



ACUTE FLACCID PARALYSIS (AFP) SURVEILLANCE — COUNTRY UPDATE

As of 2nd January 2009, the AFP surveillance system has reported 5192 cases in 2008, with 2113 from Punjab, 1307 from Sindh, 1235 from NWFP, 183 from FATA, 245 from Balochistan, 63 from AJK, 21 from FANA and 25 from Islamabad. Among these AFP cases there are **118 confirmed polio cases in 48 districts** of the country in 2008, see map below. **The overall AFP surveillance indicators at the national and provincial levels are above the international standards.** The non-polio AFP rate (annualized) in 2008 is 6.4 per 100,000 children below 15 years of age and percentage of AFP cases with adequate specimens is 92%.

POLIOVIRUS EPIDEMIOLOGY (2008)

So far 118 wild poliovirus cases were confirmed in 48 districts of the country, including 81 type-1 and 37 type-3 cases (the majority of specimens collected from AFP cases in December are still under process in the laboratory). This compares to 32 cases in 2007, 40 in 2006 and 28 in 2005.

It is important to note that the ongoing insecurity and inaccessibility in areas having ongoing circulation, including central NWFP (and southern Afghanistan), is a key reason for the increase in the number of cases in 2008. This resulted in the continued circulation in these areas, but also in importations in polio-free areas of the country, due to increased population movements to more secure areas.

Majority of the cases in 2008 are related to two outbreaks (64 cases) associated with "importations" that include an outbreak of P-1 in central/northern Punjab (31 cases) and an outbreak of P-3 in central NWFP and FATA (33 cases). A small outbreak of P1 also occurred in Quetta (4 cases), due to an 'importation' of virus from southern Afghanistan. It is important to highlight that **staff in NWFP and FATA continued their efforts to take advantage of every opportunity to vaccinate children, despite insecurity.** Ongoing insecurity in NWFP and FATA remains a significant risk to polio eradication.

It is worth noting that in 2008: a) There are **no polio cases from the previous reservoir areas of southern Punjab and southern NWFP and FATA**, despite circulation in the neighboring areas (Note: 1, all independent observers consistently reported high SIA quality in southern Punjab, but this could not be verified in southern NWFP/FATA due to insecurity; and 2, key surveillance indicators in these areas are above the international standards). b) There are **no type-1 cases from Sindh in the high transmission season** (last case in August, 2008). c) **More than 264 million doses of OPV were given to eligible children all over the country.** Eleven vaccination campaigns (5 NIDs & 6 additional rounds) were conducted in the transmission zones (described below), as well as 8 outbreak and case response campaigns, using the epidemiologically appropriate mono-valent vaccine.

No scheduled campaign was delayed due to logistics or operational issues. Gaps in quality of immunization activities, both supplementary and routine, remained in transmission zones nonetheless. This was affirmed by independent international monitors who reported inconsistent quality in vaccination activities at district and sub-district level in some districts, which is large enough to allow poliovirus circulation despite overall high coverage.

The immediate challenge in 2009 is to interrupt remaining endemic circulation in the 3 well known transmission zones: central NWFP & FATA; Sindh province (Karachi & Jacobabad) with neighboring areas of Balochistan (Nasirabad—Jafarabad areas); and north-western Balochistan (and southern Afghanistan).

Key epidemiological characteristics of polio cases in 2008: the majority are below 2 years (74%), 85% from poor families, 71% living in multiple family dwellings and 55% have first language Pashto. Fifty-one percent of cases received 7 plus doses of OPV based on recall of parents; only 29% received 3 routine doses and 9% cases received no OPV doses due to refusal of parents or insecurity. **Most of these features indicate ongoing barriers to vaccination, perhaps the most important being reaching all children especially infants through culturally appropriate (preferably with at least one female member) vaccination teams.**

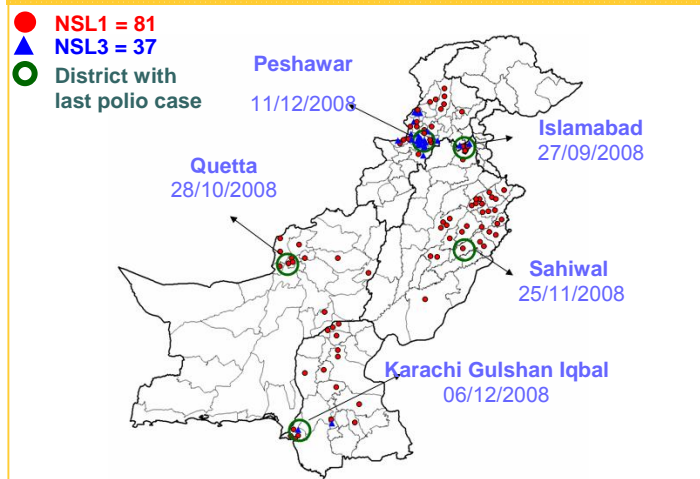
Inside this issue	page
AFP Surveillance Country Update	1
Polio News Briefs & upcoming events	1
Year End Technical Review	2
Percent AFP cases notified within 7 days	2
Global update	2
Province wise AFP surveillance data	3
Recent Polio cases - characteristics	3
Update on January 2009 NIDs	3
District wise summary of key indicators	4-8
Reported AFP cases by week of onset	8
Confirmed polio cases by month of onset	8

