such as antenatal care, malaria, nutrition, family planning and integrated management of childhood illnesses (IMCI). The state implemented 2 rounds of this RI expansion intervention in 2022 (May and July) with lessons learnt from the previous implementation to guide the rounds planned for 2023 across the 16 LGAs, 689 settlements have been proposed for the implementation.

RI Intensification was introduced to address the high number of zero-dose (ZD) children with an estimated 2.2 million ZD children and 3.1m children with no measles vaccines in 2021 in Nigeria representing the second-highest number zero-dose children globally. Borno State has 8 LGAs with a high number of zerodose children.

The rising cases of cVPV2, Diphtheria, and measles outbreaks across some LGAs are additional factors that led to the intensification the RI intervention. The phase I intervention was conducted in 13 LGAs in February, 2023 with the second round being proposed for a date in April 2023.

The BOSPHCDA with her partners have continued to intensify supportive supervision of health Facilities offering RI (both fixed post and outreach sessions). For collaborative effort, joint supervisions are carried out and this has helped to increase the routine immunization coverage and also helped to improve the capacity of the RI providers.

There are however gaps in certain areas that continue to require the support of the PEI partners including in the provision of more vaccine carriers, megaphones and in improving the consistency in the dates of campaigns to get the attention of care-givers.



Rotary International President insists Rotarians have to finish the job of eradicating polio



Rotary International President Jennifer Jones warned Rotarians against polio fatigue by insisting that the world has never been closer to winning the battle against the disease.

Speaking at an End Polio Now event at the UK House of Commons, she said she was mindful how Rotarians have heard over many years how close the world was the seizing victory.

"We get fatigued sometimes and people wonder, when it's going to happen" she said.

"But the reason for nights like tonight is to let you know that we are within reach and we have to have the confidence that we are going to do this and keep our promise to the children of the world."

We have never worked so hard to find the virus. We are aggressively going after that virus wherever it is. We are most definitely on track for the goals that we set ourselves in the strategy."

Speaking in one of the committee rooms at the Palace of Westminster, in front of an invited gathering of Rotarians, the RI President spoke movingly about her visit to Pakistan last year, watching vaccinators move from house to house in some of the most challenging slums in oppressive heat to carry out polio vaccinations of young children.

"I visited Karachi and Islamabad with one very simple purpose and that was to offer words of gratitude to these women, the vaccinators, who put themselves in harm's way every day. These women told me they believe they are on the frontline of this war."

"I am enormously proud of the work these women are doing to ensure every child remains polio-free."

She admitted that funding the Global Polio Eradication Initiative to complete the task remains a challenge. There is a gap of \$2.2 billion in order to immunize 400 million children over the next three years.





But the reward of delivering on the promise and creating the legacy of a public health infrastructure are enormous, she said.

Aidan O'Leary, the World Health Organization's Director for Polio Eradication, described 2023 as "an absolutely critical year".

Pointing out how there have been no polio outbreaks in Afghanistan or Pakistan since September last year - the only two places where the wild poliovirus is endemic - the Irishman admitted: "That comes against a backdrop where we have never looked so hard to find the virus."

He said that in both countries, despite political and security difficulties, he believed that they were winning the fight.

Though he cautioned, with federal and provincial elections looming in Pakistan, alongside dealing with the Taliban regime in Afghanistan, there remain many hurdles. "Our challenge continues to be to improve quality in each successive round of immunization activity."

"As we speak today, there is a campaign targeting more than nine million children across Afghanistan. That's not withstanding the huge challenges that exist in the country as a whole, but we continue to find a way to operate."



The WHO chief outlined challenges they were facing to fight polio in parts of Nigeria, Somalia, the Democratic Republic of Congo and Yemen, notably in northern Yemen, where the authorities have not allowed immunization campaigns to go ahead.

He added: "Given the environments we are operating in, we're going to have to continue to exercise no complacency in what we are facing.

"We would like to thank the UK and Rotary for all your support - whether it is advocacy or financial, that commitment has been outstanding.'

"And in 2023, it is important that we see it through."

At the meeting, Andrew Mitchell MP, Minister of State (Development & Africa) announced he will be taking on the role of gender champion for the Global Polio Eradication Initiative and pledging the Government's continued support for the campaign.

He pointed out how the British Government has supported the initiative to the tune of £1.4 billion. "As long as polio is anywhere, it is a threat everywhere," he said.

"They do say the last mile of any marathon is always the hardest, and the UK will continue to support the campaign in global forums."

And speaking about his new role, the Minister said: "The Global Polio Eradication Initiative has the capacity to empower women and girls. Women are critical in the fight against polio."

