

Tajikistan polio outbreak and regional response

Summary

As of 22 June 2010, Tajikistan had reported 643 acute flaccid paralysis (AFP) cases; 275 were laboratory confirmed for wild poliovirus type 1, and 60 had been confirmed negative. There had been 14 deaths among the 275 confirmed poliomyelitis (polio) cases (5.1%). Three rounds of national immunization days (NIDs) had taken place in Tajikistan and two rounds in Uzbekistan. In both, coverage was extremely high: over 99% of the targeted populations. Further rounds are expected in both countries, and Kyrgyzstan will begin an immunization campaign in July.

The WHO European Region has experienced the first importation of wild poliovirus since it was certified as polio free in 2002.

A sharp increase in early April in cases of acute flaccid paralysis (AFP) prompted Tajikistan's

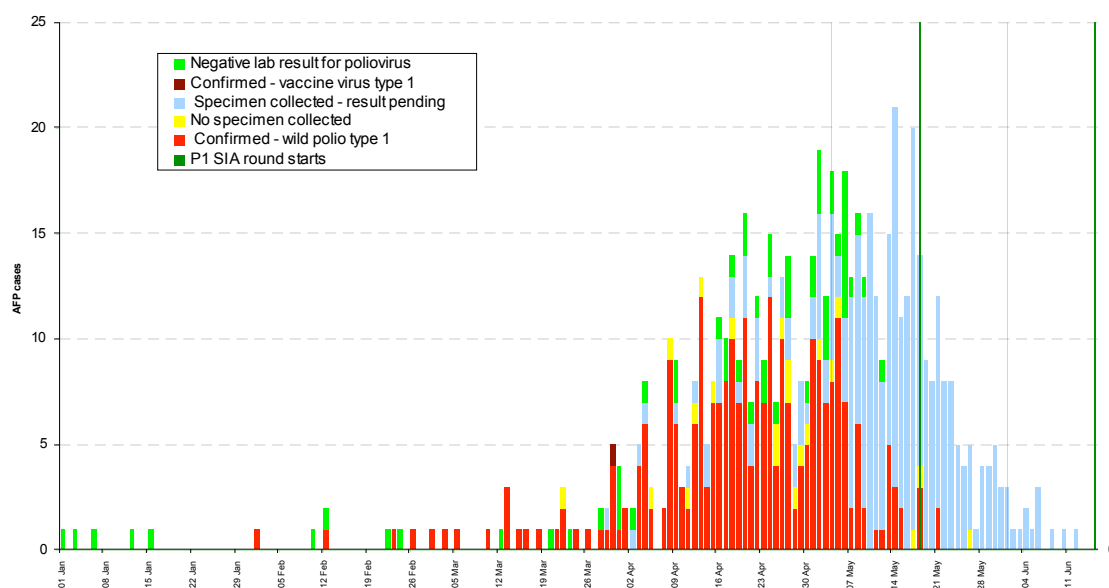
Government to request WHO to support an outbreak investigation. The WHO regional reference laboratory in Moscow, Russian Federation confirmed wild poliovirus type 1 as the cause of the outbreak on 23 April 2010.

As of 22 June 2010, Tajikistan had reported 643 AFP cases, of which 275 were laboratory confirmed for wild poliovirus type 1, and 60 were confirmed negative (10 AFP cases before 15 March – 16.6%) (Fig. 1). All laboratory-confirmed cases reported were from the south-western part of the country: Dushanbe City and surrounding provinces, Khatlon zone and Kulyab zone of Kurgan-Tube oblast (Fig. 2). AFP cases were also reported from Sughd oblast in the north.

Confirmed cases had come from 24 of 61 administrative areas (58 districts and Dushanbe City, Khudjand City, and Kurgan-Tube City). There was no evidence of transmission to Gorno-Badakhshan Autonomous oblast (GBAO) or Sughd oblast.

