

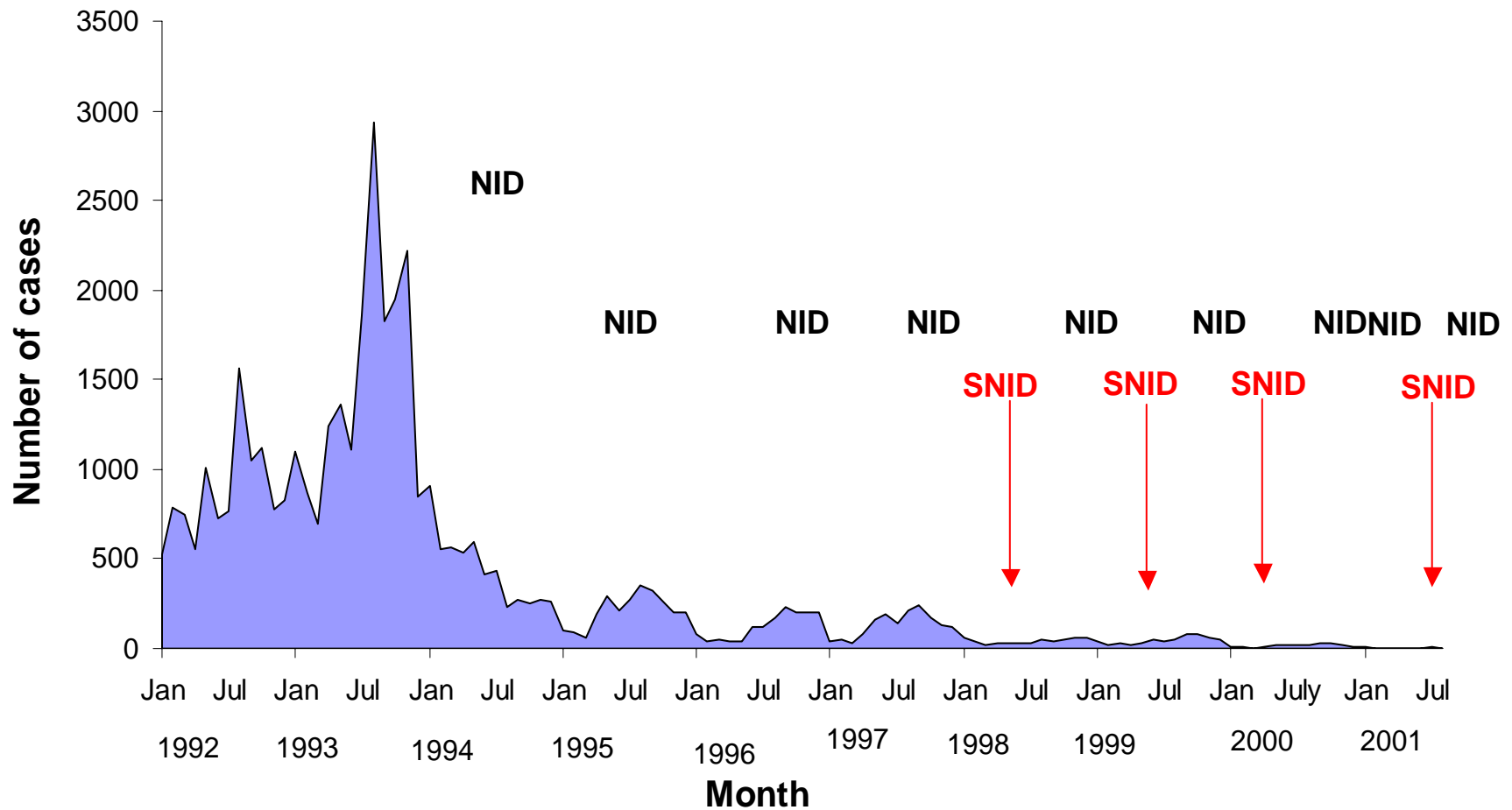


Polio Eradication Initiative Pakistan

History of Polio Eradication in Pakistan

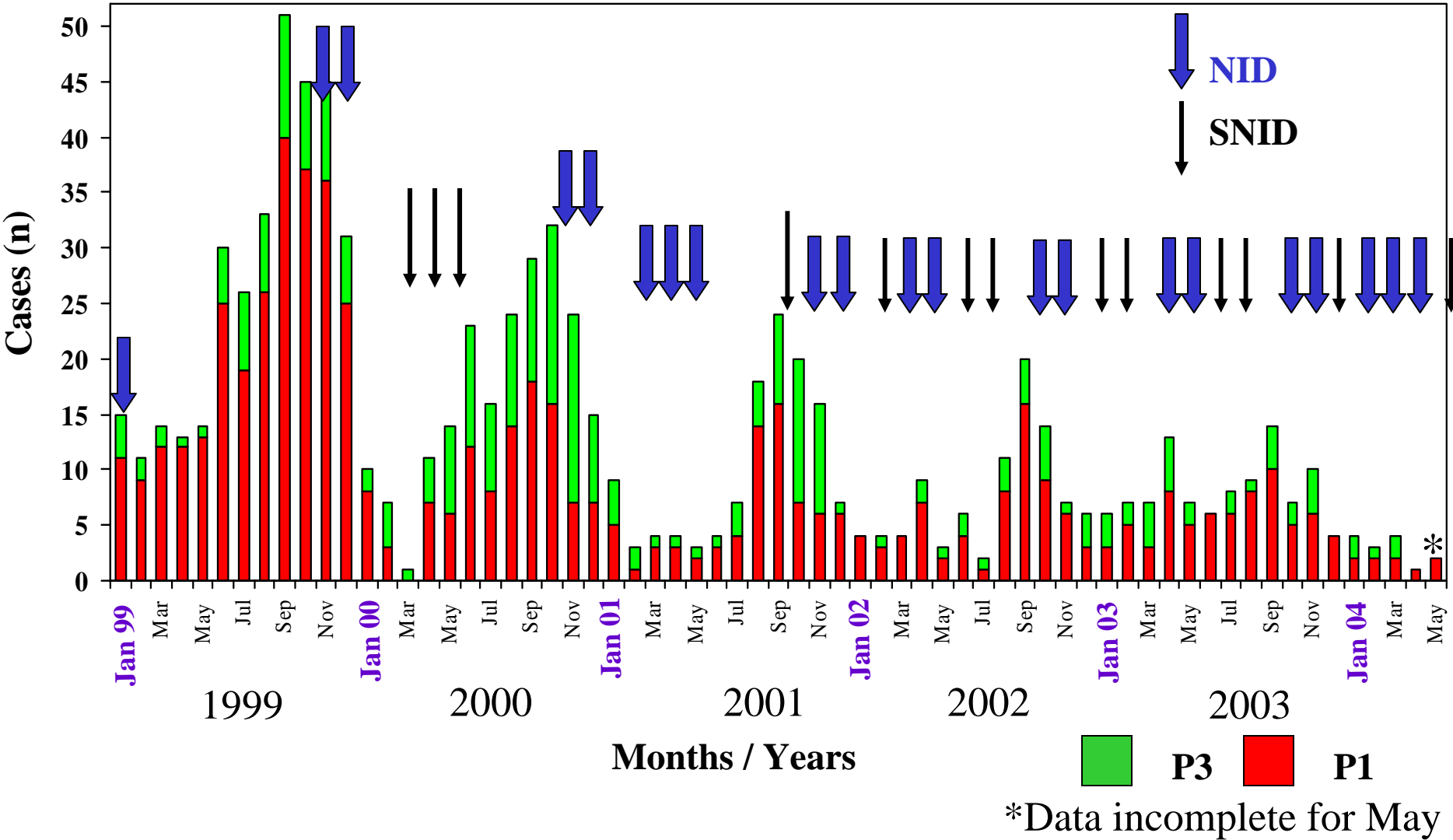
- Began in 1994 with the first pair of the National Immunization Days
- AFP (Acute Flaccid Paralysis) Surveillance system was established in 1997 and attained international standards of quality by 2000
- In 2000, began intensifying efforts with door-to-door strategy, additional rounds, additional personnel
- By 2003, 35 international staff, 8 rounds per year (4 SNID + 4 NID), 170 national staff (UNICEF/WHO)
- Also in 2003, increasing linkages with routine EPI

Polio cases reported by month, 1992 to August 2001, Adjusted for Surveillance Sensitivity

