

ACUTE FLACCID PARALYSIS (AFP) SURVEILLANCE — COUNTRY UPDATE

As of 7th April, 2009 the AFP surveillance system has reported 1017 AFP cases in 2009, including 475 from Punjab, 258 from Sindh, 198 from NWFP, 27 from FATA, 38 from Balochistan, 18 from AJK, 2 from FANA., and 1 from Islamabad. **The overall AFP surveillance indicators at the national and provincial levels are above the international standards.** The non-polio AFP rate (annualized) is 5.4 per 100,000 children below 15 years of age and percent AFP cases with adequate specimens is 94%.

POLIOVIRUS EPIDEMIOLOGY

A total of nine confirmed polio cases have been reported in 2009 from 7 districts of the country, including 4 type-1 cases (one each from TT Singh in Punjab, Karachi Gadap Town in Sindh and Mohmand & Bajour Agencies in FATA); and 5 type-3 cases (two each from Char-sadda in NWFP and Baldia town of Karachi in Sindh province and one from Sialkot in Punjab province). Seven confirmed cases have onset of paralysis in January while two cases have onset in February. It is important to highlight that as of 7th April 2009: -

- ◆ **No type-1 cases have been reported in February 2009.** After March 2008, Pakistan has reported at least one type-1 case every month until January 2009.
- ◆ There have been **no polio cases from Balochistan this year.** It is however important to highlight that all 5 cases from Afghanistan are from the southern region that shares borders and very active and frequent population movements with Balochistan and Sindh especially north-western Balochistan (Quetta, Kila Abdullah, Pishin) and Karachi. This is reinforced by the epidemiological and genetic data of the last type-1 polio case from Karachi Gadap which is linked to ongoing type-1 poliovirus circulation in southern Afghanistan.

There have been no polio cases reported from northern Sindh and the adjoining districts of Balochistan since October 2008, southern Punjab for 18 months, and southern NWFP/FATA for 16 months. AJK has been without polio cases for 8 years and FANA for 10 years as well, reinforcing that polio eradication strategies work if implemented comprehensively.

One type-3 polio case was reported since publication of the last bulletin from Baldia Town Karachi . Epidemiological data complemented by the genetic data reinforces that a) there is ongoing circulation of wild poliovirus type-3 in Karachi indicating immunity gaps due to inconsistent vaccination coverage in 2008 and 2009 b) the fact that there are two cases within a 4km radius in the

same town during the low transmission season in high risk communities denotes an impending outbreak of WPV3.

Epidemiological characteristics of polio cases to date in 2009, highlight that: a) **all of the NWFP and FATA cases (4) are from areas inaccessible to vaccination teams for a considerable period;** b) the bulk of cases are from known risk groups and communities (all 3 Karachi cases are from ethnic or religious minorities; 1 of the Punjab cases is from an ethnic minority). It is also important to highlight that the **bulk of cases are among young children** (12–60 months; median age—24 months). No cases in 2009 are zero dose, highlighting that children are reached through SIAs . However, these children have low immunity due to inadequate routine EPI and inconsistent campaign quality (only one of nine polio cases this year received 3 OPV doses, 2 cases had 1 to 3 doses and 2 cases had 4 to 6 doses).

The key challenge in 2009 remains interrupting the remaining endemic circulation in the well known and well defined transmission zones in Pakistan. Proper implementation of the province and district specific plans is the way forward to stopping poliovirus circulation in the country. Provincial and district health authorities are urged to institute a mechanism to objectively monitor the implementation of these plans.

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Federal Minister of Health attending a call in Polio Control Cell during March 2009 National Immunization Days

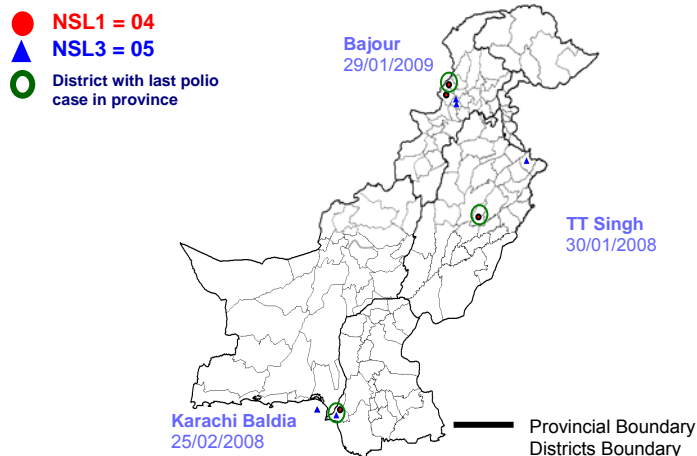
News Briefs

- ◆ **Inter-provincial EPI review meeting held in Karachi on 27-28 March highlights concern about low routine EPI coverage in the country and inadequate quality of polio vaccination campaign in Karachi.**
- ◆ **The Governor Sindh and City Nazim Karachi assured the Federal Director General Health and the National Program Manager EPI of their commitment to support polio eradication and EPI.**
- ◆ **During the annual Rotary District Conference (Lahore 21-23 March), Rotarians endorsed the need for a more proactive role of Rotary Clubs at the operational (district) level focusing on local resource mobilization and mobilizing the community.**

Upcoming events

- ◆ **Next sub national immunization days will be held from 13-15 April**
- ◆ **Campaign against tetanus will be conducted in selective parts of the southern Punjab from 27th April to 9th May**

CONFIRMED POLIO CASES BY DISTRICT 2009



CASE NOTIFICATION OF AFP CASES WITHIN 7 DAYS OF ONSET OF PARALYSIS, ANALYSIS BY TEHSILS, 2006-2008

The percentage of AFP cases notified within 7 days of onset of paralysis is a globally accepted indicator for reflecting the efficiency of the surveillance system in terms of timeliness for notification of AFP cases and thus detecting polio viruses, if present. The international target requires that 80% or more AFP cases should be notified within 7 days of onset of paralysis.