To ensure uniform high quality vaccination coverage in all campaigns, consultations were held with various cadres of staff engaged in immunization to develop province specific plans addressing local needs. The need for province-specific plans was a recommendation of the global Advisory Committee on Polio Eradication. **Central to activities in 2009 is to ensure an intensified national drive for polio eradication**, including: a) the establishment of an inter-provincial coordination committee chaired by the Federal Health Minister to provide oversight and accountability at all levels for high quality vaccination activities; b) increased inter-sectoral collaboration (education, finance, interior and religious affairs in particular); c) increased cross border collaboration; and d) increased engagement of all community stakeholders.

News Briefs & Upcoming Events

- ◆ Technical review on 16th December concludes that higher coverage in Pakistan is needed due to very efficient poliovirus circulation.
- ◆ The Federal Minister to chair inter-provincial coordination committee on polio on 9th January in Islamabad. The meeting will review provincial plans for 2009. The WHO Regional Director joins the meeting.
- ◆ National Immunization Days 19 to 21 January (central and northern Punjab and central Sindh and Karachi — 12 to 14 January)
- ◆ Cross border coordination meeting on polio eradication between Pakistan & Afghanistan — 10 & 11 February
- ◆ Six high risk districts of Punjab will conduct vaccination campaign against tetanus from 9 to 19 February targeting about 4 million women of child bearing age

CONFIRMED POLIO CASES BY DISTRICT 2008



YEAR-END TECHNICAL REVIEW FOR POLIO ERADICATION

The Federal Ministry for Health convened a one-day technical review on 16 December 2008 to assess the status and priorities for polio eradication in Pakistan. Professor Rashid Jooma, Director General Health, chaired the review which included the Chairman of the National Immunization Technical Advisory Group and National Certification Committee independent oversight bodies, the President Pakistan Paediatrics Association, WHO, UNICEF, Rotary International, the World Bank, CIDA, USAID and JICA. Dr Bruce Aylward, the Global Director of Global Polio Programme also participated in the meeting. The Federal Minister for Health, Mir Aijaz Hussain Jakhrani chaired the concluding session.

The consultation concluded that very efficient poliovirus transmission is as important a factor for the continued cases in Pakistan as well as the ongoing performance gaps in vaccination activities. The level of population immunity now being achieved in most parts of the country would have stopped transmission in many other countries (e.g., sub-Saharan Africa). Even transient gaps in coverage are sufficient to allow ongoing transmission in the 3 transmission zones and/or vi-

uses imported from other areas. Assessment of SIA quality using finger marking confirms these ongoing gaps in key areas.

Major decisions: A much 'bigger operation' than in 2008' with increased involvement of other sectors and ministries together with increased accountability of the programme at all levels will be critical to stop transmission of polio in 2009. Polio campaigns must be sustained at their planned intensity. To heighten the attention given to eradication across the country, the Minister of Health has established an inter-provincial coordination committee which will meet regularly. A National Task Force will be considered to ensure systematic engagement of all relevant sectors (government departments and private / NGOs). Collaboration will be further enhanced with the Government of Afghanistan to conduct synchronized vaccination campaign in border areas. The Director General will chair the polio eradication operations steering committee on a monthly basis to ensure full government oversight of all major technical and operational issues.

PERCENT AFP CASES NOTIFIED WITHIN 7 DAYS OF ONSET OF PARALYSIS—2008

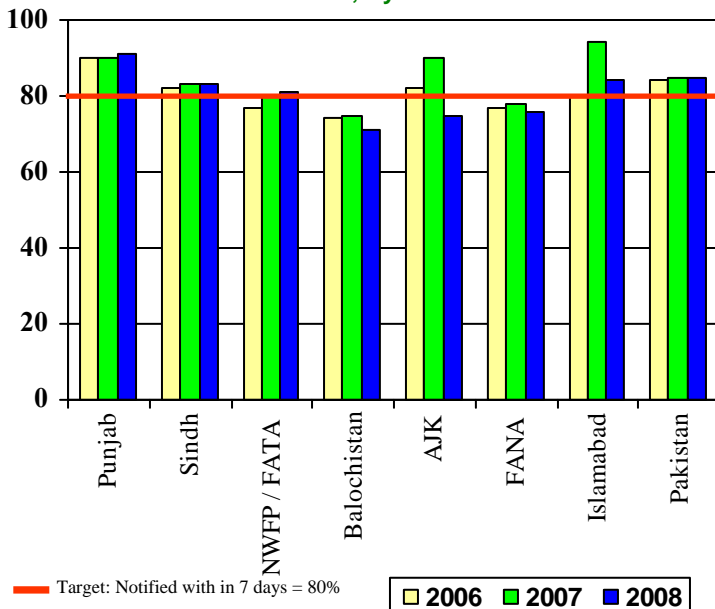
The percentage of AFP cases notified within 7 days of onset of paralysis is an indicator used to measure the efficiency of the surveillance system. The timely notification of AFP cases thus means a timely detection of polio viruses, if present. The minimum required standard is 80%.

