

## AFP Surveillance Bulletin - India

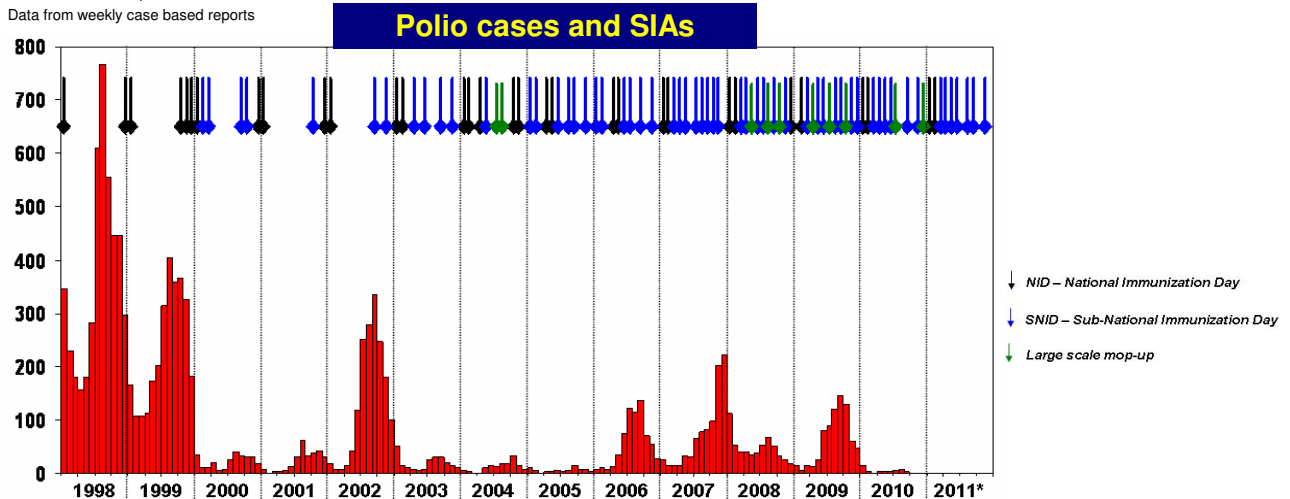
Report for week 4, ending 28 January 2012

