IEAG Findings
5-6 December 2005
Surveillance Quality
Surveillance Indicators
India 2005*

5.47

82%

* data as on 26th November 2005
AFP cases India 1998 - 2005
Epidemiology of Polio in India
Monthly incidence of polio in India
January 1998 – September 2005*

Number of cases

* data as on 29th November, 2005
P3 Virus: Number of cases by year
Characteristics of Polio Cases
India, 2005*

OPV Status
- 0 dose: 0%
- 1 - 3 doses: 9%
- 4 - 6 doses: 28%
- 7 - 9 doses: 30%
- 10+ doses: 33%

AGE
- <12 mths: 31%
- 12-23 mths: 31%
- 24-59 mths: 36%
- 60+ mths: 2%

* data as on 1st December 2005
Wild polio cases by Community, 2005

**Bihar**

2005*

Hindu 54%

Muslim 46%

(N=24)

**Uttar Pradesh**

2005*

Hindu 42%

Muslim 58%

(N=24)
Location of poliovirus, 2005*

(53 cases)

Most recent virus – 13th October 2005, Sitamarhi

- Uttar Pradesh: 24
- Bihar: 24
- Jharkhand: 2
- Delhi: 1
- Uttaranchal: 1
- Punjab: 1

* data as on 29th November, 2005
Spread of polio from Bihar, 2005

* data as on 1st December, 2005
SIA Quality in High Risk Areas
Immunization Status (children < 5 years)

Uttar Pradesh

1999 2000 2001 2002 2003 2004 2005*

Bihar

1999 2000 2001 2002 2003 2004 2005*

* data as on 26th November 2005
Supervisors Cross-checking Work
September 2005

West UP
- 93%

Bihar
- 82%

< 80 %
- 80% to 90%
- > 90%
Comparison of PPI Coverage

Bihar

~ 3.5% increase in April 05 coverage over Oct 04

Bihar still has 12-14% of houses with missed children vs. just 6-8% in UP.

Uttar Pradesh

~ 11% increase in April 05 coverage over Oct 04
Teams not working by SIA microplan

May 05
7.3%

Sep 05
9.1%
Impact of mOPV1
Summary of mOPV1 Use, 2005

4-6 mOPV1 rds, Apr-Nov in the 3 reservoir areas.

300 m doses used in Apr-Nov 2005
Number of Polio cases, India

Data as of 2nd December 2005
WPV1 Positive Mumbai Sewage Samples
Jan’04 – Oct’05

58% +ve in May-Oct '04 vs. 7% in same period in 2005.

August, September, October isolates are importations.
P1 wild, 2004-2005

13 high risk districts-UP

Bihar

Data as of 2\textsuperscript{nd} December 2005
Proportion of AFP with Wild Poliovirus by season & state, 2003-2005
Summary

• Introduction of mOPV1 & innovative SIA approaches has reduced polio to lowest incidence and geographic extent ever.

• Progress is fragile, and Bihar now poses highest risk, as evidenced by recent exports to Jharkhand, Punjab and Nepal.

• The enhanced impact of mOPV1 during the low season could stop all polio in early-2006.
tOPV Immune Response & Season *
Mumbai, India, 1977

* Pangi NS, Master JM, Dave KH. Ind Ped XIV(7); 1977.
Recommendations
Programme Priorities

**Bihar:** districts in north east, north west & Patna are the highest priority due to:

- high case numbers,
- geographic extent,
- exportations to polio-free areas,
- suboptimal SIA quality.

**Uttar Pradesh:** western districts remain very high priority due to ongoing WPV1 transmission & last type 3 isolations.
State Government Oversight

Bihar:

• Build on engagement of new Chief Minister with full polio briefing, as soon as possible.
• Propose biweekly CM briefing during the critical 3 month period through end-Feb.
• CS to consider (a) weekly oversight of Jan/Feb preps (esp. high priority districts) and (b) establish Polio Task Force & Polio Cell.

UP: sustain high level State Government & District Administration oversight of eradication activities.
Recommended SIA Schedule

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIDs</td>
<td>NIDs</td>
<td>NIDs</td>
<td>SNIDs</td>
<td>SNIDs</td>
<td>SNIDs</td>
<td>SNIDs</td>
<td>NIDs</td>
<td>NIDs</td>
<td>NIDs</td>
<td>NIDs</td>
<td>NIDs</td>
<td>NIDs</td>
<td>NIDs</td>
<td>NIDs</td>
</tr>
</tbody>
</table>

SNIDs: 2006-2007
SNIDs Jan-Feb 2006

- **Extent:** all of UP, Bihar, Delhi, Greater Mumbai/Thane & selected districts of Jharkhand and Uttaranchal.

- **Vaccine:** mOPV1 in WUP, Bihar & Greater Mumbai; elsewhere tOPV.

- **International Coordination:** with infected areas of Nepal.
Vaccine

- **mOPV1**: use in all SIAs in all areas of known type 1 transmission & at highest risk.

- **tOPV**: use for all routine immunization activities and SIAs in polio-free states.

- **mOPV3**: use in all SIAs responding to WPV3; in absence of WPV3, and if feasible, mOPV3 could be used in at least 1 rd in WUP districts at highest risk of WPV3.
Enhancing SIA Impact 1

Continue Recent Innovations:

- High Risk Area (HRA) approach.
- Underserved strategies.
- Transit sites (incl. railway plan).

Deploy as many SMOs as possible to HRAs (esp. in Bihar), to facilitate SIA planning, monitoring, etc in Jan/Feb.

Expand SM Net as proposed in Bihar & ensure adequate resources for same.
Enhancing SIA Impact - Bihar

• **State government:** consider assigning a senior IAS Officer on Special Duty to oversee day-to-day operations with CS & Secretary for FW.

• **District & Block Administrations:**
  – Ensure existing/acting DMOs & MOICs fully involved in block level planning/preps; DM to monitor engagement.
  – if positions vacant, immediately assign DMO & MCIO polio responsibilities to other, existing staff.

• **December Planning Meeting:** review & enhance mechanisms for reaching missed children (i.e. X houses, revisiting, children outside households)
Surveillance

- NPSP should continue current approach to monitor & address state & sub-state surveillance issues.

- During the detailed investigations of 'hot cases' and virus-confirmed cases, the IEAG reaffirms the importance of also reviewing the history of compatible cases in the area.
Routine Immunization

IEAG notes the work to implement national & state routine EPI plans and recommends:

• Enhanced work, under the NTAG, to link the monitoring of outreach sessions to coverage data.

• High priority districts in WUP & Bihar should be targeted for intensive efforts to improve routine immunization.

• Consideration should be given to expanding external monitoring activities to other states.
Summary
Summary

• Introduction of mOPV1 & innovative SIA approaches has reduced polio to lowest incidence and geographic extent ever.

• Progress is fragile, and Bihar now poses highest risk, as evidenced by recent exports to Jharkhand, Punjab and Nepal.

• Enhanced impact of mOPV1 during low season could stop all polio in early-2006.

• Strong partner support to GoI is essential.