The key surveillance indicators in all provinces and most districts are above or reaching the international standards. However, efforts should continue to further improve the timeliness for detection of AFP cases. The following bar graph shows that all provinces and regions are above or reaching the target, except Balochistan, AJK and FANA. As shown in the map below, there are

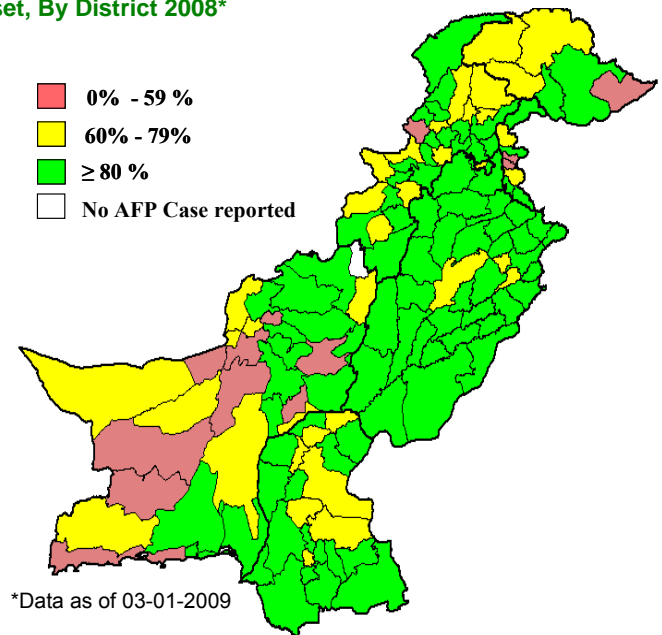
gaps in this indicator at the district and agency levels (yellow and red districts), which is most pronounced in FATA and Balochistan as well as a few key areas of Sindh and Punjab.

In those districts where there is a low rate of notification within 7 days; need is to conduct in-depth and regular analysis of health-care seeking behaviour of the reported AFP cases. Based on this analysis, a review of the current surveillance network should be undertaken to see the appropriateness and priority given to zero reporting and active surveillance sites. Targeted awareness building sessions should be undertaken to ensure the immediate reporting of all AFP cases.

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



Percentage AFP Cases Notified with in 7 days of paralysis onset, By District 2008*



Global Update, 2008

As of January 06, 1618 confirmed cases were reported globally in 2008 as compared to 992 in the same period in 2007. The cases from endemic countries are 1486 and 132 are from non-endemic countries. The cases are: Pakistan - 118, India - 549, Afghanistan - 31, Nigeria - 788, Angola - 26, Niger - 15, CAR - 2, Ethiopia - 2, DRC - 5, Sudan - 21, Ghana - 9, Nepal - 6, Chad - 33, Burkina Faso - 5, Mali - , Togo - 3 and Benin - 4.

Province-wise AFP Surveillance Data for 2007 & 2008

Province/Region	AFP Surveillance Data 2007						AFP Surveillance Data 2008										Rec. File Date
	Minimum Ex-pected AFP* Cases (Annual)	Total Reported AFP Cases	Wild Polio Cases	Indicators			Minimum Ex-pected AFP*	Total Reported AFP Cases	Wild Polio virus Cases	Indicators			Zero Reporting‡		Active Surveil-lance (%)† †		
				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 (%)† †	
Punjab	841	2,000	1	4.8	93	93	860	2,113	31	4.9	94	94	911	94	94	98	
Sindh	355	1,092	12	6.3	90	91	365	1,307	18	7.2	90	91	1306	93	89	95	
NWFP	206	882	8	8.4	88	92	213	1,235	39	11.4	87	91	1218	89	87	90	
FATA	34	129	3	7.3	85	92	36	183	14	9.7	83	82	224	65	63	56	
Balochistan	75	237	8	6.0	83	85	77	245	11	6.1	82	85	480	96	92	97	
AJK	32	50	0	3.1	94	93	33	63	0	3.8	89	95	83	100	100	100	
FANA	11	18	0	3.2	100	100	12	21	0	4.3	90	85	42	100	100	100	
Islamabad	11	17	0	4.3	94	82	11	25	5	3.2	92	95	39	100	92	100	
Pakistan	1,523	4,425	32	5.7	91	92	1,604	5,192	118	6.4	92	92	4,303	92	90	92	