Table 1: AFP cases by month of paralysis onset, last 13 months

State/UT's	Total AFP cases in 2011	AFP cases as on week 4, 2011	AFP cases as on week 4, 2012	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12
Andhra Pradesh	1105	20	47	72	46	59	52	62	83	98	114	156	133	103	127	47
Andaman & Nicobar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arunachal Pradesh	36	0	0	0	2	1	5	6	6	3	2	4	4	1	2	0
Assam	468	13	15	35	18	24	32	46	60	60	38	48	24	46	37	15
Bihar	17570	575	701	1292	1045	1162	1334	1360	1392	1589	1864	1964	1619	1537	1412	701
Chandigarh	38	1	0	3	1	2	3	1	3	5	5	4	7	3	1	0
Chhattisgarh	318	5	8	18	20	18	21	18	31	32	44	42	23	23	28	8
D & N Haveli	5	0	1	0	1	1	0	0	1	0	0	0	0	1	1	1
Daman & Diu	6	0	0	0	1	1	0	0	0	1	1	0	1	0	1	0
Delhi	704	18	28	42	37	41	46	46	54	80	78	81	86	61	52	28
Goa	26	0	0	2	2	1	1	1	0	6	1	4	3	1	4	0
Gujarat	1034	47	34	91	69	70	55	77	108	93	110	117	95	78	71	34
Haryana	994	31	41	60	42	73	60	88	86	98	119	119	91	78	80	41
Himachal Pradesh	140	4	2	8	7	12	12	8	11	12	14	12	19	14	11	2
Jammu & Kashmir	237	0	0	10	9	20	25	27	25	12	14	20	25	28	22	0
Jharkhand	1523	40	39	104	92	105	102	129	129	140	180	170	137	138	97	39
Karnataka	909	23	43	75	51	70	59	84	72	91	84	104	77	76	66	43
Kerala	386	27	12	44	31	38	16	23	31	36	19	34	52	32	30	12
Lakshadweep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh	2842	68	96	159	150	195	200	222	260	348	345	290	255	213	205	96
Maharashtra	2803	83	119	185	179	191	181	180	233	322	287	281	234	273	257	119
Manipur	19	0	0	0	0	2	1	5	0	2	4	0	4	1	0	0
Meghalaya	29	0	1	1	0	1	2	3	5	2	5	2	3	5	0	1
Mizoram	5	0	0	0	0	0	0	0	0	0	2	1	0	2	0	0
Nagaland	33	1	0	2	4	1	0	3	2	2	3	6	4	4	2	0
Orissa	1163	25	40	86	72	80	74	67	86	95	145	90	152	134	82	40
Pondicherry	13	1	2	2	0	1	1	0	0	3	1	1	3	0	1	2
Punjab	581	7	24	27	26	28	25	42	62	73	72	51	53	51	71	24
Rajasthan	1830	34	45	120	111	121	106	134	170	223	206	192	186	146	115	45
Sikkim	8	1	1	1	0	2	0	1	0	0	1	1	1	1	0	1
Tamil Nadu	620	11	17	52	41	43	35	46	55	59	64	44	43	66	72	17
Tripura	58	2	4	3	1	3	3	0	5	6	4	6	8	8	11	4
Uttarakhand	368	13	15	21	26	21	19	30	30	28	56	39	41	32	25	15
Uttar Pradesh	22460	739	790	1629	1359	1478	1365	1615	1828	2017	2504	2755	2168	1970	1772	790
West Bengal	2520	59	105	138	130	178	143	184	210	212	252	286	294	265	228	105
<b>TOTAL</b>	<b>60851</b>	<b>1848</b>	<b>2230</b>	<b>4282</b>	<b>3573</b>	<b>4043</b>	<b>3978</b>	<b>4508</b>	<b>5038</b>	<b>5748</b>	<b>6638</b>	<b>6924</b>	<b>5845</b>	<b>5391</b>	<b>4883</b>	<b>2230</b>

