Report on

The STATE of HEALTH of MUMBAI

July 2016

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I. Foreword

UN's Sustainable Development Goals (SDGs) emphasises to end the epidemics of aids, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases by year 2030. India being a signatory of the UN's SDS has a Herculean task ahead of it. We have put large amount of financial and other resources behind this effort to try and achieve these goals.

Mumbai the Urbis Prima of India should naturally be leading in this effort but unfortunately when we take stock of the ground realities it is very far from its goal and if at all the situation has gotten worse as far as Tuberculosis and other ailments are concerned.

The Municipal Corporation of Mumbai Spends nearly 218 crores every year in health but has very little to show for this. The state of health of Mumbai is bleak, the total number of dengue cases has gone by 711% from 2011 to 2015. The number of people dying due to dengue has also doubled in that period (from 62 to 124). Every year nearly 7000 people die due to Tuberculosis. The number of Diarrhoea has also gone by 20% in the last five years. There were 207 cases of Cholera in the year 2015-16 and three people died due to Cholera.

While government is spending a lot of money on different programs and schemes, results of the same are not seen as Mumbaikars spend a huge amount from their pockets on health related issues. It was revealed to us in our current year's citizen survey of 25,215 households in Mumbai, 9% of annual family income of Socio Economic Classification (SEC D and E) is spent on hospital or medical cost. Overall around 8% people spend on medical and hospital costs and 47 of thousand households use private or charitable clinics or hospitals.

Public health available with the government just represents the patients who have been treated in the government hospitals and dispensaries. Only 34% of the population of Mumbai exclusively use them. If this is the case in 34% of the population you can only imagine the total numbers. Unfortunately for us there is no central point where we can get comprehensive data of the city.

To address the above issues, Praja has been consistently talking about strengthening the Health Surveillance System (HSS) to effectively monitor and evaluate various health programme/schemes. In a welcoming move, MCGM conducted verbal autopsy in 2014. One of the findings of the study acknowledged that 7090 cases of T.B. (Tuberculosis) registered as per the Registration of Birth and Death Act 1969. Praja has been consistently pinpointing this. While T.B. control unit of MCGM showed only 1351 deaths in the same year. However instead of using this opportunity to conduct a scientific study which can help in augmenting the system, the report which was shared with Praja shows many gaps and shortcomings in the way the study was conducted. If the authorities are really serious about controlling nay eradicating TB and other diseases as targeted in the SDG, we urgently need to acknowledge the real problem to find out solutions. Further we need to augment our HMIS (Health Management Information System) and HSS to give critical feedback to strengthen our programmes. Sincere efforts put towards implementing these steps would eventually lead us to achieving SDG and creating a healthy society.

Nitai Mehta

Managing Trustee, Praja Foundation

II. Acknowledgements

Praja has obtained the data used in compiling this white paper through Right to Information Act, 2005. Hence it is very important to acknowledge the RTI Act and everyone involved, especially the officials who have provided us this information diligently.

We would like to appreciate our stakeholders; particularly, our Elected Representatives & government officials, the Civil Society Organizations (CSOs) and the journalists who utilise and publicise our data and, by doing so, ensure that awareness regarding various issues that we discuss is distributed to a wide-ranging population. We would like to take this opportunity to specifically extend our gratitude to all government officials, particularly in Public Health Department for their continuous cooperation and support.

Praja Foundation appreciates the support given by our supporters and donors, namely European Union Fund, Friedrich Naumann Foundation, Dasra, TATA Trusts, Narotam Sekhsaria Foundation and Madhu Mehta Foundation and numerous other individual supporters. Their support has made it possible for us to conduct our study & publish this white paper.

We would also like to thank our group of Advisors & Trustees and lastly but not the least, we would like to acknowledge the contributions of all members of Praja's team, who worked to make this white paper a reality.

European Union

dasra

Friedrich Naumann STIFTUNG FÜR DIE FREIHEIT

Narotam Sekhsaria Foundation

Madhu Mehta Foundation

TATA TRUSTS

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Tata Trusts have supported Praja Foundation in this project. The Trusts believe in a society of well-informed citizens and it is to this effect that Tata Trusts supports Praja's efforts to communicate with and enable citizens to interact with their administration through innovative and effective methods.

Part A – Data[1] on Diseases/Ailments & Health Personnel in Mumbai (Data got through RTI)

RTI (Right to Information Act) Data in this section has been collected from (167) Municipal Dispensaries, (26) Municipal Hospitals and (5) State Hospitals for the period April'2011 to March'2016. Also RTI Data from(8) Other Government Hospitals [which include Central Railway[2], Bombay Port Trust Hospital, Western Railway Hospital, Police Hospital (Nagpada and Naigaon), ESIS – Worli, Mulund, Kandivali, Marol) and (12) Police Dispensaries] has been collected for the period of April'2012 to March'2016. *Kindly refer Annexure 1 for list of Hospitals and dispensaries*. This data relates only to IPD (In Patient Department); these are cases treated in various government dispensaries/hospitals. Cause of death data for the months from January 2016 to March 2016 is not available with MCGM due to data migration to CRS (Civil Registration System).

It must be noted that the data in this section includes only government dispensaries/hospitals and does not include data on occurrences of various diseases/ailments treated in private and charitable dispensaries/hospitals. **According to our survey (*details of which are in Part C of this report*) 30% households in Mumbai use <u>only</u> government dispensaries/hospitals**. The data on cases of diseases/ailments treated in private and charitable dispensaries/hospitals was not available under RTI and hence we have conducted the survey to estimate certain parameters to monitor status of health of Mumbai (*refer to Part C for details*).

[1] Otherwise stated all the data tables henceforth are in Financial Years i.e. April to March.
[2] Data from Central Railway hospital, Byculla was not received from Dec'15 to Mar'16

Table 1: Malaria number of cases and death from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Malaria Cases in government dispensaries/hospitals in Mumbai					
MCGM dispensaries/hospitals	38616	18296	15987	13865	12516
State hospitals	1212	1280	1052	854	1233
Other government dispensaries/hospitals		2363	1359	964	882
Total Cases	39828	21939	18398	15683	14631
Population /Total Cases	312	567	676	793	850
Number of Deaths due to Malaria in Mumbai					
Total Deaths	308	238	202	103	84[3]
Total Cases/Total Deaths	129	92	91	152	174

Number of registered cases and total number of deaths seem to be stabilising in last few years due to "Fight the Bite" campaign. At present cases registered under Malaria are 14631 while registered deaths due to Malaria are 84. Efforts need to be further to put in order to the eradicate Malaria. Goal 3 of UN's Sustainable Development Goals emphasises to end epidemic of aids, tuberculosis, malaria, and neglected tropical diseases, combat hepatitis, water borne disease and other communicable disease.

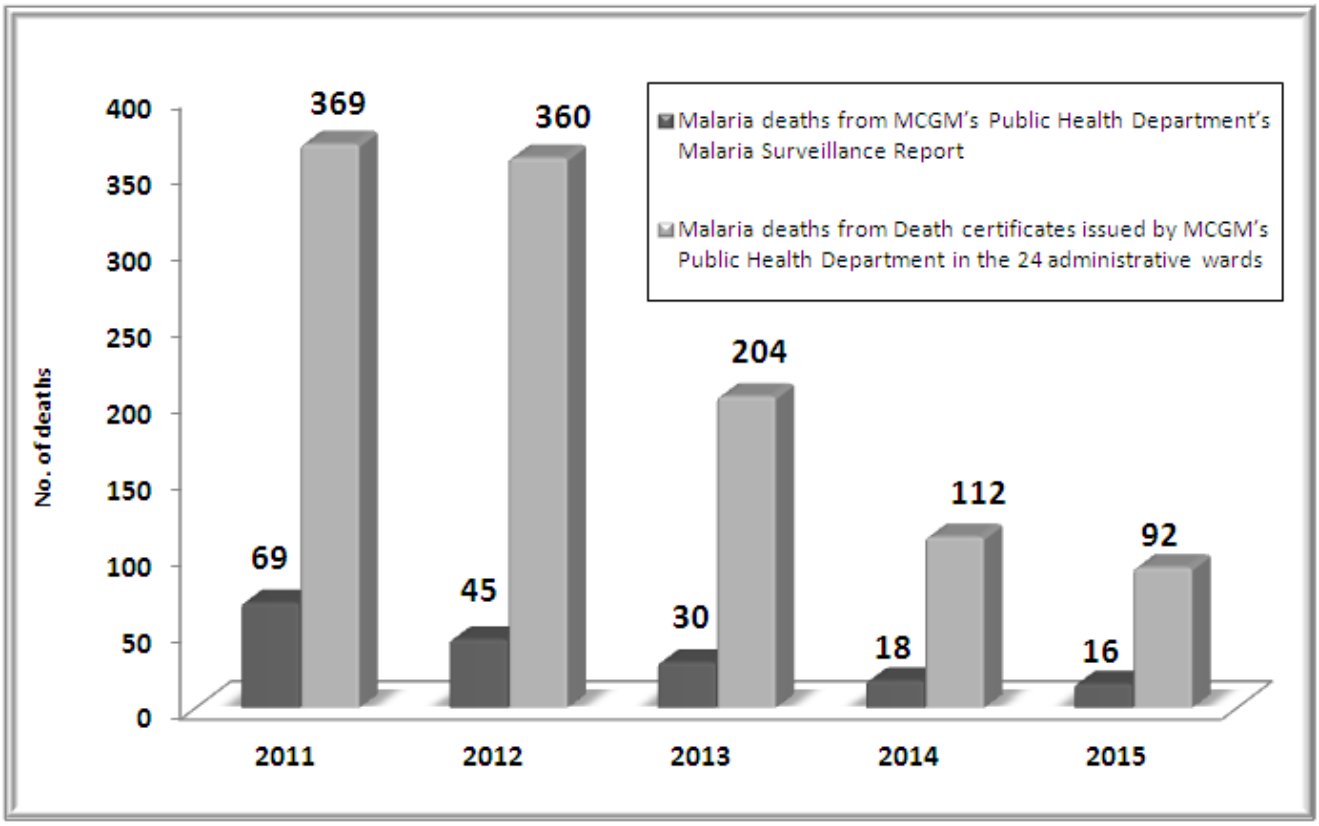
Table 2: Dengue number of cases and deaths from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Dengue Cases in government dispensaries/hospitals in Mumbai					
MCGM dispensaries/hospitals	1759	4447	6052	8372	12870
State hospitals	120	289	732	1523	1776
Other government dispensaries/hospitals		131	477	404	598
Total Cases	1879	4867	7261	10299	15244
Population /Total Cases	6622	2556	1714	1208	816
Number of Deaths due to Dengue in Mumbai					
Total Deaths	62	77	111	102	124[4]
Total Cases/Total Deaths	30	63	65	101	123

Registration of Dengue cases have increased by 8 times in last five years from 2011 to 2016, while reporting of death cases has increased over two times since 2011-12 to 2015-16. In 2014-15, death cases registered due to Dengue were 102 (in 12 months) while in mere 9 months' span from April 2015 to December 2015, number of deaths due to the disease has become 124.

