NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME (NVBDCP)

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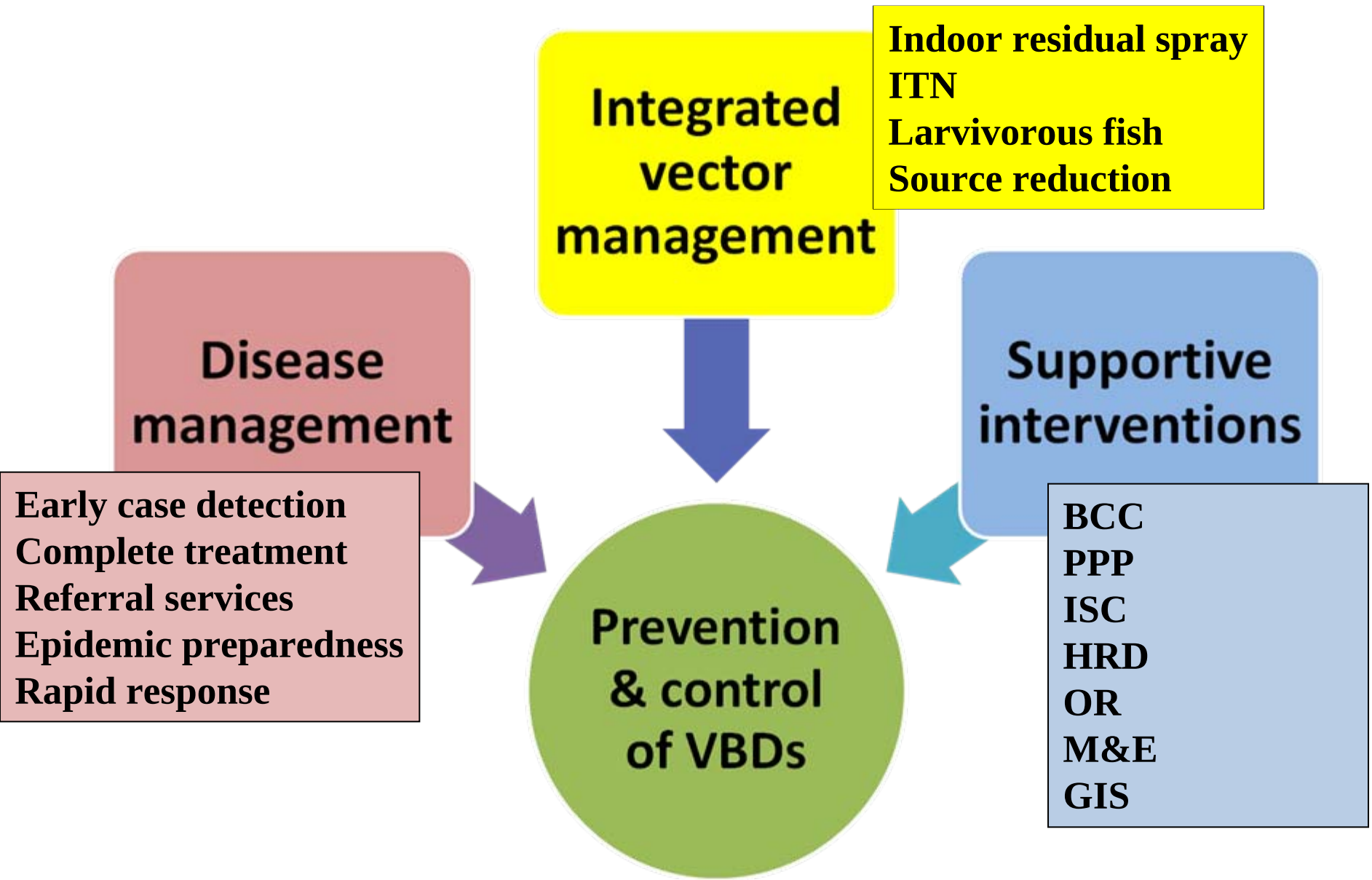
Introduction

- ❑ Launched in year 2003-04
- ❑ Major vector borne diseases-
- Malaria
- Filaria
- Kala-azar
- Japanese Encephalitis
- Dengue / Dengue Hemorrhagic fevers
- Chikungunya

Three pronged strategy



Mission statement

- Integrated accelerated action towards
  - Reducing mortality on account of Malaria, Dengue and JE by half
  - Elimination of Kala-azar by 2010
  - Elimination of lymphatic filariasis by year 2015.

