

# INTENSIVE INTER SECTORAL PROGRAMME FOR THE PREVENTION AND CONTROL OF DENGUE



**National Dengue Control Unit  
Ministry of Health, Nutrition & Indigenous**



**Presidential Task Force  
on Dengue Control**

# **PREVENTION AND CONTROL OF DENGUE** **ACTION PLAN**

	<b>Page no.</b>
Background	3
<b><u>Institutions</u></b>	
1 Government, Private institutions and Places of Religious Worship	4
2 Schools and Higher Education Institutions	5
3 Residential Houses	7
4 Construction sites	8
5 Fisheries Harbours and Fishing Boats	10
6. Public Communication Through Mass Media	13

## MONITORING & EVALUATION

### **Message from H.E. the President**

When the human civilization, having cleared dense jungles and tamed ferocious wild beasts, is heading towards the space age, we Sri Lankans are faced with the decisive challenge, whether to bow down to the wiles of a mere mosquito.

In a situation where state hospitals are overflowing with dengue patients we can no longer treat it as someone else's problem.

Dengue no longer is a health problem but a cultural problem. If we fail to dispose our garbage properly, if we nurture mosquito habits in our households, if we make provisions for mosquito nurseries in our cities and environs, we shall no longer be treated as civilised people.

Our responsibility as regards to dengue is a collective responsibility in which exists a task enforced on us and exercise to be trained. This plan for prevention and control of dengue reminds us over and over again, of this task enforced on us. I earnestly expect each and everyone to take this situation into serious consideration and accomplish their responsibility.

Mithripala Sirisena  
President  
Democratic Socialist Republic of Sri Lanka

## **Background**

Dengue has become a major public health issue in the country today with 68,053 cases reported by June 2017 and consequent deaths at 206 (Death rate 0.3). Dengue has thus reached alarming proportions and with the possible onslaught of the South-West monsoon rains in the coming months. It is of utmost importance to follow a rapid action plan, by the clinical and preventive institutions, to prevent a possible epidemic situation.

While the Aedes mosquitoes responsible for the spread of dengue, breed in many types of environments, according to current entomological reports, about 40% of Aedes mosquitoes breed in discarded containers and utensils. Additionally construction sites, schools, religious places and other institutions also contain large tracts of mosquito breeding sites, thus necessitating the maintenance of a proper solid waste management system and clearance of water stagnation which are main contributors to this mosquito breeding. It is, therefore, necessary and important to identify proper mechanisms to prevent the dengue menace and its spread.

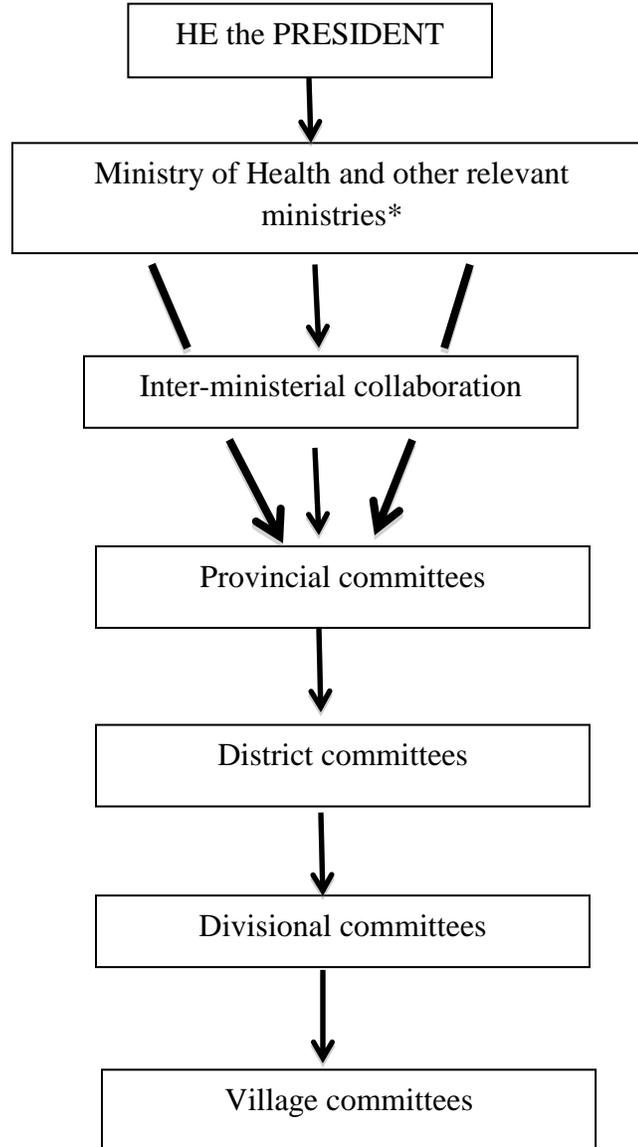
Considering the available scientific data the following action plan is suggested with the objective of prevention and control of dengue and to minimize dengue fatality.