[3] & [4] Cause of death data for financial year 2015-16 available with MCGM is not available from January'16 to April 2016 due to data migration.

Graph 1: Discrepancy in reporting system of Malaria death[5]



According to Surveillance department in 2015 only 16 people have died because of malaria in 12 months but at the same time Public Health Department had issued death certificates in 92 cases with the mentioned cause of death as Malaria.

Note: Civil Registration System is a continuous, Permanent and Systematic recording of births and deaths obtained under the RBD (Registration of Births & Deaths) Act, 1969 is called the Civil Registration System. The responsibilities for reporting the events have been prescribed separately for domiciliary events as well as Institutional events.

USES OF REGISTRATION

Legal and Protective Uses for Individuals:

- *Birth registration records provide legal proof of place of birth and date of birth.*
- *Death registration record required for settlement of inheritance, insurance claims etc. Have evidentiary value under Indian Evidence Act, 1872.*

Administrative Uses:

- *A legal register of locality wise births and deaths.*
- *Main source of information on mortality causes of death, to facilitate health planning, etc.*

Statistical Uses:

- *Source of demographic data for socio-economic planning, development of health systems and population control*
- *Data on fertility and mortality is essential in understanding the trends in population growth and is used for population projections.*

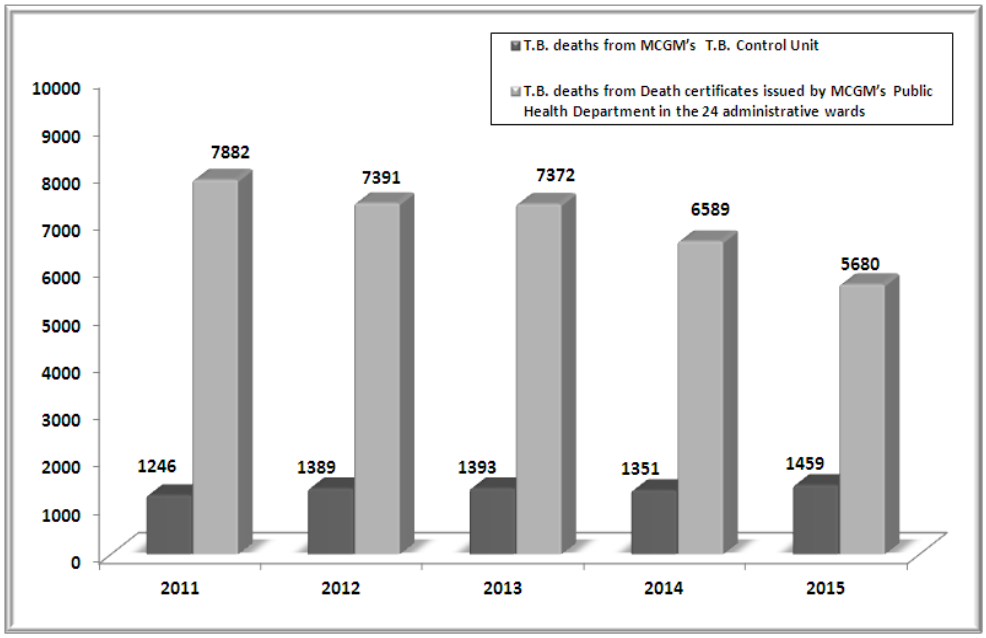
[5] Data given in graph is as per Calendar year.

Table 3: Tuberculosis number of cases and deaths from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Tuberculosis Cases in government dispensaries/hospitals					
MCGM dispensaries/hospitals	30016	34873	39644	40525	39060
State hospitals	659	946	1216	1829	1645
Other government dispensaries/hospitals		598	619	483	467
Total Cases	30675	36417	41479	42837	41172
Population /Total Cases	406	342	300	290	302
Number of Deaths due to Tuberculosis in Mumbai					
Total Deaths	8375	7170	7319	6501	4077[6]
Total Cases/Total Deaths	4	5	6	7	10

41172 Tuberculosis cases were registered at government institutions from 2015-16, while 4077 deaths were registered from April 2015- December 2015. From the year April 2011 to December 2015, Tuberculosis took life of 33,442 people. 19 people have died daily due to Tuberculosis in the last 5 years.

Graph 2: Discrepancy in reporting system of Tuberculosis deaths[7]

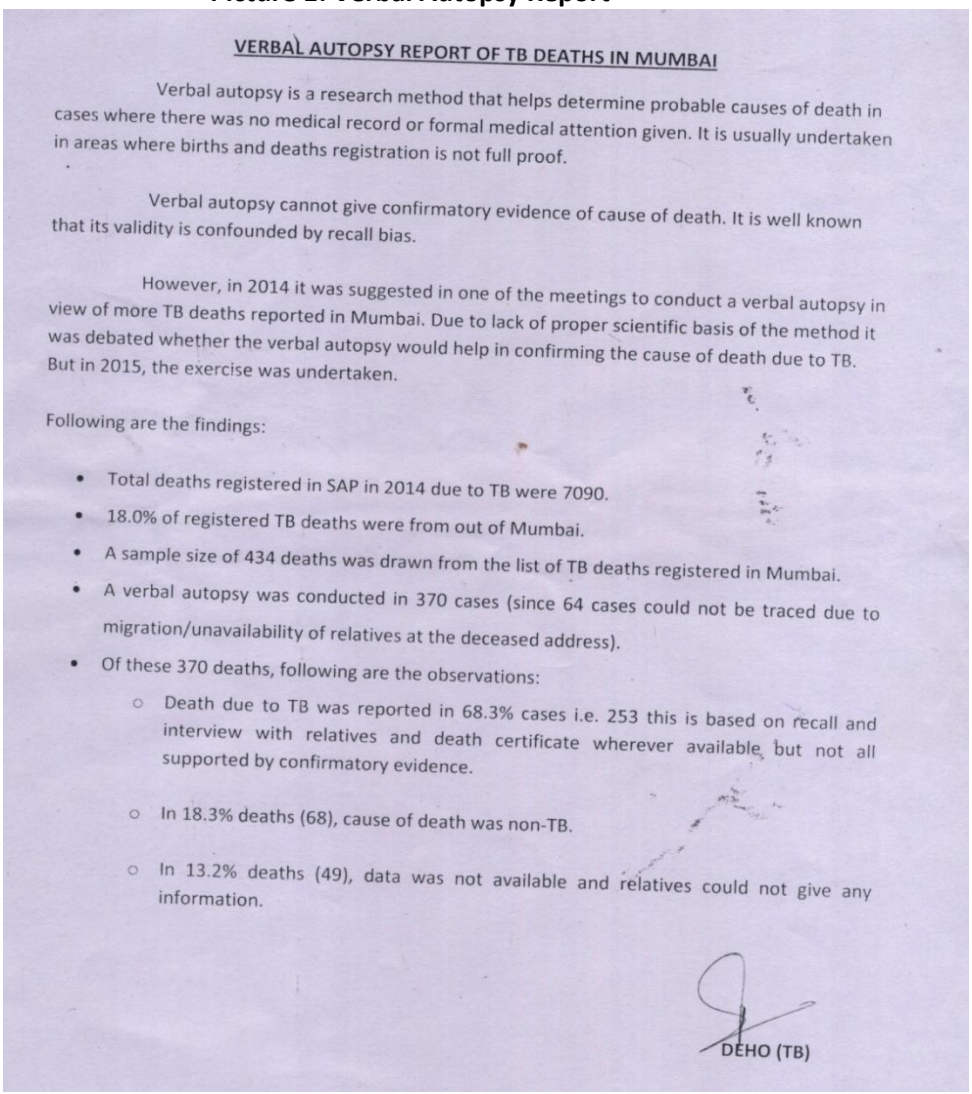


Tuberculosis deaths reported by Tuberculosis Control unit from 2015 are 1459 while deaths reported by MCGM Public Health Department from 2015 are 5680. Tuberculosis deaths as per MCGM's Public Health Department have remained more or less consistent.

[6] Cause of death data for financial year 2015-16 available with MCGM is not available from January'16 to April 2016 due to data migration.

[7] *Deaths shown in graph as per Calendar year.*

Picture 1: Verbal Autopsy Report



VERBAL AUTOPSY REPORT OF TB DEATHS IN MUMBAI

Verbal autopsy is a research method that helps determine probable causes of death in cases where there was no medical record or formal medical attention given. It is usually undertaken in areas where births and deaths registration is not full proof.

Verbal autopsy cannot give confirmatory evidence of cause of death. It is well known that its validity is confounded by recall bias.

However, in 2014 it was suggested in one of the meetings to conduct a verbal autopsy in view of more TB deaths reported in Mumbai. Due to lack of proper scientific basis of the method it was debated whether the verbal autopsy would help in confirming the cause of death due to TB. But in 2015, the exercise was undertaken.

Following are the findings:

- Total deaths registered in SAP in 2014 due to TB were 7090.
- 18.0% of registered TB deaths were from out of Mumbai.
- A sample size of 434 deaths was drawn from the list of TB deaths registered in Mumbai.
- A verbal autopsy was conducted in 370 cases (since 64 cases could not be traced due to migration/unavailability of relatives at the deceased address).
- Of these 370 deaths, following are the observations:
    - Death due to TB was reported in 68.3% cases i.e. 253 this is based on recall and interview with relatives and death certificate wherever available, but not all supported by confirmatory evidence.
    - In 18.3% deaths (68), cause of death was non-TB.
    - In 13.2% deaths (49), data was not available and relatives could not give any information.

DEHO (TB)

Note:

Verbal autopsy is a research method wherein household interviews are conducted of families of the deceased and record interviews that preceded the deceased individual's death as well as the standard questions about key symptoms. To validate the official MCGM records of the cause of death as per TB Control Unit and the deaths certificates issued by MCGM, and to suggest improvements to the TB programme, verbal Autopsy can be a useful tool.

Praja filed an RTI[8] on 2nd June 2016, to seek reports from MCGM on Verbal Autopsy if they had conducted any, along with reports generated. In the report attached above it can be seen that no criteria was set for sampling, questionnaire and methodology to conduct Verbal Autopsy. There is no mention of duration to conduct verbal autopsy. Verbal autopsy is an essential tool to understand cause of death, and hence it should be undertaken seriously. Verbal autopsy is carried out within six months of the death of the deceased individual and on the contrary report does not highlight any such duration. However, the report does note that MCGM has registered 7090 deaths due to TB in 2014, while the TB Control Unit has a record of only 1315 deaths. This anomaly needs to be explained by Public Health Department authorities and action needs to be initiated as per RBD Act, 1969; if required.