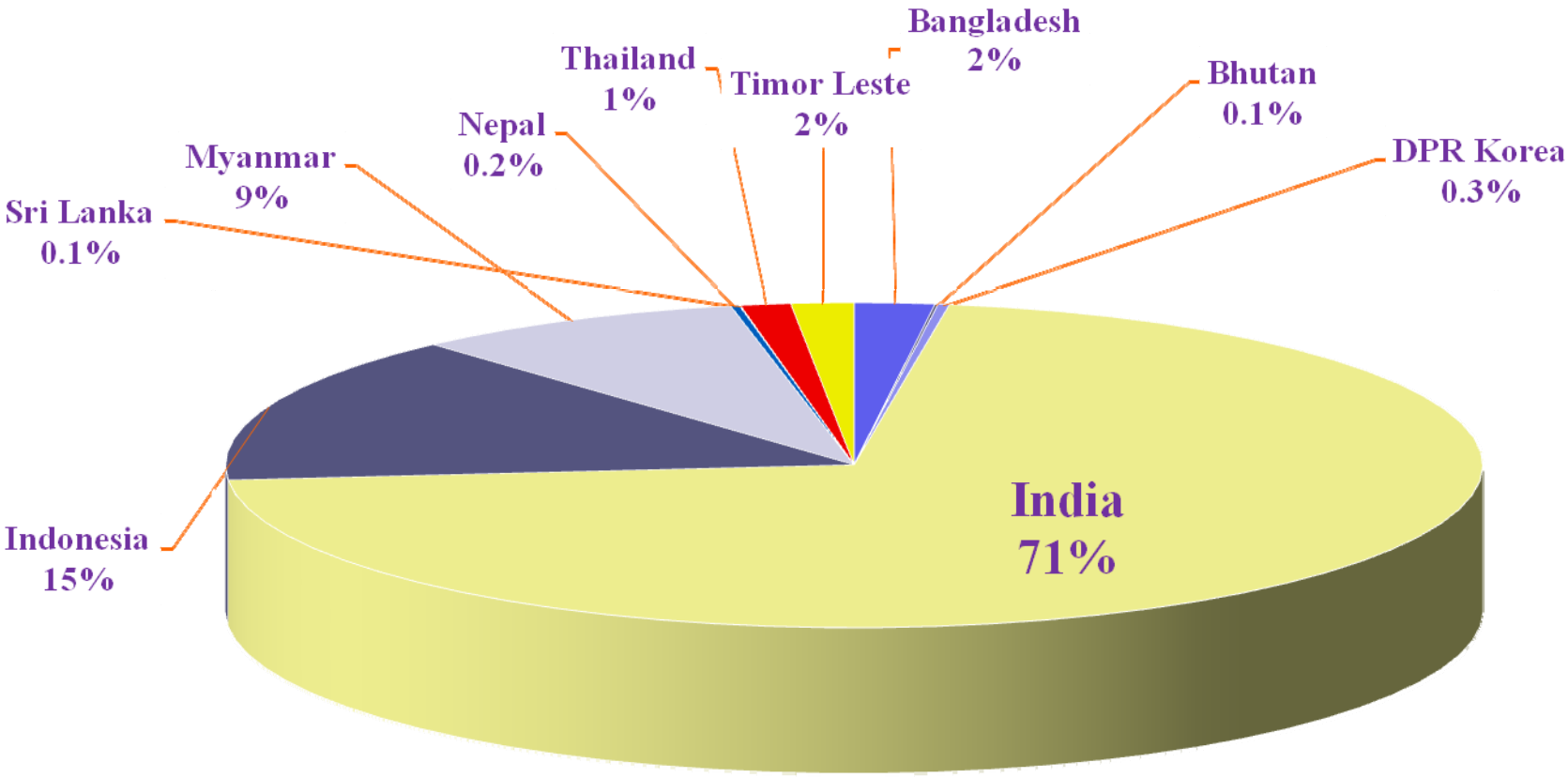
MALARIA

- Malaria is a potentially life threatening parasitic disease caused by parasites known as
  - *Plasmodium viviax (P.vivax),*
  - *Plasmodium falciparum (P.falciparum),*
  - *Plasmodium malariae (P.malariae)* and
  - *Plasmodium ovale (P.ovale)*

- It is transmitted by the infective bite of *Anopheles* mosquito

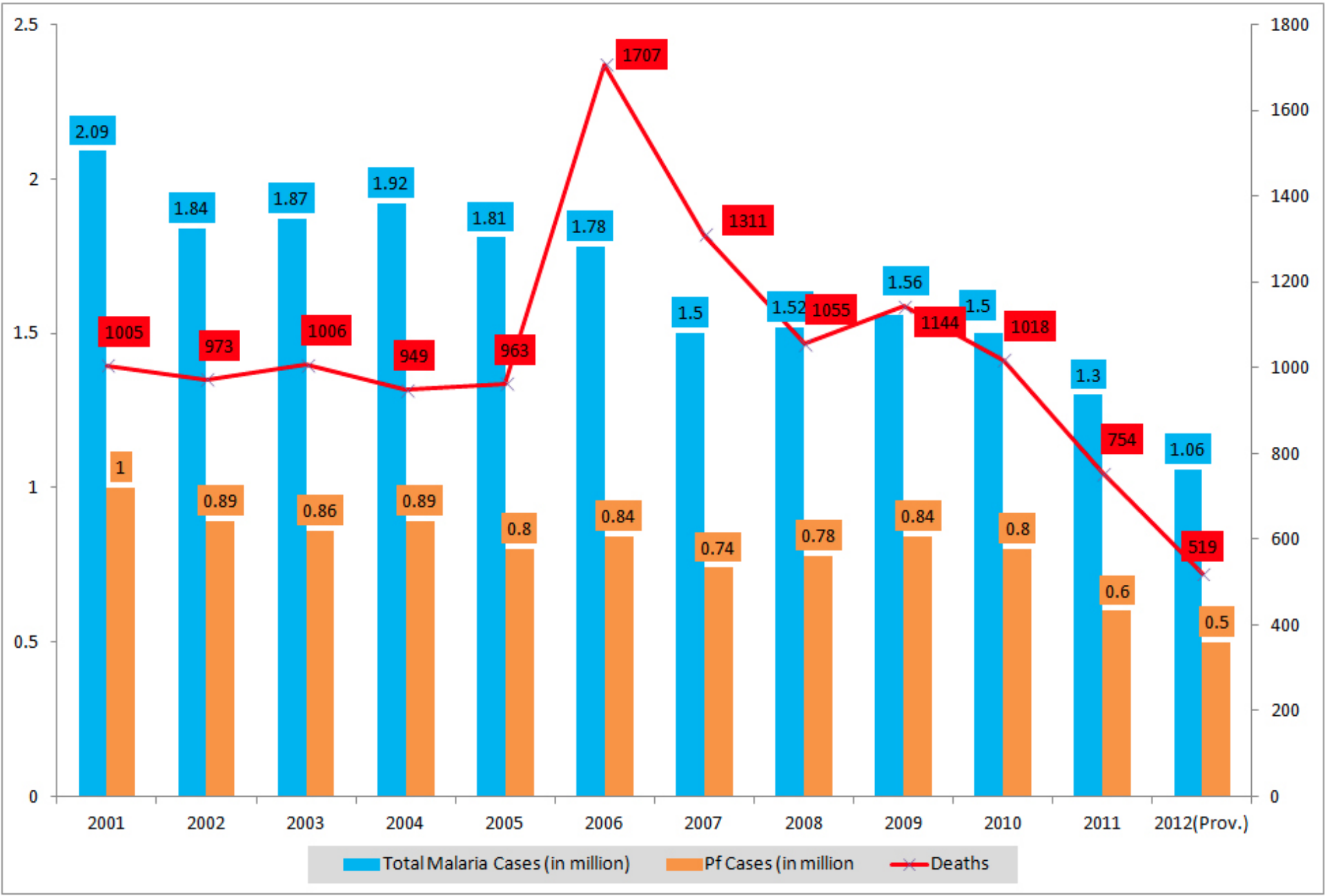
- Man develops disease after 10 to 14 days of being bitten by an infective mosquito

