

CHAD

Immunization					Surveillance				
12-month immunization indicator			National		Immunization Performance	Percent of states / provinces with:		Virology	Surveillance Performance
District: % missed children in SIAs*	Province: % missed children in SIAs**	Overall 12-month immunization indicator	POL3	0-dose		NPAFPR >= 2***	Adeq. Stools >= 80%***		
Weak	Weak	Weak	63	10.3	Weak	100	66.7	Some	Weak

* 12-month district immunization indicator: Based upon Chad's 2011 MPI for immunization but using available data from SIAs conducted during the previous 12 months (1 Jan 2011 - 31 Dec 2011). Additional details in the 4th Quarter 2011 Progress Report of the GPEI Process Indicators for 2010 and 2011 and Methods Supplement.

**12-month provincial immunization indicator: Based upon available data from SIAs conducted in all provinces in Chad except the provinces in N'Djamena and in the southern and eastern WPV transmission zones (MPI provinces) during the previous 12 months (1 Jan 2011 - 31 Dec 2011). The provinces in N'Djamena and in the southern and eastern WPV transmission zones were omitted given their consideration in the 12-month district immunization indicator. Additional details in Methods Supplement.

*** based on the upper 90% confidence limit

Chad has a high risk of failure to detect and interrupt WPV transmission by the end of 2012. There have been 131 cases of WPV (128 type 1 and 3 type 3) confirmed in 29 districts thus far for 2011 in Chad. This is in comparison to 2010 when 26 (11 type 1 and 15 type 3) cases were confirmed in 16 districts.

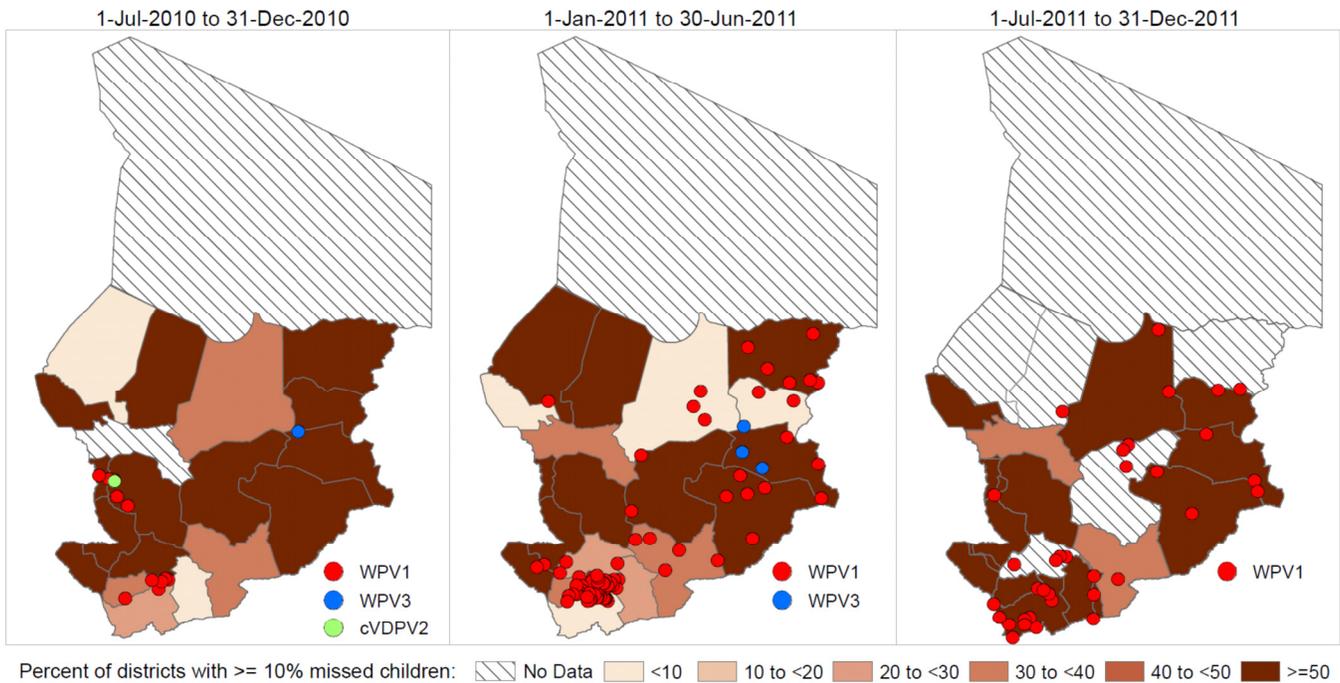
The Strategic Plan MPI addresses greater N'Djamena and the districts of the southern and eastern transmission zone, which have been the main (but not only) areas of transmission in 2010–2011. In 2011, transmission extended toward the center and eastern regions of the country. This risk assessment analyzed SIA monitoring data from these and all other provinces where available. SIA IM data aggregated at the district and provincial levels suggest little to no improvement in SIA quality over time, including in the SIAs conducted in late 2011. IM data from several districts in N'Djamena and Ouaddai provinces indicate percentages of missed children well over 10% in the October and November 2011 SIAs. In most of the other districts monitored in the time period of this assessment, the proportion of missed children has not met the 10% MPI criterion; however, LQAS results suggest that IM data overestimate coverage. Overall immunization performance remains weak. Although the latest WPV3 case had onset 10 March 2011, continued re-established transmission of WPV3 in eastern provinces remains a high risk. Extensive WPV1 transmission after 2010 importation into 2011 and the occurrence of an imported cVDPV2 in 2010 from Nigeria indicate high susceptibility because of ongoing weaknesses in routine and SIA immunization coverage. SIAs since September 2010 have used bOPV, with partial use of tOPV and mOPV1 in the greater N'Djamena area.