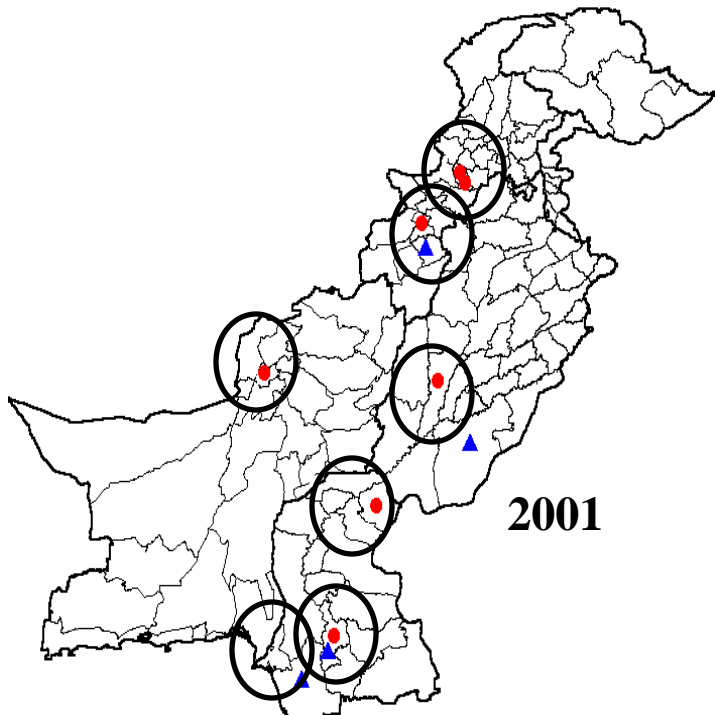


Confirmed Polio Cases ~ by Poliovirus Type & Month

Jan 1999 - May 2004

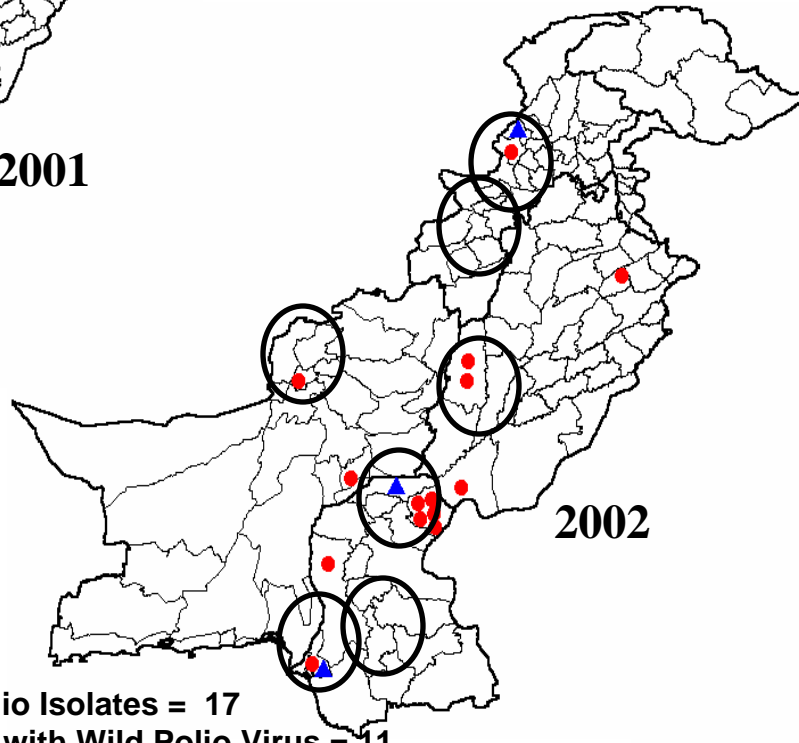


Comparison of Poliovirus Isolates in Low Season (Feb-April) 2001 – 2003