India’s contribution to Malaria in SEAR



India contributes to 71% of total malaria cases in the SEAR

Trends of Malaria cases & deaths (2001-2012)



Milestones of Malaria control activities in India

Prior to 1953	• Estimated Malaria cases in India: 75 million
1953	• National Malaria Control Programme (NACP)
1958	• NMCP --→ NMEP (National Malaria Eradication Programme)
1965	• Cases reduced to 0.1 million
1970-76	• Resurgence of malaria • 6.46 million malaria cases

1977

- Modified Plan of Operation implemented

1997

- World Bank assisted Enhanced Malaria Control Project (EMCP)

1999

- Renaming to National Anti Malaria Programme (NAMP)

2002

- Renaming to **National Vector Borne Disease Control Programme (NVBDCP)**

2005
- Global fund assisted Intensified Malaria Control Project (IMCP)
- Introduction of RDT in the programme

2006
- ACT introduced

2008
- ACT extended
- World Bank supported National Malaria Control Project

2009
- Introduction of LLINs

2010
- New drug policy

Classification of Endemic Areas

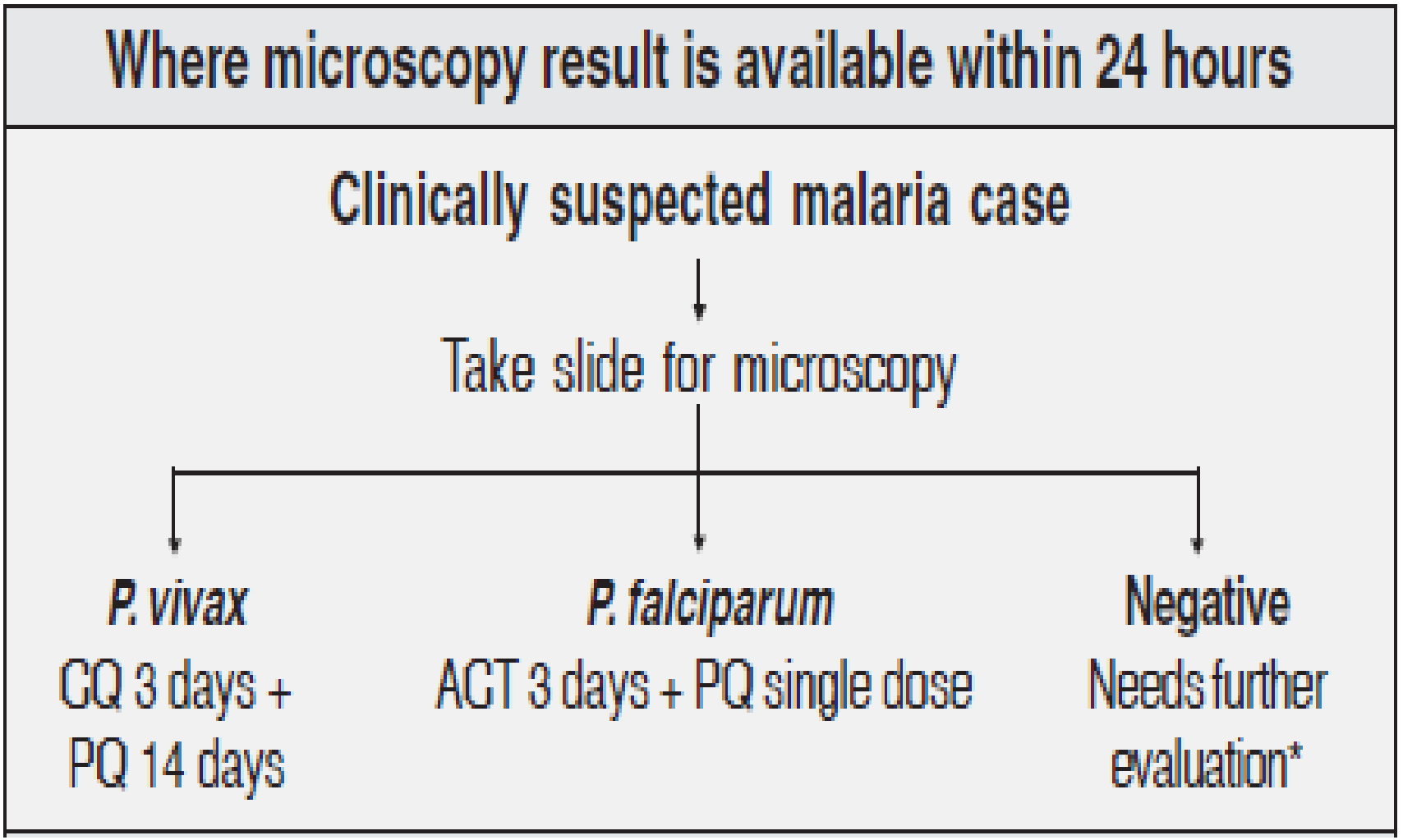
Annual Parasite Incidence (API) More than 2	**Annual Parasite Incidence (API) Less than 2**
• Spraying of all areas • Entomological assessment • Surveillance: ➢ Active surveillance ➢ Passive surveillance • Treatment of cases	• Spraying: focal spraying • Surveillance: more vigorously • Treatment • Follow-up • Epidemiological investigation

