

Risk Assessment:

Chad has a high, decreasing risk of failure to detect and interrupt WPV transmission by the end of 2010 because of weak immunization and surveillance performance. Monitoring data following SIAs in the second and third quarters of 2010 suggest progress and decreasing risk, accompanying increased political support. The absence of detected WPV during the high transmission season is encouraging, but improvements in surveillance are needed.

**Chad has a high, decreasing risk of failure to detect and interrupt WPV transmission by the end of 2010. No WPV has been detected during the typical high season, but further improvements in surveillance are needed.**

**DEMOCRATIC REPUBLIC OF THE CONGO**Epidemiologic Situation:

Thirty WPV1 cases have been detected during January-September 2010 in DRC: 29 WPV1 cases were identified in provinces adjacent to Angola, as a result WPV importations of Angolan origin, and one WPV1 case was detected in the second quarter in Katanga province on the border with Tanzania/Lake Tanganyika.

Immunization Performance:

The MPI target is <10% missed children in each SIA in Orientale, North & South Kivu, and all provincial capitals (GPEI #7). SIAs were implemented in North & South Kivu in September and in five districts in five other provinces in August/September. Of the 11 evaluations (provinces and rounds) overall, six indicated  $\geq 10\%$  missed children, with 41% missed in North Kivu and 14% to 16% missed overall in each round. Consequently, immunization performance is weak.

NPAFP immunization data are consistent with the SIA monitoring data. The reported immunization status of NPAFP children indicates weak national coverage (11% 0-dose children).<sup>10</sup> The overall proportion of NPAFP children with 4+ doses of OPV (29%) is inconsistent with the Pol3 estimate (74%) and suggests Pol3 overestimation.

Surveillance Performance:

The MPI targets are >80% adequate specimens in all provinces (GPEI #5) and a NPAFP rate >2 in all provinces (GPEI#6). 100% of provinces meet NPAFP >2. Adequate specimen collection overall is borderline intermediate at 79% but six of 11 provinces failed to reach 80% adequate specimen collection. With the majority of provinces not meeting GPEI #5, surveillance performance is weak. Additionally, undetected transmission in Katanga by WPV isolated in DRC in 2007-2008 demonstrates suboptimal surveillance performance with deficiencies in AFP detection, investigation, specimen collection and/or transport in eastern areas of the country.

<sup>10</sup> Missing dose information for 10% of NPAFP children limit interpretation of these data

Risk Assessment:

All recent WPV cases at the southwest border of DRC are imported or closely related to WPV from Angola. There has not been sufficient time to determine if response efforts will interrupt transmission within six months of onset of confirmation of the first case.

Although SIA monitoring suggests improvements, weak immunization performance and surveillance performance indicate that DRC has a high, increasing risk of failure to detect and interrupt WPV

transmission by the end of 2010. Caution will be needed in interpreting the last date of WPV case onset as an indicator of the end of transmission because of surveillance limitations in eastern provinces.

**Democratic Republic of the Congo has a high, increasing risk of failure to detect and interrupt WPV transmission by the end of 2010; evident weaknesses in surveillance are of major concern.**

**SUDAN**

Since the WPV transmission zone in 2008–2009 was south Sudan, this risk assessment is limited to that area.

Epidemiologic Situation:

WPV1 of Nigerian origin was imported into Sudan via Chad in 2004 and resulted in 147 cases during 2004–2005. Although undetected in the interim, genetically related WPV1 was again isolated in 2008, with 71 cases in south Sudan during 2008–2009. South Sudan was classified in 2009 by the Advisory Committee on Polio Eradication as having suspected re-established transmission. No further cases have been identified since the latest case with onset 27 June 2009.

Immunization Performance:

The MPI target is <10% of missed children in each state during each SIA (GPEI #10). A sub-national SIA was planned for June, but SIAs were not conducted and therefore subsequent IM data are not available for a reassessment of immunization performance since the 14 September CDC report. SIA monitoring data for the two rounds in February and March indicate suboptimal coverage ( $\geq 10\%$  missed children) in 60% of the 10 provinces. Additionally, outside the house monitoring data were not available for analysis. 0-dose coverage in the 10 states was 7.2%. Immunization performance is weak.

Note: The national immunization status of NPAFP children masks the specific data for the states of south Sudan. Nationally, the proportion of NPAFP children with 4+ doses of OPV is high (80%) and comparable with national Pol3 (84%) and 0-dose (4%) estimates.

Surveillance Performance:

The MPI targets of >80% adequate specimens in all provinces in south Sudan (GPEI #8) and a NPAFP rate >2 in all provinces (GPEI#9) were met, indicating strong surveillance performance. This is a marked improvement since the 14 September CDC report and reflects the success of efforts to strengthen surveillance since October 2009.