#### **AFFECTED PEOPLE OF DENGUE IN NASHIK DISTRICT\***

BY

#### Dr. Nigale Chintaman Bhaguji\*

Asst. Prof. & Head ,Dept. of Geography, KGDM Arts, Commerce & Science College, Niphad, Nashik. Email Id- <u>chintamannigale2010@gmail.com</u>

#### Dr. Shelar Suresh Kautik\*

Asst. Prof. & Head. PG Dept. & Research centre of Geography, G.E.T. Arts, Comm. & Sci. College, Nagaon, Dhule. Email Id-<u>dr.skshelar@rediffmail.com</u>

#### Dr. Borase Sudhakar Jagannath\*

Asst. Prof. Dept. of Geography, RNC Arts, JDB Comm. & NSC Sci. College Nashik Road, Maharashtra. Email Id- <u>borasesudha@gmail.com</u>

#### Abstract:

In India the highest dengue cases in the year 2015 total 99913 and 220 second highest deaths have been reported. During 2012, 50222 cases and 242 deaths and during 2013, 75808 cases and 193 deaths were reported. And lowest during 2002, 2139 cases and 35 deaths were reported Highest number of deaths were reported by Kerala in 2003 (68) followed by Tamil Nadu in 2012 (66). Delhi 65 in 2006 and 60 in 2015 then Maharashtra 59 in 2012, 56 in 2005 and in 2014, 54 deaths have been reported. In Maharashtra has recorded 54 Dengue positive cases in 2001 and 4936 positive cases in 2015 and total Dengue deaths 2 and 23 respectively. The highest positive cases were reported in the year 2014 were 8573 and lowest were 54 in 2001. Then there was a growing number of Dengue positive cases from 2001 to 2015, 370 in year 2002, 772, in 2003, 856 in 2004 In 2005, however, it stabilized to a low of 349 and later again it increased in 2006 ,were 736, 2007, were 830 , in year 2007 were 910, After that the number of Dengue cases was more than 1000 in all the years from 2009 to 2015 e.g. 1224, 1489, 1138 2931, 5610 8573 and 4936 respectively Nashik reported the 11 positive cases in 2001, after that Thane district reported 86 Dengue positive cases in 2002, again Thane and Nashik district was highest cases reported in 2004, there were 88 Dengue positive cases in Thane district. In 2006, there were 115 Dengue positive cases in Thane district and 112 in Nashik district,

Keywords: Dengue favor, positive cases, total deaths

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<sup>\*</sup> Correspondence Author: Dr. Nigale Chintaman Bhaguji

### **INTRODUCTION:**

In this research paper I have tried to get the information about The Affected People of Dengue in Nashik District. In the last few years, many positive cases and people died due to dengue favor in the Nashik district, and according to reports and Taluka Wise of blood sample test and positive cases of Dengue in Nashik district during 2011-2017. As well as Dengue high risk villages, total positive cases and total deaths due to Dengue had shown in this paper.

### **METHODOLOGY:**

The methodology of present work will includes primary and secondary data the collection of data regarding the Dengue various methods will be adopted. I visited some government and private Hospitals continuously to know the information from hospitals staff and patients through the dialogues and interviews through the questionnaires methods, and observations. And the secondary data collected through health department, medical bulletins, such as District malaria office and Government hospital in Nashik.

## **OBJECTIVES:**

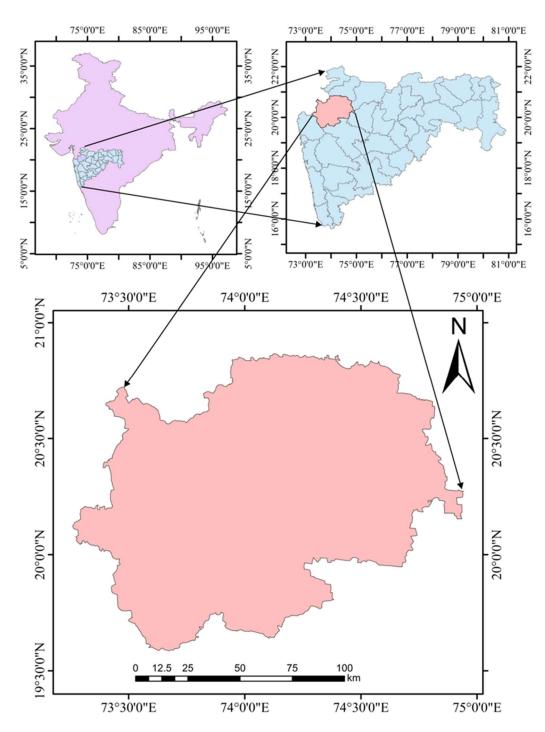
- To identify the situation and existing knowledge of Dengue in Nashik District.
- To assess the awareness regarding Dengue among people in Nashik district.