[8] Refer annexure no.4

Table 4: Diarrhoea number of cases and deaths from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Diarrhoea Cases in government dispensaries/hospitals in Mumbai					
MCGM dispensaries/hospitals	99100	97563	114666	113236	115759
State hospitals	739	785	1561	1129	1741
Other government dispensaries/hospitals		1479	1953	2392	1842
Total Cases	99839	99827	118180	116757	119342
Population /Total Cases	125	125	105	107	104
Number of Deaths due to Diarrhoea in Mumbai					
Total Deaths	299	250	260	260	125[9]
Total Cases/Total Deaths	334	399	455	449	955

In 2015-16; 1,19,342 people suffered from Diarrhoea while the number of registered death cases due to Diarrhoea has reduced by twice in last five years. The cause of concern here is that diarrhoea has affected on an average 118093 in last 3 years in Mumbai as reported in government dispensaries/hospitals.

Table 5: Cholera number of cases and deaths from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Cholera Cases in government dispensaries/hospitals in Mumbai					
MCGM dispensaries/hospitals	168	187	89	19	187
State hospitals	10	11	7	11	6
Other government dispensaries/hospitals		0	0	1	14
Total Cases	178	198	96	31	207
Population /Total Cases	69901	62840	129608	401367	60108
Number of Deaths due to Cholera in Mumbai					
Total Deaths	9	10	7	3	3[10]
Total Cases/Total Deaths	20	20	14	10	69

From 2014-15 to 2015-16, the number of cholera cases registered has increased seven times with 31 in 2014-15 to 207 in 2015-16 respectively; while three died of Cholera from April'15 to December'15.

[9] &[10] Cause of death data for financial year 2015-16 available with MCGM is not available from January'16 to April 2016 due to data migration.

Table 6: Typhoid number of cases and deaths from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Cases in government dispensaries/hospitals in Mumbai					
MCGM dispensaries/hospitals	7298	4160	6492	4355	4486
State hospitals	263	200	232	193	538
Other government dispensaries/hospitals		261	607	390	306
Total Cases	7561	4621	7331	4938	5330
Population /Total Cases	1646	2693	1697	2520	2334
Number of Deaths due to Typhoid in Mumbai					
Total Deaths	7	9	10	3	7[11]
Total Cases/Total Deaths	1080	513	733	1646	761

Number of Typhoid cases registered with Government institution has increased 8% from 2014-15 to 2015-16 while deaths due to typhoid have increased compared to previous year, with three deaths in 2014-15 to seven in 2015-16.

Table 7: Diabetes number of cases and deaths from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Diabetes Cases in government dispensaries/hospitals in Mumbai					
MCGM dispensaries/hospitals	20674	19423	35118	43265	20449
State hospitals	590	728	742	1135	832
Other government dispensaries/hospitals		4794	4981	4310	9415
Total Cases	21264	24945	40841	48710	30696
Population /Total Cases	585	499	305	255	405
Number of Deaths due to Diabetes in Mumbai					
Total Deaths	2251	2575	2421	2493	1885[11]
Total Cases/Total Deaths	9	10	17	20	16

Diabetes cases have decreased by 37% in current year while deaths have decreased by 24%.

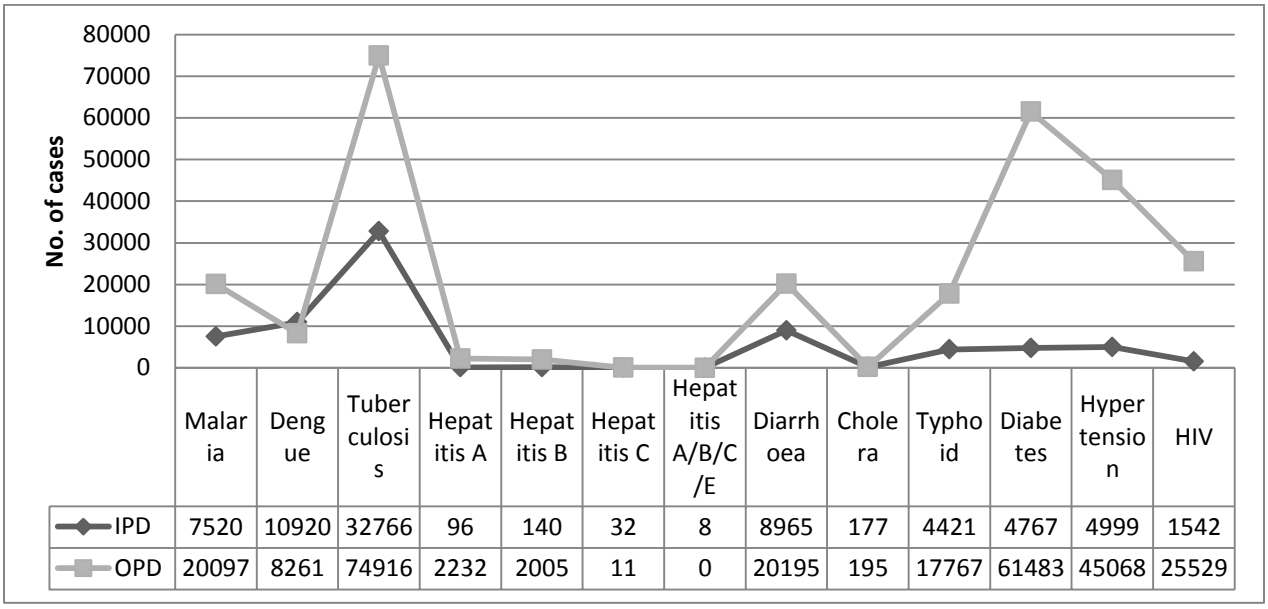
[11] Cause of death data for financial year 2015-16 available with MCGM is not available from January'16 to April 2016 due to data migration.

Table 8: Hypertension number of cases and deaths from April'2011-March'16

Years	2011-12	2012-13	2013-14	2014-15	2015-16
Number of Hypertension Cases in government dispensaries/hospitals in Mumbai					
MCGM dispensaries/hospitals	24866	21005	26901	31960	22499
State hospitals	652	921	821	1039	865
Other government dispensaries/hospitals		6798	7915	5671	12597
Total Cases	25518	28724	35637	38670	35961
Population /Total Cases	488	433	349	322	346
Number of Deaths due to Hypertension in Mumbai					
Total Deaths	3952	4034	4618	5061	3205[12]
Total Cases/Total Deaths	6	7	8	8	11

Registered number of Hypertension cases has reduced by 7% compared to previous year while total death cases due to hypertension have reduced by 37% in one year, yet it is a cause of concern that more than 3000 people die of hypertension every year.

Graph 3: Comparison of OPD and IPD patients in the year 2015-16[13]



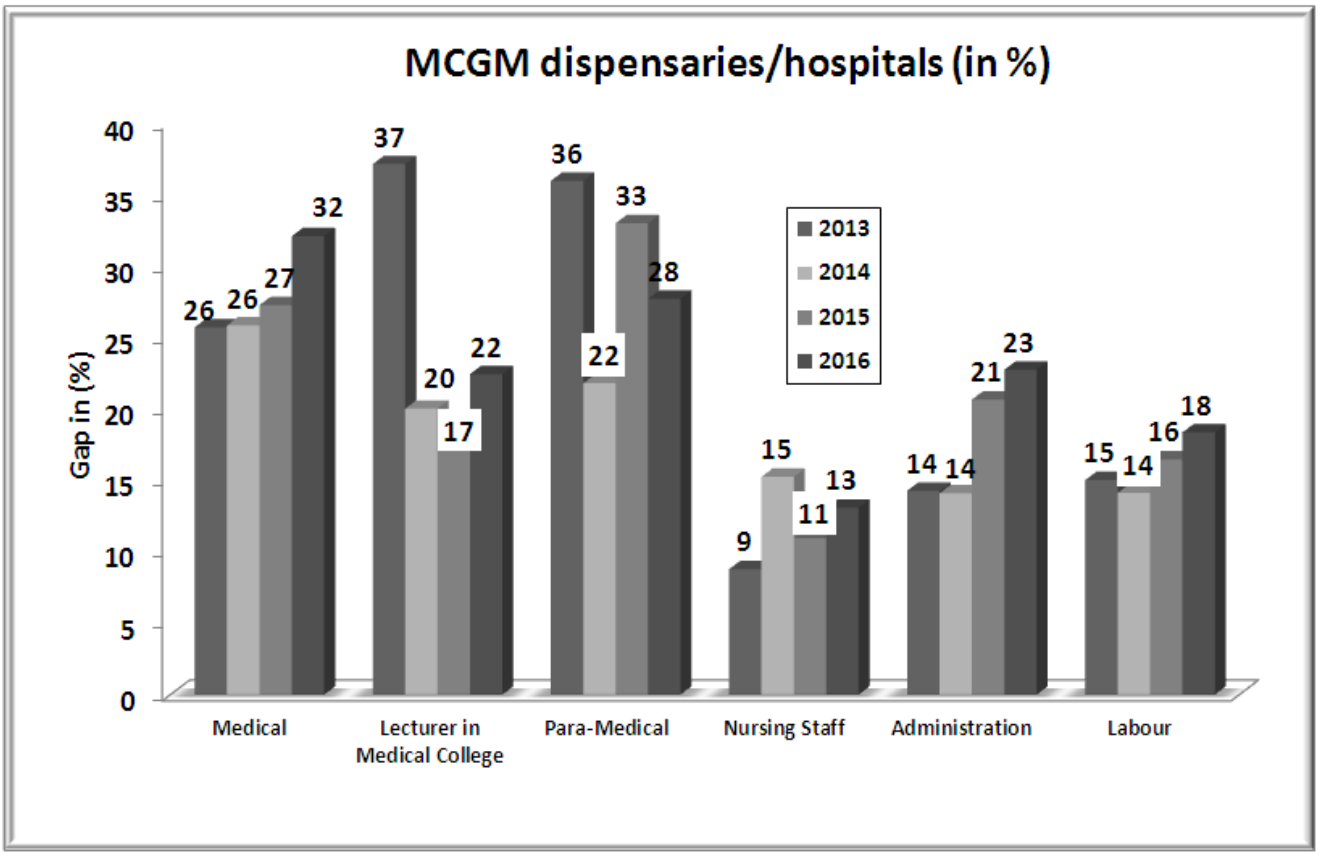
	Malaria	Dengue	Tuberculosis	Hepatitis A	Hepatitis B	Hepatitis C	Hepatitis A/B/C/E	Diarrhoea	Cholera	Typhoid	Diabetes	Hypertension	HIV
IPD	7520	10920	32766	96	140	32	8	8965	177	4421	4767	4999	1542
OPD	20097	8261	74916	2232	2005	11	0	20195	195	17767	61483	45068	25529

Note: When we filed RTIs to know incidences of diseases treated by dispensaries/hospitals, the number given has always consisted of only the IPD figures. However, several patients are also treated in OPD. The OPD data is not classified disease-wise and not provided when we file the RTIs. There are some hospitals who do not maintain this disease-wise classification at all. For e.g. there have been 14631 Malaria cases in 2015-16 (Refer to Table No. 1) according to RTI data. This clearly states that there is a gap in data maintained in government facilities. All (unique) cases should be classified disease-wise in IPD as well as OPD in order to know the accurate data. This calls for building a robust health surveillance system.