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

** Non Polio rate is annualized up to week No.52 ending on 26 December 2008.

‡ Zero reports and active surveillance averaged for last 4 weeks

○ Indicator below target; † Target ≥80%

02 January 2009⁵

Key Epidemiological Characteristics of Polio Cases since the Last Bulletin

Ten polio cases have been reported in Pakistan since publication of the last report including 4 type-1 and 6 type-3 cases. The type-1 cases are from Charsadda (1 case) and Nowshera (1 case) districts of NWFP / FATA, Jhang (1 case) & Sahiwal (1 case) districts of Pun-

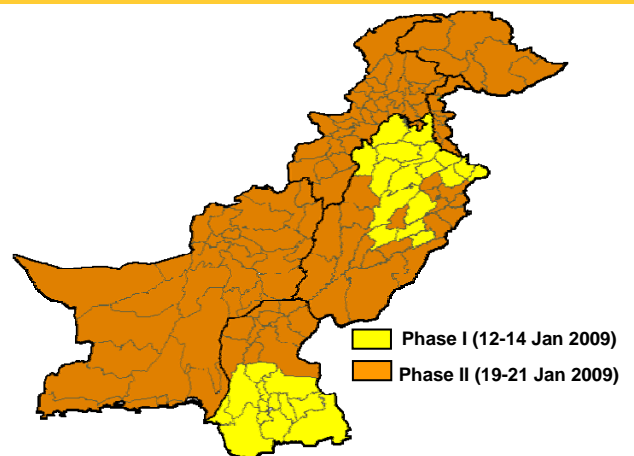
jab. The type-3 cases are from Khyber Agency (1 case) and Peshawar (3 cases) district of NWFP/FATA, Hyderabad district (1 case) & Gulshan Iqbal town-Karachi (1 case) from Sindh province. Key epidemiological characteristics of cases are shown in table below.

Province	No. of cases	WPV Type		Sex		Age (Range: 9-96 months)			Routine OPV Doses			SIA OPV doses*	
		Type-1	Type-3	Male	Female	1-11 months	12-23 months	24+ months	3 doses	Zero	1-2	1-6	7 or more
Punjab	2	2	0	1	1	1	1	0	1	0	1	1	1
Sindh	2	0	2	1	1	0	2	0	1	1	0	0	2
NWFP/FATA	6	2	4	3	3	0	4	2	3	3	0	1	5
Total	10	4	6	5	5	1	7	2	5	4	1	2	8

An update on the January 2009 NIDs

The first round of National Immunization Days (NIDs) in 2009 will be held from 19th to 21st January 2009 in all areas of the country including AJK and FANA. This campaign will be staggered in Punjab and Sindh province, see map for areas and dates. To meet a shortfall of 12 million doses of tri-valent OPV in the country, some districts will use mOPV. The campaign in remaining parts of the country will be held simultaneously as per schedule from 19th-21st January, using tOPV. The distribution of all logistics and social mobilization materials has been initiated. It is hoped that recent provincial planning workshops and inter-provincial coordination meeting on 9th January will energize and reinvigorate enthusiasm to ensure vaccination of every child in the upcoming NIDs.

Map for areas in phase I & II Jan 2009 NIDs



It is important to highlight that any area having coverage verified by finger marking below 90% will be re-done under close supervision as per the national policy.