## **STUDY AREA:**

Nashik district lying between 19°35'18" North latitude to 20°53'07" North latitude and 73°16'07" East longitude to 74°56'27" East longitude, with an area 15530 sq.km The total population of the district was 6107187 as per the census of 2011. Nashik is bounded on the North-West by the Dangs and Surat districts of Gujarat state, on the North by the Dhulia district, on the East by the Jalgaon and Aurangabad district, on the south by the Ahmadnagar district and towards South-West by the Thane district. The district comprises 15 talukas like Nashik, Peth, Surgana, Trimbak, Igatpuri, Sinner, Niphad, Dindori, Kalvan, Satana, Malegaon, Devla, Chandwad, Nandgaon and Yeola. Nashik district covers 5.05% area of Maharashtra

Study area Map:

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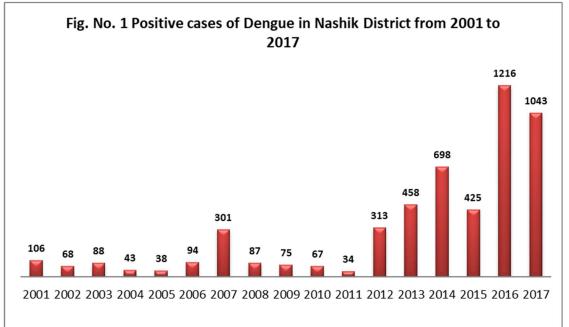


# DENGUE SITUATION IN NASHIK DISTRICT:

Table No.1 Na	ashik District Der	ngue Outbreak	Information fro	m 2001 to 2017

Year	Positive	Death
2001	106	04
2002	68	02
2003	88	10
2004	43	01
2005	38	07
2006	94	04
2007	301	00
2008	87	03
2009	75	00
2010	67	01
2011	34	03
2012	313	11
2013	458	06
2014	698	09
2015	425	00
2016	1216	06
2017	1043	01

Source: District Government Hospital Nashik



Above the figure No 1. shows the Nashik District Positive cases of Dengue information from 2001to 2017. In the year 2016 and the year 2017 the highest numbers of cases were positive and it was 1216 and 1043 respectively. As per the descending order of 698 in 2014, 458 in 2013, 425 in 2015 and there were 313 Dengue positive cases in year 2012. The lowest in 2001, there were only eleven positive cases in Dengue from 2002 to 2011, the Dengue positive cases were below 100. In 2006 alone, there were potentially over 112 cases of Dengue.

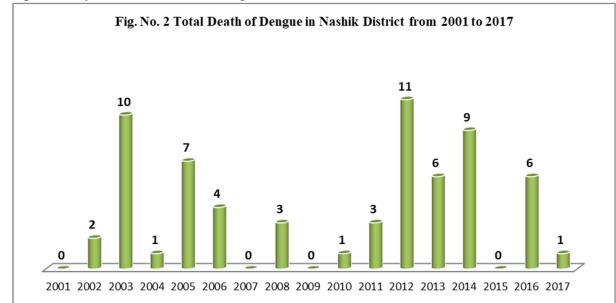


Figure No. 2 shows the Nashik District Total deaths of Dengue year 2001 to 2017. In 2012, the highest numbers of death were recorded and it was eleven. After that, in the year 2003 and 2014 there were ten and nine deaths respectively due to Dengue. In the year 2005 seven deaths in the year 2013 and 2016, 6 deaths each were due to Dengue. Four persons in 2006, three person's death 2008 and 2011. And only one person died due to Dengue in the year 2004, 2010 and 2017. And the years 2001, 2004, 2009 and 2015 even there was a Dengue infected persons but there was no deaths in this period due to Dengue.

