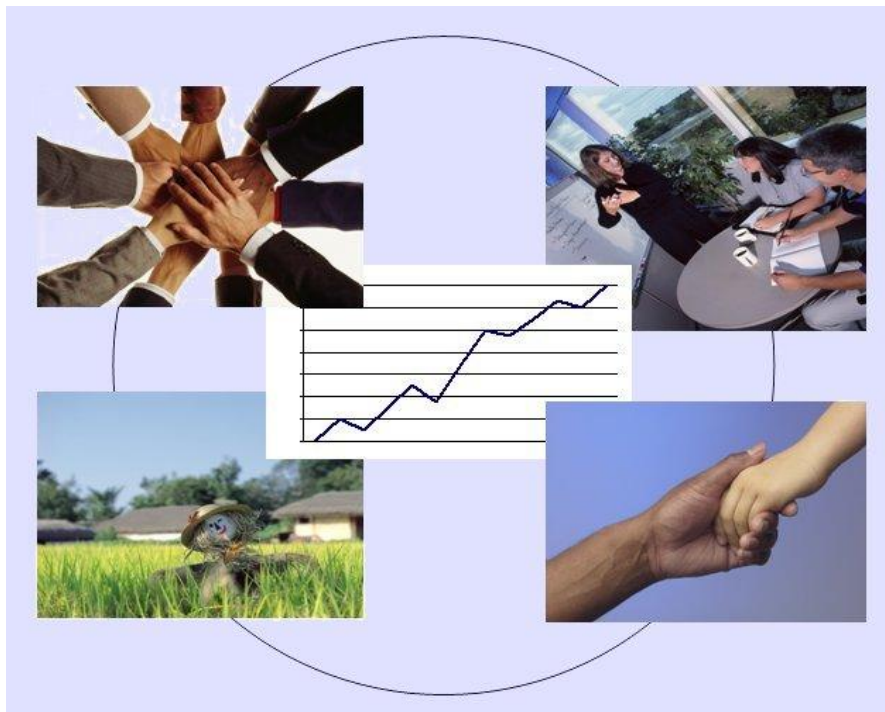


CORPORATE GUIDELINES TO CONFRONT MALARIA



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INTRODUCTION

The NVBDCP is an umbrella programme for prevention and control of vector borne diseases (VBDs) and is an integral part of the India's National Rural Health Mission (NRHM). The NVBDCP envisages a well informed and self-sustained, healthy India with equitable access to quality health care and the programme activities are in tandem with the National Health Policy (2002) and NRHM goals as well as the Millennium Development Goal of halting and reversing the incidence of malaria and other vector borne diseases by the year 2015 towards reduction of poverty.

Till now, limited involvement of private sectors/corporate in the programme has led to persistence of public sector provider-driven programmes. Presently, the NVBDCP recognizes the need for engaging the corporates to complement the ongoing and/or planned control efforts by NVBDCP, in atleast the catchment areas of the organizations. Public Private Partnership is a key supportive programme strategy aiming at reaching the entire target population with correct information and services on effective malaria control tools and technologies. This is aligned with the flagship programme of the Government of India—the National Rural Health Mission (NRHM) launched in 2005 that aims at making the health care services (both public and private) acceptable, affordable and accountable to all.

PROGRAMME OBJECTIVES

1. Overall Objectives

The Objectives of the Malaria Control Programme are:

- Prevention of deaths due to malaria
- Prevention of morbidity due to malaria
- Maintenance of ongoing socioeconomic development

2. Specific Objectives

- API 1.3 or less in the 11th Five Year Plan
- At least 50% reduction in mortality due to malaria by the year 2010, as per National Health Policy (2002)
- To halt and reverse the incidence of malaria by 2015 (as per Millenium Development Goals)

In India presently, screening of fever cases for malaria is done under the National Vector Borne Diseases Control Programme (NVBDCP) covering about 10% of the population annually, of which about 1.5 to 2.0 million are positive for the malarial parasite; around 45%-50% of these cases are due to *Plasmodium falciparum*. Though the Annual Parasite Incidence (API) has come down in the country, it varies from one state to another. The malaria situation remains a major problem in certain states and

geographical pockets. Majority of malaria cases and deaths in India are being reported from Orissa, the seven North Eastern states, Jharkhand, Chattisgarh, Madhya Pradesh and Rajasthan with Orissa alone contributing more than 20% of the cases in the country. Public private partnership with corporate is envisaged under NVBDCP towards achieving this aim.

CORPORATE SOCIAL RESPONSIBILITIES (CSR)

CSR is about how companies manage the business processes to produce an overall positive impact on society. This is a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment; companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. At operational level of the activities of corporates, they do contribute directly or indirectly to disease processes by affecting the ecological dynamics of their catchment area. Therefore, they have implied social responsibility to positively assist in preventing and arresting the disease process.

Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.

In endemic areas, malaria is often the disease that causes significant economic impact as it is often: the main reason for absenteeism; the main cause of medical consultations; the cost of medical expenses. Many corporate directors are aware of this but do not have a real understanding of the situation.