FEEDBACK

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DISTRICT WISE SUMMARY OF SURVEILLANCE DATA - PUNJAB

District	AFP Surveillance Data 2007						AFP Surveillance Data 2008									
	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	29	57	0	4.0	91	87	30	58	1	3.9	97	93	30	94	94	97
Bahwalnagar	23	44	0	3.8	95	81	24	52	0	4.4	94	93	25	92	92	94
Rahimyar Khan	38	91	0	4.8	91	89	39	98	0	5.2	92	97	40	93	91	100
Dera Ghazi Khan	20	84	1	8.4	92	91	20	95	0	9.5	98	92	20	96	96	96
Layyah	13	37	0	5.6	97	97	14	50	0	7.4	94	94	17	95	90	100
Muzaffargarh	32	96	0	6.0	95	93	33	111	0	6.8	95	94	26	98	98	100
Rajanpur	13	71	0	10.7	94	95	14	63	0	9.4	97	98	16	92	92	100
Faisalabad	61	124	0	4.1	81	89	63	129	2	4.1	85	89	36	98	98	93
Jhang	31	79	0	5.1	90	89	32	82	4	5.0	83	94	26	85	85	100
Toba Tek Singh	18	78	0	8.9	94	94	18	54	1	6.0	91	91	23	96	92	100
Gujranwala	39	72	0	3.7	89	100	40	104	3	5.0	94	96	47	92	92	100
Gujrat	22	55	0	4.9	100	96	23	46	0	4.1	100	97	40	99	96	100
Hafizabad	9	35	0	7.6	89	78	9	32	5	5.6	88	96	23	100	98	100
Mandi Bahuddin	12	48	0	7.8	100	97	13	33	0	5.4	97	100	25	94	94	100
Narowal	14	41	0	6.0	93	97	14	33	0	4.9	94	100	30	92	92	94
Sialkot	31	36	0	2.4	97	100	31	48	1	3.1	96	100	25	82	82	100
Kasur	27	60	0	4.5	95	94	28	71	2	5.1	97	98	27	100	100	100
Lahore	80	110	0	2.8	96	100	80	109	2	2.7	95	92	42	94	94	88
Okara	25	104	0	8.4	95	95	25	105	2	8.2	96	92	32	94	94	100
Sheikhupura	23	37	0	3.2	95	97	24	40	3	3.1	98	96	29	96	96	100
Nankana Sahib	14	41	0	5.7	88	95	14	38	1	4.9	89	96	29	100	90	98
Khanewal	23	51	0	4.4	92	95	24	87	2	7.3	97	97	30	97	97	94
Lodhran	13	54	0	8.1	94	96	14	48	0	7.1	94	94	22	87	87	100
Multan	36	78	0	4.4	95	95	37	74	0	4.1	95	92	30	96	96	100
Pakpattan	14	29	0	4.0	93	88	15	35	0	4.8	97	96	17	85	84	96
Sahiwal	20	51	0	5.1	92	89	20	53	1	5.1	92	95	28	85	85	98
Vehari	24	48	0	4.0	98	93	25	65	0	5.4	95	93	27	91	91	92
Attock	14	28	0	4.0	100	92	14	29	0	4.1	97	100	15	100	100	100
Chakwal	12	29	0	5.0	100	96	12	29	0	5.0	100	100	10	100	100	100
Jhelum	10	24	0	4.7	96	86	10	26	0	5.1	96	95	20	89	89	100
Rawalpindi	38	62	0	3.2	97	94	40	63	1	3.2	97	96	29	96	96	100
Bhakkar	12	43	0	7.2	95	92	12	37	0	6.1	97	81	11	96	96	100
Khushab	10	25	0	5.1	100	86	10	26	0	5.3	96	95	16	100	100	100
Mianwali	12	32	0	5.5	97	100	12	40	0	6.8	95	97	17	100	100	90
Sargodha	29	45	0	3.1	93	97	29	50	0	3.5	98	97	31	97	97	99
Punjab	841	2,000	1	4.8	93	93	860	2,113	31	4.9	94	94	911	94	94	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.