An analysis of data from the last 3 years (2006-2008), shown in the bar chart and the map, indicates that at the national level, the Pakistan programme is consistently meeting and surpassing the global standard. The same is situation in most of the provinces and regions. Balochistan, FATA and FANA have a pattern of low percent of AFP cases notified within 7 days of onset of paralysis. Detailed analysis down to the sub-district level (shown in the map) indicates that there are areas with persistently low timeliness for the notification of AFP cases. Of particular concern are the following tehsils (third level administrative unit), many of which are in active transmission zones (see section on Poliovirus Epidemiology) or re-infected areas:

NWFP: Tehsils: Mardan; Tank; Swat, Battagram, Banda Dawood Shah (Kohat Distt.) and Dir (Dir Upper Distt.);

FATA: Tehsils: Jamrud, Landi Kotal & Bara (Khyber Agency); Ambar Uthman, Pindiali & Yake Ghund (Mohmand Agency);

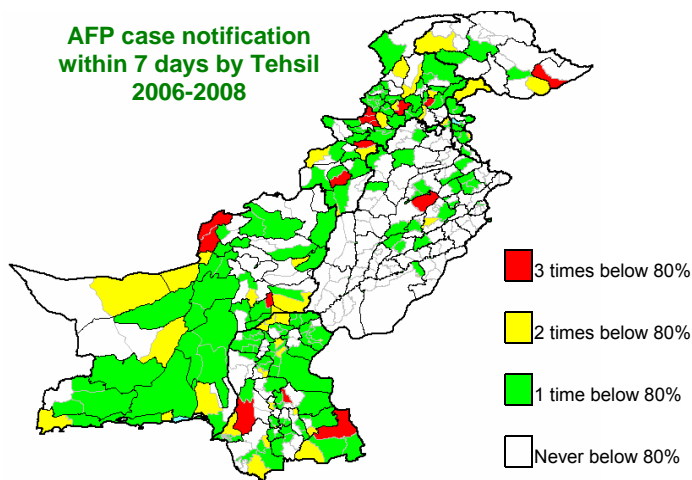
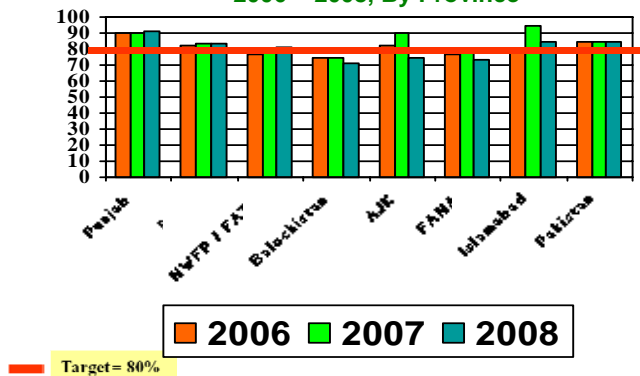
Sindh: Tehsils: Gadap, Site, & Liyari towns (Karachi Distt.); Kingri and Kotdiji (Khairpur Distt.); Sinjhora (Sanghar Distt.); Thana Bula Khan (Jamshoro Distt.); and Sindhri (Mirpur Khas Distt.)

Punjab: Tehsils: Chiniot (Jhang Distt.); Samundri (Faisalabad Distt.) and Murree (Rawalpindi Distt.).

Balochistan: Tehsil Gulistan (Kila Abdullah).

All Executive District Officers Health/District Health Officers/Agency Surgeons, especially in the above areas are requested to ensure that every case of AFP is immediately notified by all health care providers. A review of health facilities in the current surveillance network, including those within the private sector should be conducted together with targeted awareness sessions for immediate reporting of all AFP cases.

Percent AFP Cases Notified within 07 days of paralysis onset 2006 ~ 2008, By Province



RENEWED COMMITMENT - NEW INITIATIVES

The launch of the Prime Minister's action plan on Polio Eradication is showing impact towards the implementation of the annual plan for 2009 and improved inter-sectoral collaboration. Salient features are:

- ◆ The March campaign was jointly inaugurated by the Federal Ministers for Health and Interior
- ◆ Federal minister for Information inaugurated the National Polio Control Cell at the Pakistan Television (PTV), a channel with the widest coverage and viewer-ship nationally, in collaboration with private sector TV channels. The national control cell and toll free number were promoted extensively by all media and through city branding. A total of 14,433 calls were received during the March NIDs and 22,601 children were vaccinated through this effort.
- ◆ The National Database and Registration Authority (NADRA) sup-

ported the March NIDs by establishing special vaccination points at their mobile registration vehicles. A total of 88/185 NADRA vans worked as polio vaccination points in March NIDs and vaccinated a total of 17,821 children.