[12]Cause of death data for financial year 2015-16 available with MCGM is not available from January'16 to April 2016 due to data migration.

[13]Further details in Annexure 5

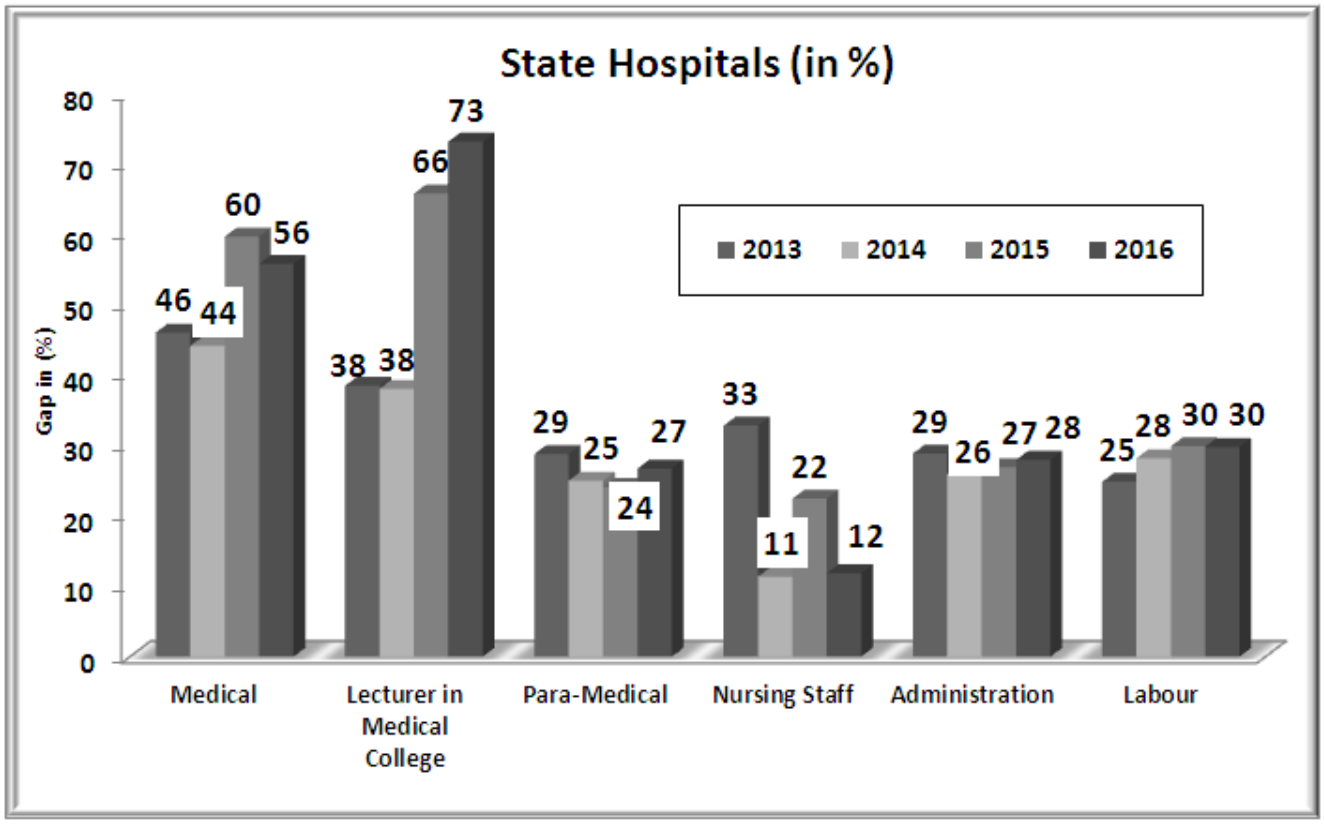
Graph 4: Shortage of staff in MCGM's dispensaries/hospitals[14]



Overall gap in MCGM dispensaries/hospitals is 19% with most significant gap in medical department (32%) and paramedical (28%).

[14] The data shown as of 31st March of the related year.

Graph 5: Shortage of staff in State hospitals[15]



Overall gap in MCGM state hospitals is 23% with most significant gap in Medical department (56%) and lecturer in medical college department (73%).

[15] The data shown as of 31st March of the related year.

Part B – Cause of death data[16]

Table 9: Causes of death in Mumbai from April'2011-December'2015

Cause of Death	2011-12		2012-13		2013-14		2014-15		Apr-Dec 15	
	No. of Deaths	In %	No. of Deaths	In %	No. of Deaths	In %	No. of Deaths	In %	No. of Deaths	In %
Malaria (B50 TO B54)	308	0.3	238	0.3	202	0.2	103	0.1	84	0.1
Dengue (A90)	62	0.1	77	0.1	111	0.1	102	0.1	124	0.2
Tuberculosis (A-15,16,17,18,19,)	8375	8.9	7170	8.1	7319	8.2	6501	7.2	4077	6.9
Diarrhoea (A09)	299	0.3	250	0.3	260	0.3	260	0.3	125	0.2
Cholera (A00)	9	0.0	10	0.0	7	0.0	3	0.0	3	0.0
Typhoid (A01)	7	0.0	9	0.0	10	0.0	3	0.0	7	0.0
Diabetes (E10-E14)	2251	2.4	2575	2.9	2421	2.7	2493	2.7	1885	3.2
Hypertension (I10-I15)	3952	4.2	4034	4.6	4618	5.1	5061	5.6	3205	5.4
HIV / AIDS (B20-24)	732	0.8	577	0.7	464	0.5	393	0.4	241	0.4
Other Cause of deaths	77998	83.0	73615	83.1	74261	82.8	75790	83.6	49667	83.6
Total Deaths	**93993**	**100**	**88555**	**100**	**89673**	**100**	**90709**	**100**	**59418**	**100**

Note: Cause of death data available with MCGM from April 2015 to December 2015, hence we have analysed cause of death data for nine months in each year from 2011 to 2015 to give a comparative idea.

Table 10: Cause of death in Mumbai from 2011 to 2015 for a period of nine months from April to December

Cause of Death	2011		2012		2013		2014		2015	
	No. Of Deaths	In %	No. Of Deaths	In %	No. Of Deaths	In %	No. Of Deaths	In %	No. Of Deaths	In %
Malaria (B50 TO B54)	256	0.4	219	0.3	185	0.3	95	0.1	84	0.1
Dengue (A90)	54	0.1	74	0.1	104	0.2	97	0.1	124	0.2
Tuberculosis (A-15,16,17,18,19,)	5541	8.5	5413	8.2	5615	8.2	4885	7.2	4077	6.9
Diarrhoea (A09)	252	0.4	199	0.3	214	0.3	216	0.3	125	0.2
Cholera	3	0.0	9	0.0	7	0.0	1	0.0	3	0.0
Typhoid	6	0.0	7	0.0	9	0.0	2	0.0	7	0.0
Diabetes (E10-E14)	1640	2.5	1942	2.9	1827	2.7	1834	2.7	1885	3.2
Hypertension (I10-I15)	2842	4.4	2953	4.4	3368	4.9	3780	5.5	3205	5.4
HIV / AIDS	475	0.7	441	0.7	373	0.5	288	0.4	241	0.4
Other Cause of deaths	53834	82.9	55131	83.0	56558	82.9	56960	83.6	49667	83.6
Total Deaths	**64903**	**100**	**66388**	**100**	**68260**	**100**	**68158**	**100**	**59418**	**100**

[16]Cause of death data for financial year 2015-16 with MCGM is not available from January 2016 to March 2016 due to Data migration.

Table 11: Age-wise causes of death in the year April'15-December'15

Cause of death		< 4 Years	5-19 Years	20-39 Years	40-59 Years	60 - Above	Not Stated	Total
Malaria	In (no)	2	6	27	29	20	0	84
	In (%)	2.4	7.1	32.1	34.5	23.8	0.0	
Tuberculosis	In (no)	35	236	1236	1552	1018	0	4077
	In (%)	0.9	5.8	30.3	38.1	25.0	0.0	
Dengue	In (no)	6	24	47	26	21	0	124
	In (%)	4.8	19.4	37.9	21.0	16.9	0.0	
Diabetes	In (no)	2	4	51	444	1384	0	1885
	In (%)	0.1	0.2	2.7	23.6	73.4	0.0	
Diarrhoea	In (no)	35	1	11	26	52	0	125
	In (%)	28.0	0.8	8.8	20.8	41.6	0.0	
Hypertension	In (no)	9	4	53	570	2569	0	3205
	In (%)	0.3	0.1	1.7	17.8	80.2	0.0	
Other Cause of deaths	In (no)	3464	1518	6029	11602	27304	1	49918
	In (%)	6.9	3.0	12.1	23.2	54.7	0.0	
Total Deaths		**3553**	**1793**	**7454**	**14249**	**32368**	**1**	**59418**

A significant number of people have died in the productive age group of 20-39 years due to causes that are treatable such as Malaria (32.1%) and Dengue (37.9%); while there are 68.4% Tuberculosis deaths in the age groups of 20 to 59 years. Out of total deaths due to Diarrhoea, children below the age of 4 account for 28%.

Table 12: Gender-wise causes of death April'15-December'15

Cause of death	Male		Female		Not Stated		Total
	No.	(%)	No.	(%)	No.	(%)	
Malaria	55	65	29	35	0	0.0	84
Tuberculosis	2763	68	1312	32	2	0.05	4077
Dengue	65	52	59	48	0	0.0	124
Diabetes	954	51	931	49	0	0.0	1885
Diarrhoea	48	38	77	62	0	0.0	125
Hypertension	1563	49	1642	51	0	0.0	3205
Other Cause of deaths	29249	59	20669	41	0	0.0	49918
Total Deaths	**34697**	**58**	**24719**	**42**	**2**	**0**	**59418**

Number of males dying due to Tuberculosis is over double the number of women dying to the diseases.

