

13. EPIDEMIC DISEASES CONTROL PROGRAMME - 2008

DISASTER MANAGEMENT

DISASTER

Disaster is an unforeseen ruinous and offer sudden misfortune that happens either through lack of foresight or through some hostile External agency.

An event, concentrated in time and space, in which a society or a Community undergoes severe damage and incurs such losses to its Members and physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential factors of society is prevented .

Types of disaster

- ✍ Earthquake
- ✍ Cyclone / floods / drought
- ✍ Snow stores
- ✍ Nailstorms
- ✍ Landslides
- ✍ Tsunami
- ✍ Biological & chemical warfare
- ✍ Bioterrorism

Disaster impact

Mitigation Preparedness -- Disaster -- Relief measures & Rehabilitation reconstructions

PREPAREDNESS

- ✍ Map showing risk areas
- ✍ Risk areas with population
- ✍ Formation of Team (Dist, PHC & HSC Level)
- ✍ Health Hazards relating to Disaster.
- ✍ Medical Care
- ✍ Diseases surveillance
- ✍ Availability of Drugs / Disinfectants
- ✍ List of Telephone Nos. of Co-ordinating Departments
- ✍ Formation of District Level Monitoring Team

PRE / POST MANAGEMENT

- ✍ Monitoring and collection of Samples and sending for Analysis to Laboratory
- ✍ Health Education Activities.
- ✍ History of previous natural calamities
- ✍ Health Education Activities
- ✍ Disposal of dead bodies and animals as per WHO Guidelines
- ✍ Case Management, Medical treatment and referral to higher Medical Institutions
- ✍ Collection , compilation and sending of daily reports to District Headquarters
- ✍ Daily Visit to High risk areas and relief centers and maintaining treatment centers in the form of extension clinic at high risk villages.

NORTH EAST MONSOON 2008

During November, 2008, Tamil Nadu coast was badly affected by a cyclonic storm and was named "Nisha". The following districts were affected due to floods.

1.Thiruvarur, 2.Thanjavur, 3.Nagapattinam, 4.Cuddalore, 5.Pudukottai, 6. Ramanathapuram, 7.Thoothukudi, 8. Thirunelveli, 9.Kanyakumari, 10.Kancheepuram & 11.Thiruvallur.

The people in the flood affected districts were accommodated in safe place. All preventive and control measures were taken to avoid the spread of monsoon related diseases.

- a. 20 Medical Officers to Thiruvarur district and 17 Medical Officers to Nagapattinam district were deputed from Thanjavur Medical College for carrying out public health measures in the affected areas and for minor ailment treatments to the affected population.
- b. Health Inspectors and Paramedical staff, deployed from the unaffected districts, were deputed to the flood affected districts for carrying out waterborne and vector borne diseases control measures.
- c. Five Crores chlorine tablets were distributed to the flood affected areas to protect and for the supply of chlorinated safe drinking water in the flood affected areas.
- d. Govt. sanctioned a sum of Rs.3.16 Crores towards wages for temporary mazdoors and for vector control activities.
- e. Two Joint Directors of Public Health and Preventive Medicine from the Directorate were deputed to supervise, intensify and monitor the diseases control activities, in Cuddalore and Nagapattinam districts to avoid the spread of the water borne diseases like A.D.D., Cholera, Jaundice, Typhoid and vector borne diseases like Malaria, Dengue, Chikangunya.
- f. 3850 nos. of temporary mazdoors were deployed to carry out the activities of fogging operation, water chlorination and environment sanitation.