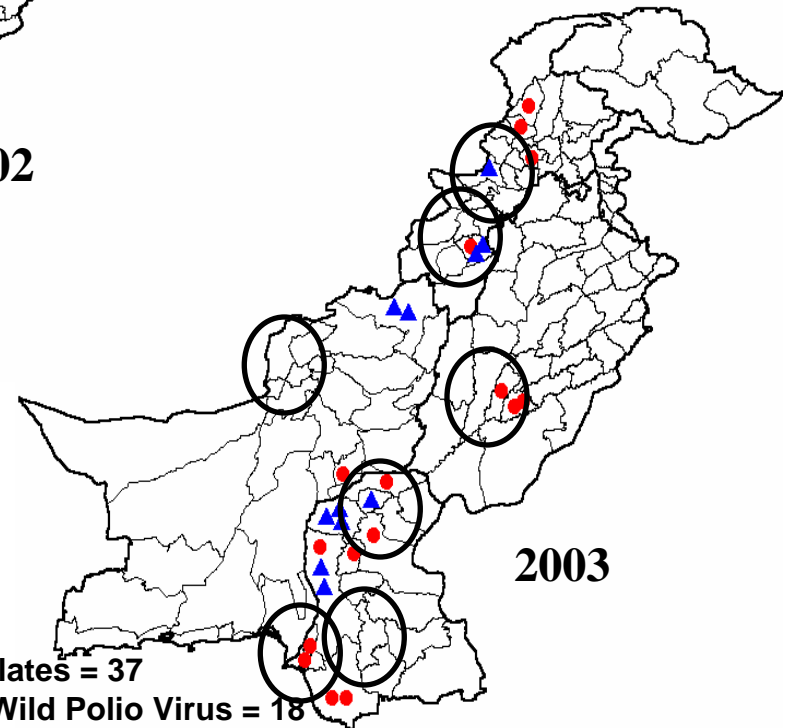
2001

Wild Polio Isolates = 11
Districts with Wild Polio Virus = 9





2002

Wild Polio Isolates = 17
Districts with Wild Polio Virus = 11

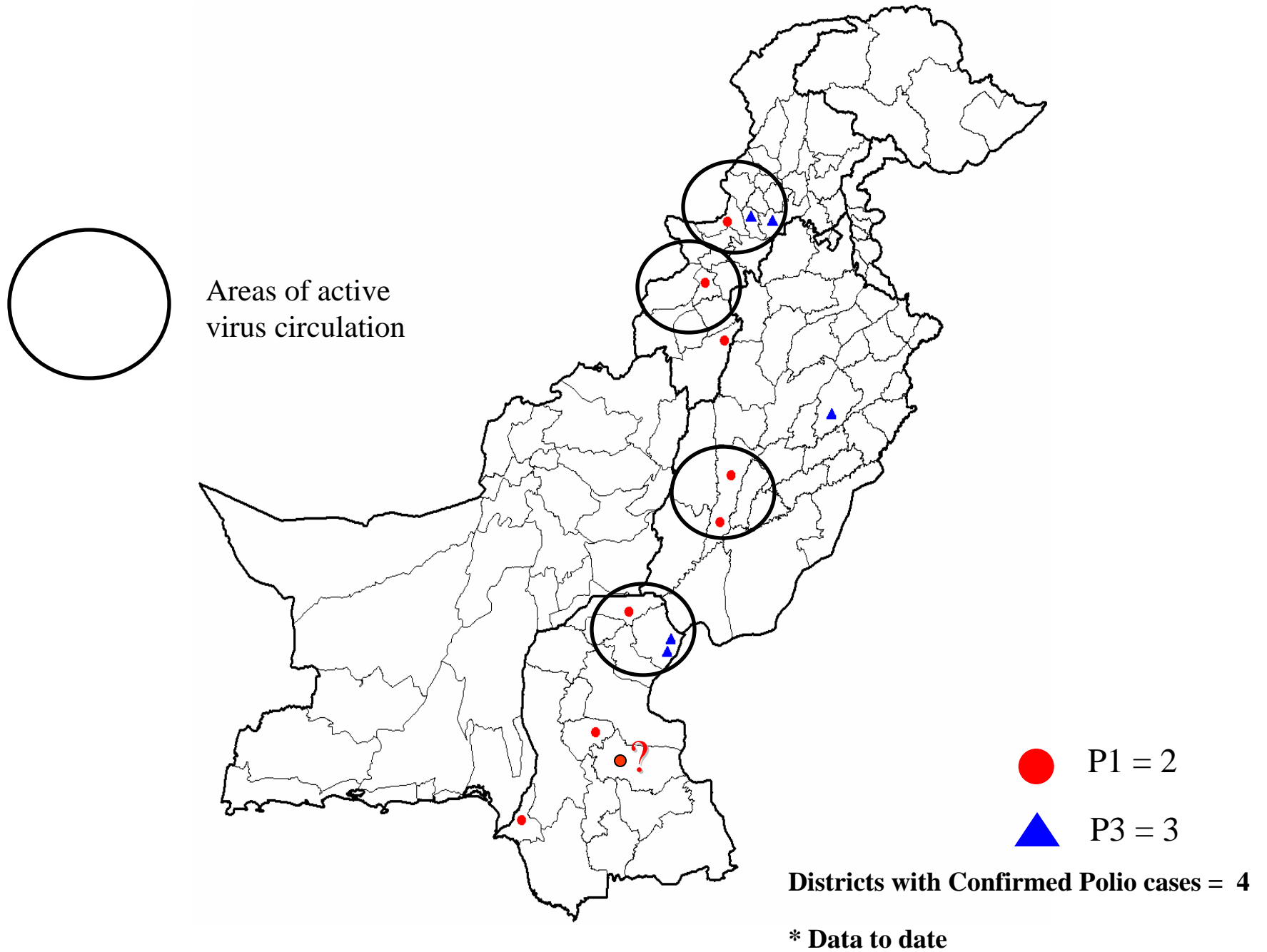


2003