"0" means that report was received but no cases were identified

Data from weekly case based reports



**Table 2: Classification of AFP cases and key surveillance indicators, 2011 and 2012**

State/UT's	2011										2012											
	AFP						Surveillance Indicators				AFP						Surveillance Indicators					
	AFP Cases	Case Classification					Annualized Rates		Specimen		AFP Cases	Case Classification					Annualized Rates		Specimen			
		Confirmed Polio	VDPV	Compatible	Discarded (non-polio AFP)	Pending		AFP rate	Non-polio AFP rate	% with 2 spec. w/in 14 days		% with any specimen	Confirmed Polio	VDPV	Compatible	Discarded (non-polio AFP)	Pending		AFP rate	Non-polio AFP rate	% with 2 spec. w/in 14 days	% with any specimen
Total						> 90 Days	Total										> 90 Days					
Andhra Pradesh	1105	0	0	0	1006	99	52	3.86	3.52	81	95	47	0	0	0	11	36	0	2.44	0.57	94	96
Andaman & Nicobar	0	0	0	0	0	0	0	0.00	0.00	NA	NA	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Arunachal Pradesh	36	0	0	0	31	5	4	6.39	5.51	78	97	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Assam	468	0	0	0	449	19	11	3.70	3.55	91	99	15	0	0	0	3	12	0	1.58	0.32	93	93
Bihar	17570	0	0	15	16797	758	497	41.16	39.35	88	98	701	0	0	0	259	442	0	21.49	7.94	91	98
Chandigarh	38	0	0	0	36	2	2	6.48	6.14	82	100	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Chhattisgarh	318	0	1	0	256	61	50	3.37	2.71	64	92	8	0	0	0	1	7	0	1.05	0.13	100	100
D & N Haveli	5	0	0	0	3	2	1	3.52	2.11	60	80	1	0	0	0	1	0	0	18.96	18.96	100	100
Daman & Diu	6	0	0	0	6	0	0	5.36	5.36	100	100	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Delhi	704	0	0	0	650	54	34	8.54	7.88	82	98	28	0	0	0	8	20	0	5.33	1.52	75	93
Goa	26	0	0	0	23	3	0	6.65	5.88	73	92	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Gujarat	1034	0	0	0	979	55	30	4.72	4.47	84	95	34	0	0	0	12	22	0	2.05	0.72	88	97
Haryana	994	0	0	0	891	103	76	9.77	8.76	78	97	41	0	0	0	19	22	0	5.21	2.41	90	95
Himachal Pradesh	140	0	0	1	132	7	6	6.27	5.91	91	99	2	0	0	0	2	0	0	1.22	1.22	100	100
Jammu & Kashmir	237	0	0	0	234	3	2	4.49	4.44	97	100	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Jharkhand	1523	0	0	3	1394	126	95	11.33	10.37	81	96	39	0	0	0	8	31	0	3.72	0.76	82	87
Karnataka	909	0	0	0	850	59	50	4.68	4.38	82	96	43	0	0	0	14	29	0	2.96	0.96	88	93
Kerala	386	0	0	0	362	24	13	4.19	3.93	83	97	12	0	0	0	1	11	0	1.87	0.16	83	83
Lakshadweep	0	0	0	0	0	0	0	0.00	0.00	NA	NA	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Madhya Pradesh	2842	0	1	0	2651	190	118	9.43	8.79	82	97	96	0	0	0	27	69	0	4.21	1.18	92	98
Maharashtra	2803	0	0	2	2610	191	113	7.21	6.71	82	97	119	0	0	0	34	85	0	3.93	1.12	95	97
Manipur	19	0	0	0	18	1	1	1.79	1.70	89	95	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Meghalaya	29	0	0	0	29	0	0	2.41	2.41	93	93	1	0	0	0	0	1	0	1.07	0.00	100	100
Mizoram	5	0	0	0	5	0	0	1.17	1.17	80	100	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Nagaland	33	0	0	0	32	1	0	4.06	3.94	97	100	0	0	0	0	0	0	0	0.00	0.00	NA	NA
Orissa	1163	0	1	0	1074	88	61	8.36	7.72	80	97	40	0	0	0	9	31	0	3.69	0.83	88	93
Pondicherry	13	0	0	0	13	0	0	3.77	3.77	92	100	2	0	0	0	1	1	0	7.40	3.70	100	100
Punjab	581	0	1	0	534	46	30	6.79	6.24	80	96	24	0	0	0	9	15	0	4.04	1.51	88	92
Rajasthan	1830	0	1	0	1676	153	99	6.49	5.95	78	97	45	0	0	0	10	35	0	2.10	0.47	89	96
Sikkim	8	0	0	0	8	0	0	3.05	3.05	100	100	1	0	0	0	0	1	0	6.04	0.00	100	100
Tamil Nadu	620	0	0	0	593	27	14	3.75	3.59	91	98	17	0	0	0	6	11	0	1.25	0.44	88	88
Tripura	58	0	0	0	54	4	1	3.91	3.64	86	95	4	0	0	0	1	3	0	3.59	0.90	100	100
Uttarakhand	368	0	0	0	349	19	11	9.26	8.78	83	97	15	0	0	0	4	11	0	4.73	1.26	100	100
Uttar Pradesh	22460	0	2	18	20977	1463	976	26.92	25.14	83	97	790	0	0	0	163	627	0	12.63	2.61	87	92
West Bengal	2520	1	0	4	2378	137	82	7.46	7.04	86	98	105	0	0	0	42	63	0	4.32	1.73	82	90
<b>TOTAL</b>	<b>60851</b>	<b>1</b>	<b>7</b>	<b>43</b>	<b>57100</b>	<b>3700</b>	<b>2429</b>	<b>13.58</b>	<b>12.74</b>	<b>84</b>	<b>97</b>	<b>2230</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>645</b>	<b>1585</b>	<b>0</b>	<b>6.64</b>	<b>1.92</b>	<b>89</b>	<b>95</b>