**Table 13.1. CAMPS CONDUCTED AND CASES REPORTED
NORTH EAST MONSOON-2008**

NAME OF THE DISTRICT	DATE	NO. OF VILLAGES AFFECTED	NO. OF CAMP SITES	TREATMENT GIVEN				REMARKS.
				MINOR-AILMENTS	A.D.D.	FEVER	OTHERS	
1	2	3	4	5	6	7	8	9
THANJAVUR	27.11.2008	23	20					
	28.11.2008	62	59					
	30.11.2008	19	19					
	01.12.2008	8	8					
CUDDALORE	30.11.2008	98	51	3527 (URI)	17	667	4378	87 OHT
PARAMAKUDI	26.11.2008	NO AREA AFFECTED BY FLOOD						
KANCHEEPURAM	27.11.2008	03	03	0	0	10	0	
	01.12.2008	16	16	0	0	03	0	
KARUR	15.11.2008	NO AREA AFFECTED BY FLOOD						
TIRUCHY	28.11.2008	13	13	424	03	35	0	
	29.11.2008	31	31	850	07	51	0	
	01.12.2008	31	31	415	01	08	0	
RAMANAD	27.11.2008	08	08	81	00	17	205	
	28.11.2008	04	04	88		34	417	
MADURAI	03.12.2008	NO AREA AFFECTED BY FLOOD						
THENI	27.11.2008	NO AREA AFFECTED BY FLOOD						
	03.12.2008					92	4	
VIRUDHUNAGER	06.12.2008	NIL						
KANYAKUMARI						2846	206	

NATURAL CALAMITIES - TSUNAMI

INTRODUCTION:

Earth Quake in Indonesia followed by Tsunami on 26.12.2004 has badly affected many coastal areas of Tamil Nadu, Pondicherry, Kerala, Andhra Pradesh, Orissa, and Andaman and Nicobar Islands. Tamil Nadu is one of the worst affected States by this Tsunami due to the long and widespread coastal areas.

Chennai City, Kancheepuram, Tiruvallur, Cuddalore, Villupuram, Nagapattinam, Tiruvarur, Thanjavur, Kanniyakumari, Thoothukudi, Tirunelveli, Ramanthapuram and Pudukottai districts were affected by Tsunami. Among the above districts Nagapattinam, Kanniyakumari and Cuddalore were severely affected.

DAMAGES:

No. of Coastal Districts affected	:	13
No. of villages / Kuppams affected	:	345
Population affected	:	8,96,781
No. of houses / huts damaged	:	1,23,105
No. of human lives lost	:	7,993
No. of persons injured	:	3,136
No. of PHCs damaged	:	3
No. of HSCs damaged	:	16

RELIEF MEASURES UNDERTAKEN:

- ✍ Identification and disposal of dead bodies was given top priority. Almost 95% of the dead bodies have been retrieved and disposed of either by cremation or burial.
- ✍ Earth moving equipment and JCBs have been mobilized and sent to Nagapattinam and Kanniyakumari districts in large numbers to remove obstacles and extricate dead bodies.
- ✍ The assistance of Army, Navy and Air Force and the Coast Guard was obtained for the removal of dead bodies.
- ✍ No. of persons evacuated : 4,98,480
- ✍ No. of relief camps opened on 20th January, 2005 : 28
- ✍ No. of persons in camps as on 20th January, 2005 : 23,207
- ✍ Ex-gratia paid @ Rs.1/- lakh each : 5,745

PUBLIC HEALTH MEASURES UNDERTAKEN

✍	Medical Treatment given so far	:	2,24,495
✍	Disease Treated	:	ADD - 835; ARI - 44,360; SKIN - 11,822; FEVER - 11,628; MEASLES - 75, CHICKEN POX - 58; OTHERS - 1,55,717

PREVENTIVE MEASURES UNDERTAKEN:

i. Environmental Hygiene

- ✍ Disinfections of shelters, Camps, and affected areas with Bleaching Powders, Phenyle and Slacked Lime
- ✍ Chlorination of all drinking water sources and providing protected water through lorries, etc..
- ✍ Vector Control measures

ii. IEC Activities

- a. Distribution of Handbills
- b. Exhibition of Banners
- c. Screening Cinema slides in theaters
- d. News through Local News Papers
- e. Inter personal communications

iii. Immunization and Surveillance

To prevent mortality and morbidity among children under five years, one dose of measles vaccine, Vit. A, Oral Polio and ORS were given.

iv. Food Sanitation was also supervised by the Health Team

v. Disease Surveillance

Epidemic Disease Surveillance Teams formed to identify any water borne, Vector Borne diseases in the affected and non affected areas.

vi. DRUGS AND MEDICINES UTILIZED

Medicines	Bleaching Powder
Phenyle	Slacked Lime
O.R.S.	Chlorine Tablets
Chloroscope Kits	

vii. ADDITIONAL ALLOCATION SOUGHT

Proposal was submitted to Govt. through the Commissioner and Special Commissioner for Revenue, Rehabilitation Department for a sum of Rs.21.145 Crores for allocation of funds for the Public Health activities for the Tsunami affected areas in Tamilnadu for next three months.