-Dave King for Rotarygbi.org







Presentation of polio souvenirs to UNICEF Country Representative Miss Cristian Munduate by NNPPC Chairman PDG Joshua Hassan



Group photograph of NNPPC team and UNICEF officials during an advocacy in Abuja



Vice Chairman (Abuja) PDG Kazeem Mustapha in blue Attire, during the 39th Expert Review Committee meeting (ERC).



Past District Governor Kazeem Mustapha addressing partners at the 39th meeting of the Expert Review Committee (ERC) on Polio eradication & Routine immunization in Nigeria, in Abuja.



PAG Alh. Ndanusa Yakubu representing Rotary International at the First Quarterly Review Meeting of the Northern Traditional Leaders Committee (NTLC) in Abuja.



NNPPC meeting with WHO Representatives in Abuja







Group photograph of RID9110 team with the Rotary International delegates for Peace Activator Trainees



Presentation of Poliostop magazines by DG Omotunde Lawson to RI delegates for Peace Activator Trainees



flagged Off at Oregun Primary Health Center by Dr Ore Finnih Senior Specialist Assistant to the Lagos State Governor.



PAG ALH Ndanusa Yakubu and NPHCDA Executive Director Dr Faisal Shuaib OON



Ogun State Honorable Commissioner of Health Dr Tomi Coker flagged off the polio outbreak response at Ikenne Primary Health Center, Ikenne Local Government Area of the state.



Polio Outbreak Response (OBR2) Flag Off at Palm Avenue Primary Health Center Mushin LGA, Lagos state.







Dr. Faisal Shuaib ED/CEO NPHCDA

#### FG targets 2023 to reduce vaccinederived poliovirus to Zero in Nigeria

campaign, no child should be missed and that is exactly what you did and we got rid of WPV. The cVDPV2 is no different and that is the level of commitment that is required for us to finish the job."

The Minister of Health, Dr Osagie Ehanire said the incoming administration needs to invest in primary health care.

Dr Ehanire said "We know that the poor health indices in maternal and child mortality and morbidity are generated largely in rural areas with no access to any form of healthcare. We need to do more in terms of advocacy to the coming administration and philanthropists to invest in primary healthcare and for traditional leaders to demand their own standard primary healthcare centers, one per political ward, from state and local governments or politicians running for office.



Dr. Osagie Ehanire Honourable Minister for Health

Routine immunisation is a standard service at PHCs and it is free, safe, effective, and available across the country. Parents and caregivers need to be mobilised to ensure that children receive the vaccines according to the Nigerian routine immunization schedule. On his part, the Sultan of Sokoto, His Emminence Sa'ad Abubakar pledged to continue mobilising every household to demand PHC services, especially vaccines for the children. The Sultan who was represented by the Emir of Argungu, Sumail'a Mera said the review meetings provide opportunities to discuss scheduled activities for the period and beyond.

"We will also access progress made, and challenges faced, share good practices, and exchange new ideas. It is also an avenue to learn about new programmes and initiatives of our government for the overall development and well-being of our people. We are therefore always happy to attend and contribute our best to the discussions.

"We assure you that we will continue to do our best to ensure that every husband and every mother is mobilized and motivated to demand for PHC services, especially vaccines for their children and family," he noted.

The Federal Government is committed to reducing the number of new cases of vaccine derived poliovirus in Nigeria to zero by the end of the year 2023. This was revealed by the Executive Director and Chief Executive Officer of the National Primary Healthcare Development Agency (NPHCDA), Dr Faisal Shuaib at the recent Northern Traditional leaders Committee on Primary Healthcare Review Meeting in Abuja. The Federal Government also announced that 96 per cent of the Local Government Areas in the country have achieved 100 per cent in the outbreak response against the Circulating Vaccine-Derived Polio Virus Type 2.

This mutant form of the poliovirus occurs in populations where there are lots of unimmunized children. In situations of subpar immunization levels, the attenuated virus from the vaccine is able to circulate within the community for a prolonged period and attain a virulent status again thus causing paralysis and perhaps death in susceptible unimmunized children within the community. The lower the level of population immunity within the community, the higher the chances that the virus can survive, mutate and spread within the community. The way to ensure that this does not happen is to ensure that all children under the age of 5 within our communities are vaccinated with the polio drops.

While commending the northern traditional leaders' significant contributions to eradicating the Wild Polio Virus (WPV), Dr Faisal Shuaib said "We would not have been able to eradicate WPV without the northern traditional leaders' committee on polio eradication." "We are making progress, but the progress that we need to make this year is important because while reducing the number of cVDPV2 by over 90 per cent, we have to get down to zero. The target for 2023 is not a further reduction but getting it to zero. We know that if there is anywhere that the message will resonate, it has to be in this room because you are the people that will make it happen."

