

**DENGUE:**

Dengue is caused by the bite of an infected *Aedes aegypti* mosquito. *Aedes* is a day biter i.e. it bites during the day time. These mosquitoes usually breed in clean water collections in containers, tanks, disposable junk material such as discarded buckets utensils tyres flower pots etc. All such containers should be emptied regularly, atleast once a week to stop breeding of these mosquitos. Dengue can present as **Dengue Fever (DF)** or **Dengue Haemorrhagic Fever (DHF)/ Dengue Shock Syndrome (DSS)**

S.No.	Districts	2012		2013		2014		2015		2016	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1	Amritsar	26	0	244	0	22	0	873	5	1358	3
2	Barnala	3	0	18	0	7	0	367	0	123	0
3	Bathinda	8	0	177	0	11	0	2017	1	168	0
4	Faridkot	14	0	30	0	8	0	351	0	348	1
5	Fatehgarh Sahib	15	0	503	1	6	0	710	0	258	0
6	Fazilka	0	0	19	0	3	0	74	0	55	0
7	Ferozepur	24	0	35	0	4	0	543	0	431	0
8	Gurdaspur	27	1	354	1	18	0	181	0	212	1
9	Hoshiarpur	79	0	258	1	75	1	562	3	406	0
10	Jalandhar	30	1	112	1	44	1	1047	1	580	1
11	Kapurthala	9	1	135	1	26	1	317	2	263	0
12	Ludhiana	210	1	1033	17	184	3	1876	4	755	1
13	Mansa	3	0	168	0	1	0	837	0	275	0
14	Moga	6	1	13	0	1	0	505	0	234	0
15	Pathankot	0	0	58	1	13	0	84	0	136	1
16	Patiala	29	0	672	1	22	0	1747	1	1342	2
17	RupNagar	22	0	23	0	3	0	94	0	193	1
18	S.A.S. Nagar (Mohali)	234	4	80	1	2	1	556	0	2088	4
19	S.B.S. Nagar	5	0	40	0	7	1	377	0	440	0
20	Sangrur	21	0	94	0	4	0	712	0	586	0
21	Shri Muktsar Sahib	5	0	44	0	11	0	149	1	66	0
22	Tarn Taran	0	0	7	0	0	0	149	0	122	0
	<b>Total</b>	<b>770</b>	<b>9</b>	<b>4117</b>	<b>25</b>	<b>472</b>	<b>8</b>	<b>14149</b>	<b>28</b>	<b>10439</b>	<b>15</b>

## **Dengue Fever:**

### **Signs and Symptoms of Dengue Fever:**

- a. Abrupt onset of high fever
- b. Severe frontal headache
- c. Pain behind the eyes which worsens with eye movement
- d. Muscle and joint pains
- e. Loss of sense of taste and appetite
- f. Measles-like rash over chest and upper limbs
- g. Nausea and vomiting

### **Signs and Symptoms of Dengue Haemorrhagic Fever (DHF)/ Dengue Shock Syndrome (DSS)**

- a. Symptoms similar to dengue fever
- b. Severe continuous stomach pains
- c. Skin becomes pale, cold or clammy
- d. Bleeding from nose, mouth & gums and skin rashes
- e. Frequent vomiting with or without blood
- f. Sleepiness and restlessness
- g. Patient feels thirsty and mouth becomes dry
- h. Rapid weak pulse

## **Activities for Dengue:**

### **1. Early Diagnosis and Prompt Treatment (EDPT)**

### **2. Vector Control**

**1. Early Diagnosis and Prompt Treatment (EDPT):** Early diagnosis of a suspected case of Dengue is very important to decrease morbidity and mortality due to Dengue. A physician/ medical officer can suspect a fever case to be a suspected case of Dengue by recognizing the signs and symptoms of the disease. Laboratory

confirmation of a suspected case can be done by Ig M Mac ELISA test for Dengue which is done free of cost at 10 Sentinel Surveillance Hospitals throughout Punjab as identified by GOI. The testing kits are supplied free of cost by GOI from NIV (National Institute of Virology) Pune. From 2011, as per recommendations of GOI, testing with NS1 Ag ELISA kits has been started at these SSHs in Punjab for early diagnosis of dengue in initial stage of infection.

**Sentinel Surveillance Hospitals:** State has one SSH for free testing of Dengue and Chikungunya in each district.

### **Dengue & Chikungunya Testing Centres Punjab**

<b>Sr.No.</b>	<b>Name of District</b>	<b>SSH Address</b>
1	Amritsar	Govt. Medical College
2	Barnala	Civil Hospital Barnala
3	Bathinda	Civil Hospital Bathinda
4	Fazilka	Civil Hospital Fazilka
5	Faridkot	Guru Gobind Singh Medical Collage Faridkot
6	Fatehgarh Sahib	Civil Hospital Fatehgarh Sahib
7	Ferozepur	CH Ferozepur
8	Gurdaspur	Civil Hospital Gurdaspur
9	Hoshiarpur	Civil Hospital Hoshiarpur
10	Jalandhar	Civil Hospital Jalandhar
11	Kapurthala	Civil Hospital Kapurthala
12	Ludhiana	Civil Hospital Ludhiana
13	Mansa	Civil Hospital Mansa
14	Moga	Civil Hospital Moga
15	Pathankot	Civil Hospital Pathankot
16	Patiala	Govt. Medical College
17	RupNagar	Civil Hospital Rupnagar
18	S.A.S. Nagar	Civil Hospital Mohali
19	S.B.S. Nagar	CH Shahid Bhagat singh Nagar
20	Sangrur	Civil Hospital Sangrur
21	Sh. Muktsar Sahib	Civil Hospital Shri Muktsar Sahib
22	Tarn Taran	Civil Hospital

Treatment is provided free of cost to all the patients of Dengue at all the Health centres throughout the State of Punjab

**Activities Undertaken for Management and Control of Dengue:**

1. Control Rooms have been established at the State level and all the district headquarters to collect & give any information regarding vector borne diseases and to provide necessary information to the public regarding Vector Borne Diseases.
2. Rapid Response Teams have been constituted in all the districts of Punjab at the district and sub-divisional level to provide prompt medical relief to the patients suffering from Vector Borne Disease & Water Borne Disease.
3. Blood Component Separators have been installed in all the 20 districts of Punjab for management of serious cases of Dengue.
4. Aphresis Machines have been installed in 6 districts namely Ludhiana, Amritsar, Bathinda, Jalandhar, Sangrur and SAS Nagar for management of severe cases of Dengue.
5. IEC activities had been undertaken and will be undertaken throughout the State. Month of June will be celebrated as “Anti-Malaria Month” and the month of July will be celebrated as “Anti Dengue Month”. The IEC activities will continue throughout the transmission season of dengue.
6. Do’s and Don’ts for management of Dengue, as issued by GOI.
7. Guidelines for treatment and management of dengue and dengue haemorrhagic fever have been circulated to all the districts.
8. **State Task Force:** State task force/ State Monitoring Committee has been established under the chair of Chief Secretary, Punjab for intersectoral coordination and reviewing the prevention, control and management of vector borne diseases throughout the State. Similarly District level monitoring committees have been constituted under the chair of respective Deputy Commissioners for intersectoral coordination for prevention, control & management of vector borne diseases.
9. Public Advisories are issued regularly in the newspapers as follows:

- i. To sprinkle burnt oil in the stagnant water.
- ii. To keep the water pots covered.
- iii. To keep over head water tanks tightly covered.
- iv. To prevent stagnation of water in the broken bottles, flower pots, buckets, tyres etc.
- v. To use mosquito nets, Mosquito repellent oils & creams etc.