1. Early detection of patients and further improvement of clinical management.
2. Strengthening measures to controlling the spread of dengue and avoid an epidemic situation

Although other health indicators are at a high standard in Sri Lanka, dengue has risen up to epidemic levels and therefore it is suggested to conduct continuous activities to combat the current dengue epidemic situation

As decided by the Presidential Task Force on Dengue Control, it is important to establish a structure from provincial to rural level to fulfill the above objectives.

## PRESIDENTIAL TASK FORCE STRUCTURE



\*Education, Environment, Defense, Public Administration, Provincial Councils and Local Government, Disaster Management, Finance & Media

The most active committee for dengue control activities should be the village committee. This committee must implement the action plan under the technical guidance of the relevant Medical Officer of Health/ Public Health Inspector and with the assistance of respective Grama Niladaris. It is important to implement the above stated action plan headed by the relevant Divisional Secretary and the chairperson of the local government authority.

**ACTION PLAN – PREVENTION & ELIMINATION OF MOSQUITO BREEDING AT GOVERNMENT & PRIVATE INSTITUTIONS**

<b>Activity</b>	<b>Responsibility</b>	<b>Targets</b>
<p>1. Conduct dengue control programme continuously for 3 consecutive months starting from the 1<sup>st</sup> of June 2017</p> <p>2. All institutions (government and private) and religious places should engage in cleaning their premises for one hour in a selected day in every week</p> <p><b><u>Government and private institutions and religious places</u></b></p> <ul style="list-style-type: none"> <li>➤ Inspect the premises for one hour (feasible time) in a selected day in every week to remove mosquito breeding sites with the participation of whole staff / members.               <ul style="list-style-type: none"> <li>• Divide the premises and surrounding environment to zones and give responsibility to relevant officers</li> <li>• Permanent solution for proper waste management                   <ul style="list-style-type: none"> <li>✓ Educate all staff on waste segregation</li> <li>✓ Prevent carrying polythene to the institution</li> <li>✓ Reduce waste</li> <li>✓ Proper disposal of degradable and non-degradable waste and waste water removed from canteens</li> <li>✓ Establish a committee to supervise waste segregation process and prepare a report</li> </ul> </li> </ul> </li> <li>➤ Put larvivorous fish into ponds</li> <li>➤ Send a monthly report to the relevant Medical Officer of Health (MOH) as per the circular issued by the Presidential Secretariat</li> <li>➤ Get technical advice from MOH/ Public Health Inspector when necessary.</li> <li>➤ Pay more attention to construction sites: inspect the site with a responsible officer and a health and safety officer</li> </ul>	<p>All government and private institutions Provincial councils and Local Governments Ministry of Mahaweli Development and Environment Ministry of Health, Nutrition &amp; Indigenous Medicine</p>	<p>All government and private institutions and religious places free of mosquito breeding sites</p>