- ◆ Mobilink, the largest mobile company of Pakistan will facilitate the campaign by sending text messages to their subscribers, informing them about the schedule of SIAs and free hotline number for the Polio Control Cell requesting them to get their children vaccinated.
- ◆ Rotary District Governor in Pakistan with the help of partners has developed guidelines for improved and effective engagement of the local Rotary Clubs focusing on local advocacy, social mobilization and resource mobilization.



Federal minister for parliamentary affairs attending a call at polio control cell



Federal minister for information inaugurating the polio control cell



Federal ministers for Health and Interior jointly inaugurating the polio campaign at a NADRA mobile registration vehicle

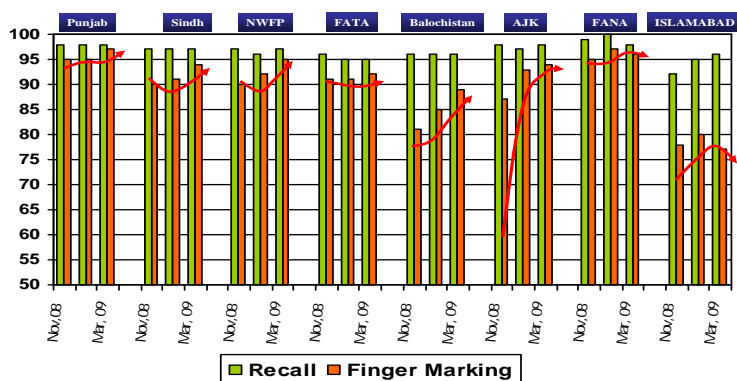
Global Update, 2009

232 confirmed cases were reported globally in 2009 (159 cases were from endemic countries and 73 from non-endemic countries) compared with 291 for the same period in 2008. The cases are: Pakistan - 9, Afghanistan - 5, India - 22, Nigeria - 123, Kenya - 4, Sudan - 25, Benin - 11, Uganda - 6, Niger - 10, Angola - 4, Togo - 3, Borkina Faso - 6, and 1 each from Ivory Coast, DRC, Mali and Ghana. For details, please visit www.polioeradication.org

NATIONAL IMMUNIZATION DAYS - MARCH 2009

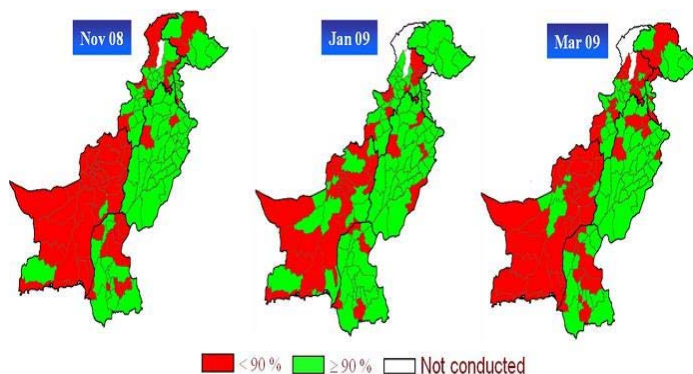
The second nation-wide polio campaign for 2009 was held from 16-18 March. A total of approximately 606,468 children could not be accessed due to insecurity in NWFP and FATA (11% of the provincial target).

Coverage verified by finger marking is 94% at the national level; however it is not consistent at the provincial and more so at the district levels (please see the chart and maps below). Province wise coverage by finger marking is; Punjab-97%, Sindh-94%, NWFP-98%, FATA-92%, Balochistan-89%, AJK-94%, FANA-96% and Islamabad 77%.



Comparison of coverage by recall and finger marking by province, November 2008 & January and March 2009 NIDs

At the national level, coverage verified by finger marking has improved from below 80% in 2008 to 94% in March 2009. Finger marking coverage has also been progressively improving at the provincial and district and levels. The number of districts with coverage verified by finger marking more than 90% has increased from 75 (56%) in November 2008 to 109 (82%) in March 2009. This can be attributed to renewed commitment at the national and provincial levels. Main challenge is great variability of coverage at district (and sub-district levels). **Areas having coverage verified by finger marking below 90% are re-covered.**



Vaccination Coverage <5 years verified through Finger Marking on PCM in November 2008 & January & March 2009 NIDs

INTER PROVINCIAL EPI REVIEW MEETING - KARACHI

Federal Secretary Health chaired the first inter-provincial quarterly EPI review meeting of 2009. Provincial DGs (Health), Provincial EPI managers and officials of partner agencies from the federal and provincial level were also in attendance. The first session was chaired by the Federal Secretary Health and facilitated by the Director General Health Professor Rasheed Jooma. Dr Altaf H Bosan, NPM – EPI and Dr Ni'ma Saeed Abid, National Team Leader – WHO/PEI shared the updates on routine EPI and PEI respectively. The Federal Secretary and DG expressed their concern over the poor routine EPI performance in general and continued sub-optimal coverage in SIAs in Karachi. Provincial Program Managers shared the updates with the meeting in the next session. There were detailed discussions on all aspects of provincial performance and specific recommendations were suggested by different participants. On the 2nd day the Provincial Secretary (Health) Sindh chaired the proceedings where there were updates on MNTe, GAVI, Measles surveillance, immunization barriers and communications were presented by officials from the Federal EPI and

partner agencies.