Strategies: Malaria

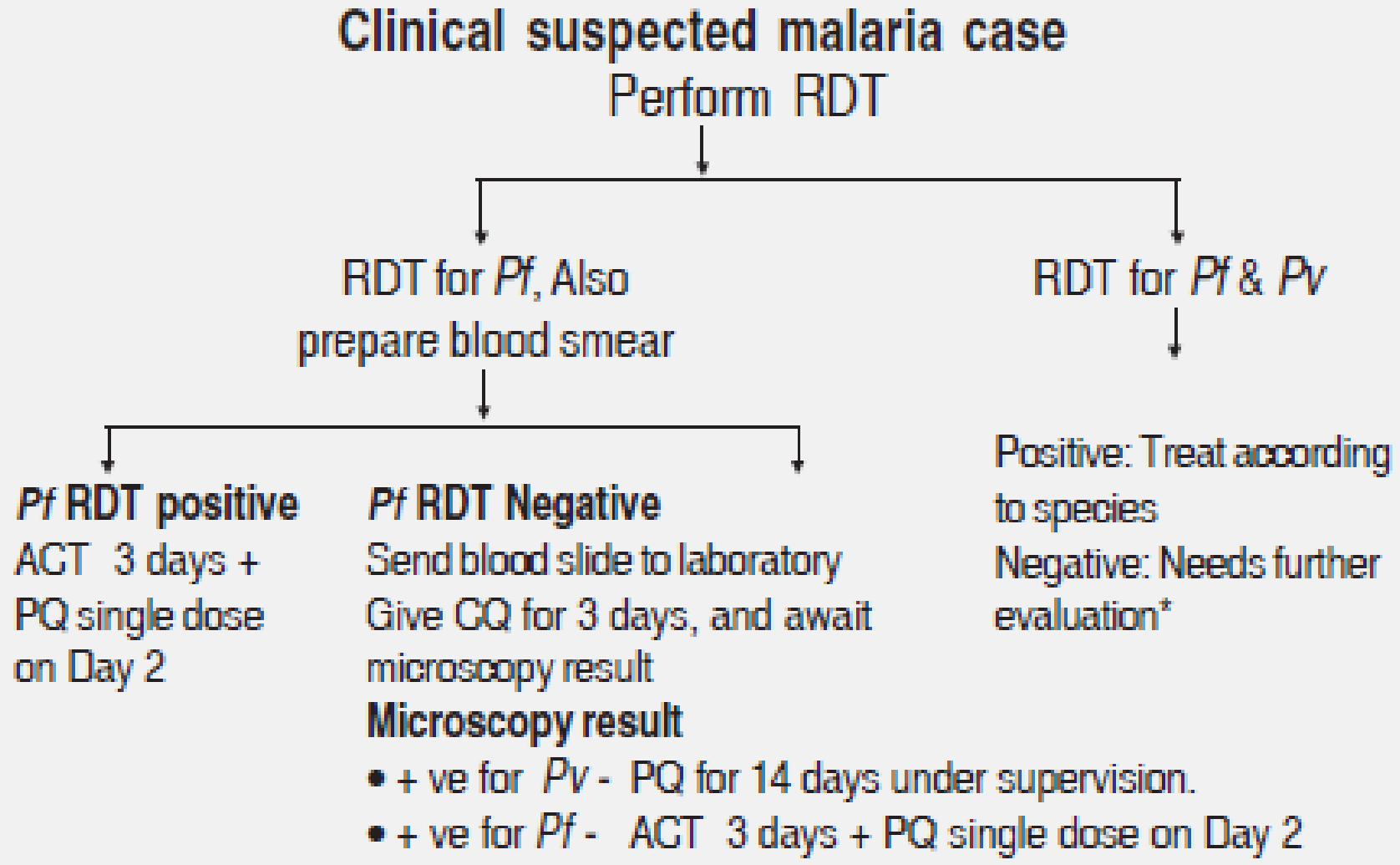
Early case detection and prompt treatment (EDPT)

- Clinically suspected malaria cases are confirmed on microscopy or rapid diagnostic kits(RDK)
- Drug Distribution Center (DDC) and Fever Treatment Depots(FTD) have been established in rural areas
- In inaccessible areas, Health agencies and volunteers running FTD's are provided with RDK's