**ACTION PLAN – PREVENTION & ELIMINATION OF MOSQUITO BREEDING IN SCHOOLS AND HIGHER EDUCATION INSTITUTIONS**

Activity	Responsibility	Targets
<p><b><u>Schools</u></b></p> <p>1. Conduct dengue control programme continuously for 3 consecutive months starting from the 1<sup>st</sup> of June 2017</p> <p>2. All schools (government and private) should engage in cleaning their premises for one hour in a selected day in every week</p> <p>➤ Conduct cleaning activities in all school premises for one hour (feasible time) on a selected day in every week to remove mosquito breeding sites with the participation of all teachers and students (e.g. Friday morning from 11 a.m. to 12 noon)</p> <ul style="list-style-type: none"> <li>• Establish school dengue control committees and strengthen them</li> <li>• Include an hour in the time table for cleaning</li> <li>• Divide the school premises into zones and give responsibility to relevant classes</li> <li>• Engage cleaning school premises one hour for one day per week</li> <li>• Daily inspect the school by the dengue control committee: provide a report to the Principal weekly</li> <li>• All Principals should submit a monthly report to Zonal Director and the relevant MOH</li> </ul>	<p>Ministry of Education</p> <p>Ministry of Health, Nutrition &amp; Indigenous Medicine</p>	<p>All schools free of mosquito breeding sites</p> <p>All schools should be converted to schools that inspect mosquito breeding sites regularly at a designated time in a week</p>
<p><b><u>Higher Education institutions</u></b></p> <p>3. Conduct cleaning activities in all higher education institutions (government and private) for one hour (feasible time) in a selected day in every week to remove mosquito breeding sites with the participation of all lecturers, students and other staff</p> <p>➤ Establish institutional dengue control committees and strengthen them</p>	<p>Ministry of Higher Education</p>	

<p>4. Other control activities to be done continuously to combat dengue</p> <ul style="list-style-type: none"> <li>➤ Clean school premises and remove mosquito breeding sites before commencing schools by all parents and students after each vacation</li> <li>• Daily completion of the field inspection form for dengue breeding sites and inform problematic areas to higher officials</li> <li>• Provide solutions by the institutional head and higher officials after inspecting those problematic areas</li> <li>• Send a monthly report to Zonal Director and a summary to the Ministry of Education about the mosquito breeding tendency by all schools</li> <li>➤ Develop waste management system in schools/ higher education institutions <ul style="list-style-type: none"> <li>• Educate all school children about waste segregation</li> <li>• Prevent carrying polythene to school- “No polythene” policy</li> <li>• Reduce waste</li> <li>• Proper disposal of degradable and non-degradable waste and waste water removed from canteens and hostels</li> </ul> </li> <li>• Establish a committee to supervise waste segregation process and prepare a report</li> </ul>	<p>Provincial Councils</p> <p>Ministry of Health, Nutrition &amp; Indigenous Medicine</p> <p>Ministry of Education</p> <p>Ministry of Higher Education</p>	
<ul style="list-style-type: none"> <li>➤ Pay attention to pools, water tanks and proper management of them and put larvivorous fish into ponds</li> <li>➤ Frequent inspection of construction sites in schools and higher education institutions</li> <li>➤ Prepare a separate file for these activities and maintain them</li> <li>➤ Hold inter school and district level competitions on “Prevention of dengue mosquito breeding”</li> </ul>	<p>All Principals and Vice Chancellors</p> <p>National Institute of Education</p>	