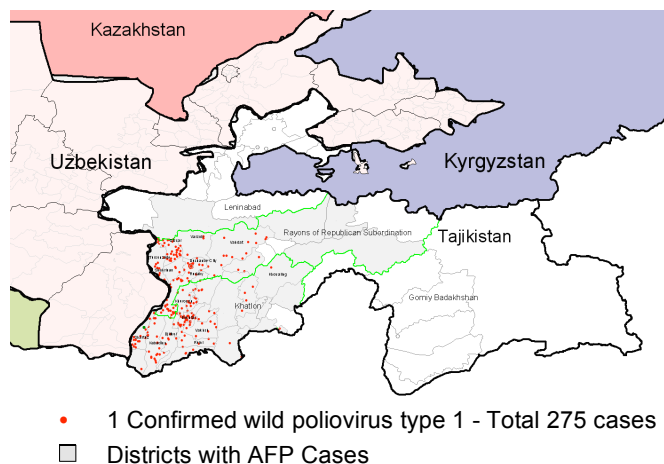
There had been 14 deaths among the 275 laboratory-confirmed polio cases (5.1%). Of these, 7 were in children aged ≤ 2 years, and 7 in people aged 4–35.

Fig. 1. AFP and laboratory-confirmed polio cases in Tajikistan by day of paralysis onset, 2010



Note. There were 643 AFP cases (including 275 confirmed wild poliovirus type 1), according to data as of 22 June 2010.

Fig. 2. Tajikistan: areas affected by AFP and polio



Of the **275 confirmed wild poliovirus cases**, 58 (21.09%) were in infants (< 1 year); 154 (56.00%) are in children (1–5 years); 42 (15.27%) are in young people (6–14 years), and 21 (7.64%) in people aged ≥ 15 years. Information on vaccination history was available for 87 confirmed cases. Of these, 11 (12.64%) had received less than 3 doses of oral polio vaccine (OPV) and 76 (87.35%) were reported to have received 3 or more doses of OPV. Investigation was under way to confirm the accuracy of reported immunization status.

Elsewhere in the Region, 4 cases of AFP have been laboratory confirmed for wild poliovirus type 1 in the Russian Federation, the only country outside Tajikistan to confirm such cases. To date, 3 of the 4 cases are imported. The single case from

Chelyabinsk region may have been locally transmitted. Further investigation is under way. The imported cases are in people who have come from or recently travelled through Tajikistan.

NIDs

The third round (of four planned) of NIDs in Tajikistan was held during 1–5 June (Table 1). Reported coverage was 98.8% of the population aged < 18 years, with 3 052 881 people immunized. Similar high coverage levels were reported for both of the first two rounds in Tajikistan (targeting children < 6 years).

The picture is similar in Uzbekistan, where coverage in the second round of immunization was 100.4% (2 895 946 people immunized). Coverage at the regional level is 97.3–100.9%. Independent monitoring data show similar results.

NIDs were synchronized between the two countries and with immunization in Afghanistan in May 2010. Two rounds of NIDs in Kyrgyzstan are planned for 5–9 July and 9–13 August, targeting children aged < 6 years. Kazakhstan and Turkmenistan also plan to conduct NIDs in July 2010.

WHO reference poliovirus laboratory

The WHO reference poliovirus laboratory in Moscow, Russian Federation belongs to the WHO global polio laboratory network and serves as a regional hub for the countries of central Asia. The hundreds of samples from Tajikistan and neighbouring countries reach the Moscow laboratory in batches, where they are tested for poliovirus using the latest advances in molecular biology and traditional cell culture methods. Shortly after the confirmation of the cause of the outbreak, virologists determined the genetic sequence of the virus and identified its probable source. This information was taken into account in response activities. Investigation of clinical samples from cases and their contacts continues.

Table 1. Officially reported national coverage with OPV during NIDs in Tajikistan and Uzbekistan, 2010

Country and round	Date	Targeted age cohort		People immunized	
		Age (years)	Number	Number	% of target group
Tajikistan					
1	4–8 May	< 6	1 113 841	1 127 107	99.4
2	18–22 May	< 6	1 147 112	1 139 883	99.4
3 ^a	1–5 June	< 18	3 068 568	3 052 881	98.8
Uzbekistan^b					
1	17–21 May	≤ 5	2 853 092	2 877 251	100.8
2	7–11 June	≤ 5	2 885 505	2 895 946	100.4

^a In the third round, 99.6% of all children and adolescents < 15 were immunized.

^b The number immunized is higher than planned due to detection of groups < 5 not recognized during the microplanning for various reasons.

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