A number of decisions and recommendations were made at the end of the meeting among which the key recommendations are as follows: -

- ◆ Developing a strategic concept paper for improving routine EPI
- ◆ Using Polio SIAs as an opportunity for improving routine EPI
- ◆ Completion of district wise EPI inventory and share the complete data with the federal EPI by the provincial EPI offices by 15 April.
- ◆ Developing plan for 2009 Nation-wide Coverage Evaluation Survey (CES)
- ◆ Special plans and support was suggested for Karachi to ensure high coverage of all children especially high risk communities through ensuring availability of appropriate staff at the grass-root level and effective visibility of health leadership during SIAs.

Province-wise AFP Surveillance Data for 2008 & 2009

Province/ Region	AFP Surveillance Data 2008						AFP Surveillance Data 2009										Rec. File Date
	Minimum Expected AFP* Cases	Total Reported AFP Cases	Wild Polio Cases	Indicators			Minimum Expected	Total Reported AFP Cases	Wild Polio virus Cases	Indicators			Zero Reporting‡		Timeliness (%)+ ‡	Active Surveillance (%)+ ‡	
				Non-Polio AFP Rate	Adequate Stools (%)	60 Day Follow Up				Non-Polio AFP Rate**	Adequate Stools (%)	60 Day Follow Up	Number Zero Reporting	Completeness (%)+ ‡			
Punjab	860	2,177	31	5.0	94	94	885	475	2	4.6	95	98	912	95	95	99	03 April 2009 ⁵
Sindh	365	1,334	18	7.2	90	91	374	258	3	5.9	93	96	1431	93	87	98	
NWFP	213	1,275	38	11.5	86	91	219	198	2	7.8	88	84	1209	88	87	89	
FATA	36	191	14	9.7	82	89	37	27	2	5.9	81	71	215	70	68	68	
Balochistan	77	253	11	6.2	82	86	78	38	0	4.2	92	81	480	97	92	99	
AJK	33	65	0	3.8	88	95	35	18	0	4.5	94	83	91	100	100	100	
FANA	12	23	0	4.6	87	95	10	2	0	1.7	100	-	42	100	100	100	
Islamabad	11	26	5	3.3	92	96	13	1	0	1.0	100	-	39	100	90	100	
Pakistan	1,604	5,344	117	6.5	92	92	1,651	1,017	9	5.4	94	92	4,419	93	90	94	

* The expected number of AFP cases calculated @ 2/100,000 children below 15 years of age.

‡ Zero reports and active surveillance averaged for last 4 weeks

** Non Polio rate is annualized up to week No.12 ending on 28 March 2009.

Indicator below target; † Target ≥80%

FEEDBACK

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 PO Box: 1013, Phone: +92 51 9255123, +92 51 9255282, Exchange: +92 51 9255075,077, 184,185, Ext: 62461 Fax:+92 51 9255192, 9255274
 Email: epidata@pak.emro.who.int Website: www.whopak.org/polioeradication

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA - PUNJAB

District	AFP Surveillance Data 2008						AFP Surveillance Data 2009									
	Minimum Expected AFP Cases (Annual)*	Total Reported AFP Cases	Wild Polio Cases	Indicators			Minimum Expected AFP Cases (Annual)*	Total Reported AFP Cases	Wild Polio Cases	Indicators			Zero Reporting†			Active Surveillance (%)+ ‡
				Non-Polio AFP Rate	Adequate Stools (%)+	60 Day Follow Up (%)+				Non-Polio AFP Rate **	Adequate Stools (%)+	60 Day Follow Up (%)+	Number Zero Reporting Sites	Completeness (%)+ ‡	Timeliness (%)+ ‡	
Bahawalpur	30	61	1	4.0	97	94	31	10	0	2.8	100	100	30	100	96	95
Bahwalnagar	24	54	0	4.5	93	94	24	9	0	3.2	100	100	25	86	86	84
Rahim Yar Khan	39	103	0	5.3	92	97	40	20	0	4.3	95	100	40	90	90	96
Dera Ghazi Khan	20	98	0	9.6	98	91	21	26	0	10.6	96	100	20	91	91	100
Layyah	14	50	0	7.3	94	94	14	12	0	7.4	100	100	17	100	100	100
Muzaffargarh	33	112	0	6.8	95	94	34	25	0	6.3	80	100	26	94	94	100
Rajanpur	14	64	0	9.3	97	98	14	13	0	8.0	100	100	17	93	93	100
Faisalabad	63	133	2	4.2	83	90	64	18	0	2.4	94	100	36	99	99	98
Jhang	32	85	4	5.0	82	95	32	9	0	2.4	89	100	26	87	87	100
Toba Tek Singh	18	55	1	6.0	91	89	18	10	1	4.2	90	100	23	92	92	100
Gujranwala	40	107	3	5.0	93	97	42	20	0	4.2	95	100	47	99	99	100
Gujrat	23	49	0	4.2	96	95	23	14	0	5.2	86	100	40	96	95	100
Hafizabad	9	32	5	5.5	88	96	10	4	0	3.6	100	100	23	97	97	100
Mandi Bahuddin	13	34	0	5.4	97	97	13	12	0	8.1	100	100	25	90	90	100
Narowal	14	33	0	4.8	94	100	14	12	0	7.4	100	100	30	100	100	94
Sialkot	31	49	1	3.0	94	100	32	19	1	4.9	95	100	25	97	97	100
Kasur	28	71	2	5.0	97	95	28	16	0	4.9	100	100	27	100	100	100
Lahore	80	114	2	2.8	95	92	83	25	0	2.6	96	100	42	100	100	96
Okara	25	105	2	8.1	96	93	26	13	0	4.3	92	100	32	95	95	95
Sheikhupura	24	41	3	3.2	98	95	25	10	0	3.5	90	100	29	100	100	100
Nankana Sahib	14	39	1	4.8	87	94	15	13	0	7.3	100	100	29	100	89	100
Khanewal	24	90	2	7.4	94	96	24	24	0	8.6	100	100	30	95	95	100
Lodhran	14	51	0	7.4	94	95	14	14	0	8.5	100	0	22	92	92	100
Multan	37	79	0	4.3	91	90	38	23	0	5.3	96	100	30	99	99	100
Pakpattan	15	35	0	4.7	97	97	15	9	0	5.1	78	100	17	90	90	100
Sahiwal	20	56	1	5.3	91	96	21	15	0	6.2	93	100	28	71	71	98
Vehari	25	65	0	5.3	95	92	25	10	0	3.4	90	-	27	99	99	100
Attock	14	30	0	4.2	97	100	15	4	0	2.4	100	100	15	100	100	100
Chakwal	12	30	0	5.1	100	100	12	4	0	2.9	100	100	10	100	100	100
Jhelum	10	27	0	5.2	96	96	11	4	0	3.3	100	100	20	80	80	100
Rawalpindi	40	66	1	3.3	97	95	41	18	0	3.8	100	75	29	93	93	100
Bhakkar	12	41	0	6.6	98	82	13	9	0	6.1	100	100	11	93	93	100
Khushab	10	26	0	5.2	96	96	10	5	0	4.3	100	100	16	100	100	100
Mianwali	12	41	0	6.8	95	95	12	9	0	6.4	100	100	17	100	100	93
Sargodha	29	51	0	3.5	98	96	30	17	0	5.0	100	100	31	98	98	100
Punjab	860	2,177	31	5.0	94	94	885	475	2	4.6	95	98	912	95	95	99