Wild Polio Isolates = 37
Districts with Wild Polio Virus = 18

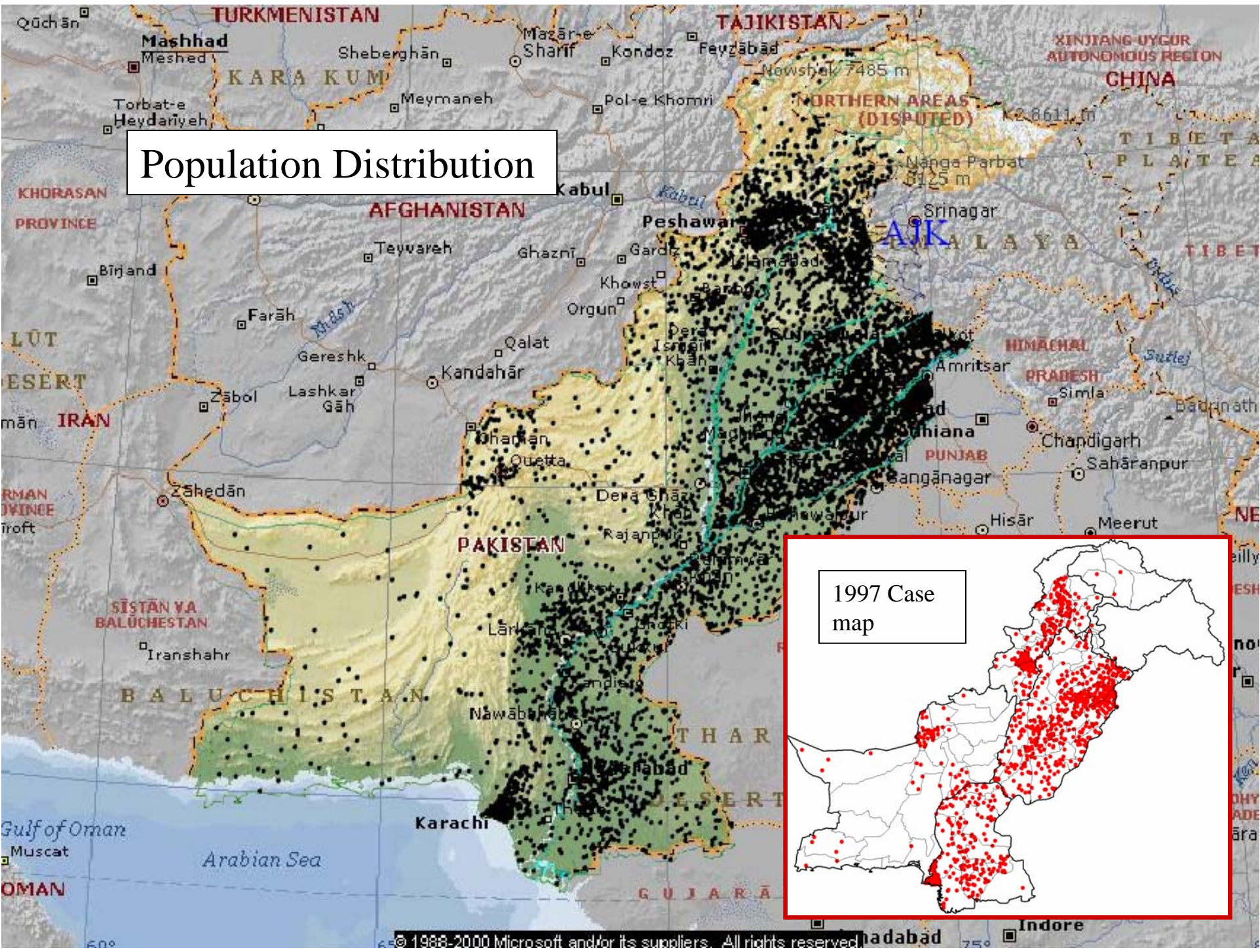
 P1 Wild
 P3 Wild

Confirmed Polio Cases 2004*



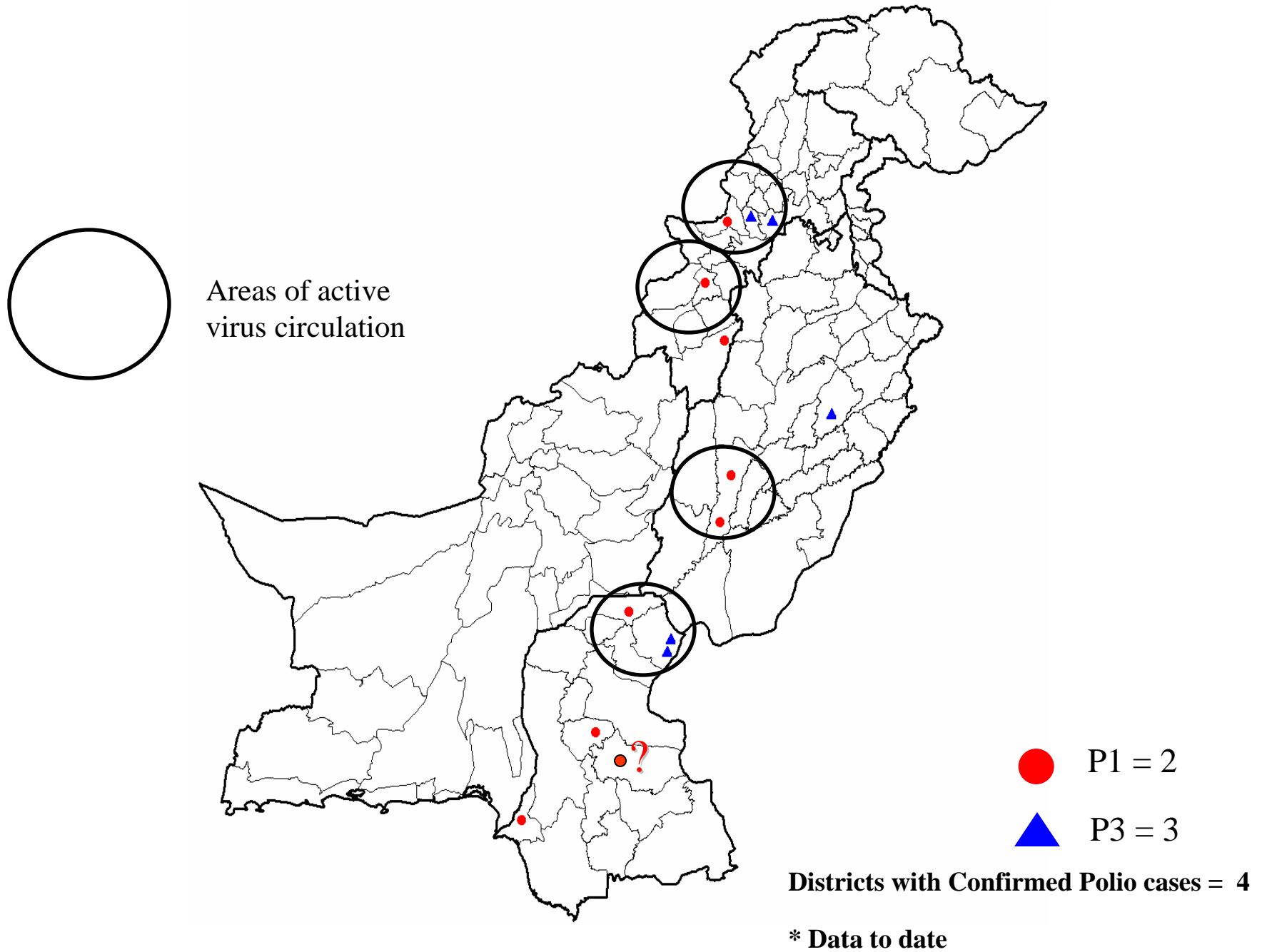
*Risk Factors for Continued Virus
Circulation*