** Non Polio rate is annualized up to week No.47 ending on 22 November 2008.

† Target ≥80%

‡ Zero reports and active surveillance averaged for last 4 weeks

○ Indicator below target

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA - SINDH

Town/District	AFP Surveillance Data 2007						AFP Surveillance Data 2008									
	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	2	5.7	87	71	5	15	0	6.6	80	100	20	90	90	100
Bin Qasim	5	7	0	2.9	100	100	5	23	0	9.3	91	95	22	100	100	100
Gadap	4	17	0	8.4	88	100	4	21	1	9.8	86	85	13	100	100	100
Gulberg	5	5	0	1.9	100	100	6	10	0	3.7	90	100	8	100	100	100
Gulshan-e-Iqbal	8	22	0	5.5	86	94	8	24	1	5.7	92	100	15	100	100	100
Jamsheed	9	10	0	2.3	90	88	9	16	0	3.7	88	100	18	100	75	85
Kamari	6	11	0	4.0	82	90	6	11	0	3.9	82	83	11	100	100	100
Korangi	7	16	0	4.7	100	84	7	28	0	8.2	93	100	10	100	100	100
Landhi	9	15	0	3.3	93	85	9	19	0	4.2	100	93	20	100	98	100
Liaqatabad	8	6	0	1.6	83	100	8	13	0	3.4	85	100	17	97	94	100
Layari	7	4	0	1.2	75	66	7	14	0	4.4	100	90	15	100	92	100
Malir	6	11	0	3.8	100	80	6	16	0	5.5	94	100	15	100	100	100
North	8	12	0	3.0	75	81	8	20	1	4.7	80	89	13	96	96	93
North Nazimabad	6	7	0	2.4	86	80	6	10	0	3.4	90	71	12	100	90	88
Orangi	10	16	0	3.2	88	100	11	24	0	4.7	96	100	22	84	84	100
Shah Faisal	6	8	0	2.7	75	83	6	13	0	4.3	85	83	11	100	100	100
Saddar	9	10	0	2.1	80	90	10	19	1	3.9	84	83	22	100	100	100
Site	7	6	0	1.8	83	83	7	12	1	3.3	92	72	15	100	100	100
District Wise Summary— Sindh																
KARACHI	123	198	2	3.2	88	88	128	308	5	4.9	90	93	279	98	96	98
Badin	13	46	0	7.4	89	90	13	55	0	8.8	93	90	54	99	93	85
Dadu	12	50	0	8.1	94	84	13	34	1	5.2	100	85	45	98	90	100
Jamshoro	7	27	0	8.1	93	96	7	30	0	9.0	73	77	30	95	81	92
Tando M. Khan	5	15	0	5.7	100	80	5	21	0	9.5	81	83	12	100	100	100
Tando Allahyar	5	16	0	6.3	100	93	5	32	0	12.0	81	85	24	90	89	91
Matiari	6	27	0	9.7	89	91	6	31	0	11.6	94	96	40	100	94	98
Hyderabad	16	20	0	2.6	100	94	16	40	2	4.7	78	91	30	100	100	100
Thatta	12	40	1	6.2	93	89	13	70	0	11.4	96	90	34	88	84	82
Jacobabad	8	98	2	22.7	80	97	9	74	3	17.7	89	95	45	99	84	100
Larkana	13	27	0	4.1	89	100	14	44	0	7.3	89	97	46	86	86	88
Kashmore	7	37	0	10.2	89	91	7	43	0	11.7	86	93	29	98	87	100
Kambar	9	43	5	8.1	98	95	10	38	0	6.8	92	87	41	92	92	88
Shikarpur	10	57	0	11.7	93	88	10	65	1	13.1	95	96	39	99	97	100
Mirpurkhas	10	55	0	10.4	89	83	11	53	1	10.0	94	97	83	97	97	98
Umerkot	8	42	0	10.5	88	97	8	37	0	9.2	89	84	35	93	93	97
Sanghar	17	43	0	5.2	88	90	17	59	1	6.8	92	85	54	83	80	88
Tharparkar	11	29	0	5.3	86	88	11	38	0	6.9	97	96	83	81	80	98
Ghotki	12	49	1	8.2	86	93	12	47	0	8.0	89	87	50	94	94	100
Khairpur	18	96	1	10.7	93	95	18	105	2	11.4	90	95	95	80	80	80
S.M.B.B	11	19	0	3.4	84	82	11	23	1	4.0	83	88	39	83	79	98
Naushero Feroz	11	22	0	3.9	100	84	11	37	1	6.2	86	90	49	95	78	100
Sukkur	11	36	0	6.8	97	94	11	23	0	4.3	100	85	70	94	94	100
Sindh	355	1,092	12	6.3	90	91	365	1,307	18	7.2	90	91	1306	93	89	95

* 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.47 ending on 22 November 2008.

† Target ≥80%

‡ Zero reports and active surveillance averaged for last 4 weeks

○ Indicator below target

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA - NWFP & FATA

District /Agency	AFP Surveillance Data 2007						AFP Surveillance Data 2008									
	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 (%) ††	
District Wise Summary — NWFP																
Bannu	8	38	0	9.7	86	97	8	41	0	10.4	83	91	43	94	91	100
Dera Ismail Khan	10	44	0	8.6	93	88	11	51	0	9.6	86	93	64	98	98	97
Lakki Marwat	6	34	0	11.7	88	87	6	52	0	17.6	92	91	55	96	95	100
Tank	3	4	0	2.8	100	100	3	21	0	14.7	81	94	27	93	93	100
Abottabad	9	30	0	6.4	97	89	9	30	0	6.4	97	96	93	74	74	89
Batagram	3	13	0	9.9	85	63	3	14	1	9.0	79	100	31	91	91	100
Haripur	8	23	0	6.1	87	86	8	25	0	6.6	92	90	66	98	88	88
Kohistan	4	7	0	3.3	86	100	4	7	0	3.3	86	66	21	90	90	77
Mansehra	13	53	0	8.3	96	89	13	76	0	11.8	91	89	74	92	92	100
Karak	5	27	0	10.4	81	96	5	29	0	11.1	90	95	28	92	92	100
Kohat	7	29	0	8.6	90	88	7	44	2	12.3	91	94	40	70	70	93
Hangu	4	5	0	2.6	100	100	4	12	0	6.3	75	81	27	85	85	96
Bunir	6	40	0	12.5	93	97	7	46	0	14.1	93	95	42	100	100	100
Chitral	4	11	0	6.1	100	63	4	8	0	4.4	100	100	27	97	97	100
Dir Lower	9	43	0	9.8	95	100	9	70	0	15.8	94	98	62	92	92	95
Dir Upper	7	26	0	7.9	88	92	7	30	2	8.1	83	85	30	100	100	100
Malakand	5	19	0	6.9	89	88	6	43	0	15.5	86	97	46	100	100	100
Swat	15	36	1	4.6	86	88	16	37	4	4.3	84	58	46	37	17	50
Shangla	5	9	0	3.4	100	87	5	15	0	5.7	100	92	35	100	100	0
Mardan	17	91	4	10.1	88	94	18	138	1	15.8	80	87	77	87	87	89
Swabi	12	48	0	8.0	88	100	12	105	0	17.3	85	91	63	93	90	100
Charsadda	12	53	0	8.9	81	93	12	82	3	13.2	83	91	49	82	82	98
Nowshera	10	65	2	12.4	82	90	10	77	4	14.2	87	85	48	83	83	98
Peshawar	25	128	1	10.2	82	94	26	182	22	12.6	87	94	124	87	87	91
NWFP	206	882	8	8.4	88	92	213	1,235	39	11.4	87	91	1218	89	87	90
Agency Wise Summary — FATA																
Bajour	8	29	0	7.4	86	92	8	33	4	7.2	91	62	28	39	37	20
Khyber	7	38	2	10.4	79	100	7	72	6	18.6	81	96	73	87	81	100
Kurram	5	12	0	4.8	92	91	5	7	0	2.8	86	28	30	0	0	0
Mohmand	4	15	0	6.8	73	83	5	26	4	9.8	73	80	26	89	89	31
Orakzai	2	6	0	7.6	100	100	2	8	0	10.7	100	100	33	99	93	84
North Waziristan	4	16	0	7.9	94	92	4	20	0	9.8	80	77	21	66	66	89
South Waziristan	5	13	1	5.2	92	66	5	17	0	7.3	88	91	13	77	77	65
FATA	34	129	3	7.3	85	92	36	183	14	9.7	83	82	224	65	63	56
NWFP & FATA	234	1,011	11	8.5	88	92	248	1,418	53	11.2	86	89	1442	84	82	82