Algorithm for diagnosis & treatment of Malaria

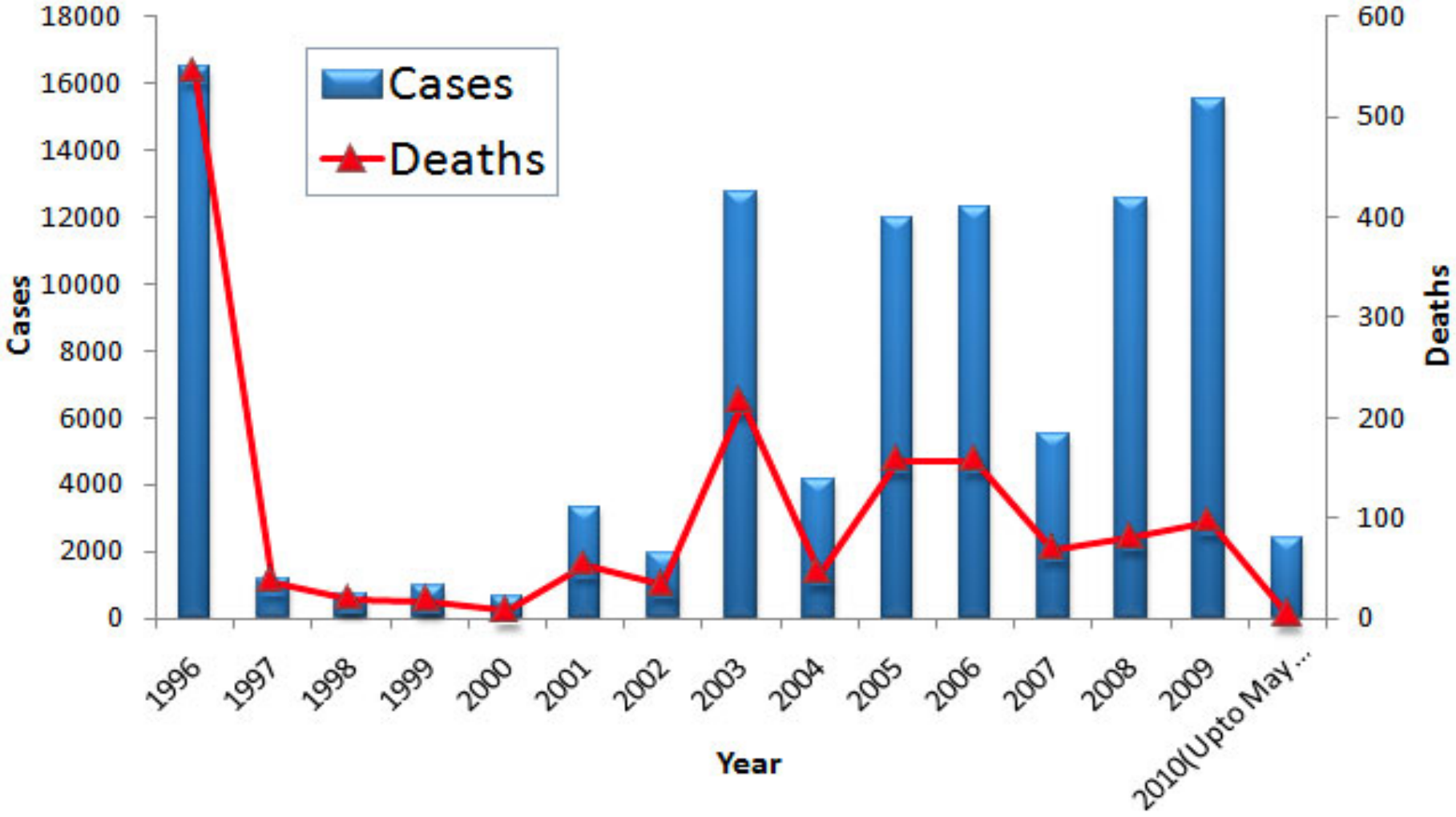


Where microscopy result is not available within 24 hours



ACT: Artesunate, Sulfadoxine & Pyrimethamine

Trends of DENGUE cases & deaths (1996-2010)