✍ MAN POWER INVOLVED

Medical Officers : 800

Para Medical staff : 1,600

Field workers : 3,000

✍ **VEHICLES MOBILIZED.. .. : 700**

✍ VARIOUS SUPPORTING AGENCIES

W.H.O - Supports surveillance mechanism with computers

UNICEF - Supports measles immunization, Vit. A, OPV Administration & O.R.S. Distribution

GOVT.AGENCY

- ❖ Govt. of India supports drug and disinfectants distribution for a value of Rs.65.00 Lakhs
- ❖ Several other State Govts. have supported by way of providing Medicines and Doctors.
- ❖ NIE & VCRC - Pondichery supports surveillance mechanism
- ❖ Disinfectants supplied from UK through TTK-LIG Limited, Chennai through Bhoomiga Agency, Chennai (NGO)

Under National Calamity fund a sum of 11.30 crores were allotted for the relief in the Tsunami affected districts by the Commissioner for Revenue Administration, Chennai during 2007-08

TABLE 13.2. MAJOR OUTBREAKS OF ACUTE DIARRHOEAL DISEASES - 2008

S.No.	Name of the HUD	PHC	DURATION			2008		
			FROM	TO	No. of Days	Cases	Deaths	CFR
1	Dindigul	Viruveedu	27.02.2008	29.02.2008	3	68	1	1.5
2	Erode	TN Palayam	01.03.2008	01.03.2008	1	75	0	0.0
3	Kancheepuram	Pattalam	21.01.2008	23.01.2008	3	93	0	0.0
4	Kanniyakumari	Kottaram	17.05.2008	19.05.2008	3	84	0	0.0
5	Kovilpatti	Puthiam Puthur	28.03.2008	03.04.2008	7	141	0	0.0
6	Madurai	Thirumangalam	10.01.2008	17.01.2008	8	82	0	0.0
7	Madurai	Madurai Corpn.	04.04.2008	13.04.2008	10	130	1	0.8
8	Nagapattinam	Vadavoor	31.01.2008	11.02.2008	12	156	1	0.6
9		Nagai Municipality	31.01.2008	11.02.2008	12	188	1	0.5
10	Ramanathapuram	Thangachimadam	26.03.2008	28.03.2008	3	196	1	0.5
11	Sivaganga	Paganeri	01.11.2008	01.11.2008	1	70	0	0.0
12	Sivakasi	M.Pudupatti	07.09.2008	12.09.2008	6	70	1	1.4
13	Vellore	Mudur	19.02.2008	27.02.2008	9	132	0	0.0
14	Viluppuram	Nallan Pillaipetral	29.01.2008	01.02.2008	4	150	0	0.0
	State Total					1635	6	0.37