**ACTION PLAN – PREVENTION & ELIMINATION OF MOSQUITO BREEDING IN RESIDENTIAL HOUSES**

Activity	Responsibility	Targets
<p>1. Conduct dengue control programme continuously for 3 consecutive months starting from the 1<sup>st</sup> of June 2017</p> <p><b><u>Inspection of houses</u></b></p> <ul style="list-style-type: none"> <li>➤ Inspect the premises at a selected time in a selected day in every week to remove mosquito breeding sites with the participation of all households</li> <li>➤ Strengthen Community Health programmes               <ul style="list-style-type: none"> <li>• Establish active health committees with all GNs and community leaders</li> </ul> </li> <li>➤ Establish a permanent solution for proper waste management               <ul style="list-style-type: none"> <li>✓ Educate all household members on waste segregation</li> <li>✓ Reduce polythene use</li> <li>✓ Reduce waste</li> <li>✓ Proper disposal of degradable and non-degradable waste and waste water</li> </ul> </li> <li>➤ Put larvivorous fish into ponds</li> <li>➤ Use unused lands for plantation as a community activity/ support</li> <li>➤ Frequent inspection of high risk areas in MOH areas</li> <li>➤ GNs should discuss this matter in the committee: weekly about high risk areas and monthly about other areas. Arrange weekly divisional committee meetings in high risk areas under the Divisional Secretary and submit a progress report by a PHI on dengue control activities.</li> <li>➤ Take action to remove all non-degradable waste weekly from all premises</li> <li>➤ Praise the houses free of mosquito breeding sites during the village committee meetings</li> </ul>	<p>Ministry of Public Administration &amp; Management</p> <p>Provincial councils</p> <p>Ministry of Mahaweli Development &amp; Environment</p> <p>Ministry of Health, Nutrition &amp; Indigenous Medicine</p>	<p>“Grama Niladhari” (GN) divisions with Village committees/ “Sanasa” Committee</p> <p>High risk GN areas free of mosquito breeding sites</p>

## **ACTION PLAN – PREVENTION & ELIMINATION OF MOSQUITO BREEDING AT CONSTRUCTION SITES**

<b>Activities</b>	<b>Responsibility</b>	<b>Targets</b>
<p>1. Conduct dengue control programme continuously for 3 consecutive months starting from the 1<sup>st</sup> of June 2017</p> <ul style="list-style-type: none"> <li>➤ Appoint a Health and Safety officer/ Mosquito control supervising officer in main construction sites</li> <li>➤ Promote environment friendly construction sites that are free of dengue mosquito breeding places (e.g. buildings without roof gutters. Balconies, concrete slabs and lift wells need to be constructed without creating water collecting places)</li> <li>➤ Carry out regular inspections to identify potential breeding sites (e.g. empty bottles, tires, plastic, tanks, barrels, equipment etc.)</li> <li>➤ Notify MOH/ PHI about the water collecting areas which can't be reached, to apply larvicides and/or fogging if required,</li> <li>➤ Educate all construction workers about cleaning of environment and advise them to use mosquito nets</li> <li>➤ Establish a permanent solution for proper waste management               <ul style="list-style-type: none"> <li>• Educate about waste segregation</li> <li>• Prevent bringing polythene to the construction site</li> <li>• Reduce waste</li> <li>• Proper removal of degradable and non-degradable waste and waste water</li> <li>• Supervision of waste segregation</li> </ul> </li> </ul>	<p>Provincial Councils</p> <p>Ministry of Mahaweli Development &amp; Environment</p> <p>Ministry of Health, Nutrition &amp; Indigenous Medicine</p> <p>Ministry of Housing and construction/ Construction Industry Development Authority</p>	<p>Presence of a Health and Safety officer &amp; a mosquito control officer in all construction sites</p> <p>Construction sites free of mosquito breeding places</p>

➤ Seek technical advice from MOH or PHI on Dengue control and prevention when necessary		
➤ Register all construction sites under provincial councils and send a monthly report to the provincial council and to the MOH		