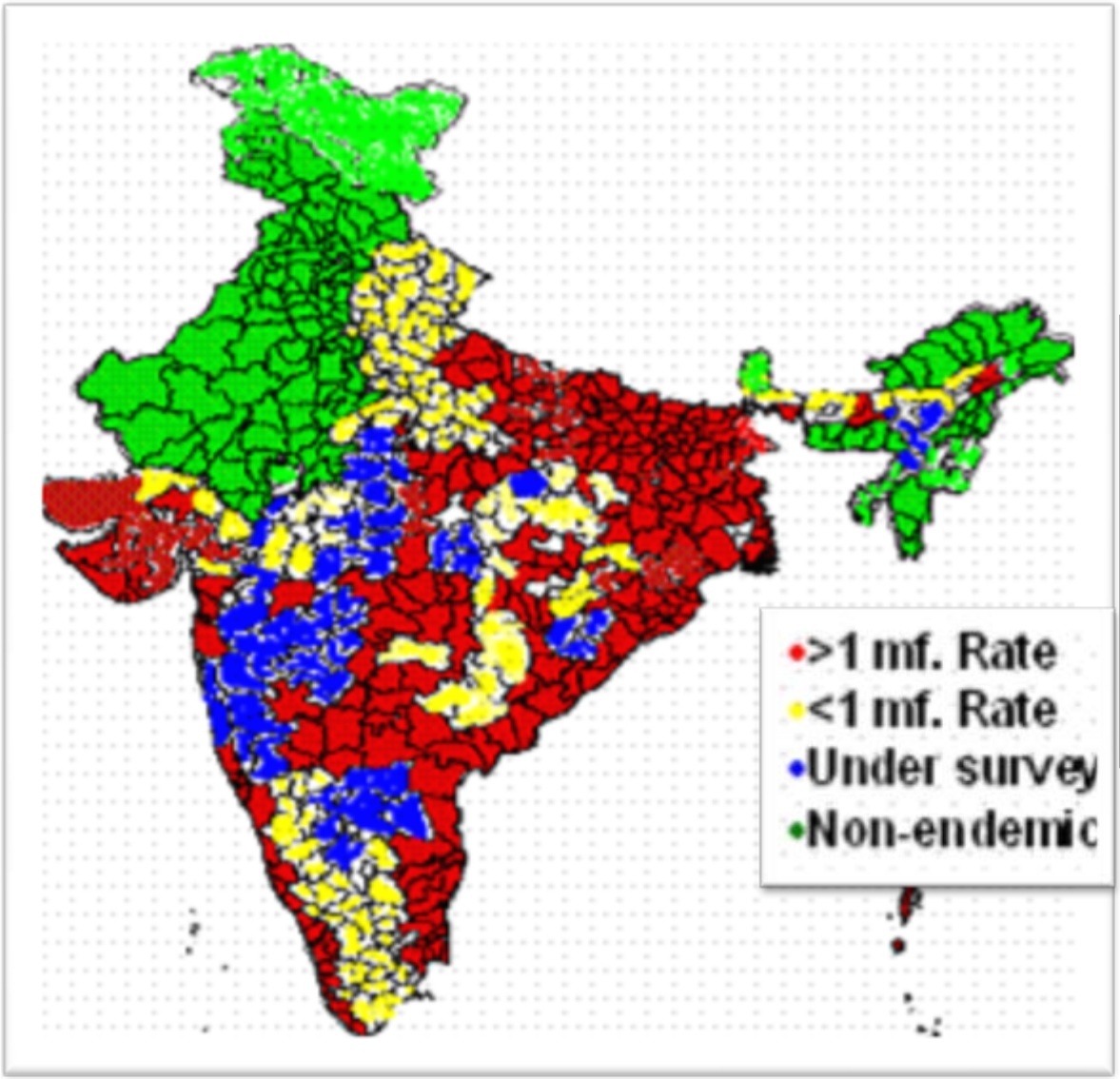


GoI initiatives for Dengue

- Long term action plan for Prevention and Control of Dengue (2007).
- National guidelines for clinical management of Dengue fever, DHF & DSS (2007)
- Established 110 Sentinel surveillance hospitals with laboratory support for augmentation of diagnostic facility for Dengue in endemic State(s) in 2007 which has been increased to 170 in 2009.
- 13 Apex referral laboratories with advanced diagnostic facilities for back up support.
- To maintain the uniformity and standard of diagnostics in these laboratories IgM MAC ELISA test kits are provided through National Institute of Virology (NIV), Pune. Cost is borne by GOI.

- Diagnosis of Dengue and Chikungunya is provided to the community at free of cost.
- Kits are supplied by NIV, Pune on receipt of requirement from the respective states.
- Buffer stocks are also maintained to meet any exigency.
- Ensuring the diagnostic facility and availability of kits is the responsibility of the respective State Programme Officers, NVBDCP.

FILARIA Endemic Districts



Trend Of Average MF rate		
Year	2004	2008
National Average	1.24	0.63

Endemic district 250 (in 20 States/UTs)

Strategies for Filaria Control

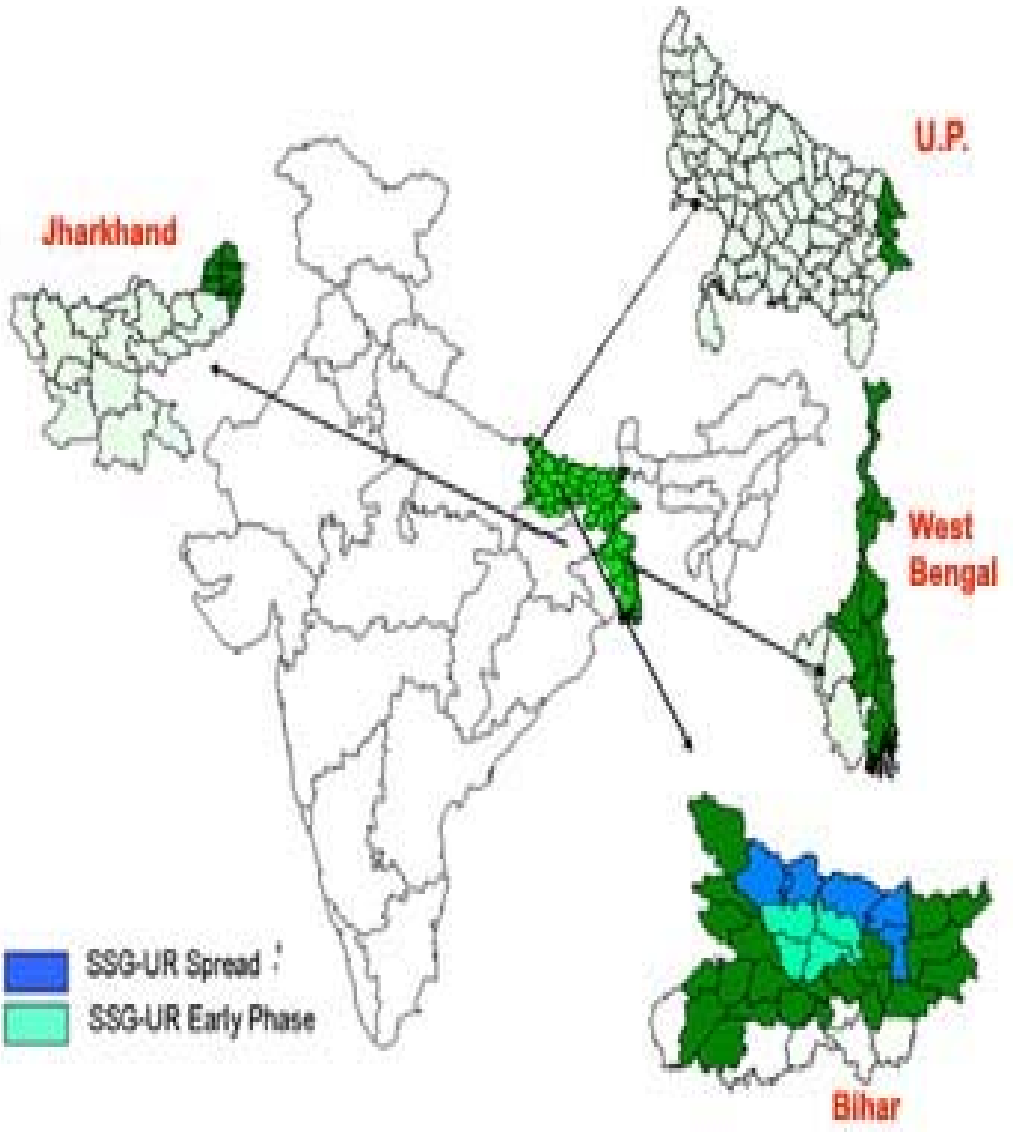
- Recurrent anti-larval measures at weekly intervals.
- Environmental methods including source reduction by filling ditches, pits, low lying areas, deweeding, desilting, etc.
- Biological control of mosquito breeding through larvivorous fish.
- Anti-parasitic measures through 'detection' and 'treatment' of microfilaria carriers and disease person with DEC by Filaria Clinics in towns covered under the programme.

