National Vector Borne Disease Control Program

The National Vector Borne Disease Control Program (NVBDCP) covers 6 vector borne diseases namely

1. Malaria
2. Japanese Encephalitis
3. Dengue
4. Kala Azar
5. Chikungunya
6. Filariasis

Out of these, malaria, JE, and Dengue are found in Nagaland. Malaria is endemic in all the 11 districts while JE is detected in 8 districts (Dimapur, Kohima, Peren, Mokokchung, Zunheboto, Longleng, Tuensang, Wokha), and Dengue in 1 district (Dimapur).
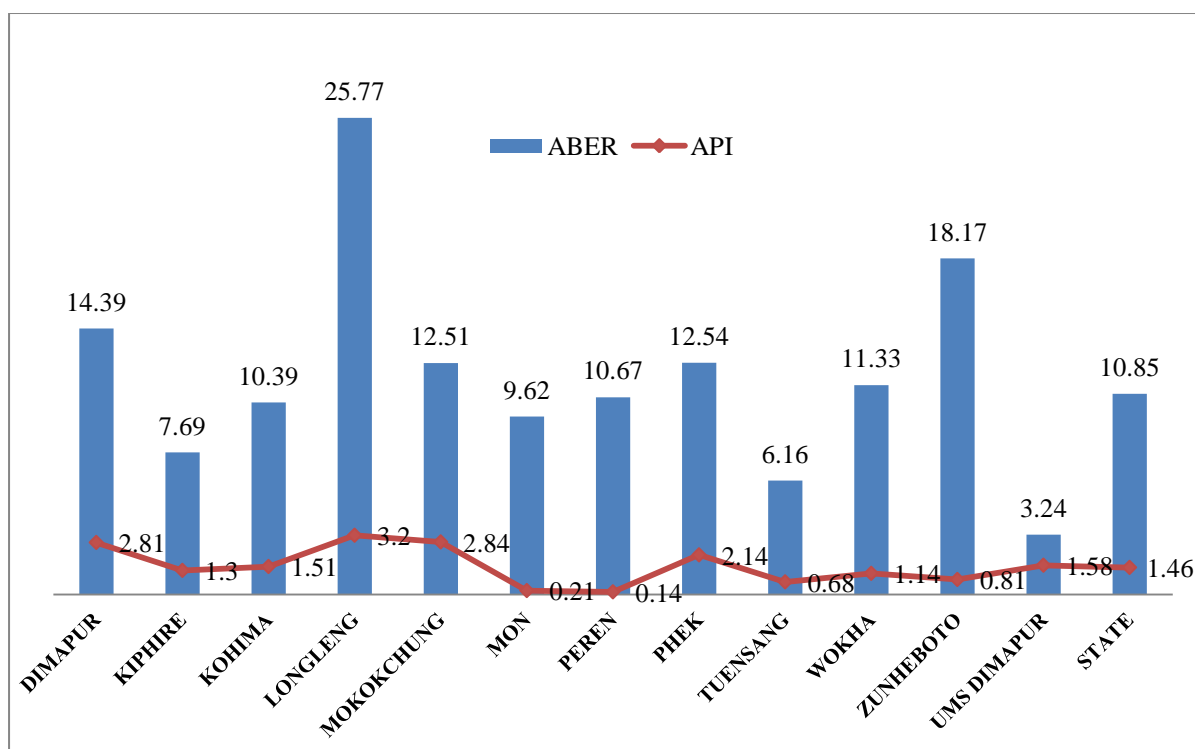
Malaria

No. of malaria cases and deaths (district-wise) in the last 4 years

District	2009		2010		2011		2012	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
DIMAPUR	1392	19	1460	1	666	0	513	0
KIPHIRE	114	0	72	0	68	0	96	0
KOHIMA	882	1	540	0	568	0	409	0
LONGLENG	208	0	291	0	112	0	162	0
MOKOKCHUNG	2552	1	1118	0	781	0	548	0
MON	669	2	297	0	68	0	53	0
PEREN	63	0	97	2	15	1	13	0
PHEK	433	0	157	0	344	1	349	1
TUENSANG	286	0	127	0	90	0	133	0
WOKHA	1393	1	367	0	298	0	190	0
ZUNHEBOTO	280	0	129	0	123	0	114	0
UMS DIMAPUR	217	11	304	11	230	2	311	0
TOTAL	**8489**	**35**	**4959**	**14**	**3363**	**4**	**2891**	**1**

- Falciparum malaria constitutes 28.4% of the total malaria cases.
- The Annual Blood Examination Rate **ABER** (total tested/total populationx100) for 2012 was 10.85% (National target >10%)
- The Annual Parasite Incidence **API** (total positive/total populationx1000) for 2012 was 1.46 (National target for elimination phase is <1/1000 population).

District-wise ABER and API during 2012 are given in the chart below:

Indoor Residual Spray (IRS) of DDT

IRS was carried out in two rounds between March and August 2012. In the first round, 70% of the target population was covered and 57.83% in the second round.

Japanese Encephalitis

Sl. No.	Year	District	No. of cases	Deaths
		Dimapur	7	0
	2009	Mokokchung	2	2
1	**Total**		9	**2**
		Kohima	1	1
	2010	Dimapur	23	5
2	**Total**		24	**6**
		Kohima	1	1
		Dimapur	30	5
		Mokokchung	2	0
		Zunheboto	1	0
	2011	Peren	2	0
3	**Total**		36	**6**
		Dimapur	17	2
		Wokha	1	0
	2012	Peren	3	0
4	**Total**		21	**2**
	GRAND TOTAL		90	**16**

Dengue

Dengue cases/deaths, 2009-2012, Nagaland

Sl. No.	Year	No. of cases	Deaths
1	2009	25	0
2	2010	0	0
3	2011	3	0
4	2012	0	0

All the detected cases were from Dimapur.

Concerns and priorities:

- To improve surveillance, early case detection and prompt treatment of malaria to achieve the elimination phase target of API <1/1000 population.
- Diagnostic facility for JE/Dengue is presently available only in Dimapur. JE cases were detected from other 7 districts and testing facility network needs to be expanded
- Need for Sub Centre-wise entomological and epidemiological mapping of vectors and vector borne diseases.
- Mobilization and motivation of trained ASHAs to be actively engage in slide collection/RDT tests and treatment.
- Strengthen monitoring and supervision in hard to reach areas especially during monsoon due to seasonal nature of the diseases.
- Improve financial management: timely submission of expenditure statements and release of funds, maintenance and digitization of accounts.
- Improve IT for e-reporting through provision of power back-up, internet connectivity, and training of staffs.
- Adequate supply of Long Lasting Insecticide treated Nets (LLINs) (from NVBDCP New Delhi)
- Supply of bivalent RDT for malaria (by NVBDCP New Delhi)
- Vector control: need for source reduction strategies.