Average no. of days per outbreak

5.9

Average no. of cases per outbreak

117

Average no. of deaths per outbreak

0.43

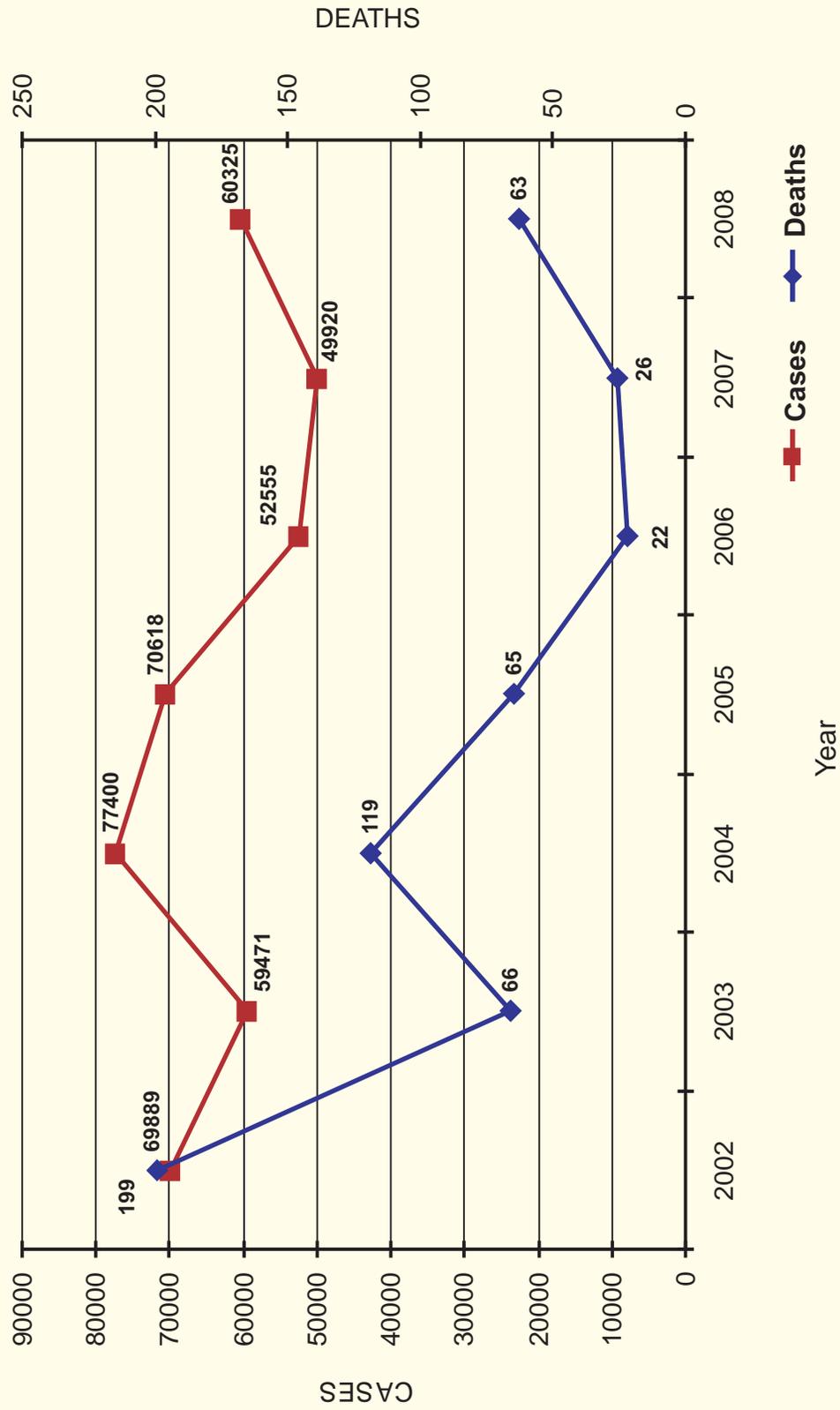
ADD outbreak Occurs most frequently during January