* 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.47 ending on 22 November 2008.

† 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 2007						AFP Surveillance Data 2008									
	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	2	0	3.6	100	100	1	3	0	5.6	100	66	11	***	***	***
Kalat	2	6	0	5.2	83	83	2	2	0	1.8	50	50	13	***	***	***
Kharan	1	2	0	3.0	100	100	1	3	0	5.8	100	66	6	75	75	75
Khuzdar	5	8	0	3.4	100	85	5	12	0	5.1	100	81	32	75	68	50
Lasbella	4	13	1	6.5	69	90	4	6	0	3.2	83	60	27	100	94	100
Mastung	2	5	0	6.0	60	100	2	2	0	2.4	100	50	15	89	87	100
Gawadar	2	3	0	2.8	33	50	2	7	0	6.4	100	100	11	100	100	100
Kech	4	5	0	2.6	100	100	4	7	0	3.7	86	100	18	100	96	100
Panjgour	3	1	0	0.8	100	100	3	6	0	4.7	67	100	12	100	90	100
Nasirabad	3	21	2	12.2	81	71	3	22	1	13.2	77	76	22	***	***	***
Bolan	3	9	0	5.6	67	88	3	4	0	2.8	100	100	15	100	97	100
Jafarabad	5	38	0	15.1	84	80	5	34	0	12.9	79	87	28	100	100	100
Jhalmagsi	1	4	0	6.3	75	100	1	6	0	9.3	100	50	17	95	95	100
Chaghai	2	2	0	1.7	50	50	2	5	0	8.9	60	75	11	100	92	100
Noshki	1	5	0	8.4	100	100	1	7	0	15.9	71	66	9	100	100	100
Killa Abdullah	5	16	3	5.3	69	92	5	15	2	4.7	80	100	20	***	***	***
Pishin	5	14	1	5.7	79	72	5	17	1	6.9	82	78	36	***	***	***
Quetta	9	34	0	7.7	88	93	9	37	4	6.5	78	88	57	96	92	100
Dera Bugti	2	6	0	5.5	67	83	2	7	0	6.3	86	83	7	91	91	100
Kohlu	1	3	0	5.6	67	100	1	1	0	1.9	0	100	6	***	***	***
Sibi	2	7	0	6.3	86	100	2	6	0	5.9	100	100	17	89	89	100
Harnai							1	1	0	1.3	100	-	10	***	***	***
Ziarat	1	2	0	13.1	100	100	1	3	1	13.6	33	100	7	97	93	100
Washuk	1	3	0	6.1	100	50	1	1	0	1.9	100	100	9	100	100	100
Zhob	2	8	0	7.7	100	75	2	9	0	9.1	78	100	16	100	92	100
Sherani	1	1	0	2.7	100	0	1	0	0	0.0	-	-	3	100	100	100
Loralai	3	6	1	3.3	100	83	3	6	1	3.3	100	80	14	100	94	100
Barkhan	1	2	0	3.6	100	100	1	6	1	8.1	83	80	9	100	88	100
Musa Khel	1	2	0	2.8	100	0	1	5	0	6.7	80	100	9	100	98	100
Killa Saifullah	2	7	0	7.0	100	100	2	5	0	5.0	60	100	13	100	93	100
Balochistan	75	237	8	6.0	83	85	77	245	11	6.1	82	85	480	96	92	97

* 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.47 ending on 22 November 2008.