Population Distribution



1997 Case map

Confirmed Polio Cases 2004*

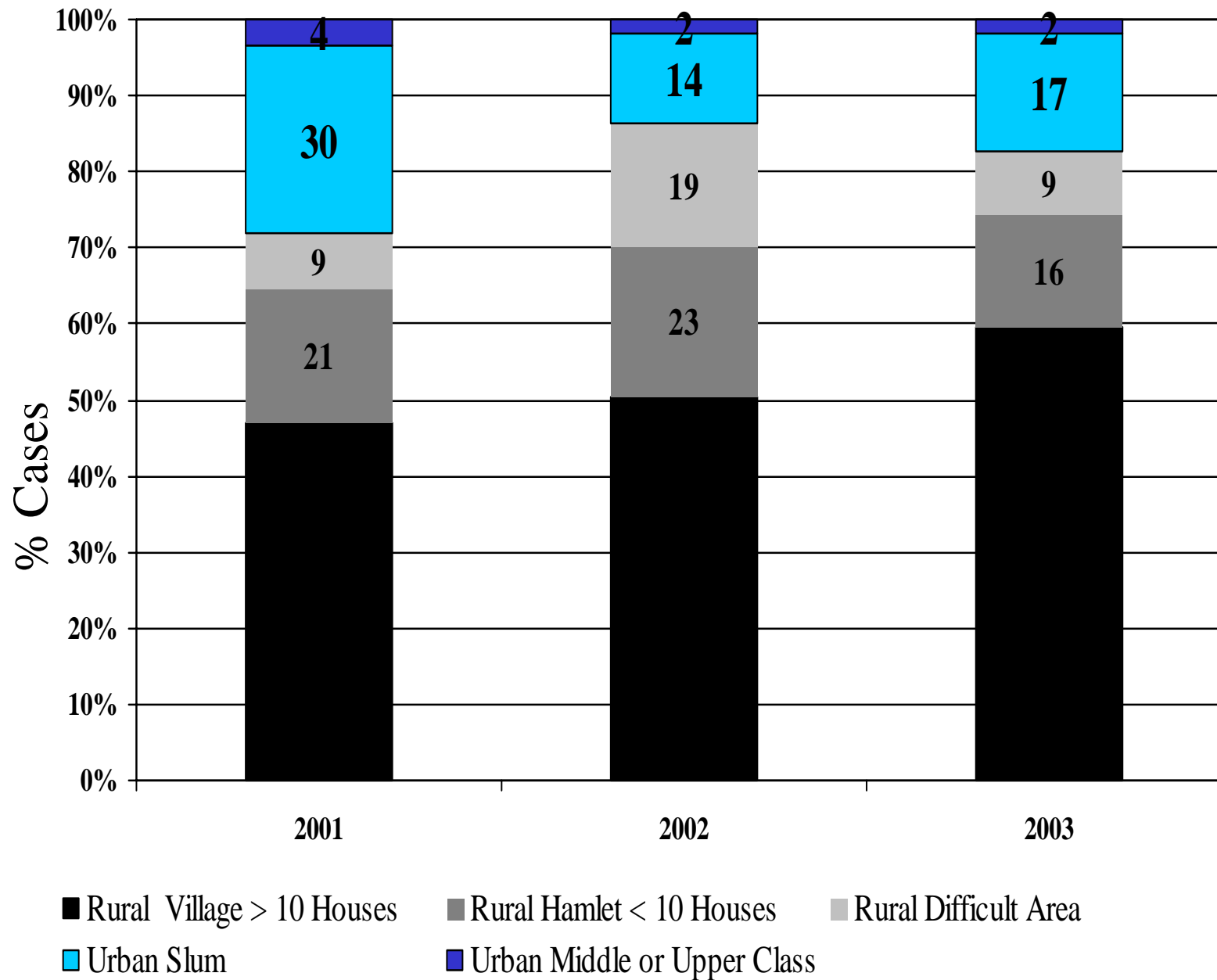


Detailed Epidemiologic Data

Characteristics of cases and families (respondents)	2001 (N=124)		2002 (N=118)		2003 (N=111)	
Religion	n	%	n	%	n	%
Islam	119	96%	117	100%	109	98%
Hindu (in 2001, 3/4 from Hyderabad = 38% of cases)	4	4%	0	0%	2	2%
Christian	1	1%	1	1%	0	0%
Afghan Nationals	16	13%	7	6%	6	5%
NWFP	7	26%	5	9%	4	67%
Balochistan	3	15%	1	13%	1	17%
Islamabad	0	0%	0	0%	1	17%
Sindh (in 2001, all in Karachi = 80% of cases)	6	12%	1	1%	0	0%
Nomad: CDA, Kabdulah, Zhob, Jhang, Khairpur (2003)	4	3%	2	2%	6	5%
Family socioeconomic status						
Poor	107	92%	100	84%	93	83%
Working/Middle class	9	8%	17	14%	18	16%
Wealthy	0	0%	2	2%	0	0%
Fathers education						
No formal education (up to grade 9)	113	93%	94	80%	98	88%
Matriculate	8	7%	22	19%	9	8%