5 times / 14 incidences

Table 13.3. REPORTED ACUTE DIARRHOEAL DISEASES - 2008

S.No.	Name of the HUD	MYE Population- 2008	2008		Incidence Rate per 1000 Popn.	Case Fatality Rate (%)
			Cases	Deaths		
1	Aranthangi	722367	42	0	0.06	0.0
2	Chennai	4711961	2211	0	0.47	0.0
3	Cheyyar	938705	4021	0	4.28	0.0
4	Coimbatore	2827097	0	0	0.00	0.0
5	Cuddalore	2404663	8552	10	3.56	0.1
6	Dharapuram	1226697	552	0	0.45	0.0
7	Dharmapuri	1421022	57	3	0.04	5.3
8	Dindigul	1181617	3698	2	3.13	0.1
9	Erode	1546378	1070	0	0.69	0.0
10	Kallakuruchi	1483372	360	5	0.24	1.4
11	Kancheepuram	1295418	172	1	0.13	0.6
12	Karur	995468	0	0	0.00	0.0
13	Kovilpatti	606821	1434	1	2.36	0.1
14	Krishnagiri	1748930	115	1	0.07	0.9
15	Madurai	2708632	7416	7	2.74	0.1
16	Nagapattinam	1570415	1611	3	1.03	0.2
17	Nagarcoil	1731538	1500	1	0.87	0.1
18	Namakkal	1618678	287	0	0.18	0.0
19	Palani	860498	653	1	0.76	0.2
20	Paramakudi	594059	64	1	0.11	1.6
21	Perambalur	1263794	199	4	0.16	2.0
22	Poonamallee	442178	48	1	0.11	2.1
23	Pudukkottai	834365	376	0	0.45	0.0
24	Ramanathapuram	643745	222	1	0.34	0.5
25	Saidapet	1921189	1404	0	0.73	0.0
26	Salem	3340978	4	3	0.00	75.0
27	Sankarankoil	1370351	137	1	0.10	0.7
28	Sivaganga	1193696	1316	2	1.10	0.2
29	Sivakasi	1200786	154	1	0.13	0.6
30	Thanjavur	2335216	625	0	0.27	0.0
31	The Nilgiris	800222	34	0	0.04	0.0
32	Theni	1126679	159	1	0.14	0.6
33	Thiruvallur	2691103	6607	3	2.46	0.0
34	Thiruvarur	1220354	61	1	0.05	1.6
35	Thoothukudi	1050775	363	1	0.35	0.3
36	Tiruchirapalli	2581084	5324	0	2.06	0.0
37	Tirunelveli	1516547	35	0	0.02	0.0
38	Tirupattur	1973352	2123	3	1.08	0.1
39	Tiruppur	2004644	1447	0	0.72	0.0
40	Tiruvannamalai	1352396	3290	0	2.43	0.0
41	Vellore	1834615	1748	2	0.95	0.1
42	Villupuram	1627113	427	2	0.26	0.5
43	Virudhunagar	687107	407	1	0.59	0.2
	State Total	67206625	60325	63	0.90	0.1