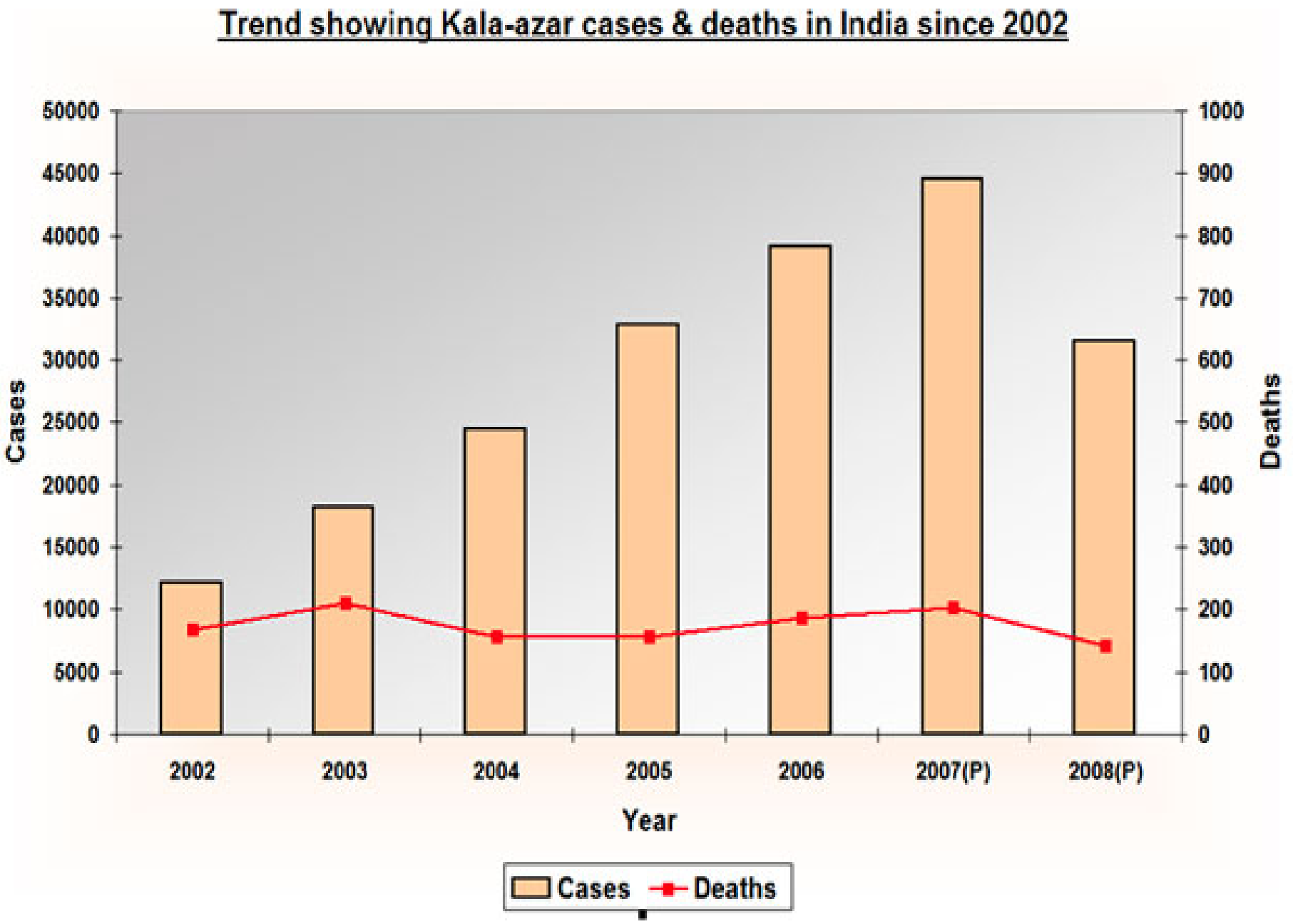
❑Revised Strategy

- Annual Mass Drug Administration with single dose of DEC was taken up as a pilot project in 1996-97.
- This strategy was to be continued for 5 years or more to the population excluding children below two years, pregnant women and seriously ill persons in affected areas to interrupt transmission of disease.

Extent of problem of KALA-AZAR in India

- Endemic in eastern States of India namely Bihar, Jharkhand, Uttar Pradesh and West Bengal
- 48 districts endemic; sporadic cases reported from a few other districts.



