

With cVDPV1 and cVDPV2 outbreaks unfolding against the backdrop of a major humanitarian crisis, polio surveillance has never been tougher – or more important



Dr Mutahar Ahmed, national surveillance coordinator At his office in Sana'a, Yemen, Dr Mutahar Ahmed stands before a wall-sized map of his country and feels the weight of the world on his shoulders.

“The situation here in Yemen is very complex, and the problems we face are quite immense,” said Dr Ahmed.

As Yemen's national surveillance coordinator, Dr Ahmed leads the country's acute flaccid paralysis (AFP) surveillance efforts, the primary means of tracking poliovirus transmission. With an explosive outbreak of circulating vaccine-derived poliovirus type 2 having paralysed 115 children and counting, and with swathes of the country's infrastructure – from roads to hospitals – decimated by conflict, you'd be forgiven for thinking that his and his team's efforts to surveil for poliovirus were falling short or otherwise compromised. But you'd be wrong.

In Yemen, despite a long-running conflict and complex humanitarian disaster that has significantly impacted health care, AFP surveillance indicators tell a promising story of a

functioning system where case detection, sample collection and laboratory analysis – the steps that enable us to detect poliovirus so we can respond to it – are, in fact, on track.



Dr Mutahar Ahmed reviewing the location of AFP cases with Dr Khaled Al-Moayad, Director of Disease Control and Surveillance in Sanaa, Yemen. Surveillance data allows the polio programme to identify new AFP cases and to test those cases to determine whether polio infection is the cause. In this way, a robust and wide-reaching AFP surveillance system enables health workers to detect the presence and circulation of poliovirus.

“In addition to our work building the engagement and knowledge of pediatricians and clinicians, we are reaching the community and community-based health care providers including traditional healers. We also appeal to families for their support in reporting cases. The more aware they are of the symptoms of paralysis in a child, the quicker our surveillance coordinators can collect the stool sample for analysis,” said Dr Ahmed.

Early detection of symptoms such as AFP is a crucial step in the chain of polio surveillance. If a case of paralysis is not reported within the first 14 days of the onset of symptoms, the reliability of testing the sample in the laboratory reduces significantly. In Yemen, the AFP surveillance system in high-risk districts is supported by volunteers trained in community-based surveillance. In 2021, 82% of AFP cases were detected early, within the first seven days of the onset of paralysis, which is above the global target of 80%.