AFP cases &gt; 15 years of age or missing age information are excluded

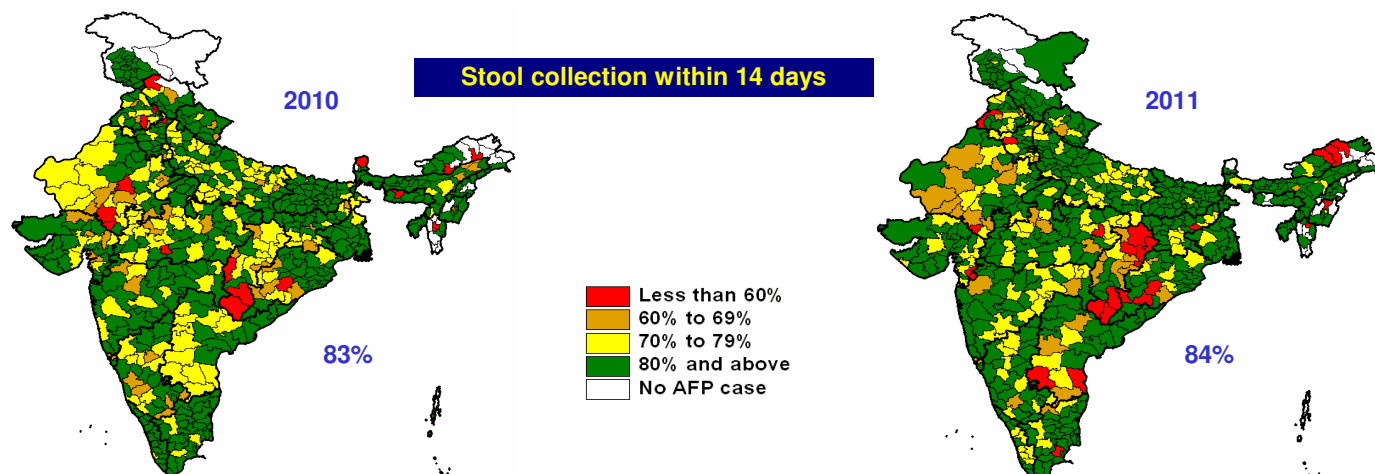


Table 3: Primary isolation results of AFP cases

2012								
Polio Laboratories	Number of AFP cases with stool specimens	Number of AFP cases with laboratory result as				Number of cases pending for		Number of specimens received by lab
		Culture positive for poliovirus	Culture positive for polio virus and NPEV	NPEV	No polio virus or NPEV	<=14 days	>14 days	
BJMC, Ahmedabad	257	3	0	8	74	172	0	509
NIV, Bangalore	153	4	1	5	30	113	0	304
IOS, Kolkata	92	0	0	6	85	1	0	169
KIPM, Chennai	122	0	0	15	63	44	0	225
NCDC, Delhi	386	4	0	6	101	275	0	751
CRI, Kasauli	62	0	0	3	27	32	0	133
ERC, Mumbai	0	0	0	0	0	0	0	0
SGPGI, Lucknow	602	4	1	83	165	349	0	1146
<b>TOTAL</b>	<b>1674</b>	<b>15</b>	<b>2</b>	<b>126</b>	<b>545</b>	<b>986</b>	<b>0</b>	<b>3237</b>

2011								
Polio Laboratories	Number of AFP cases with stool specimens	Number of AFP cases with laboratory result as				Number of cases pending for		Number of specimens received by lab
		Culture positive for poliovirus	Culture positive for polio virus and NPEV	NPEV	No polio virus or NPEV	<=14 days	>14 days	
BJMC, Ahmedabad	7667	385	36	1433	5781	32	0	15566
NIV, Bangalore	4841	327	94	1501	2907	12	0	9734
IOS, Kolkata	7121	278	40	1061	5742	0	0	14290
KIPM, Chennai	9281	333	69	1983	6886	10	0	18617
NCDC, Delhi	5813	251	26	483	5009	43	1	11688
CRI, Kasauli	1802	86	4	307	1400	5	0	3653
ERC, Mumbai	5833	347	68	1667	3751	0	0	11883
SGPGI, Lucknow	16664	769	198	6466	9198	33	0	33521
<b>TOTAL</b>	<b>59022</b>	<b>2776</b>	<b>535</b>	<b>14901</b>	<b>40674</b>	<b>135</b>	<b>1</b>	<b>118952</b>