Protecting Employees

- To reduce absenteeism it is justified to protect the local employees, whether from endemic areas or non endemic areas, should be covered by some corporate driven programme.
- The corporate must care for sick employees during working hours (full-time employees, temporary employees, day workers and contractual workers/labourers).

Protecting Employees families

- Every corporate program should at least aim to protect the pregnant women and infants, the most susceptible of their employees' / workers family members.

Protecting Neighboring Communities

- The flight range of the mosquito is around 3 kms. radius Therefore, for controlling vectors the corporate should include neighboring populations along with the employees and their families.

Protecting Migrant workers

- Protective measures should be included in the corporate programme for the workers/ employees moving from one transmission zone to another.

MALARIA CONTROL STRATEGIES IN NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAM (NVBDPC)

The strategies for prevention and control of malaria and its transmission are:

1. Surveillance and case management
 - Case detection (passive and active)
 - Early diagnosis and complete treatment
 - Sentinel surveillance
2. Integrated Vector Management (IVM)
 - Indoor Residual Spray (IRS)
 - Insecticide Treated bed Nets (ITNs) / Long Lasting Insecticidal Nets (LLINs)
 - Antilarval measures including source reduction
3. Epidemic preparedness and early response
4. Supportive interventions
 - Capacity building
 - Behaviour Change Communication (BCC)
 - Intersectoral collaboration
 - Monitoring and Evaluation (M & E)
 - Operational research and applied field research

CORPORATES AND MALARIA CONTROL

The most important and useful method of controlling malaria is combating the mosquito, the vector of the parasite.

The following measures can be taken up, as per the National Vector Borne Disease Control Programme guidelines, for vector control:

- Larva control: cleaning up of the possible breeding places of mosquito, biological control through larvivorous fish, outdoor insecticide treatment;
- adult mosquito control: insecticide treatment by fumigation or indoor residual spraying (IRS)
- Personal protection: use of insecticide treated bed nets(ITNs) or long lasting insecticidal nets(LLINs).

Apart from taking up all these preventive activities, additional measures may be implemented for special situations or for high risk population.

Finally the malaria control program for corporate must include medical provision for the sick. Medical care must be immediately available and adapted to the situation in order to avoid complications and progression of case to severe malaria with high mortality

Activities in malaria control by the corporates

i) Information-education-communication:

Without the support of local people it is impossible to control malaria. For that the people has to be empowered with the knowledge about the disease and also the protective and curative measures of the disease. The programme manager has to develop an IEC plan, with approval of the Directorate, NVBDCP that is matched to the local context and also faithful to the corporate culture. The aim of IEC is to obtain full involvement of local people, and their active participation in the program. The following objectives have to be achieved:



- Educating the local people to go to the clinic as soon as they notice the first sign of fever
- Motivation of the individuals, based on the conviction that control is possible and can be effective, and that it will improve life for each and everyone. For example, if everyone collaborates fully, death through malaria may become a rare event.
- Understanding of the disease, of the risks and of the chances of getting cured. For example, it may be possible to save the life of a little child who is having convulsions if he receives treatment within 24 hours of occurrence of first symptoms..
- Understanding the methods of malaria control — their strengths and their limitations. For example, why a mosquito net is useful even though we only use it for seven or eight hours a day especially the ITNs/LLINs.

An IEC operation must be matched to the target population; particular attention needs to be paid to the language used. Messages conveyed in local dialects often have more impact in rural areas. It is often advisable to enlist the collaboration of local people to help translate important slogans. The message should be clear and simple enough to promote community participation.

ii) Personal Protection

Personal protection helps to limit the contact between human host and the vector. The best aid for this purpose is the insecticide treated bed net (ITN/LLIN). The employee should get the nets free of cost (No. of free LLINs to be distributed = total population / 2.5) and the most crucial role of the corporate to play is to mobilize the employees and their neighboring population about the optimal use of the nets.

iii) Sanitation operations for mosquito breeding site reduction

Cleaning up of stagnant unused water collections helps in reducing the breeding sites. Now a days, in most of the corporate the major clean up is well managed in waste water management in a better way. But the micro clean up measures, i.e., the cleanup efforts on the individual level (such as filling in puddles, drainage operation, getting rid of empty

cans, old tyres or any other container which can hold water, and pruning trees.) should be taken up by the corporate. The community should actively get involved in the procedure to reduce mosquito breeding sites in the area.

iv) Anti Larval Measures

(a) Biological control

Larva control – one of the main components of malaria control – includes all the techniques used to eradicate mosquito larvae. Biological control in breeding sites is a non-polluting and non-toxic alternative to insecticide treatment. It can have its real impact only in zones with low transmission rates. Biological control measures are sophisticated and only suitable in zones where breeding sites can be readily identified and are accessible.