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Sr. No	Talu ka	20 01	20 02	20 03	20 04	20 05	20 06	20 07	20 08	20 09	20 10	20 11	20 12	20 13	20 14	20 15	20 16	20 17
1	Chan dwad	10	6	8	5	3	4	18	8	7	5	3	33	41	48	23	78	58
2	Nipha d	5	3	4	4	1	3	19	5	4	6	2	12	25	33	22	52	42
3	Nand gaon	8	4	8	4	3	9	24	6	6	4	3	38	40	58	33	10 5	88
4	Yeola	8	4	7	4	4	6	21	8	7	7	2	41	46	68	51	10 2	98
5	Male gaon	12	8	11	5	5	10	41	11	9	8	4	44	52	82	54	18 4	14 7
6	Sinna r	11	7	6	6	4	9	30	8	7	7	3	29	49	68	41	15 6	14 5
7	Satan a	3	2	3	1	1	3	10	3	3	3	3	12	21	38	33	72	66
8	Peth	3	3	3	3	2	4	12	2	2	1	0	6	15	22	12	30	30
9	Surga na	2	2	3	0	2	4	10	3	3	2	0	5	16	28	14	44	28
10	Trim bak	5	5	5	1	1	4	14	3	3	4	2	7	18	28	21	38	33
11	Deola	4	4	4	1	1	4	18	5	4	4	2	9	12	33	28	44	38
12	Dind ori	9	5	6	2	2	4	13	4	3	2	2	9	18	27	12	42	38
13	Igatp uri	3	3	4	1	2	5	11	3	3	2	1	14	23	32	9	38	33
14	Kalw an	2	2	4	0	1	7	12	4	3	4	2	8	18	26	11	30	31
15	Nashi k	21	10	12	6	6	18	48	14	11	8	5	46	64	10 7	61	20 1	16 8
	Total	10 6	68	88	43	38	94	30 1	87	75	67	34	31 3	45 8	69 8	42 5	12 16	10 43

Table No. 2 Positive Cases of Dengue in Nashik District from 2001 to 2017

Source: District Government Hospital Nashik

Table no. 2 shows statistics of positive Dengue cases in Nashik district for the 17 year period from 2001 to 2017. The highest number was 1216 in 2016 and 1014 positive cases were recorded in 2017. In 2011, only 34 positive cases were reported in the entire Nashik district. And in particular, of all the talukas, Nashik Taluka has more Dengue patients than other talukas.

In the year 2001, 21 of 106 Nashik and two of the lowest Surgana, ten in 68 positive cases in 2002 and two in Satana, Surgana respectively. In 2003, the maximum number of twelve in Nashik

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Taluka, followed by Malegaon eleven and the lowest three were Satana, Surgana and Peth. In 2004, no more than 43 Nashik cases and no Dengue positive cases were found in Surgana and Kalwan. In 2005, six Dengue positive cases were reported again in Nashik Taluka of the total 94 Dengue positive cases in 2006, eight were in Nashik. In 2007, 48 out of 301 Nashik 48 cases were registered following Malegaon 41 and 30 Dengue positive cases in Sinnar Taluka. In 2008, Dengue positive cases dropped to 87 out of which 14 in Nashik. And only two Dengue positive cases were reported in Peth Taluka. Total 75 cases in 2009, Nashik Eleven In the year 2010, there were 34 Dengue positive cases in the district in the year 67, 2011, out of which five positive cases were not reported in Nashik but five in Surgana Taluka. Thereafter, there was a sharp increase in Dengue positive cases again in the district e.g. in 2012, out of 313 Nashik 46, Malegaon 44, Yeola 41, Nandgaon 38. In the year 2013, 458 Dengue positive cases were reported in Nashik 64, Malegaon 52, Sinnar 49, and Yeola 46. Dengue positive cases were recorded in the lowest in Deola Taluka. In 2014, there was a slight increase in Dengue positive cases, with Nashik Taluka crossing 100 and reporting 107 Dengue positive cases. Thereafter, Malegaon Taluka also increased to 82. Similarly, Sinnar and Yeola Taluka recorded 68 and Peth Taluka recorded the lowest. In 2015, Dengue positive cases dropped slightly to 425. In 2016, however, the Dengue positive cases increased tremendously, surpassing the number of 1000 and reaching 1246. The maximum numbers of Dengue positive cases were reported in Nashik 201, Malegaon 184, Sinnar 156, Nandgaon 105 and Yeola 102. In 2017, however, Dengue positive cases declined slightly to 1043 in comparison to 2016, but Nashik Taluka increased and it recorded 168, Malegaon 147, Sinnar 145 Yeola 98 and Nandgaon 88 thus maximum Dengue positive cases were reported.