Table 4: Intratypic differentiation (ITD) of isolates from AFP cases

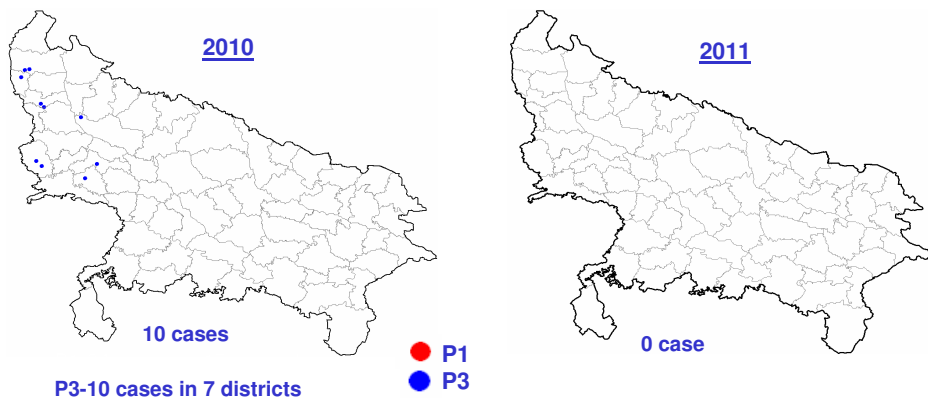
2012																		
Polio Laboratories	Number of AFP cases referred for ITD	Number of AFP cases with ITD result as														Number of cases pending for		
		Wild poliovirus				Vaccine poliovirus				VDPV			NPEV by PCR	Non enterovirus	Negative	<= 7 days	8-14 days	>14 days
		Type 1	Type 2	Type 3	Mix	Type 1	Type 2	Type 3	Mix	Type 1	Type 2	Type 3						
ERC, Mumbai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IOS, Kolkata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCDC, Delhi	4	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0
KIPM, Chennai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NIV, Bangalore	5	0	0	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0
SGPGI, Lucknow	5	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0
BJMC, Ahmedabad	3	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0
<b>TOTAL</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>

2011																		
Polio Laboratories	Number of AFP cases referred for ITD	Number of AFP cases with ITD result as														Number of cases pending for		
		Wild poliovirus				Vaccine poliovirus				VDPV			NPEV by PCR	Non enterovirus	Negative	<= 7 days	8-14 days	>14 days
		Type 1	Type 2	Type 3	Mix	Type 1	Type 2	Type 3	Mix	Type 1	Type 2	Type 3						
ERC, Mumbai	650	1	0	0	0	198	105	157	126	0	3	0	53	0	7	0	0	0
IOS, Kolkata	204	0	0	0	0	56	17	78	48	0	0	1	2	1	0	0	1	0
NCDC, Delhi	244	0	0	0	0	71	23	97	51	0	0	0	1	0	0	1	0	0
KIPM, Chennai	402	0	0	0	0	99	49	142	111	0	1	0	0	0	0	0	0	0
NIV, Bangalore	421	0	0	0	0	119	36	136	102	0	1	0	27	0	0	0	0	0
SGPGI, Lucknow	967	0	0	0	0	317	166	297	166	0	0	0	11	8	1	0	1	0
BJMC, Ahmedabad	423	0	0	0	0	121	56	129	101	0	1	0	15	0	0	0	0	0
<b>TOTAL</b>	<b>3311</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>981</b>	<b>452</b>	<b>1036</b>	<b>705</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>109</b>	<b>9</b>	<b>8</b>	<b>1</b>	<b>2</b>	<b>0</b>