**ACTION PLAN – PREVENTION & ELIMINATION OF MOSQUITO BREEDING AT FISHERIES HARBOURS / FISHING BOATS**

<b>Activities</b>	<b>Responsibility</b>	<b>Targets</b>
<p>➤ Prevention of dengue mosquito breeding in fisheries harbours and fishing boats</p> <ul style="list-style-type: none"> <li>• Educate boat owners, managers and users about mosquito breeding sites</li> <li>• Educate staff on prevention and control with the support of officers from the Ministry of fisheries</li> <li>• Elimination of dengue mosquito breeding sites from abandoned fishing boats and vessels until their disposal and keep them in an easily accessible place</li> <li>• Develop rules and regulations for removal of abandoned boats within a given time period</li> <li>• Prevention of disposal of plastic containers and polythene to surrounding seashore and follow a proper method for waste management</li> </ul>	<p>Ministry of Fisheries and Aquatic Resources Development</p> <p>Ministry of Defence</p> <p>Ministry of Health, Nutrition &amp; Indigenous Medicine</p>	<p>Removal of all abandoned fishing boats and vessels</p> <p>Fisheries harbours and seashore free of waste</p>

**ACTION PLAN – PREVENTION & ELIMINATION OF MOSQUITO BREEDING**

**INFORMATION TO GENERAL PUBLIC THROUGH EFFECTIVE USE OF MASS MEDIA**

Activities	Responsibility	Targets
<p>1. Effective communication by mass media on dengue control</p> <ul style="list-style-type: none"> <li>➤ Publish paper advertisements on all newspapers about the dengue control programme to be initiated on 1<sup>st</sup> of June (through different ministries: e.g. Health, Education, Mahaweli Development &amp; Environment and provincial councils etc.)</li> <li>➤ Broadcast same message at the same time in all mass media and involve all personnel including professionals to engage in the same dengue control activity</li> <li>➤ Broadcast short messages to strengthen the community               <ul style="list-style-type: none"> <li>• Broadcast this message as a main message in all mass media from 1<sup>st</sup> of June for the next 3 months</li> </ul> </li> <li>➤ Appoint a technical staff to educate mass media and inform about the planned activities through this technical staff (e.g. Awareness programmes by Physicians from all hospitals including IDH, all the doctors and other staff in the NDCU and officers from Health Education Bureau)</li> <li>➤ Educate on how to keep the premises free from dengue mosquito breeding especially in houses, construction sites, schools and working institutions               <ul style="list-style-type: none"> <li>• Clean water accumulating places like concrete roofs, roof gutters</li> <li>• Cover the water storage containers/ tanks to prevent mosquitoes entering</li> <li>• Clean inner surfaces of water storage containers, tanks, flower vases, bird baths etc. by scrubbing</li> <li>• Segregate and dispose waste to prevent collection of water</li> <li>• Prevent water collection in tyres by proper storage and disposal</li> </ul> </li> </ul>	<p>Ministry of Mass media</p> <p>Ministry of Health, Nutrition &amp; Indigenous Medicine</p> <p>Mass media institutions</p>	<p>Education of public on “Dengue illness and dengue breeding sites” by all mass media</p>

<ul style="list-style-type: none"><li>➤ Make short advertisements (Jingles) by mass media</li><li>➤ Advertise National programmes and field inspections by mass media</li><li>➤ Broadcast dengue awareness programmes free of charge</li><li>➤ Broadcast about planned time slots for inspection of mosquito breeding sites for specific institutes (e.g. Friday 11 am to 12 noon in schools, Friday morning for institutions and construction sites, Sunday morning for houses and religious places)</li></ul>		
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## **MONITORING & EVALUATION**

### ➤ **Institutions (Government and private)**

Submit monthly report to the relevant MOH and supervision of the institutes by the MOH

### ➤ **Schools**

Daily inspection by the school dengue control committee: weekly report to the Principal.