"For the first time in the history of our polio eradication activities around cVDPV2, we were able to achieve 96 per cent of the LGAs actually scoring 100 per cent in terms of the children that we were able to reach. This has never happened, especially when you look at the quantum of LGAs and the difficulties in the area of insecurity that we have seen in some of these areas. "While this is the first time, we have seen this type of coverage, we don't want it to be the last but we want it to be the standard, that every time we go out there for a





# African leaders call for urgent action to revitalize routine immunization

African heads of state have agreed on key measures to revamp routine immunization across the continent following massive disruptions caused by the COVID-19 pandemic that stymied childhood vaccination programmes and heightened outbreaks of vaccine-preventable diseases. A total of 8.4 million children in the African region, compared with 18 million globally, were left out by immunization services in 2021, according to estimates by UNICEF and World Health Organization (WHO). Access to immunization services is even more difficult among poor or marginalized communities or those rendered vulnerable by conflicts or living in fragile settings.

At a high-level event on the side-lines of the 36th Ordinary Session of the African Union (AU) Heads of State and Government in Addis Ababa, the leaders endorsed a declaration on "Building momentum for routine immunization recovery in Africa" which aims to "revitalize the momentum for all populations to have universal access to immunization to reduce mortality, morbidity and disability, and consequently help Member States to achieve their health SDGs and economic and development goals."

"We believe that it is possible to achieve the national and global immunization targets including eradication and elimination goals. Progress in meeting immunization targets, we believe, is a driver for equitable health outcomes for children, mothers and the population as a whole," said H.E. Dr Julius Maada Bio, President of Sierra Leone. "We believe as a government that the returns on investment for immunization are very high for our progress towards meeting the SDGs."



The declaration, at the event convened by the African Union Commission for Health, Humanitarian Affairs and Social Development, the Government of Sierra Leone and World Health Organization (WHO), also called for urgent measures to "address persistent bottlenecks in vaccine and healthcare delivery systems, especially in the poorest, vulnerable and most marginalized communities."

Across the continent, immunization coverage for many vaccine-preventable diseases is well below the 90-95%

range needed to keep Africa free of these diseases. For instance, in 2021, the median vaccination coverage for measles was 69%; while for diphtheria-tetanus-pertussis coverage was 82.5%; and 81.5% for the third dose of the polio vaccine.

"Recalling the Addis Ababa Declaration on Immunization endorsed by Heads of State at the 28th African Union Summit, Africa's leaders hold a mandate to secure sustainable financing toward increasing access to immunization, and work with communities to strengthen immunization systems across the continent. We can end vaccine-preventable diseases and save many more lives. This is core to achieving healthy, prosperous communities as premised in the AU Agenda 2063: The Africa We Want," said H.E. Ambassador Minata Samate Cessouma, the AU Commissioner for Health, Humanitarian Affairs and Social Development.

"Immunization saves lives and is one of the best health investments that money can buy," said Dr Matshidiso Moeti, WHO Regional Director for Africa. "The COVID-19 pandemic has had a devastating impact on immunization efforts in Africa and has made it critical for us to catch up, recover and get back to normal."

In Africa vaccine-preventable diseases are responsible for 93% of ongoing infectious disease outbreaks. Currently vaccine-preventable disease outbreaks are ongoing in 31 African countries, with 17 having more than one vaccine-preventable disease outbreak. Without renewed political will and immediate, intensified efforts, it is estimated that immunization coverage will not return to 2019 levels until 2027.

"Children who were missed by immunization services are more likely to also experience limited or no access to health, nutrition, education and other social services," said Marie-Pierre Poirier, UNICEF Regional Director for West and Central Africa. "With strong political will and increased investment in essential services for children, including immunization, we can accelerate progress towards the Immunization Agenda 2030, the African Union's Agenda 2063 and the global Sustainable Development Goals 2030 to ensure a healthier, safer and more prosperous Africa for its children and for all."

The "Building momentum for routine immunization recovery in Africa" declaration also aims to reignite the continent's commitment to meet the goals of the Immunization Agenda 2030, a new global strategy to address the challenges of immunization and save more than 50 million lives worldwide.

The declaration called on African regional economic communities, health organization and the African Development Bank to support the initiative. It also urged vaccine manufacturers to improve access to doses and the UNICEF and WHO to support countries to monitor progress towards the immunization goals.