Table 13: Top 10 causes of death in Mumbai

Cause of Death	2011-12	2012-13	2013-14	2014-15	Apr-Dec 15
Acute Myocardial Infarction (I21-I22)	10475	9897	10187	10263	6498
Other Forms of Heart Diseases (I30-I51)	7690	7488	7507	8781	5206
Septicaemia (A40-A41)	6024	5611	5650	6014	4077
Tuberculosis (A15-A19)	8375	7170	7319	6501	3858
All Other Ischemic Heart Diseases (I20 & I23-I25)	4590	4375	4366	4554	3235
All Other Hypertensive Diseases (I10,I12-I15)	3541	3585	4118	4604	2953
All Other Diseases of the Respiratory System (J60-J86, J92-J98)	3934	4078	4131	4336	2657
Pneumonia (J12-J18)	4072	3330	2937	3215	2329
Renal Failure (N17-N19)	3734	3431	3377	3308	2275
Diseases of the Liver (K70-K76)					2122

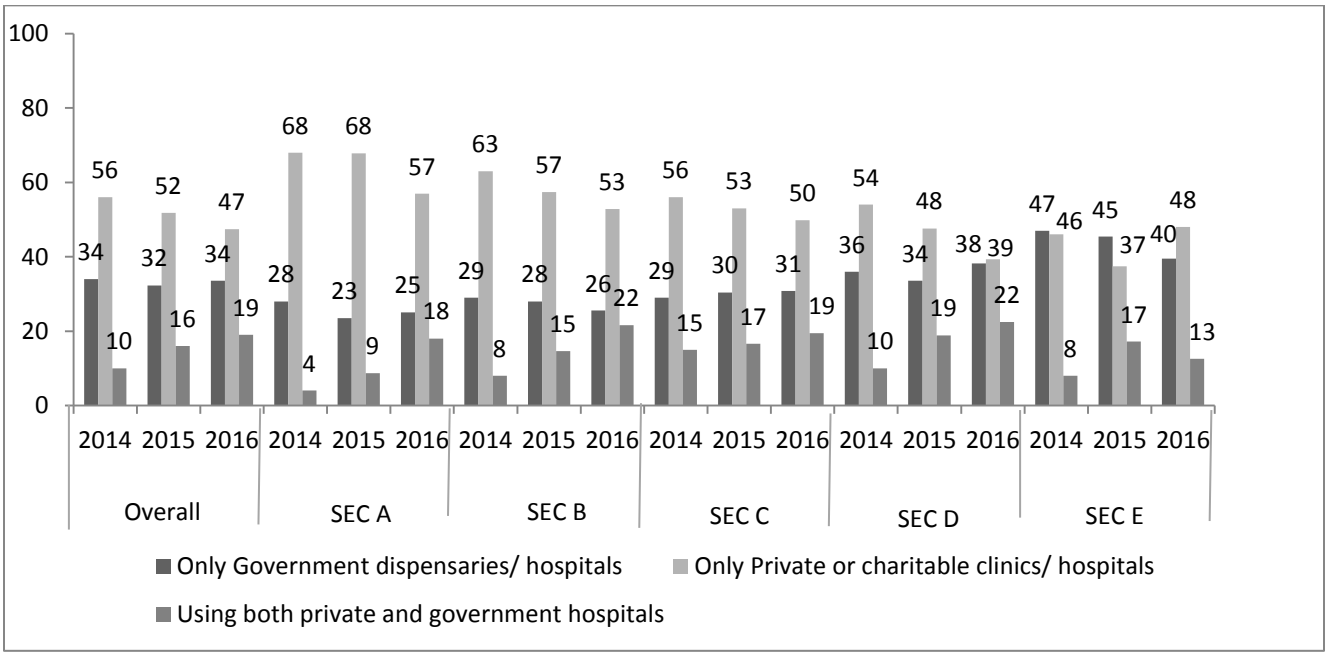
Part C: Citizen Survey Data

Survey Methodology

Praja Foundation had commissioned the **household survey** to Hansa Research and the survey methodology followed is as below:

- In order to meet the desired objectives of the study, we represented the city by covering a sample from each of its 227 wards. Target Group for the study was :
  - ✓ Both Males & Females
  - ✓ 18 years and above
  - ✓ Belonging to that particular ward.
- Sample quotas were set for representing gender and age groups on the basis of their split available through Indian Readership Study (Large scale baseline study conducted nationally by Media Research Users Council (MRUC) for Mumbai Municipal Corporation Region.
- The required information was collected through face to face interviews with the help of structured questionnaire.
- In order to meet the respondent within a ward, following sampling process was followed:
  - ✓ 5 prominent areas in the ward were identified as the starting point
  - ✓ In each starting point about 20 individuals were selected randomly and the questionnaire was administered with them.
- Once the survey was completed, sample composition of age & gender was corrected to match the population profile using the baseline data from IRS. This helped us to make the survey findings more representatives in nature and ensured complete coverage.
- **The total study sample was 25,215 according to survey conducted by Hansa Research.**

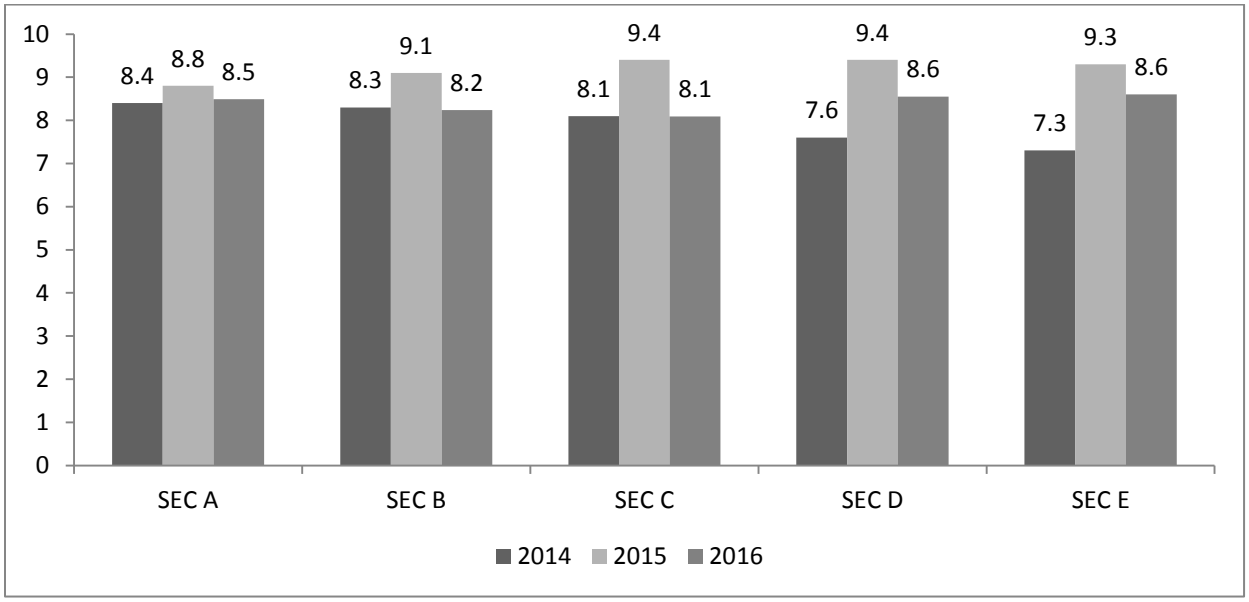
Graph 6: Type of Facilities used by the citizens across different socio-economic classes, 2016[17]



Usage of only private hospitals has seen a decline from 52% to 47%, while the incidence of using both government and private hospitals has increased from 16% to 19%. The incidence of using only government hospitals has remained mostly stable.

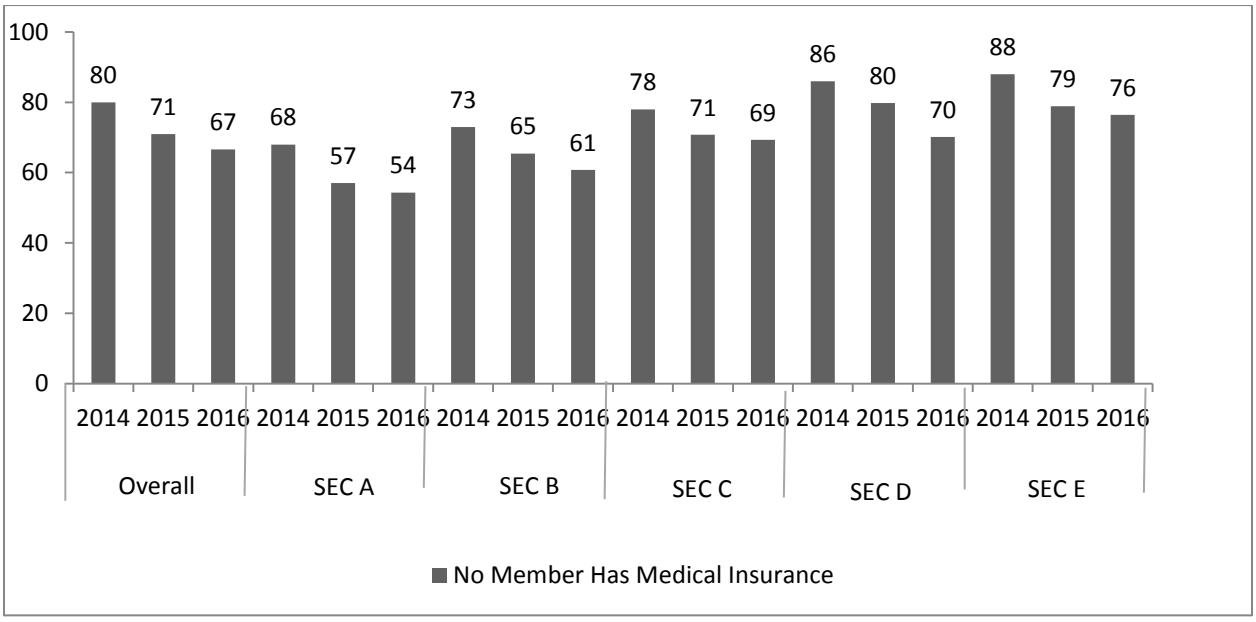
[17] As of March 2016

Graph 7: Estimated percentage of Annual Family Income spent on hospital/medical costs across socio-economic classes[18]



Percentage of annual family income being spent on hospital/ medical expenses has gone down across SECs, particularly among the lower SECs.

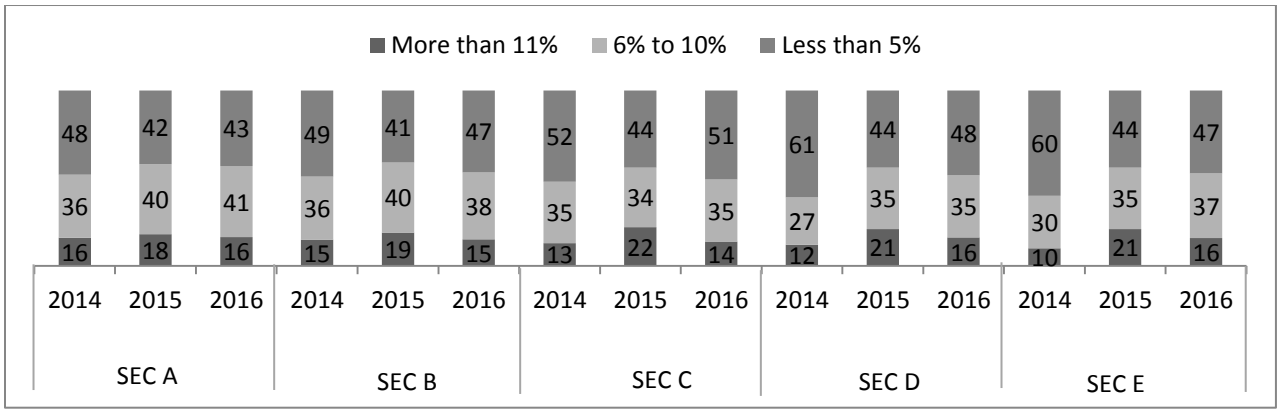
Graph 8: Medical Insurance across socio-economic class's family with no Medical Insurance



Percentage of families without medical insurance has gone down from 71% in 2015 to 67% in 2016. Biggest shift is seen in SEC D, where the percentage not having medical insurance has gone down from 80% to 70%

[18] Refer Annexure 7 for Socio-Economic Classification

Graph 9: Estimated percentage of Annual Family Income spent on hospital/medical costs across socio-economic classes



Percentage of households spending more than 11% of their annual family income on hospital/ medical costs has seen a drop across SECs, while a higher percentage is now spending between 6% to 10% of their annual family income on hospital/ medical costs.