Graduate	1	1%	2	2%	4	4%
Mothers education						
No formal education (up to grade 9)	121	100%	113	95%	109	98%
Matriculate	0	0%	4	3%	2	2%
Graduate	0	0%	2	2%	0	0

Last updated: 28/5/2004

Detail EPI Cases with type of area 2000-2004*



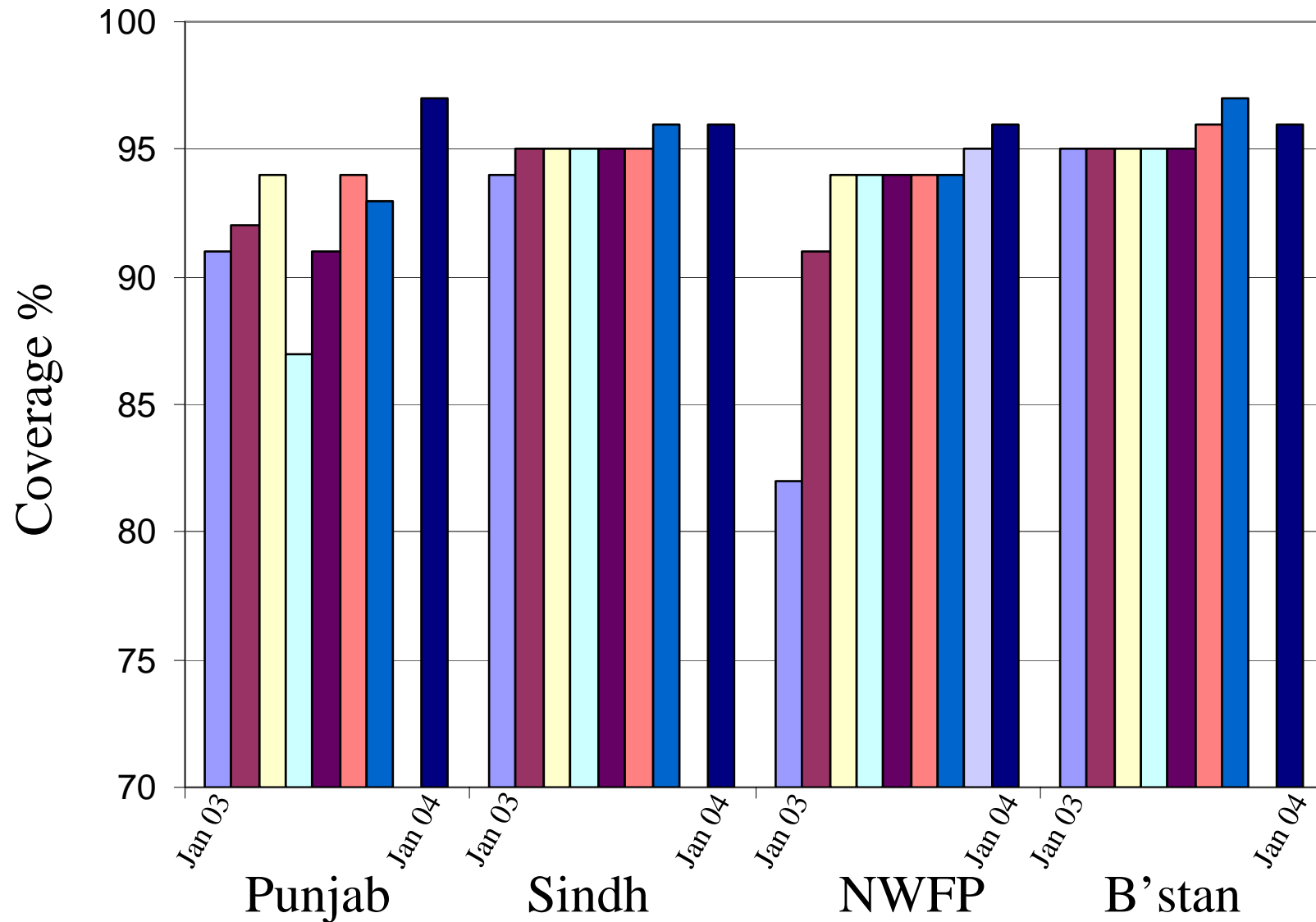
Characteristics of High-Risk Districts

- Inconsistent campaign coverage
 - Repeatedly failing to reach 95%
 - One good round isn't enough – average coverage predictive, need 4 or 5 high-quality rounds to stop transmission
 - Excessively missing the youngest age group
- Inconsistent leadership
 - Frequent change of district leadership
 - Uninvolved district leadership (not just EDO)
- Socially conservative population
 - Lack of access to children, especially the youngest
 - Resistance to strangers coming into community
 - Resistance to involvement of women
- High population density