Source: WHO





#### **GPEI Statement on cVDPV2 detections in Burundi and Democratic Republic of the Congo**



Through ongoing surveillance, the Global Polio Eradication Initiative (GPEI) has received notification of the detection of circulating vaccine-derived poliovirus type 2 (cVDPV2) in Burundi and the Democratic Republic of the Congo (DRC) linked with the novel oral polio vaccine type 2 (nOPV2). The viruses were isolated from the stool samples of seven children with acute flaccid paralysis (AFP) - six in DRC (eastern Tanganyika and South Kivu provinces), one in Burundi (Bujumbura Rural province) - and from five environmental samples collected in Burundi (Bujumbura Mairie province). All reported isolates stem from two separate and new emergences of cVDPV2 linked with nOPV2 that originated in Tanganyika and South Kivu provinces in DRC.

GPEI is supporting local authorities in both and neighbouring countries to conduct a thorough risk assessment and plan vaccination responses to reduce the risk of further transmission, as per outbreak response protocols. Burundi and DRC have scheduled initial vaccination campaigns to be conducted in April and based on the ongoing risk assessment, subsequent campaigns may be expanded to include areas in neighbouring countries.

Additionally, both AFP and environmental surveillance are being stepped up in the areas of detection, and the operationalization of further environmental surveillance sites is being evaluated. Samples from Burundi, DRC, and neighboring countries are also being prioritized for testing by the Global Polio Laboratory Network.

These are the first instances of cVDPV2 linked with nOPV2 since roll-out of the vaccine began in March 2021. While detection of these outbreaks is a tragedy for the families and communities affected, it is not unexpected with wider use of the vaccine. All available clinical and field evidence continues to demonstrate that nOPV2 is safe and effective and has a significantly lower risk of reverting to a form that cause paralysis in low immunity settings when compared to monovalent oral polio vaccine type 2 (mOPV2).

To date, close to 600 million doses of nOPV2 have been administered across 28 countries globally, and the majority of countries have seen no further transmission of cVDPV2 after two immunization rounds. Throughout the vaccine's extensive field use, the strains in DRC and Burundi are the only two cVDPV2 emergences detected that have been linked with nOPV2. A preliminary assessment suggests an estimated 30-40 new cVDPV2 emergences. conditional on surveillance inputs, would have been detected by 1 March 2023 if mOPV2 was used instead of nOPV2 at the same scale.

Focused safety, effectiveness and genetic stability monitoring will continue for the duration of the vaccine's use under WHO Emergency Use Listing (EUL) and work continues to advance towards nOPV2's WHO prequalification, expected by the end of this year.

Importantly, eastern DRC is classified as one of GPEI's seven most consequential geographies for poliovirus outbreak risk. Complex humanitarian challenges in the country, including insecurity, have created longstanding barriers to reaching every child with the polio vaccine. This has contributed to the continued spread of variant poliovirus within DRC and its exportation to nearby countries. GPEI continues to adapt its strategy and work with local authorities to protect all children from this devastating disease through targeted, flexible campaign efforts.

Ultimately, no vaccine sitting in a vial can protect a child. The success of nOPV2 and any polio vaccine depends on the ability to rapidly implement highquality immunization campaigns to ensure that every child is vaccinated and poliovirus' spread is stopped.





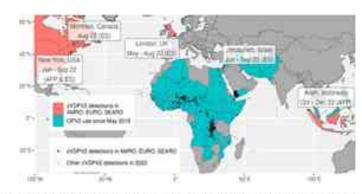
Polio – a disease many have prematurely consigned to history - made headlines around the world in recent months when the virus was detected in relatively high-income country settings from New York, London, Montreal and Jerusalem. This apparent comeback in poliofree countries has left many questioning the feasibility of eradication. On the contrary, we have never been closer to achieving our goal of a polio-free world: this resurgence only underscores the urgent need for eradication.

When the Global Polio Eradication Initiative (GPEI) was launched in 1988, nearly 1,000 children were being paralyzed with wild poliovirus (WPV) infection across 125 countries every single day. Since then, a concerted effort of health workers, communities, local governments, and global partners such as Rotary International have helped eradicate two of the three serotypes of wild poliovirus (WPV2 and WPV3) and cornered the remaining strain of WPV - type 1 (WPV1) - to small areas of Pakistan and Afghanistan – the last wild polioendemic countries. The genetic diversity of the remaining chains of WPV1 is also on the decline, indicating the virus might very well be on the verge of being wiped out.

