

**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)

Name of District	2017		2018		2019		2020		Till september 2021	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Amritsar	222	0	697	1	1115	4	371	0	446	0
Barnala	231	1	242	0	319	0	19	1	7	0
Bathinda	557	0	706	1	664	0	576	0	363	0
Faridkot	451	0	1072	0	183	0	424	1	3	0
Fatehgarh Sahib	789	1	334	2	347	0	451	0	9	0
Fazilka	270	0	112	0	661	0	875	0	9	0
Ferozepur	520	0	306	0	311	0	599	1	25	0
Gurdaspur	225	0	221	1	819	0	195	0	33	0
Hoshiarpur	1280	0	490	2	460	0	298	0	516	0
Jalandhar	455	0	704	0	385	1	236	1	24	0
Kapurthala	983	1	605	0	443	0	98	1	59	0
Ludhiana	1083	3	489	2	1509	7	1355	2	144	0
Mansa	663	1	1185	1	123	0	482	9	9	0
Moga	539	0	292	0	459	0	448	0	4	0
Pathankot	614	0	151	0	119	0	119	0	267	0
Patiala	2434	0	2332	2	261	1	307	3	53	0
RupNagar	309	0	784	0	232	0	166	1	14	0
S.A.S. Nagar	2472	6	1079	3	354	0	470	0	213	0
S.B.S. Nagar	250	2	625	1	439	0	169	1	27	0
Sangrur	627	1	1704	2	434	0	147	0	9	0
Shri Muktsar Sahib	348	2	783	0	131	1	185	1	353	0
Tarn Taran	76	0	96	0	402	0	445	0	35	0
<b>Total</b>	15398	18	15009	18	10170	14	8435	22	2622	0

## 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 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**

Sr. No.	Name of District	SSH Address
1	Amritsar	Civil Hospital Amritsar
		Govt. Medical College,
		SDH Ajnala,
2	Barnala	Civil Hospital Barnala
3	Civil Hospital Bathinda	Civil Hospital Bathinda
4	Fazilka	Civil Hospital Fazilka,
		SDH Abohar
5	Faridkot	Guru Gobind Singh Medical Collage Faridkot
		Civil Hospital Faridkot
		SDH Kotkpara
6	Fathegarh sahib	Civil Hospital Fatehgarh Sahib
7	Ferozepur	CH Ferozepur
8.	Gurdaspur	Civil Hospital Gurdaspur
		SDH Batala
9	Hoshiarpur	Civil Hospital Hoshiarpur
		SDH Bhunga
10	Jalandhar	Civil Hospital Jalandhar
11	Kapurthala	Civil Hospital Kapurthala
		SDH Phagwara
12	Ludhiana	Civil Hospital Ludhiana
		SDH Jagraon
		SDH Khanna
13	Mansa	Civil Hospital Mansa
14	Moga	Civil Hospital Moga
15	Pathankot	Civil Hospital Pathankot
16	Patiala	Govt. Medical College
		MKH Hospital Patiala
		AP Jain Govt Hospital Rajpura
		SDH Nabha
17	Rupnagar	Civil Hospital Rupnagar
18	S.A.S. Nagar	Civil Hospital Mohali
		SDH Derabassi
		SDH Kharar
19	S.B.S. Nagar	CH Shahid Bhagat singh Nagar
20	Sangrur	Civil Hospital Sangrur
		SDH Malerkotla
21	Sh. Muktsar Sahib	Civil Hospital Shri Muktsar Sahib
		SDH Malout
22	Tarn Taran	Civil Hospital Tarn Taran

Treatment is provided free of cost to all the patients of Dengue at all the Healthcentres 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. Apheresis 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, flowerpots, buckets, tyres etc.
  - v. To use mosquito nets, Mosquito repellent oils & creams etc.