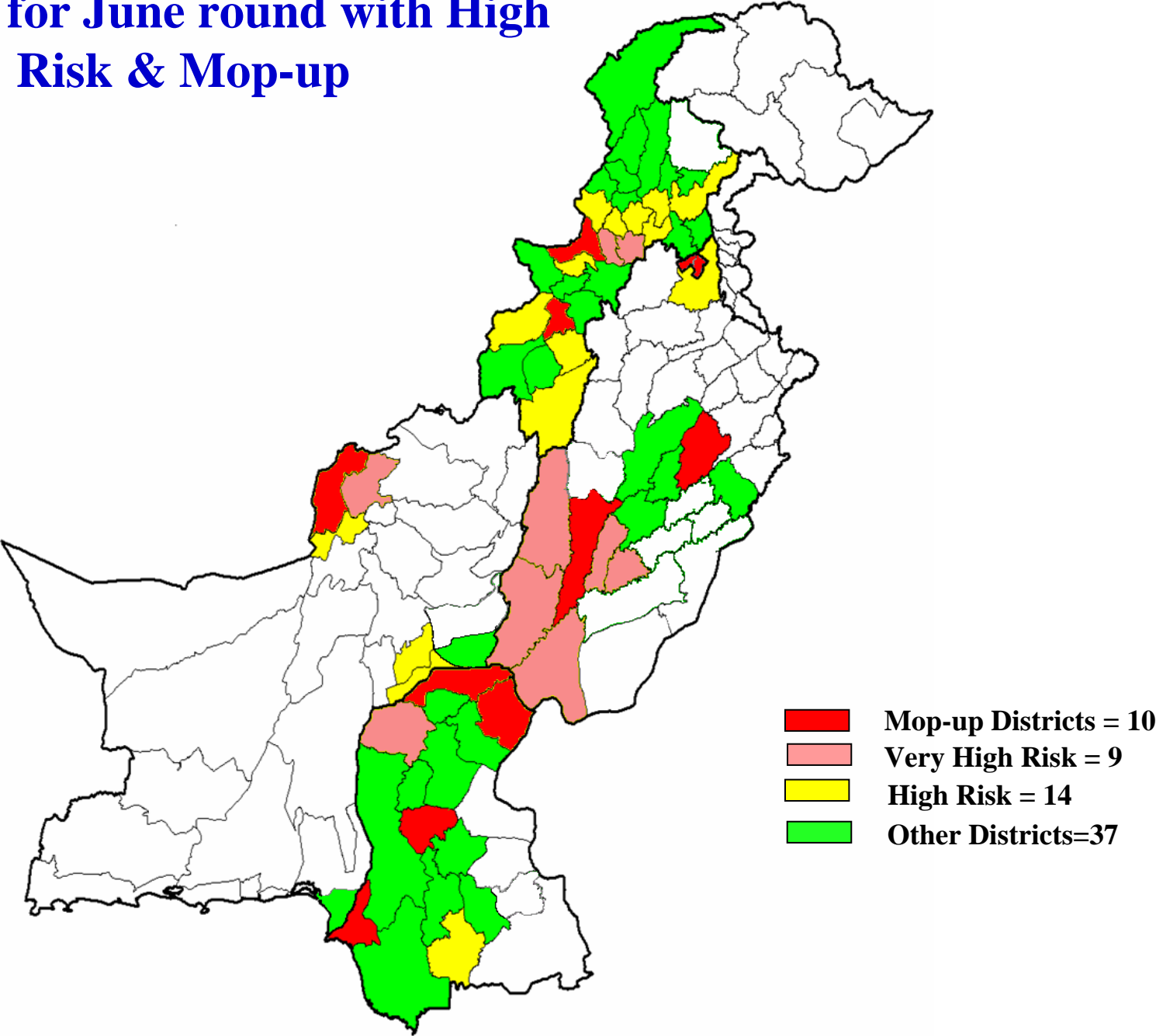
Summary

- Persistent reservoirs of virus are still active in parts of the country
 - S. Sindh has shown the most progress
 - Balochistan not yet re-infected
- If reservoirs are cleared by mid year, eradication likely to be achieved this year.

SIA Coverage by Province, Pakistan, 2003 - 4



Districts for June round with High Risk & Mop-up



Goals and Activities for 2004

- **Goal:** Rid country of polio virus by 31 December 2004
- **Activities:**

	J	F	M	A	M	J	J	A	S	O	N	D
Campaigns	X	X	X		*	X	X	X				

Mop-ups as
needed

* = SNID

X = NID

Thank You