**Chart 38. CASES AND DEATHS OF ACUTE DIARRHOEAL DISEASES - TAMILNADU
2002 TO 2008**

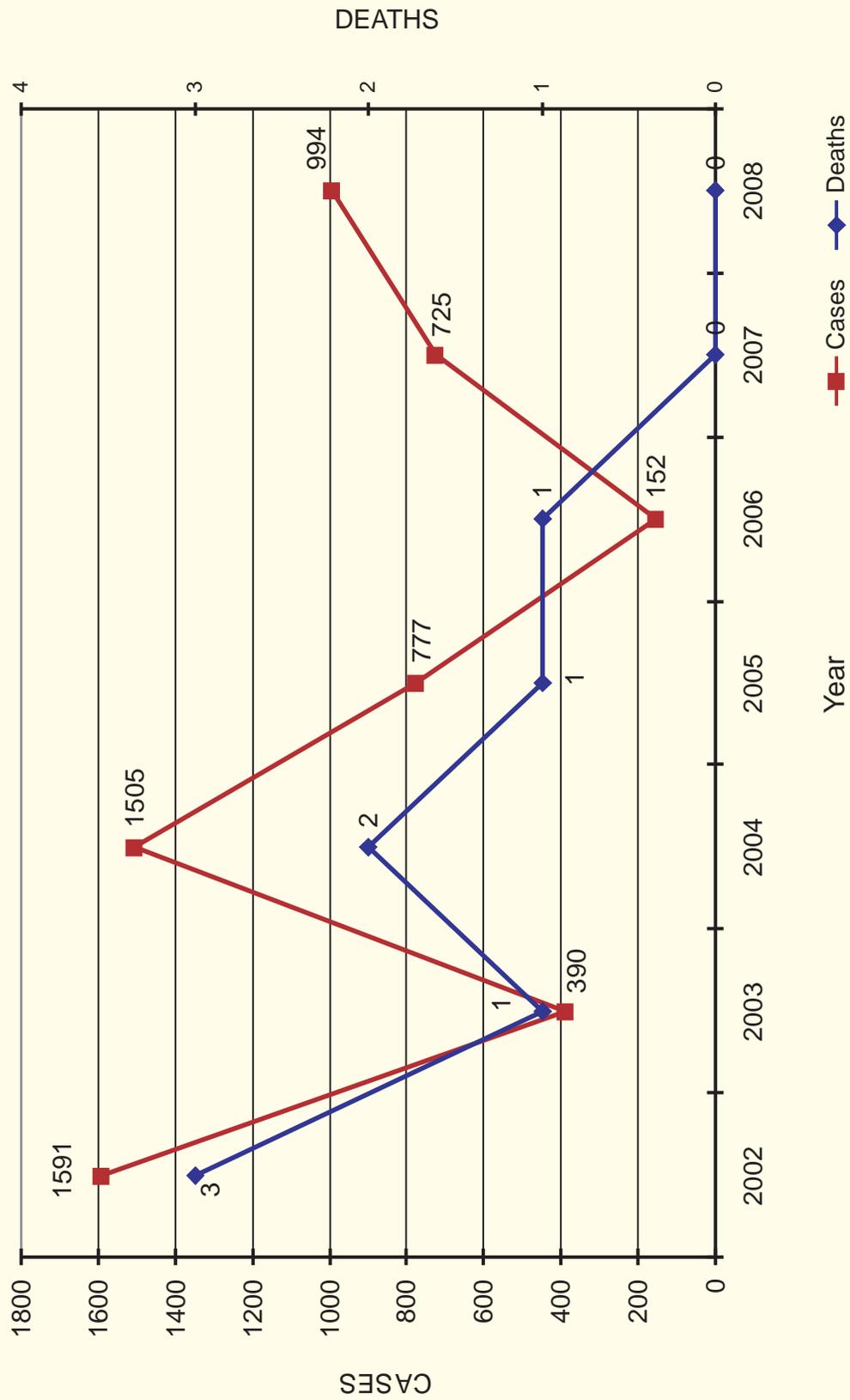


Source : Epidemic Control

Table 13.4. CONFIRMED CHOLERA CASES & DEATHS - 2008

S.No.	Name of the HUD	MYE Population-2008	2008		Incidence Rate per 1000 Popn.
			Cases	Deaths	
1	Aranthangi	722367	0	0	0.00
2	Chennai	4711961	437	0	0.09
3	Cheyyar	938705	0	0	0.00
4	Coimbatore	2827097	0	0	0.00
5	Cuddalore	2404663	8	0	0.00
6	Dharapuram	1226697	0	0	0.00
7	Dharmapuri	1421022	0	0	0.00
8	Dindigul	1181617	13	0	0.01
9	Erode	1546378	0	0	0.00
10	Kallakuruchi	1483372	0	0	0.00
11	Kancheepuram	1295418	21	0	0.02
12	Karur	995468	0	0	0.00
13	Kovilpatti	606821	0	0	0.00
14	Krishnagiri	1748930	0	0	0.00
15	Madurai	2708632	84	0	0.03
16	Nagapattinam	1570415	0	0	0.00
17	Nagarcoil	1731538	0	0	0.00
18	Namakkal	1618678	0	0	0.00
19	Palani	860498	0	0	0.00
20	Paramakudi	594059	0	0	0.00
21	Perambalur	1263794	0	0	0.00
22	Poonamallee	442178	18	0	0.04
23	Pudukkottai	834365	0	0	0.00
24	Ramanathapuram	643745	0	0	0.00
25	Saidapet	1921189	14	0	0.01
26	Salem	3340978	0	0	0.00
27	Sankarankoil	1370351	0	0	0.00
28	Sivaganga	1193696	3	0	0.00
29	Sivakasi	1200786	0	0	0.00
30	Thanjavur	2335216	0	0	0.00
31	The Nilgiris	800222	0	0	0.00
32	Theni	1126679	0	0	0.00
33	Thiruvallur	2691103	335	0	0.12
34	Thiruvarur	1220354	0	0	0.00
35	Thoothukudi	1050775	0	0	0.00
36	Tiruchirapalli	2581084	15	0	0.01
37	Tirunelveli	1516547	0	0	0.00
38	Tirupattur	1973352	1	0	0.00
39	Tiruppur	2004644	0	0	0.00
40	Tiruvannamalai	1352396	6	0	0.00
41	Vellore	1834615	37	0	0.02
42	Villupuram	1627113	2	0	0.00
43	Virudhunagar	687107	0	0	0.00
	State Total	67206625	994	0	0.01

**Chart 39. CASES AND DEATHS OF CHOLERA - TAMILNADU
2002 TO 2008**



Source : Epidemic Control