† Target ≥80%
‡ Zero reports and active surveillance averaged for last 4 weeks
○ Indicator below target *** data not received from district

DISTRICT WISE SUMMARY OF SURVEILLANCE DATA AJK, FANA & ISLAMABAD

District	AFP Surveillance Data 2007						AFP Surveillance Data 2008									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	7	0	3.3	100	100	4	11	0	5.1	91	100	11	100	100	100
Bhimber	3	6	0	3.6	83	100	3	9	0	5.2	100	100	10	100	100	100
Kotli	6	8	0	2.5	100	87	6	11	0	3.4	91	100	13	100	100	100
Mirpur	3	12	0	7.0	100	100	4	9	0	4.9	100	100	19	100	100	100
Muzaffarabad	7	10	0	2.8	90	80	7	17	0	4.7	76	90	12	100	100	100
Neelum	1	2	0	2.8	100	100	1	2	0	2.6	100	100	3	100	100	100
Poonch	4	3	0	1.4	67	100	4	2	0	0.9	100	100	9	100	100	100
Sudnuti	2	2	0	1.8	100	100	2	2	0	1.6	50	50	6	100	100	100
AJK	32	50	0	3.1	94	93	33	63	0	3.8	89	95	83	100	100	100

District Wise Summary of Surveillance Data - FANA

Diamer	1	3	0	5.0	100	100	1	3	0	5.9	67	33	5	100	100	100
Astore	1	0	0	0.0	-	-	1	1	0	1.6	100	100	5	100	100	100
Ghanche	1	1	0	1.4	100	100	1	2	0	4.1	100	100	7	100	100	100
Ghizer	1	4	0	5.6	100	100	1	4	0	6.0	100	100	7	100	100	100
Gilgit	3	6	0	3.9	100	100	3	8	0	5.9	88	100	12	100	100	100
Sakardu	3	4	0	2.7	100	100	3	3	0	2.5	100	66	6	100	100	100
FANA	11	18	0	3.2	100	100	12	21	0	4.3	90	85	42	100	100	100

District Wise Summary of Surveillance Data - ISLAMABAD

Islamabad	11	17	0	4.3	94	82	11	25	5	3.2	92	95	39	100	92	100
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* 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.47 ending on 22 November 2008. ‡ 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 26/12/2008)

Province	Total AFP 2006	Total AFP 2007	Total AFP 2008	W 38	W 39	W 40	W 41	W 42	W 43	W 44	W 45	W 46	W 47	W 48	W 49	W 50	W 51
				20 Sep 08	27 Sep 08	04 Oct 08	11 Oct 08	18 Oct 08	25 Oct 08	01 Nov 08	08 Nov 08	15 Nov 08	22 Nov 08	29 Nov 08	06 Dec 08	13 Dec 08	20 Dec 08
Punjab	1936	2000	2113	51	40	30	68	43	50	49	41	42	37	33	29	31	5
Sindh	1207	1092	1307	21	21	27	27	26	20	33	27	36	30	22	9	18	1
NWFP & FATA	967	1011	1418	32	15	21	22	27	19	28	17	27	23	24	13	15	7
Balochistan	228	237	245	3	3	4	3	7	5	6	9	5	6	5	6	3	0
AJK	45	50	63	1	1	1	0	0	0	4	3	4	4	0	2	4	0
FANA	13	18	21	0	0	0	1	0	0	1	0	0	0	1	0	0	0
Islamabad	20	17	25	1	2	1	0	0	0	0	0	2	0	0	0	0	0
Pakistan	4416	4425	5192	115	83	85	124	110	99	127	97	116	100	85	59	71	13

CONFIRMED POLIO CASES BY MONTH OF ONSET — (Source AFP REC file)

Province	2006	2007	2008	2007	2008												
				Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov†	Dec‡	
Punjab	2	1	31	0	0	0	0	0	0	0	0	3	8	13	5	2	0
Sindh	12	12	18	1	2	1	0	5	2	1	2	3	0	0	1	1	1
NWFP & FATA	16	11	53	5	0	0	0	1	2	0	10	5	13	13	4	5	5
Balochistan	10	8	11	2	0	0	0	0	1	2	1	2	2	3	0	0	0
AJK / FANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ISLAMABAD	0	0	5	0	0	0	0	0	0	0	2	0	3	0	0	0	0
Pakistan	40	32	118	8	2	1	0	6	5	3	18	18	31	21	7	6	6