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Sr.	Talu	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
No	ka	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
1	Chan dwad	1	0	1	0	0	0	0	0	0	0	1	1	0	1	0	1	0
2	Nipha d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3	Nand gaon	0	0	1	0	1	0	0	1	0	0	0	0	1	1	0	0	0
4	Yeola	0	0	1	0	1	1	0	0	0	0	1	0	1	1	0	0	0
5	Male gaon	1	1	2	0	1	1	0	1	0	0	0	2	2	2	0	1	1
6	Sinna r	1	0	1	1	1	0	0	0	0	1	1	1	1	1	0	0	0
7	Satan a	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
8	Peth	0	1	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0
9	Surga na	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
10	Trim bak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Deola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Dind ori	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
13	Igatp uri	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
14	Kalw an	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0
15	Nashi k	1	0	2	0	1	1	0	1	0	0	0	2	1	2	0	3	0
	Total	4	2	10	1	7	4	0	3	0	1	3	11	6	9	0	6	1

Table No. 3 Nashik District Taluka-Wise Deaths of Dengue from 2001 to 2017

Source: District Government hospital Nashik

In the above table no. 3 In the Nashik district, the total and Taluka-Wise Dengue deaths were reported from 2001 to 2017. During this entire 17-year period, 68 people died of Dengue in Nashik district. In Malegaon Taluka, the highest number of fifteen, followed by Nashik fourteen, Sinnar nine, Chandwad and Yeola six each, Nandgaon five, Peth four, Kalvan three, Satana two, Igatpuri, Dindori and one each in Niphad Taluka. In Deola, Trimbak and Surgana Taluka, however, no one died due to Dengue. Considering the entire district, eleven people died of Dengue in 2012, ten in 2003, and nine in 2009, while in 2004, 2010 and 2017, only one person died of Dengue in the entire district. In 2007, 2009 and

2015, there were no recorded cases of Dengue deaths. All the above data indicate that Malaria and Dengue positive cases and total deaths have been reported in Nashik, followed by Malegaon, Sinnar, Yeola and Nandgaon Taluka. However, cases of Malaria and Dengue positive cases and deaths in the districts of Igatpuri, Peth, Surgana Trimbak, Kalvan, Niphad etc. are very small. In the remaining Deola, Satana, Chandwad and Dindori talukas, the number of Malaria and Dengue positive cases is moderate and the number of deaths is low.

### **CONCLUSION:**

The only way to get rid of Aedes Aegypti mosquito is by itself due to the diagnosis and treatment of the patient and the treatment of symptoms, the mortality rate can be greatly reduced. However, various types of remedies can be managed to get control over Dengue. Actually there is no drug or vaccine available for DHF treatment, so be careful not only to treat it but also to get better. There is no specific treatment for Dengue but in the year 2019, Denguexia (Dengue vaccine) was approved, but the World Health Organization vaccine will be given only to the confirmed person due to Dengue infection.

1. Personal Remedial Treatment

- Whole sleeves with shirts and full pants with socks
- Dosage killer creams, liquefied, hands, legs, to the naked body
- To set up coils, mats, etc., to avoid being enslaved
- Using mosquito nets for children and younger does not mean mosquito bites

### 2. Biological Control

- In ornamental tanks, fishes such as mosquito larvae, such as gappi fish
- Use biological pesticides to slaughter or escape

### 3. Chemical Control

- Use chemical insecticides if there is reproduction in large tanks
- Using aerosol spray during the day is so sure to burn.

### 4. Environmental Management System

• Finding and destroying mosquito breeding sites

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- Management of Roof, Vertical and Shadow Wings of the house
- Suitable cover over the stored water
- Sure water supply
- Keeping a dry day in a week
- Separate the wet and dry waste in the house.

#### 5. Health Education

To inform common people about this disease and the mosquito causing mosquitoes, such as TV, radio, newspapers, graffiti cinema slides, medical bulletins, magazines etc.

6. Community Participation

Sensitize people to find and destroy Mosquitos breeding sites and participate in various social institutions, schools, colleges. In addition to this, one day in a month, in various public places such as Garden, market River banks, roads, various government

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