* The expected number of AFP cases calculated @ 2/100,000 children below 15 years of age; number expected cases by district may not add up to the total because of rounding off.

† Target ≥80%

○ Indicator below target

** Non Polio rate is annualized up to week No.12 ending on 28 March 2009.

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA - SINDH

Town/District	AFP Surveillance Data 2008						AFP Surveillance Data 2009									
	Minimum Expected AFP Cases (Annual) *	Total Reported AFP Cases	Wild Polio Cases	Indicators			Minimum Expected AFP Cases (Annual)*	Total Reported AFP Cases	Wild Polio Cases	Indicators			Zero Reporting ‡			Active Surveillance (%) † †
				Non-Polio AFP Rate	Adequate Stools (%) †	60 Day Follow Up (%) †				Non-Polio AFP Rate **	Adequate Stools (%) †	60 Day Follow Up (%) †	Number Zero Reporting Sites	Completeness (%) † †	Timeliness (%) † †	
Town Wise Summary — Karachi																
Baldia	5	15	0	6.5	80	80	5	8	2	10.8	100	100	20	100	100	100
Bin Qasim	5	23	0	9.1	91	95	5	3	0	4.8	67	100	22	100	100	100
Gadap	4	22	1	10.0	77	90	4	11	1	19.5	82	100	12	90	90	100
Gulberg	6	10	0	3.7	90	100	6	2	0	3.0	50	-	14	100	100	100
Gulshan-e-Iqbal	8	26	1	6.1	92	100	9	4	0	4.0	100	100	20	100	100	100
Jamsheed	9	17	0	3.8	88	100	9	3	0	2.8	100	-	18	100	86	75
Kamari	6	12	0	4.2	83	90	6	3	0	4.3	100	100	11	100	100	100
Korangi	7	28	0	8.0	93	96	7	7	0	8.3	71	100	12	100	100	100
Landhi	9	20	0	4.1	95	94	10	3	0	2.6	100	-	22	99	99	100
Liaqatabad	8	13	0	3.3	92	100	8	2	0	2.1	100	100	17	100	97	100
Layari	7	14	0	4.3	100	92	7	9	0	11.5	89	100	15	98	87	100
Malir	6	19	0	6.4	95	100	6	4	0	5.5	100	-	15	100	100	100
North	8	21	1	4.9	81	85	9	1	0	1.0	100	-	13	92	92	100
North Nazimabad	6	10	0	3.3	90	80	6	2	0	2.8	100	-	13	93	93	100
Orangi	11	27	0	5.1	93	95	11	4	0	3.1	75	100	23	79	79	100
Shah Faisal	6	13	0	4.2	85	84	6	4	0	5.3	100	-	11	100	100	100
Saddar	10	19	1	3.8	84	84	10	4	0	3.5	100	100	21	100	100	100
Site	7	13	1	3.5	85	75	7	3	0	3.6	100	100	16	100	100	94
District Wise Summary— Sindh																
KARACHI	128	322	5	5.0	89	92	131	77	3	4.9	90	100	295	97	96	98
Badin	13	55	0	8.6	93	89	13	12	0	8.0	100	80	54	99	85	81
Dadu	13	35	1	5.3	100	88	13	9	0	5.9	89	50	64	97	88	100
Jamshoro	7	30	0	8.8	73	80	7	2	0	2.5	100	-	30	95	86	96
Tando M. Khan	5	21	0	9.3	81	85	5	4	0	7.6	100	100	12	100	100	100
Tando Allahyar	5	32	0	11.8	81	87	6	9	0	14.1	78	100	31	98	95	100
Matari	6	32	0	11.8	94	96	6	4	0	6.3	100	100	40	100	92	94
Hyderabad	16	40	2	4.6	78	92	17	8	0	4.1	100	100	30	100	100	100
Thatta	13	71	0	11.3	96	87	13	15	0	10.1	100	-	34	82	82	97
Jacobabad	8	75	3	17.4	89	95	8	17	0	17.7	88	100	45	99	84	100
Larkana	12	46	0	7.5	89	97	13	10	0	6.8	100	100	52	86	86	100
Kashmore	7	43	0	11.4	86	95	8	8	0	9.0	88	100	39	99	83	100
Kambar	10	38	0	6.7	89	89	12	3	0	2.2	100	100	42	92	92	100
Shikarpur	10	65	1	12.9	97	93	10	14	0	11.9	93	-	54	100	97	100
Mirpurkhas	11	53	1	9.8	94	98	11	11	0	8.7	100	100	100	89	71	100
Umerkot	8	37	0	9.0	89	83	9	3	0	3.1	100	100	35	96	96	100
Sanghar	17	59	1	6.7	92	87	18	9	0	4.4	89	-	55	90	89	95
Tharparkar	11	39	0	6.8	95	94	12	8	0	6.0	88	-	98	82	81	95
Ghotki	12	48	0	8.0	90	89	12	9	0	6.3	100	100	50	92	92	100
Khairpur	18	108	2	11.6	88	93	19	9	0	4.2	89	100	102	98	70	100
S. Benazirabad ^{^^}	11	23	1	3.9	87	90	12	4	0	3.0	100	100	39	89	82	91
Naushero Feroz	11	37	1	6.1	86	88	12	5	0	3.7	80	100	60	72	59	100
Sukkur	11	25	0	4.6	96	86	11	8	0	6.2	100	-	70	96	96	100
Sindh	365	1,334	18	7.2	90	91	374	258	3	5.9	93	96	1431	93	87	98