Note:

Data shown in below table is as per, per capita income from 2015-16.

Annual Per Capita Income in Mumbai (as per the Economic Survey of Maharshtra, 2014-15)	**Rs. 188,739**
Less 35% (accounting for savings and taxation)	**Rs. 122,680**
Annual Income per household = Per Capita X 4.58 (Average size of a household)	**Rs. 561,876**
Annual Expenditure on Health per household = 8.6%	**Rs. 48,321**
Overall Household Annual Expenditure on Health = Rs. 48,321/- X 2,830,000 (households)	**Rs. 13,675 Crores**

Table 14: Estimated cases per 1000 households of Diseases and Ailments across different socio-economic classes

Diseases and Ailments	Malaria			Dengue			Diabetes			Cancer		
	2014	*2015*	2016	*2014*	*2015*	2016	*2014*	*2015*	2016	*2014*	*2015*	2016
Overall	61	55	67	25	14	15	42	67	50	7	5	5
SEC A	56	48	51	19	8	12	34	64	52	3	2	5
SEC B	53	44	60	24	13	14	51	64	53	5	2	2
SEC C	51	44	61	24	17	14	37	61	47	10	5	2
SEC D	69	65	84	29	14	18	41	72	51	8	5	15
SEC E	77	75	74	22	14	14	55	72	45	4	12	0

Overall, there are 67 cases of Malaria for every 1000 households, which has gone up from 55 cases in 2015. Mumbai has seen a drop in Diabetes, with the number of cases per 1000 households having dropped from 67 to 50. Maximum growth in cases of Malaria is seen in SEC C and SEC D, with an increase from 44 to 61 and 65 to 84 cases respectively. Number of cases of cancer has remained stable at an overall level, but has seen an increase in SEC D.

Table 15: Gender and Age-wise estimated cases per 1000 households of Diseases and Ailments across different socio-economic classes year 2016

Diseases and Ailments	Total Estimated Cases					
	Overall	Males	Females	18 - 25 years	26 - 40 years	40+ years
Malaria	67	42	25	19	16	15
Diabetes	50	29	21	2	7	40
Hypertension	17	11	6	1	3	11
TB	8	4	4	1	4	1
Diarrhoea	3	1	2	0	1	0
Cancer	5	4	1	1	1	4
Dengue	15	9	6	5	3	2

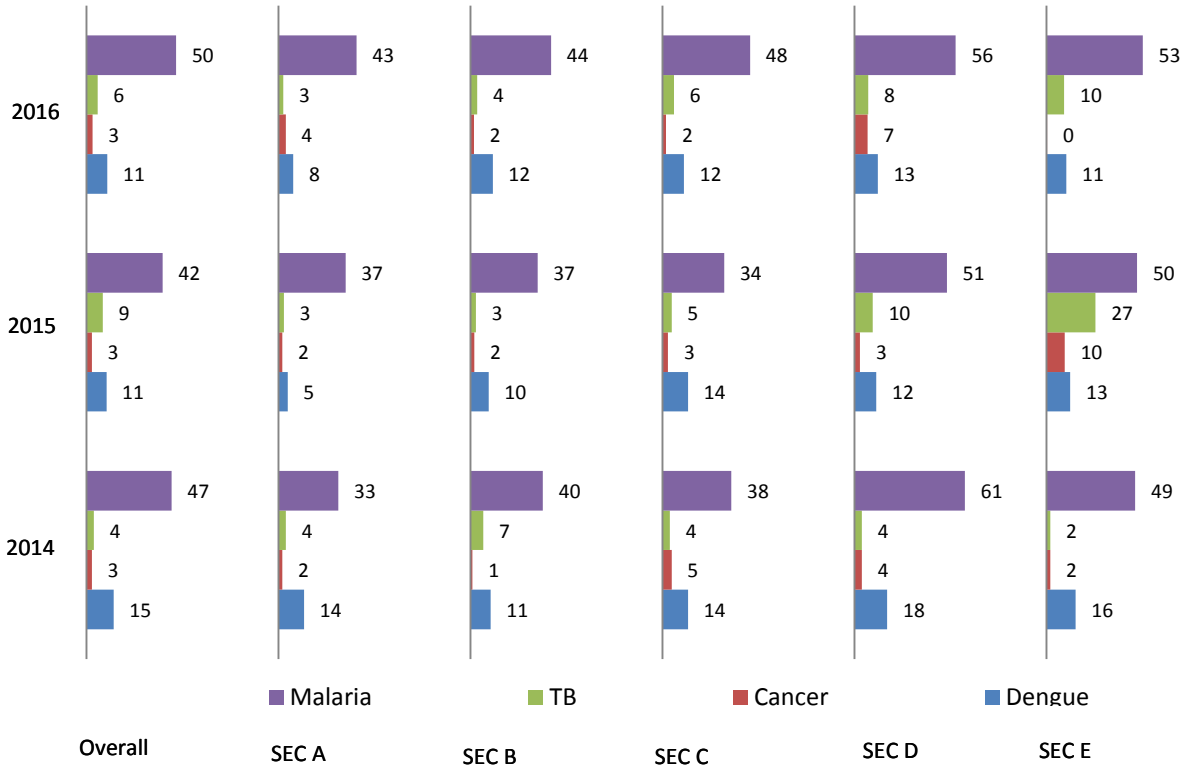
Incidence of lifestyle diseases like Diabetes and Hypertension is higher amongst the upper age group, while Malaria and Dengue are more commonly seen among males

Table 16: Type of Facilities used by the citizens by diseases per 1000 households

	Year	Malaria	Dengue	Diabetes	Cancer	T.B.
Only Government dispensaries/ hospitals	*2014*	34	18	35	35	46
	2015	40	24	34	27	49
	2016	36	37	32	58	48
Only Private or Charitable clinics/ hospitals	*2014*	61	41	56	22	16
	2015	47	63	56	36	31
	2016	38	49	56	21	31
Using both private and government hospitals	*2014*	5	41	9	43	38
	2015	13	13	11	37	21
	2016	26	15	12	21	21

When it comes to diseases like Diabetes, more people prefer going to private hospitals, while for cancer the incidence of going to government hospitals has seen an increase. For Malaria, more people now prefer a mix of private and government hospitals.

Graph 10: Whether undertaken any tests for the disease per 1000 households



The number of people who have undertaken tests for Malaria has gone up from 42 in 2015 to 50 in 2016, with the increase being the sharpest in SEC C, with the increase being from 34 cases to 48 cases. The number of people who have undergone tests for Cancer has seen an increase in SEC D.

Part D – Deliberations by Municipal Councillors and MLAs on Health Issues

MCGMs Public Health Committee

a) The Corporation under Section 38A (1) of the M.M.C. (Mumbai Municipal Corporation) Act, appoint the Public Health Committee out of their own body consisting of 36 members in their meeting after general elections and delegate any of their power and duties to such Committee and also define the sphere of business of Committee so appointed and direct that all matters and questions included in any such sphere shall be submitted to the Corporation with such Committee's recommendation.

b) Sphere of Business
"Sphere of Business of Special Committees defined by the Corporation vide Corporation Resolution No.46, dated 11th May 1999 in exercise of the powers vested in them by Sub-Section (1) of Section 38A of the Mumbai Municipal Corporation Act, 1888, as amended up to date.

i) All questions relating to the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College, Kasturba Hospital for infectious diseases, Medical Relief in the Municipal outdoor dispensaries, Medical and Nursing assistance to the poor in their homes, Venereal Diseases Dispensaries, Anti Tuberculosis League and any Medical Institution to which monetary assistance is given by the Corporation.

ii) Health Department (including Street Cleaning, Conservancy, etc.) with the exception of questions pertaining to the Mechanical Branch so far as they fall within the province of the Works Committee.

At present, there are 36 members (out of which 3 are nominated) in the Public Health Committee (kindly find list as Annexure 8)

Table 17: Total numbers of Meeting, Attendance and Questions from March'12 to March'16

Public Health Committee	Total Meetings	Attendance (%)	Total Questions Asked
March 2012 to March 2013	16	68	56
April 2013 to March 2014	17	68	122
April 2014 to March 2015	24	61	123
April 2015 to March 2016	18	64	147

Total number of Public Health committee meetings has gone down by 25%, while the attendance has increased by 3%. Number of total questions asked by Public Health Committee is 147 from April 2015 to March 2016.

Table 18: Health issues raised by Public Health Committee Councillors from March'12 to March'16

Issues	Question asked			
	March 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
Cemeteries /Crematorium related	3	1	4	3
Epidemic/Sensitive Diseases*	2	2	7	15
Malaria/Dengue	*3*	*7*	*3*	*14*
Diabetes/Hypertension	*0*	*2*	*0*	*0*
Diarrhoea/Typhoid/Cholera	*1*	*0*	*0*	*0*
Tuberculosis	*0*	*1*	*0*	*1*
Dispensary/Municipal Hospital/State Hospital	0	0	0	3
Equipment	8	2	11	9
Eradication Programme	0	1	0	0
Fogging	0	0	1	0
Health Education/Institute	0	1	1	3
Health Service Related	12	32	14	6
Human Resource	10	31	17	22
Infrastructure	2	11	18	28
Issue of Birth/Death certificates	2	0	1	2
License	1	2	1	1
Maternity homes / Primary Health Centre(PHC)	2	6	4	8
MCGM Related	1	1	2	5
Mortality rate	0	1	0	0
Medical Examination of Students	0	0	0	2
Naming/ Renaming Hospital/Health Centre/Cemeteries	2	4	4	7
Nuisance due to stray dogs, monkeys etc.	1	0	1	0
Pest Control Related	0	0	3	0
Private Health Services	0	0	0	3
Quacks	0	1	0	2
Reforms in health policies	0	1	0	0
Schemes / Policies in Health Related	4	16	20	15
Social Cultural Concerns Related	0	0	6	0
Treatment/Medicines	6	9	8	13
Total	**56**	**122**	**123**	**147**

Number of questions asked by councillors in Health Committee meeting has increased from 19% from 2014-2015. Number of questions asked on Malaria/Dengue has increased from 3 in 2014-15 to 14 in 2015-16, while only one question was asked on Tuberculosis in 2015-16 at Public Health Committee meetings.