Monthly report by all Principals to the respective Zonal Director and to the MOH

Monthly report on dengue breeding pattern of all schools to respective Zonal Director and a summary to the Ministry of Education

### ➤ **Residential Houses**

A report on mosquito breeding sites of respective MOH areas needs to be submitted to the Regional Epidemiologist

GNs should submit a weekly report about high risk areas and a monthly report about other areas in the village committee

In high risk areas meeting of the divisional committee should be held weekly headed by the Divisional Secretary and a progress report on dengue control activities need to be handed over by the PHI

A monthly report should be sent to the Presidential Task Force through the Provincial Chief Secretary

### ➤ **Construction sites**

A monthly report to be submitted to the respective MOH on dengue breeding sites

All main construction sites should be registered at the provincial council and a monthly report sent to the respective provincial council and MOH

### ➤ **Fisheries Harbours and Boats**

A monthly report to be submitted by the respective MOH to the Regional Epidemiologist on dengue breeding sites

## ***Mosquito Breeding Inspection Check List***

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<i>1. Water storage barrels</i>	<i>11. Natural (Leaf Axils, Tree holes, Bamboo stumps)</i>
<i>2. Water storage cement tanks</i>	<i>12. Discarded (degradable items)</i>
<i>3. Other water storage containers (cans, pots etc.)</i>	<i>13. Discarded non degradable items)</i>
<i>4. Concrete Slabs</i>	<i>14. Discarded (Reusable items)</i>
<i>5. Tyres</i>	<i>15. Pet feeding Cups</i>
<i>6. Ornamental and horticulture items (flower pots, vases, Tanks without fish, bird baths)</i>	<i>16. Nonfunctional Toilet Systems (Cisterns &amp; commodes)</i>
<i>7. Wells (shallow cemented wells)</i>	<i>17. Roof Gutters (blocked with leafs)</i>
<i>8. Tube wells</i>	<i>18. Ponds (cement ponds without fish and disused pools)</i>
<i>9. AC &amp; Refrigerator Trays</i>	<i>19. Temporarily removed items (scrap metal, roof tiles, plastic ware, etc.)</i>
<i>10. Covering items (polythene sacks)</i>	<i>20. Others (wet floors, earth pipes, concrete drains, concrete holes)</i>

**Mosquito breeding sites inspection format for Government or private institutions / factories / religious places and common areas**

Date: .....

Start time .....

End time .....

*M.O.H area/Local authority area		Name											Designation								
P.H.I area		1 .....											.....								
G.N. division		2 .....											.....								
Name of the institution and address		3 .....											.....								
		4 .....											.....								
Indoor and outdoor area of the institution	Inspected places	Places with mosquito larvae (If there are mosquito larvae, mention the number of places)													No. of corrected breeding places		Issues				
		water tanks and water storage containers	Roof gutters	ponds and bird baths without herbivorous fish	Hardened soil of potted plants and flower pot trays	Concrete slabs	Tyres	Tree holes/	Natural places such as Bramalla	unused toilets and tanks	A.C, Refrigerator trays	Discarded containers and items	Flower vases	Other (A 2)	Total number of places with larvae	Drains and pit holes		Number of potential places	No. of places with larvae	no. of potential places	
																With clear water					Without clear water
Indoor	Office premises																				
	Single storey buildings																				
	multiple storey buildings - 1st floor/ground floor																				
	2nd floor																				
	3rd floor																				
	4th floor																				
	5th floor																				
	6th floor																				
	7th floor																				
	8th floor																				
Outdoor	other buildings																				
	Canteen and kitchen area																				
	Construction site																				
	Toilet system																				
	Waste disposal area																				
	Vehicle yard																				
Outdoor	The park																				
	Water purification unit																				
	Disposable materials/inventory items collected area																				

A1 :plastic cups, yoghurt cups, Earthen pots, bottles, removed toys, disposed plates, tins, Wooden boxes, discarded polythene sheets, Plastic wrap, Polystyrene materials beer cans, etc.

A2 :Indoor- water collected balcony area, Temporary water collected places-Buckets for water leaks

Outdoor: removed roof tiles, Broken items, Disposable materials, Earth pipes, Antenna pipes, Broken toilets, covering polythene, edges of the upside down buckets

If mosquito larvae presence write the no. of containers with larva, or if mosquito larvae absence write X

\* Medical Officer of Health area