* The expected number of AFP cases calculated @ 2/100,000 children below 15 years of age; number expected cases by district may not add up to the total because of rounding off.

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† Target ≥80%

^{^^}Previously Nawabshah

○ Indicator below target

*** data not received from district

**Non Polio rate is annualized up to week No.12 ending on 28 March 2009.

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA - NWFP & FATA

District /Agency	AFP Surveillance Data 2008						AFP Surveillance Data 2009									Active Surveillance (%) [†]
	Minimum Expected AFP Cases (Annual) *	Total Reported AFP Cases	Wild Polio Cases	Indicators			Minimum Expected AFP Cases (Annual) *	Total Reported AFP Cases	Wild Polio Cases	Indicators			Zero Reporting [‡]			
				Non-Polio AFP Rate **	Adequate Stools (%) [†]	60 Day Follow Up (%) [†]				Non-Polio AFP Rate **	Adequate Stools (%) [†]	60 Day Follow Up (%) [†]	Number Zero Reporting Sites	Completeness (%) [†]	Timeliness (%) [†]	
District Wise Summary — NWFP																
Bannu	8	41	0	10.2	83	90	8	7	0	7.4	100	0	43	94	91	100
Dera Ismail Khan	11	53	0	9.5	85	94	11	4	0	3.2	100	-	64	90	90	96
Lakki Marwat	6	53	0	17.6	91	94	6	8	0	11.2	88	100	48	84	84	94
Tank	3	21	0	14.4	81	95	3	1	0	2.9	100	-	27	90	90	100
Abottabad	9	31	0	6.5	97	96	10	4	0	3.6	75	-	93	82	82	94
Batagram	3	14	1	8.8	79	100	3	5	0	14.7	100	-	31	96	96	100
Haripur	8	26	0	6.7	92	92	8	6	0	6.6	100	100	63	99	95	94
Kohistan	4	7	0	3.3	86	71	4	0	0	0.0	-	-	21	99	99	100
Mansehra	13	79	0	11.9	89	91	13	12	0	7.7	83	100	74	92	91	95
Karak	5	29	0	10.9	90	96	6	4	0	6.3	100	-	28	90	90	100
Kohat	7	45	2	12.3	91	95	7	4	0	4.8	75	100	40	66	66	98
Hangu	4	12	0	6.2	75	75	4	1	0	2.2	100	-	28	100	100	100
Bunir	7	47	0	14.1	91	95	7	11	0	13.8	100	100	42	100	100	100
Chitral	4	9	0	4.9	100	100	4	4	0	9.2	75	0	27	74	74	55
Dir Lower	9	72	0	15.9	93	95	9	13	0	12.1	85	100	62	94	94	97
Dir Upper	7	34	2	8.8	79	87	7	7	0	8.7	86	100	30	100	100	100
Malakand	6	43	0	15.2	86	97	6	5	0	7.4	100	100	46	100	100	100
Swat	16	37	4	3.9	84	56	16	4	0	2.1	75	-	46	47	29	23
Shangla	5	15	0	5.6	100	93	6	0	0	0.0	-	-	35	100	100	0
Mardan	18	141	1	15.6	79	87	18	18	0	8.6	83	60	77	93	93	88
Swabi	12	109	0	17.6	84	93	13	18	0	12.2	94	80	63	90	88	100
Charsadda	12	88	3	13.9	82	87	13	20	2	12.4	85	100	49	63	51	100
Nowshera	10	81	4	14.7	86	86	11	8	0	6.4	88	0	48	85	85	100
Peshawar	26	188	21	12.4	86	95	27	34	0	11.0	85	80	124	94	94	100
NWFP	213	1,275	38	11.5	86	91	219	198	2	7.8	88	84	1209	88	87	89
Agency Wise Summary — FATA																
Bajour	8	33	4	7.1	91	63	9	9	1	8.1	67	33	16	45	45	30
Khyber	7	75	6	18.3	78	95	8	6	0	6.9	100	100	72	93	86	100
Kurram	5	7	0	2.7	86	28	5	0	0	0.0	-	-	30	0	0	0
Mohmand	5	29	4	10.5	69	82	5	4	1	5.4	50	100	26	84	84	50
Orakzai	2	8	0	10.5	100	87	2	1	0	5.8	100	-	33	100	92	95
North Waziristan	4	21	0	10.1	76	80	4	3	0	6.1	100	-	21	80	80	100
South Waziristan	5	18	0	7.6	89	94	5	4	0	7.3	100	100	17	91	91	100
FATA	36	191	14	9.7	82	89	37	27	2	5.9	81	71	215	70	68	68
NWFP & FATA	248	1,461	52	11.2	86	89	256	124	4	6.1	88	82	1424	84	83	84