(b) Chemical Larvicide

Chemical larvicides are used as a source reduction method in urban malaria control



Programme. Chemical larval control is particularly indicated in urban areas where most of the breeding places are man-made and can be identified, mapped and treated. In many Indian cities malaria is the adaptation of *An. stephensi* to breeding in wells, cisterns, roof gutters, tanks and all kinds of containers; when such conditions occur in a large crowded city it can produce a severe epidemic. Domestic and peri-domestic sanitation may be an important component where individual and community cooperation is essential. The chemical larvicide involves the spraying of breeding

sites with suitable antilarval chemical substances.

v) Indoor Residual Spraying

IRS (Indoor Residual Spraying) is a vector control technique in which liquid insecticide is sprayed on the interior walls of houses. It has a two-fold effect - lethal: the insecticide kills mosquitoes when it rests on a wall; repellent: the insecticide keeps mosquitoes out of the houses. The spraying has to be done as per the programme guidelines.



vi) Activities during transmission season

All the preventive measures [(v) & (vi)] must be implemented prior to the transmission season to interrupt the transmission or to reduce the incidence of the disease. During

the transmission season the curative measures mentioned below, with appropriate services should be provided at the exact time.

vii) Diagnosis of suspected malaria cases

The suspected fever cases should be diagnosed as per the programme guidelines. This could be undertaken by the use of Rapid Diagnostic Kit (RDK) specific for *P. falciperum* infection and microscopic blood slide examination in a laboratory as and when required. The Rapid Diagnostic Test (RDT) and blood slide collection (BSC) can be undertaken by a trained health volunteer from among the factory workers or by an Accredited Social Health Activist (ASHA) trained as per National Vector Borne Disease Control Programme (NVBDCP) from among members of industrial community residential areas/localities within the corporate catchment area.

viii) Treatment of Positive cases

Uncomplicated malaria can be treated effectively with oral drugs i.e Artemisinin Combination Therapy (ACT)/Chloroquine and primaquin, as per the drug policy for malaria treatment which can be administered by trained ASHA /malaria volunteer worker. Severe malaria warrants admission into hospital and the usual treatment is Artether/quinine therapy along with supportive management.

INPUT FROM NVBDCP

To make the corporate project more successful NVBDCP will give the following inputs:

- (a) Providing training to the staffs involved in service delivery Information on malaria control (entomological and epidemiological).
- (b) Existing policy, guidelines, reports related to malaria control and kala-azar elimination.
- (c) Information on activities related to malaria control at different level.
- (d) Technical guidance for carrying out different activities.
- (e) Inputs in terms of goods (RDT, ACT/ other anti malarial drugs, laboratory supplies, LLIN, insecticide for impregnation of community owned bed nets, BCC tools and materials), as necessary and appropriate.

Inputs from the programme

<i>Actions</i>	<i>Organisation's Input</i>	<i>Input from NVBDCP</i>
IEC/BCC Activity	Staff for planning and implementing the activity	-IEC/BCC tools and materials
Sanitation Operations	Staff for planning and implementing the activity	-Training on programme guideline
Biological Control	Staff for maintaining hatcheries, seeding and transport of the fishes	-Collaboration with department of fisheries
Outdoor Insecticide Treatment of Stagnant Water and Fogging	Staff for planning and execution of the activity	-Insecticides/larvicides for the treatment, -Training on the activities
Indoor Residual Spraying	Staff for planning and execution of the activity	-Insecticides for the treatment, -Training on the activities
Personal Protection	Staff for planning and	-ITNs/LLINs,

	execution of the activity	-Insecticides for treatment of bednets -Training on impregnation of community owned bednets
Diagnosis of Suspected cases	Staffs for doing screening for malaria of the employees	-Rapid Diagnostics Kits & other consumables -Reagents, slides - Training on programme guidelines on diagnosis
	Trained personnel for laboratory testing of malaria	-Reagents, slides, -Rapid Diagnostics Kits -Other consumables -Training on programme guidelines on diagnosis
Treatment (without Medical Officer)	Nurse, Paramedical staffs	-Drugs (CQ+PQ, ACT) -Training on programme guidelines on treatment
Treatment (with Medical Officer)	Medical officer, Nurse, Paramedical staffs	- Arteether injections, quinine -Training on programme guidelines on treatment of severe malaria

MONITORING AND REPORTING TO NVBDCP

i. Interaction with District Health authorities:

Local industrial establishment should interact with the District Health Officials i.e Chief. District Medical & Health Officer and in particular with District Malaria Officer (DMO) for necessary help and advice to execute the anti-malaria programme within their catchment areas covering both the work place / factory as well as residential colony and nearby areas. The district will provide all necessary material help as per NVBDCP guidelines as applicable within the concerned district. In case of any difficulty DM/DC of concerned district an SPO of the state may also be contacted.

ii. Monitoring and reporting :

The partner corporate has to send a monthly report to DMO of district concerned giving the details mentioned below:

- Patients reported, diagnosed and treated.
- Utilization of the inputs (RDKs, drugs, nets etc.) from NVBDCP.
- Stock positioning of the inputs
- Any demand of the inputs

A detail matrix for monitoring will be developed and shared with the partner corporate in due course.

For any further information, please visit the official website of National Vector Borne Disease Control Programme – www.nvbdc.gov.in