Table 19: Number of questions asked on Health by Municipal Councillors ward-wise in All Committees from April 2012 to March 2016

Ward	No. of Councillors	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
A	4	0	1	2	11
B	3	0	1	1	3
C	4	0	3	5	0
D	7	3	8	9	7
E	8	6	11	13	8
F/N	10	5	6	14	13
F/S	7	9	4	8	4
G/N	11	8	4	7	7
G/S	9	18	14	8	13
H/E	11	8	10	10	21
H/W	6	1	2	2	5
K/E	15	11	10	11	12
K/W	13	13	12	11	7
L	15	50	100	122	97
M/E	13	5	26	26	13
M/W	8	6	13	13	10
N	12	6	8	15	18
P/N	16	11	35	48	21
P/S	8	4	7	8	22
R/C	10	8	11	8	11
R/N	7	5	29	26	36
R/S	11	14	34	30	42
S	13	8	12	9	24
T	6	1	4	11	7
Total	**227**	**200**	**365**	**417**	**412**

Municipal Councillors in wards B, C, F/S and H/W asked five questions or less than that during the year 2015-16. More number of questions was raised from L ward accounting to 23% of questions from total number of questions.

Table 20: Health issues raised by Municipal Councillors from March'12 to March'16

Issues	Question asked			
	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
Budget	0	1	0	1
Bio medical Waste	0	0	1	1
Cemeteries / Crematorium related	21	17	22	9
Compensation/Rehabilitation	0	0	0	1
Epidemic/Sensitive Diseases	28	51	84	97
Malaria/Dengue	*16*	*20*	*46*	*43*
Tuberculosis	*0*	*6*	*22*	*11*
Diarrhoea/Typhoid/Cholera	*1*	*1*	*0*	*2*
Diabetes/Hypertension	*0*	*1*	*2*	*4*
Dispensary/Municipal Hospital/State Hospital	0	0	0	7
Equipment	12	10	17	13
Eradication programme	1	1	1	3
Fogging	10	17	23	5
Health related	7	13	37	32
Human Resource	23	61	40	43
Health Services	23	47	36	16
Health Education/Institute Related	0	4	3	5
Infrastructure	9	22	37	60
Issue of Birth/Death certificates	4	7	4	4
License Related	1	1	4	12
Medical Examination Report	0	0	0	2
Maternity homes / Primary Health Centre (PHC)	9	26	11	15
MCGM related	1	5	3	6
Mortality rate	1	1	1	
Naming/ Renaming Hospital/Health Centre/Cemeteries	11	16	21	11
Nuisance due to Pest Rodents, stray dogs, monkeys etc	1	0	5	1
Negligence of officers	0	0	0	2
Private health services	2	7	2	4
Quacks	0	1	0	2
Reforms in health policies	1	1	2	1
Schemes / Policies in Health	22	45	48	40
Vaccination	0	0	0	2
Treatment/Medicines	13	11	15	17
Total	**200**	**365**	**417**	**412**

Marginally more number of questions were asked in 2015-16 than in 2014-15. Highest questions were raised on issues related to Epidemic/sensitive disease (20%), infrastructure (14%) and Schemes/ Policies in health (13.8%).

Table 21: Health issues raised by MLAs from following sessions: Winter sessions 2014 and Budget sessions 2015

Issues	Que. related to Mumbai & Schemes/Policies	Other Health Questions	Total Health Que.
Bio Medical Waste	0	6	6
Cemeteries/Crematorium related	3	1	4
Equipment's	1	1	2
Epidemic/Sensitive Diseases	29	38	67
Malaria/Dengue	10	15	25
Tuberculosis	8	6	14
Health Education/Institute	1	1	2
Health Service Related	10	2	12
Health Related Issues	12	32	44
Human Resource	24	20	44
Dispensary/Municipal Hospital/State Hospital	3	0	3
Infrastructure	14	22	36
License	0	1	1
Mortality Rate	0	18	18
Maternity homes / Primary Health Centre(PHC)	5	2	7
Schemes / Policies in Health	18	0	18
Treatment/Medicine	10	26	36
Total	**130**	**170**	**300**

22% questions asked by MLAs on epidemic/sensitive disease of total questions while no questions were asked on issues related to Dispensary/Municipal Hospital/State Hospital and Schemes / Policies in Health.

Table 22: Questions asked on health by councillors during the year March 2012 to March 2016

Ward	Councillor Name	Political Party	Health question			
			March 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
A	Makarand Narvekar	IND	0	1	0	1
A	Sushama Salunkhe*	INC	0	0	2	10
B	Javed Juneja	INC	0	0	0	1
B	Waqarunnisa Ansari	INC	0	1	0	2
B	Dnyanraj Nikam	INC	0	0	1	0
C	Sampat Thakur	SS	0	3	0	0
C	Veena Jain	BJP	0	0	2	0
C	Yaqoob Memon	SP	0	0	2	0
C	Yugandara Salekar	SS	0	0	1	0
D	Anil Singh	SS	0	1	0	0
D	Arvind Dudhwadkar	SS	0	1	6	6
D	Noshir Mehta	INC	2	3	0	0
D	Jyotshna Mehta	BJP	0	1	0	0
D	Sarita Patil	BJP	1	2	2	0
D	Surendra Bagalkar	SS	0	0	1	1
E	Faiyaz Ahmed Khan	INC	0	0	1	7
E	Geeta Gawli*	ABS	1	6	1	0
E	Manoj Jamsutkar	INC	1	1	7	0
E	Ramakant Rahate	SS	1	3	2	0
E	Samita Naik	MNS	2	0	1	1
E	Shahana Khan	INC	1	0	0	0
E	Yamini Jadhav	SS	0	1	1	0
F/N	Alka Doke	SS	0	0	1	0
F/N	Lalita Yadav*	INC	0	3	1	5
F/N	Manojkumar Sansare	IND	1	0	0	1
F/N	Nayna Sheth	INC	1	1	4	0
F/N	Pranita Waghdhare	SS	0	1	3	0
F/N	Shradha Jadhav	SS	0	1	0	0
F/N	Trushna Vishwasrao	SS	3	0	5	7
F/S	Hemangi Chemburkar	SS	1	1	2	3
F/S	Sanjay Ambole	SS	4	0	0	0
F/S	Sunil More	INC	2	2	2	0
F/S	Nandkishor Vichare	SS	1	0	1	0
F/S	Vaibhavi Chavan	SS	1	1	3	1
G/N	Ganga Mane	INC	NA	NA	NA	3

Ward	Councillor Name	Political Party	Health question			
			March 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
G/N	Jyotsna Parmar	SP	0	0	1	0
G/N	Rajendra Suryavanshi	SS	1	1	1	0
G/N	Sandeep Deshpande	MNS	1	1	1	1
G/N	Sudhir Jadhav	MNS	3	1	3	1
G/N	Vakil Shaikh	INC	1	0	0	0
G/N	Vishnu Gaikwad*	IND	2	1	1	2
G/S	Hemangi Worlikar	SS	2	4	0	2
G/S	Kishori Pednekar	SS	0	1	2	1
G/S	Mansi Dalvi*	SS	1	1	3	1
G/S	Ratna Mahale	NCP	2	1	2	1
G/S	Santosh Dhuri*	MNS	7	3	0	6
G/S	Snehal Ambekar	SS	1	0	0	0
G/S	Sunil Ahir	NCP	5	4	1	0
G/S	Seema Shivalkar	MNS	0	0	0	2
H/E	Anil Pandurang Trimbakkar	SS	0	2	1	2
H/E	Deepak Bhutkar	SS	1	2	2	5
H/E	Gulistan Shaikh*	INC	1	2	1	7
H/E	Krishna Parkar	BJP	2	1	0	3
H/E	Priyatama Sawant	INC	1	2	5	2
H/E	Pooja Mahadeshwar	SS	3	1	1	0
H/E	Snehal Suhas Shinde	MNS	0	0	0	1
H/E	Sukhada Rahul Pawar	MNS	0	0	0	1
H/W	Karen D'mello Allen*	INC	1	0	1	2
H/W	Geeta Chavan	MNS	0	1	0	1
H/W	Asif Zakaria	INC	0	1	0	1
H/W	Sunita Wavekar	INC	0	0	1	0
H/W	Mohammed Tanveer Mohammed Ali Patel	INC	0	0	0	1
K/E	Anant Nar	SS	3	2	3	2
K/E	Bhalchandra Aambure	MNS	1	0	0	2
K/E	Jyoti Alavani	IND	0	1	0	4
K/E	Manisha Panchal*	SS	3	3	3	3
K/E	Pramod Sawant*	SS	1	3	2	0
K/E	Sandhya Yadav*	SS	1	0	1	0
K/E	Sushma Rai	INC	1	0	0	0

Ward	Councillor Name	Political Party	Health question			
			March 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
K/E	Smita Sawant	SS	0	1	1	1
K/E	Shubhada Patkar	SS	0	0	1	0
K/W	Ameet Satam	BJP	1	0	0	0
K/W	Bhavna Mangela	IND	1	1	0	1
K/W	Binita Vora	INC	1	0	0	0
K/W	Dilip Patel	BJP	0	1	0	0
K/W	Devendra Amberkar	INC	0	0	5	1
K/W	Jyotsna Dighe	INC	3	0	1	0
K/W	Jyoti Jitendra Sutar	SS	0	1	0	0
K/W	Mohsin Haji Haider	INC	0	3	2	1
K/W	Raju Pednekar	SS	2	1	0	1
K/W	Sanjay Pawar	SS	1	3	1	1
K/W	Vanita Marucha	INC	1	1	1	1
K/W	Yashodhar Phanse	SS	3	1	1	1
L	Anuradha Pednekar*	SS	13	26	46	16
L	Ashraf Ansari	SP	0	1	3	0
L	Dilip Lande	MNS	3	1	3	1
L	Dilshad Azmi*	SP	0	0	1	1
L	Ishwar Tayade	MNS	0	0	0	14
L	Komal Jamsandekar	SS	1	0	0	0
L	Manali Tulaskar	SS	0	0	3	1
L	Mohd. Ishak Shaikh	SP	0	0	1	1
L	Saeeda Khan*	NCP	31	66	57	56
L	Sanjana Mungekar	SS	1	6	7	2
L	Vijay Tandel	IND	1	0	1	5
M/E	Arun Kamble	Bharip	0	1	1	0
M/E	Dinesh Panchal	SS	0	2	0	0
M/E	Mohd. Siraj Shaikh	IND	0	0	1	0
M/E	Noorjahan Shaikh	SP	0	0	0	1
M/E	Rahul Shevale	SS	1	1	0	0
M/E	Reshma Nevrekar*	SP	4	8	9	5
M/E	Rais Shaikh	SP	1	12	6	3
M/E	Shantaram Patil	SP	0	1	0	0
M/E	Sunanda Lokare	INC	0	0	3	1
M/E	Usha Kamble	INC	0	0	5	1