* The expected number of AFP cases calculated @ 2/100,000 children below 15 years of age ; number expected cases by district may not add up to the total because of rounding off.

**Non Polio rate is annualized up to week No.12 ending on 28 March 2009.

† Target >80%

‡ Zero reports and active surveillance averaged for last 4 weeks

○ Indicator below target

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA - BALOCHISTAN

District	AFP Surveillance Data 2008						AFP Surveillance Data 2009									
	Minimum Expected AFP* Cases (Annual) [†]	Total Reported AFP Cases	Wild Polio Cases	Indicators			Minimum Expected AFP Cases (Annual) [†]	Total Reported AFP Cases	Wild Polio Cases	Indicators			Zero Reporting			Active Surveillance (%) [†] ‡
				Non-Polio AFP Rate	Adequate Stools (%) [†]	60 Day Follow Up (%) [†]				Non-Polio AFP Rate**	Adequate Stools(%) [†]	60 Day Follow Up (%) [†]	Number Zero Reporting Sites	Completeness (%) [†] ‡	Timeliness (%) [†] ‡	
Awaran	1	3	0	5.5	100	66	1	0	0	0.0	-	-	11	100	96	100
Kalat	2	2	0	1.7	50	50	2	0	0	0.0	-	-	13	100	99	100
Kharan	1	3	0	5.7	100	66	1	0	0	0.0	-	-	6	100	97	100
Khuzdar	5	13	0	5.4	100	83	5	2	0	3.5	100	0	32	94	88	100
Lasbella	4	9	0	4.7	89	62	4	1	0	2.2	100	100	27	***	***	100
Mastung	2	2	0	2.4	100	100	2	2	0	10.2	50	-	15	***	***	***
Gawadar	2	7	0	6.3	100	85	2	0	0	0.0	-	-	11	***	***	***
Kech	4	8	0	4.1	88	100	4	0	0	0.0	-	-	18	100	96	100
Panjgour	3	6	0	4.6	67	80	3	0	0	0.0	-	-	12	***	***	***
Nasirabad	3	22	1	13.0	77	91	3	6	0	15.5	100	0	22	100	100	100
Bolan	3	4	0	2.8	100	100	3	4	0	11.8	100	100	15	87	87	100
Jafarabad	5	35	0	13.1	80	88	5	4	0	6.5	100	100	28	100	100	100
Jhalmagsi	1	6	0	9.1	100	66	1	0	0	0.0	-	-	17	88	88	100
Chaghai	1	5	0	8.8	60	60	1	0	0	0.0	-	-	11	100	92	100
Noshki	1	7	0	15.6	71	71	1	2	0	18.4	100	100	9	100	77	100
Killa Abdullah	5	15	2	4.7	80	100	5	5	0	8.1	80	100	20	100	92	100
Pishin	5	17	1	6.8	82	76	5	1	0	1.8	-	-	36	100	65	63
Quetta	9	37	4	6.4	78	91	11	3	0	2.4	100	100	57	96	96	100
Dera Bugti	2	7	0	6.2	86	71	2	0	0	0.0	-	-	7	100	81	100
Kohlu	1	1	0	1.8	0	100	1	0	0	0.0	-	-	6	83	83	100
Sibi	1	7	0	6.7	100	100	1	3	0	27.1	100	100	17	94	94	100
Harnai	1	2	0	2.6	100	100	1	1	0	12.0	100	-	10	100	100	100
Ziarat	1	3	1	13.3	33	100	1	0	0	0.0	-	-	7	100	100	100
Washuk	1	1	0	1.9	100	100	1	0	0	0.0	-	-	9	100	90	100
Zhob	2	9	0	8.9	78	100	3	1	0	3.0	100	-	16	98	92	100
Sherani	1	0	0	0.0	-	-	1	0	0	0.0	-	-	3	100	100	100
Loralai	3	6	1	3.2	100	83	3	2	0	5.6	100	-	14	100	95	100
Barkhan	1	6	1	7.9	83	83	1	0	0	0.0	-	-	9	100	100	100
Musa Khel	1	5	0	6.6	80	100	2	1	0	5.6	100	-	9	100	100	100
Killa Saifullah	2	5	0	4.9	60	100	2	0	0	0.0	-	-	13	98	95	100
Balochistan	77	253	11	6.2	82	86	78	38	0	4.2	92	81	480	97	92	99

* The expected number of AFP cases calculated @ 2/100,000 children below 15 years of age ; number expected cases

† Target ≥80%

by district may not add up to the total because of rounding off.