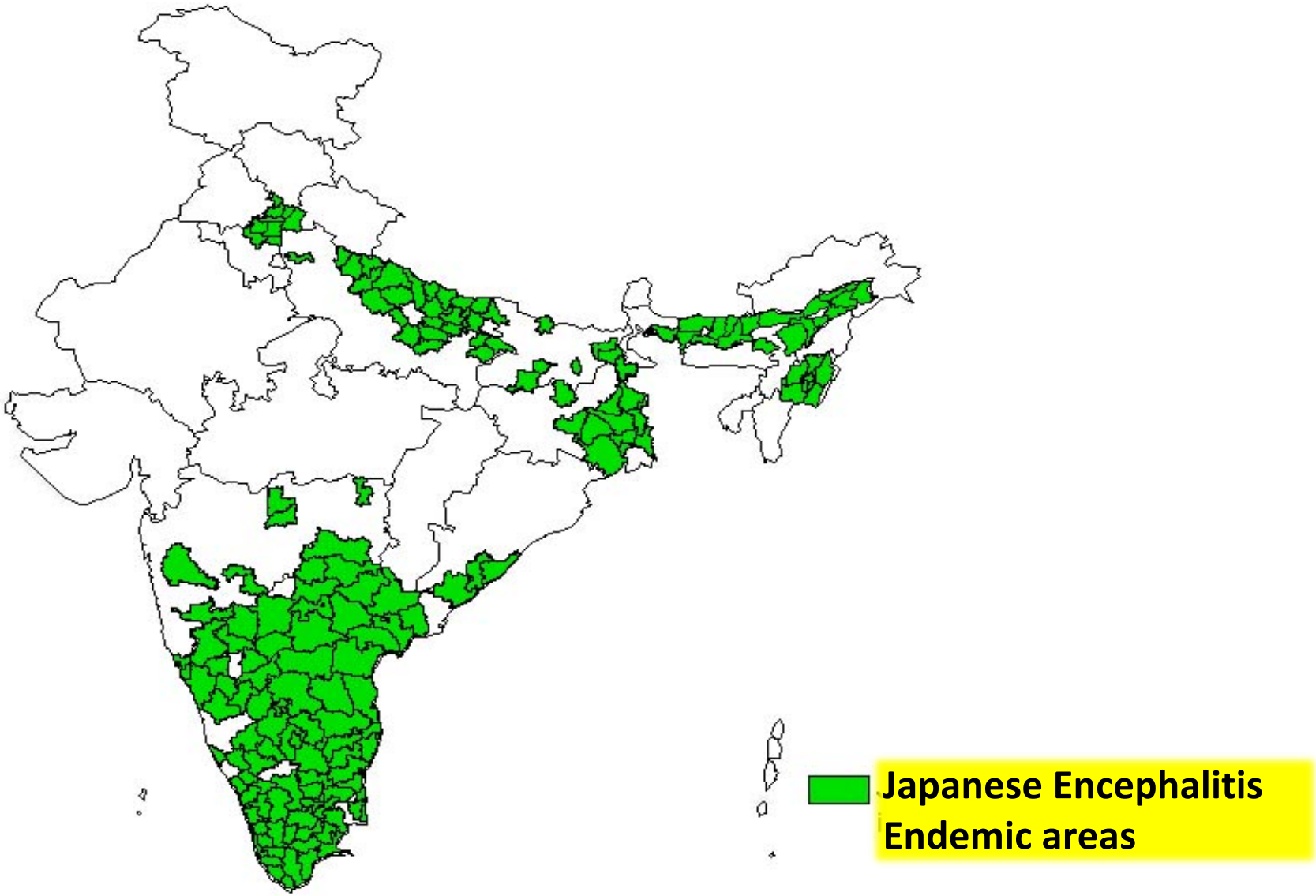

Trend showing Kala-azar cases & deaths in India since 2002
Cases
Deaths
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
1000
900
800
700
600
500
400
300
200
100
0
2002
2003
2004
2005
2006
2007(P)
2008(P)
Year
Cases
Deaths

Strategies for Kala-azar elimination

Enhanced case detection and Complete treatment

- Every case of fever of more than 15 days duration in endemic areas , not responding to anti-viral t/t or antibiotics with spleenomegaly is screened.
- Rapid diagnostic kit **RK39** has replaced Aldehyde Test for diagnosis of Kala-azar**.**
- Introduction of oral drug Miltefosine as the first line drug since 2008.
- Directly observed treatment in endemic areas

Distribution of JAPANESE ENCEPHALITIS in India



Prevention and Control of JE

- JE vaccination campaign was launched during 2006
  - 11 most sensitive districts in Assam, Karnataka and Uttar Pradesh were covered.
- Re-orientation training course on JE case management.
- The diagnostic facilities have been strengthened at 50 sentinel and 13 Apex Referral Laboratories.
- Guidelines were developed on JE case management and prevention and control.
- One Vector Borne Disease Surveillance Unit (VBDSU) and one JE sub-office was established at BRD Medical College, Gorakhpur, Uttar Pradesh.

INTEGRATED VECTOR MANAGEMENT

- Source reduction, filling, streamlining water bodies
- Biological Control-Gambusia Fishes & Biolarvicides (Bacillus sphaericus)
- Impregnated bed nets
- DDT spraying.
- IEC campaigns

Integration under NRHM

At Village Level

- Monthly meetings of Village Health & Sanitation Committee serve as a platform for health education and counseling of community.

Involvement of ASHA as-

- Surveillance worker to inform any increase in fever cases including Dengue/ Chikungunya and J.E.
- FTD for early detection of suspected malaria cases and treatment
- Linkage between ANC services and prevention & treatment of malaria
- Counselor for Filaria cases to practice home based management.
- Organizer, motivator and trainer in village level meetings/training workshops.

Thanks……