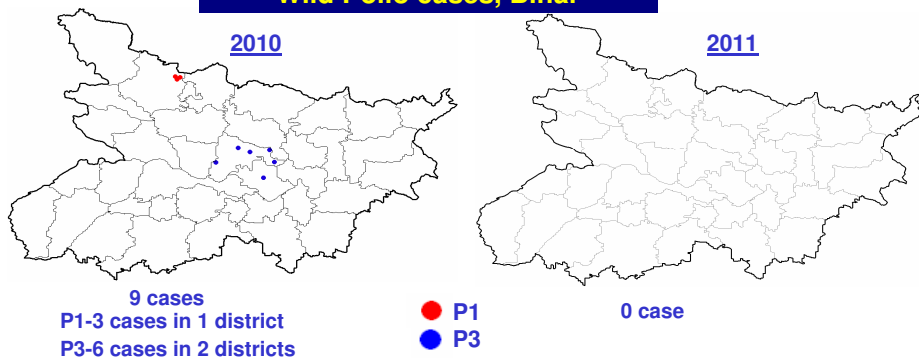
**Most recent Wild Polio Virus case by State**

State	Date of most recent polio case	Type
West Bengal	13-Jan-11	P1
Jharkhand	22-Oct-10	P3
Maharashtra	16-Sep-10	P1
Bihar	01-Sep-10	P1
Uttar Pradesh	21-Apr-10	P3
Jammu & Kashmir	07-Feb-10	P1
Haryana	13-Jan-10	P3
Rajasthan	27-Nov-09	P3
Uttarakhand	06-Nov-09	P3
Himachal Pradesh	17-Oct-09	P3
Punjab	13-Oct-09	P3
Delhi	28-Jun-09	P3
Madhya Pradesh	04-Aug-08	P3
Orissa	22-Jul-08	P3
Andhra Pradesh	16-Jul-08	P3
Assam	09-Jun-08	P1
Karnataka	03-Nov-07	P3
Gujarat	16-Mar-07	P1
Chandigarh	02-Aug-06	P1
Tamil Nadu	18-Feb-04	P1
Chhattisgarh	18-Jul-02	P1
Kerala	29-Sep-00	P1
Pondicherry	26-Nov-98	P1
Goa	28-Oct-98	P1
Daman & Diu	22-Oct-98	P1
D & N Haveli	31-Jan-98	P1
Nagaland	10-Dec-97	P1 & P3
Meghalaya	15-Oct-97	P1
Tripura	10-Oct-97	P1
A&N Islands	Before 1997	
Arunachal Pradesh	Before 1997	
Lakshadweep	Before 1997	
Manipur	Before 1997	
Mizoram	Before 1997	
Sikkim	Before 1997	

**Wild Polio cases, UP**



**Wild Polio cases, Bihar**



Month	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	112	36	36	7	18	51	4	10	8	24	112	14	16	1
February	32	22	10	1	8	16	3	5	9	14	53	5	3	0
March	42	11	10	3	7	9	1	1	8	14	40	16	0	0
April	26	8	20	3	16	7	1	2	13	14	40	13	2	0
May	49	39	6	4	42	5	9	2	36	32	34	24	2	0
June	118	69	8	13	117	7	14	6	76	30	38	79	2	0
July	324	142	25	30	251	25	13	3	121	64	53	89	5	0
August	418	187	39	62	280	29	18	6	114	78	67	119	7	0
September	283	193	32	33	334	30	18	14	137	82	49	145	3	0
October	170	195	31	38	247	20	32	7	71	98	32	129	1	0
November	226	155	31	43	180	16	14	7	55	203	24	60	0	0
December	134	69	17	31	100	10	7	3	28	221	17	48	1	0
<b>Total</b>	<b>1934</b>	<b>1126</b>	<b>265</b>	<b>268</b>	<b>1600</b>	<b>225</b>	<b>134</b>	<b>66</b>	<b>676</b>	<b>874</b>	<b>559</b>	<b>741</b>	<b>42</b>	<b>1</b>

**Wild Polio cases, India**