○ Indicator below target *** data not received from district

** Non Polio rate is annualized up to week No.12 ending on 28 March 2009.

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA AJK, FANA & ISLAMABAD

District	AFP Surveillance Data 2008						AFP Surveillance Data 2009									Active Surveillance (%) ††	
	Minimum Expected AFP Cases (Annual) *	Total Reported AFP Cases	Wild Polio Cases	Indicators			Minimum Expected AFP Cases (Annual) *	Total Reported AFP Cases	Wild Polio Cases	Indicators			Zero Reporting ‡				
				Non-Polio AFP Rate	Adequate Stools (%) †	60 Day Follow Up (%) †				Non-Polio AFP Rate **	Adequate Stools (%) †	60 Day Follow Up (%) †	Number Zero Reporting Sites	Completeness (%) † ‡	Timeliness (%) † ‡		
District Wise Summary of Surveillance Data - AJK																	
Bagh	4	12	0	5.5	92	100	4	4	0	7.7	100	-	11	100	100	100	
Bhimber	3	10	0	5.1	90	100	4	4	0	9.7	100	100	11	100	100	100	
Kotli	6	11	0	3.4	91	100	7	2	0	2.6	100	100	13	100	100	100	
Mirpur	4	9	0	4.8	100	88	4	2	0	4.5	100	100	26	100	100	100	
Muzaffarabad	7	17	0	4.7	76	94	7	3	0	3.5	67	50	12	100	100	100	
Neelum	1	2	0	2.6	100	100	2	1	0	5.6	100	100	3	100	100	100	
Poonch	4	2	0	0.9	100	100	5	1	0	1.8	100	-	9	100	100	100	
Sudnuti	2	2	0	1.6	50	50	3	1	0	3.4	100	-	6	100	100	100	
AJK	33	64	0	3.8	88	95	35	18	0	4.5	94	83	91	100	100	100	
District Wise Summary of Surveillance Data - FANA																	
Diamer	1	3	0	5.8	67	100	1	1	0	8.3	100	-	5	100	100	100	
Astore	1	1	0	1.6	100	100	1	1	0	6.7	100	-	5	100	100	100	
Ghanche	1	2	0	4.0	100	100	1	0	0	0.0	-	-	7	100	100	100	
Ghizer	1	4	0	5.9	100	100	1	0	0	0.0	-	-	7	100	100	100	
Gilgit	3	9	0	6.5	89	87	3	0	0	0.0	-	-	12	100	100	100	
Sakardu	3	4	0	3.3	75	100	3	0	0	0.0	-	-	6	100	100	100	
FANA	12	23	0	4.6	87	95	12	2	0	1.7	100	-	42	100	100	100	
District Wise Summary of Surveillance Data - ISLAMABAD																	
Islamabad	12	26	5	3.3	92	96	13	1	0	1.0	100	-	39	100	90	100	
* The expected number of AFP cases calculated @ 2/100,000 children below 15 years of age; number expected cases by district may not add up to the total because of rounding off. ** Non Polio rate is annualized up to week No.12 ending on 28 March 2009. ‡ Zero reports and active surveillance averaged for last 4 weeks: † Target ≥80%: ○ Indicator below target.																	
REPORTED AFP CASES BY WEEK OF ONSET¹ — (Source RRL REC file 03/04/2009)																	
Province	Total AFP 2007	Total AFP 2008	Total AFP 2009	W 27 Dec 08	W 03 Jan 09	W 10 Jan 09	W 17 Jan 09	W 24 Jan 09	W 31 Jan 09	W 07 Feb 09	W 14 Feb 09	W 21 Feb 09	W 28 Feb 09	W 07 Mar 09	W 14 Mar 09	W 21 Mar 09	W 28 Mar 09
Punjab	2000	2177	475	23	31	45	41	29	38	46	52	38	37	47	38	33	19
Sindh	1092	1334	258	24	16	21	17	22	35	24	22	33	22	22	21	22	9
NWFP & FATA	1011	1466	225	16	11	17	18	28	9	20	20	17	16	30	21	17	10
Balochistan	237	253	38	3	4	5	2	3	2	5	3	4	1	7	1	2	1
AJK	50	65	18	0	2	1	3	3	3	3	0	2	0	1	1	0	0
FANA	18	23	2	0	1	0	0	0	0	0	0	0	1	0	1	0	0
Islamabad	17	26	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Pakistan	4425	5344	1017	67	65	89	81	85	87	98	97	94	77	107	83	74	40
CONFIRMED POLIO CASES BY MONTH OF ONSET — (Source AFP REC file)																	
Province	2007	2008	2009	2008												2009	
				Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb [¶]	Mar [¶]	
Punjab	1	31	2	-	-	-	-	3	8	13	5	2	-	2	-	-	
Sindh	12	18	3	-	5	2	1	2	3	-	-	1	1	1	2	-	
NWFP & FATA	11	52	4	-	1	2	-	10	5	13	13	4	5	4	-	-	
Balochistan	8	11	-	-	-	1	2	1	2	2	3	-	-	-	-	-	
AJK / FANA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Islamabad</i>	-	5	-	-	-	-	-	2	-	3	-	-	-	-	-	-	
Pakistan	32	117	9	0	6	5	3	18	18	31	21	7	6	7	2	-	