However, this incredible progress is in jeopardy. Due in part to the COVID-19 pandemic, the world has seen a worrying drop in immunization rates over the past few years, creating pockets of under-immunized communities at heightened risk of polio infection and paralysis. Children missing polio vaccinations creates opportunities for polio to re-emerge and spread

#### Why is Polio Making A "Comeback" And What Can We Do About It?

- as seen in 2022 when WPV1 originating in Pakistan was detected in paralyzed children in Malawi and Mozambique. This episode served as a poignant reminder that as long as polio exists anywhere in the world, it remains a threat to people everywhere.



Spread of Circulating Vaccine Derived Policierus: Type 2 in 2022 and use of Drail Polici Vaccine Type 2 or Outbreak Response smort Cessation of Routine Clar of Type 2 live OPV in 2016 Shurch: WHO (GPE)

Persistently under-vaccinated communities are also at risk of outbreaks of vaccine-derived poliovirus (VDPVs). These polio variants evolve from oral polio vaccines (OPVs), which use a weakened form of the virus to protect children from infection and act as a key tool for many countries to stop the spread of polio. When a vaccinated child sheds that weakened virus into the environment, it can help provide indirect protection for the entire community. However, in areas with persistently low immunization coverage, the weakened vaccine virus can circulate over a prolonged period, ultimately regaining the ability to cause paralytic outbreaks that can spread across geographies.

Variant polioviruses are now the main cause of polio outbreaks around the world, with over 600 cases of circulating VDPV type 2 (cVDPV2) reported in 2022. A majority of these cVDPV2 cases have been reported from the Democratic



Republic of Congo, Yemen, and Nigeria. The polioviruses detected in sewage samples in the US (which also saw one paralytic case), Canada, the UK, and Israel were also confirmed as cVDPV2 in 2022, demonstrating that poliovirus variants can spread beyond the geographic borders of OPV-using countries through population movement and VDPVs can emerge in high-income settings where OPV is not in use if uniformly high levels of immunity are not maintained in sub-populations.

One technological solution to the VDPV situation is the development of OPV strains that are more genetically stable and therefore less likely to evolve into VDPVs. In 2011, a scientific consortium was formed to explore the development of a next-generation vaccine while still maintaining the advantages of existing OPV, such as ease of delivery and intestinal mucosal immunogenicity. As poliovirus serotype 2 strain has been associated with most of the paralytic polio outbreaks of cVDPVs, a new, type 2 OPV was selected as the initial focus of the consortium.

In November 2020, the novel oral polio vaccine type 2 (nOPV2) was authorized under the Emergency Use Listing (EUL) pathway by the World Health Organization (WHO) following positive findings from phase I and phase II studies of safety, reactogenicity, immunogenicity and the desired genetic stability. Rollout of nOPV2 for outbreak response began in March 2021 and since then, more than 580 million doses of nOPV2 have been delivered in 28 countries, with surveillance data from initial field use indicating a high likelihood of success at closing outbreaks with lower risk of seeding the emergence of new ones.

Regardless of which polio vaccine is used to stop an outbreak, there must be high immunization coverage for all children to be protected against paralysis. Following the detection of an environmental sample or

confirmation of a case of paralytic polio, outbreak response campaigns must be launched in a timely manner to reach all at-risk communities with vaccines. Coordination transcending geographic borders is also key, which is why countries currently at a high risk of polio spread - such as Pakistan and Afghanistan as well as Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe - are synchronizing campaigns to help ensure that underserved and migrant communities are not missed. Readiness on the regulatory front to use a vaccine under EUL provisions as in the case of nOPV2 and maintaining adequate global supplies of such vaccines will be important in minimizing the risk of spread of polio.

But even with novel tools, proven strategies, and ample experience at hand, political and financial commitments from the global community are paramount if we are to reach every last child with polio vaccines. As evidenced around the world in recent months. polio-free communities are not polio-risk-free. It is incumbent on all countries and partners to step up and reaffirm their support to ending polio for good. Real-world innovations to enable front-line health workers to reach underserved communities with life-saving vaccines hold the key to achieving and sustaining polio eradication.

> -Ananda Sankar Bandyopadhyay, Deputy Director Bill & Melinda Gates Foundation





Representatives of Lagos state and the major partners with the victims and families of January 2023 OBR accident in Lagos



A mintue silent for the falling heroes of January 2023 OBR in Lagos



Presentation of Bob Keegan Polio Heroes Award to one of the victims of January 2023 OBR accident in Lagos



Presentation of Bob Keegan Polio Heroes Award to the father of late vaccinator in Lagos.



NNPPC Chairman PDG Joshua Hassan supported by Dr Uti-Momah during the presentation of Rotary cheque to the husband of one of the late vaccinators in Lagos.



NNPPC Chairman PDG Joshua Hassan presenting a cheque on behalf of Rotary to one of the victims







## **HOW TO PREVENT POLIO**