Surveillance performance is weak, with the percent of adequate stool samples dropping to 67%. Chad poses a high risk to the success of the GPEI to interrupt all WPV transmission by end-2012 because of the extensive circulation of WPV1 and risk of re-established transmission of WPV3, suboptimal surveillance, and lack of substantial improvement in SIA implementation quality.

Current Quarter	3rd Qrt. Report
Overall risk of failure to detect and interrupt WPV transmission	Overall risk of failure to detect and interrupt WPV transmission
High	High

GPEI MPI	end-2010 	<10% missed children in greater N'Djamena and in the southern and eastern WPV transmission zones during each SIA in the second half of 2010
	end-2011 	<10% missed children in greater N'Djamena and in the southern and eastern WPV transmission zones during each SIA

Chad: Wild poliovirus type 1 (WPV1), wild poliovirus type 2 (WPV2), and circulating vaccine derived poliovirus type 2 (cVDPV2) cases with onset 1 July 2010 – 31 December 2011 and results of out-of-house independent monitoring for Supplemental Immunization Activities (SIAs) conducted 1 July 2010 – 31 December 2011 by 6-month periods*



*For each 6-month period for each district in the country where data were available, independent monitoring data from all SIAs conducted were pooled, and the total number of missed children was divided by the total number of children observed to obtain an overall percentage of missed children for the district for the period. Then for each province in the country, the percentage of districts with $\geq 10\%$ missed children was calculated. Color coding was assigned to ranges of percentages as indicated in the maps and legend above. For 1 July 2010 – 31 December 2010, data were available from 6 Sub-National Immunization Days (SNIDs), for 1 January 2011 – 30 June 2011, data were available from 3 National Immunization Days (NIDs) and 3 SNIDs, and for 1 July 2011 – 31 December 2011, data were available for 4 NIDs. Not all districts were monitored in a given SIA, and different districts could have been monitored in different SIAs. To be included in the analysis, a district had to have monitoring data for at least one SIA during the 6-month period. Provinces with white color coding had no monitoring data for analysis. WPV1, WPV3, and cVDPV2 cases are mapped at the district level.

The maps provided above show the increasing number and spread of WPV type 1 cases in 2011 relative to the second half of 2010. Available IM data pooled in 6-month periods do not suggest an overall trend of provinces having more districts with $< 10\%$ missed children in SIAs.