

National Vector Borne Disease Control Programme(NVBDCP)

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About the National Vector Borne Disease Control Programme(NVBDCP)

NVBDCP is an umbrella programme for prevention and control of vector borne diseases (VBDs), viz., Malaria, Lymphatic Filariasis, Kala-azar, Dengue, Chikungunya and Japanese Encephalitis (JE).

In view of synergies in prevention & control of vector borne diseases including Japanese Encephalitis and Dengue, the programme was renamed as National Vector Borne Disease Control Programme in the year 2003 with the integration of three ongoing centrally sponsored schemes viz., NAMP, NFCP and Kala-Azar Control Programme and converging prevention and control of JE and Dengue

Objectives under NVBDCP

During XI Plan, the following objectives were enlisted:

- To prevent mortality due to Vector Borne Diseases namely Malaria, Kala-azar, Dengue/DHF and Japanese Encephalitis
- To reduce morbidity due to Malaria, Dengue/DHF, Chikungunya and Japanese Encephalitis
- Elimination of Kala-azar and Lymphatic Filariasis.

In pursuance to achieve the objectives under NVBDCP, Government of India has taken various initiatives and set the goal as under

- to reduce the case incidence including morbidity on account of malaria, dengue, chikungunya and Japanese encephalitis by 50% by 2017,

- to achieve elimination of Kala-azar and lymphatic filariasis by 2015

List of Vector-Borne Diseases Control Programmes under it

1. National Anti – Malaria programme
2. Kala – Azar Control Programme
3. National Filaria Control Programme
4. Japanese Encephalitis Control Programme
5. Dengue and Dengue Hemorrhagic fever.

National Anti – Malaria programme(NAMP)

A countrywide comprehensive programme to control malaria was recommended in 1946 by the Bhore committee report that was endorsed by the Planning Commission in 1951. The national programme against malaria has a long history since that time. In April 1953, Govt. of India launched a National Malaria Control Programme (NMCP). . This was modified in 1958 to a countywide National Malaria Eradication Programme (NMEP) in view of spectacular success of NMCP

Objective:

- To bring down malaria transmission to a level at which it would cease to be a major public health problem.

Current status:

- World Malaria Reports for 3 consecutive years have hailed India's progress in Malaria Programme, and India has been acknowledged as the fastest moving /best performing country in the world in this regard.
- Malaria cases reported in 2019 were 338494 in comparison to 429928 cases in 2018, indicating a decline of 21.26% over the year 2019. Similarly, malaria cases have declined by 47.77% and *Pf* cases by 25.15 % as on 31st October 2020, as compared to the corresponding period

Kala-azar Control Programme

Kala-azar Control Programme was launched in the year 1990-91

Kala-azar or visceral leishmaniasis (VL) is a chronic disease caused by an intracellular protozoan (*Leishmania* species) and transmitted to man by bite of female phlebotomus sand fly. Currently, it is a main problem in Bihar, Jharkhand, West Bengal and some parts of Uttar Pradesh. In view of the growing problem planned control measures were initiated to control kala-azar.

Objectives:

The strategy for kala-azar control broadly included three main activities.

- Interruption of transmission by reducing vector population through indoor residual insecticides.
- Early diagnosis and complete treatment of Kala-azar cases; and
- Health education programme for community awareness.

Current status:

- 1735 cases have been reported during 2020 upto October in comparison to 2863 cases reported during corresponding period of 2019. A reduction of 39.4% of cases with no death was reported till October, 2020.
- Till October 2020 98% Kala-azar endemic blocks have achieved the elimination target of <1 KA case per 10,000 population at block level. 13 blocks (Bihar-3 and Jharkhand-10 blocks) are yet to achieve the target.

The National Filaria Control Programme

The programme was launched in 1955 to delimit the problem and implement the treatment of microfilaria carriers and disease cases with Diethylcarbamazine tablets along with anti-larval measures in urban areas.

Filariasis is an infectious tropical disease caused by any one

of several thread-like parasitic round worms. The two species of worms most often associated with this disease are *Wuchereria bancrofti* and *Brugia malayi*

Objectives:

- Reduction of the problem in un-surveyed areas
- Control in urban areas through recurrent anti-larval and anti-parasitic measures.

Current status:

- Out of 272 (257 + 15 new) endemic districts, 98 districts have cleared Transmission Assessment Survey (TAS)-1 and have consequently stopped Mass Drug Administration (MDA).
- During 2020 (till October), 84 districts have conducted MDA including 7 districts where MDA was conducted with triple drug therapy (IDA) i.e. Ivermectin + DEC + Albendazole.

Japanese Encephalitis Control Programme

Japanese encephalitis (JE) is a zoonotic disease and caused by an arbovirus, group B (Flavivirus) and transmitted by *Culex* mosquitoes. This disease has been reported from 26 states and UTs since 1978, only 15 states are reporting JE regularly.

Govt. of India has constituted a Task Force at National Level which is in operation and reviews the JE situations and its control strategies from time to time. Though Directorate of National Anti-Malaria Programme is monitoring JE situation in the country.

Objectives:

- Strengthening early diagnosis and prompt case management at PHCs, CHCs and hospitals through training of medical and nursing staff.
- IEC for community awareness to promote early case

reporting, personal protection, isolation of amplifier host, etc.;

- Vector control measures mainly fogging during outbreaks, space spraying in animal dwellings, and antilarval operation where feasible; and
- Development of a safe and standard indigenous vaccine. Vaccination for high risk population particularly children below 15 years of age.

Current status:

- Funds have been provided for all 10 Physical medicine & Rehabilitation (PMR) Deptts. 8 PMRs are functional (Assam-2, Tamil nadu-1, Uttar Pradesh-3 and West Bengal-2)
- JE vaccination Campaigns in children (1-15 yrs.) have been completed in *243 JE endemic districts. 60 more districts have been identified to be covered under JE vaccination campaign. (*Immunization Div. has increased the number to 276 districts, based on the separation of districts over the years.)
- 31 districts (Assam (9), Uttar Pradesh (7) and West Bengal (15) have been covered under Adult JE Vaccination.

Dengue and Dengue Hemorrhagic fever

Dengue Fever and Dengue Hemorrhagic Fever (DHF) are acute fevers caused by four antigenically related but distinct dengue virus serotypes (DEN 1,2,3 and 4) transmitted by the infected mosquitoes, *Aedes Aegypti*. Dengue outbreaks have been reported from urban areas from all states. All the four serotypes of dengue virus (1, 2, 3 and 4) exist in India. The Vector *Aedes Aegypti* breed in peridomestic fresh water collections and is found in both urban and rural areas.

Objectives:

- Surveillance for disease and outbreaks
- Early diagnosis and prompt case management
- Vector control through community participation and social mobilization
- Capacity building