Ward	Councillor Name	Political Party	Health question			
			March 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
M/E	Vitthal Kharatmol	BJP	0	1	1	2
M/W	Anil Patankar	INC	0	3	7	2
M/W	Rajshree Palande	BJP	0	7	3	1
M/W	Seema Mahulkar	INC	1	0	0	0
M/W	Suprada Phaterpekar*	SS	1	0	1	2
M/W	Vandana Sable	INC	4	3	2	5
N	Ashwini Mate	SS	0	0	2	0
N	Bharti Bawadane*	SS	2	2	1	7
N	Deepak Hande	IND	3	1	0	0
N	Falguni Dave*	BJP	0	2	3	4
N	Harun Khan	NCP	0	0	6	1
N	Pravin Cheda	INC	1	0	1	6
N	Pratiksha Ghuge	NCP	0	1	0	0
N	Ritu Tawade	BJP	0	2	2	0
P/N	Ajit Bhandari	SS	0	0	0	1
P/N	Anagha Mhatre	SS	2	0	1	0
P/N	Bhomsingh Rathod	INC	0	0	0	1
P/N	Cyril D'souza	IND	2	0	0	1
P/N	Deepak Pawar	MNS	0	16	30	0
P/N	Gyanmurti Sharma	BJP	3	4	1	1
P/N	Manisha Patil	SS	0	1	0	0
P/N	Parminder Bhamra*	INC	0	1	10	6
P/N	Prashant Kadam*	SS	0	0	1	2
P/N	Quamarjahan Siddiqi	INC	1	2	1	3
P/N	Ramnarayan Barot*	BJP	1	6	2	4
P/N	Rupali Raorane	NCP	0	3	0	0
P/N	Sunil Gujar	SS	0	0	1	0
P/N	Vishwas Ghadigaonkar	SS	NA	NA	NA	2
P/N	Vinod Shelar	BJP	2	0	1	0
P/S	Jitendra Valvi	SS	0	0	1	1
P/S	Kiran Patel	INC	1	0	0	0
P/S	Lochana Chavan	SS	0	0	1	2
P/S	Pramila Shinde*	SS	3	6	6	18
P/S	Rajan Padhye	SS	0	1	0	0
P/S	Sneha Zagade	INC	0	0	0	1

Ward	Councillor Name	Political Party	Health question			
			March 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
R/C	Asavari Anil Patil	BJP	0	2	3	4
R/C	Bina Paresh Doshi	BJP	1	2	0	0
R/C	Chetan Kadam	MNS	2	0	0	0
R/C	Manisha Chaudhari	BJP	1	3	1	3
R/C	Mohan Mithbaokar	BJP	1	1	0	2
R/C	Riddhi Khursange	NCP	0	1	1	0
R/C	Sandhya Doshi	NCP	0	0	1	1
R/C	Shivanand Shetty	INC	3	1	1	1
R/C	Shilpa Chogle	MNS	0	1	1	0
R/N	Abhishek Ghosalkar	SS	0	0	11	3
R/N	Sheetal A Mhatre (Kulkarni)	INC	0	0	0	1
R/N	Sheetal M Mhatre*	SS	3	8	6	26
R/N	Shubha Raul*	SS	2	20	8	5
R/N	Prakash Darekar	MNS	0	1	1	1
R/S	Ajanta Yadav*	INC	4	14	11	14
R/S	Geeta Yadav	INC	1	1	0	0
R/S	Mukeshkumar Mistry	BJP	0	0	1	0
R/S	Prajakta Vishwasrao	SS	0	0	1	2
R/S	Ramashish Gupta	INC	1	7	8	13
R/S	Shailaja Girkar*	BJP	2	3	2	1
R/S	Sunita Yadav	BJP	4	5	4	5
R/S	Shrikant Kavathankar	SS	1	2	2	2
R/S	Yogesh Bhoir*	INC	1	2	1	5
S	Anisha Majgaonkar	MNS	3	7	1	3
S	Ashok Patil	SS	0	0	1	1
S	Dhananjay Pisal	NCP	2	1	1	2
S	Mangesh Pawar	IND	0	2	0	1
S	Ramesh Korgaonkar	SS	1	1	1	2
S	Rupesh Waingankar*	MNS	0	0	2	9

Ward	Councillor Name	Political Party	Health question			
			March 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
S	Suresh Koparkar	INC	1	0	0	0
S	Tavaji Gorule*	SS	1	0	0	0
S	Vaishnavi Sarfare	MNS	0	1	2	2
S	Vishwas Shinde	SS	0	0	0	1
S	Chandan Sharma	NCP	0	0	0	1
S	Priyanka Shrungare	MNS	0	0	0	2
T	Manoj Kotak	BJP	0	0	3	0
T	Nandakumar Vaity*	NCP	0	0	3	1
T	Prakash Gangadhare	BJP	1	1	2	0
T	Samita Kamble	BJP	0	1	2	2
T	Sujata Pathak*	MNS	0	1	1	4
City	**Councillors have not asked a single question on health**		**138**	**121**	**108**	**115**
City	**227 Councillors**		**200**	**365**	**416**	**412**

Note - (*) Councillors are members in Public Health Committee for 2015-16. Kindly refer to Annexure 6 for a Public Health Committee Elected (Councillors) Members for 2015-16.

2015-16:

- Councillor asking highest number of questions on health: Saeeda Khan
- 115 councillors have not asked a single question on Health, of which four were health committee members (Geeta Gawli, Pramod Sawant, Sandhya Yadav and Tavaji Gorule) during 2015-16.

Table 23: Questions asked on health by MLAs from: Winter Sessions 2014 & Budget Session 2015

Constituency No.	Name of MLA	Political Party	Area	Que. related to Mumbai & Schemes/Policies	Other Health Que.	Total Health Que
153	Manisha Ashok Chaudhari	BJP	Dahisar	6	7	13
154	Prakash Surve	SS	Magathane	2	5	7
155	Sardar Tara Singh	BJP	Mulund	3	1	4
156	Sunil Rajaram Raut	SS	Vikhroli	0	4	4
157	Ashok Patil	SS	Bhandup West	3	2	5
159	Sunil Prabhu	SS	Dindoshi	3	8	11
160	Atul Bhatkhalkar	BJP	Kandivali East	2	3	5
161	Yogesh Sagar	BJP	Charkop	15	7	22
162	Aslam Shaikh	INC	Malad West	11	19	30
164	Bharati Hemant Lavekar	BJP	Versova	0	1	1
165	Ameet Satam	BJP	Andheri West	1	0	1
166	Ramesh Latke	SS	Andheri East	0	0	0
167	Parag Alavani	BJP	Vile Parle	1	1	2
168	Md. Arif (Naseem) Khan	INC	Chandivali	3	5	8
169	Ram Kadam	BJP	Ghatkopar West	0	0	0
171	Abu Azmi	SP	Mankhurd shivaji Nagar	9	4	13
172	Tukaram Kate	SS	Anushakti Nagar	3	1	4
173	Prakash Phaterpekar	SS	Chembur	3	1	4
174	Mangesh Kudalkar	SS	Kurla	1	5	6
175	Sanjay Potnis	SS	Kalina	4	1	5
176	Trupti Prakash Sawant	SS	Vandre (East)	0	0	0
177	Ashish Shelar	BJP	Vandre West	8	3	11
178	Varsha Gaikwad	INC	Dharavi	7	22	29
179	Captain R. Tamil Selvan	BJP	Sion Koliwada	0	0	0
180	Kalidas Nilkanth Kolambkar	INC	Wadala	8	5	13
181	Sada Sarvankar	SS	Mahim	2	3	5
182	Sunil Govind Shinde	SS	Worli	1	3	4
183	Ajay Choudhari	SS	Shivadi	4	10	14
184	Waris Pathan	AIMEIM	Byculla	0	3	3
185	Mangal Prabhat Lodha	BJP	Malabar Hill	4	3	7
186	Amin Patel	INC	Mumbadevi	24	42	66
187	Raj K. Purohit	BJP	Colaba	2	1	3
	Total			**130**	**170**	**300**

Amin Patel has asked 66 questions in Winter 20141 and Budget 2015 session.

Part E – Ward-wise Occurrence of Diseases

Table 24: Estimated proportion of usage of various Dispensaries/Hospitals from April'2015 to March'2016

Ward	Provisional Population 2011	No. of Government Hospitals	Available Government Dispensaries	Density of government dispensaries to population
A	185,014	4	6	30,836
B	127,290	0	5	25,458
C	166,161	0	5	33,232
D	346,866	0	8	43,358
E	393,286	6	11	35,753
F/N	529,034	3	7	75,576
F/S	360,972	3	9	40,108
G/N	599,039	0	10	59,904
G/S	377,749	1	14	26,982
H/E	557,239	1	8	69,655
H/W	307,581	1	5	61,516
K/E	823,885	1	12	68,657
K/W	748,688	1	7	106,955
L	902,225	1	13	69,402
M/E	807,720	1	9	89,747
M/W	411,893	1	4	102,973
N	622,853	3	8	77,857
P/N	941,366	2	10	94,137
P/S	463,507	2	2	231,754
R/C	562,162	1	6	93,694
R/N	431,368	1	4	107,842
R/S	691,229	2	6	115,205
S	743,783	0	7	106,255
T	341,463	3	3	113,821
Total	**12,442,373**	**38**	**179**	**69,510**

Table 25: Ward wise Malaria Data

Ward	Population 2011	2011-12	2012-13	2013-14	2014-15	2015-16
A	185,014	1141	602	303	183	156
B	127,290	381	99	33	31	25
C	166,161	330	162	113	92	97
D	346,866	277	112	100	90	94
E	393,286	1255	213	160	89	44
F/N	529,034	1154	362	238	176	168
F/S	360,972	1691	846	568	960	812
G/N	599,039	985	312	310	272	141
G/S	377,749	1400	201	100	64	76
H/E	557,239	383	223	179	186	114
H/W	307,581	595	170	205	177	121
K/E	823,885	1610	831	381	368	315
K/W	748,688	1080	308	205	132	133
L	902,225	751	512	386	285	232
M/E	807,720	1761	178	112	149	87
M/W	411,893	346	131	78	53	58
N	622,853	620	353	228	186	130
P/N	941,366	396	104	83	79	127
P/S	463,507	242	56	43	54	42
R/C	562,162	289	106	84	103	97
R/N	431,368	114	88	73	78	90
R/S	691,229	214	230	130	99	88
S	743,783	328	162	137	117	128
T	341,463	178	154	79	37	42
Municipal Hospital		21095	12408	11918	9961	9150
State Hospital		1212	1280	1052	854	1233
Other Government Hospital			1736	1100	808	831
Total	**12,442,373**	**39828**	**21939**	**18398**	**15683**	**14631**

The total numbers of malaria cases from 2011 to 2016 have reduced by three times. F/S (812), K/E (315) and L (232) have the highest number of malaria cases in total. Malaria cases in K/E ward have reduced by five times since 2011 to 2016.

Table 26: Ward wise Dengue Data

Dengue						
As per RTI data (in govt. dispensaries/hospitals)						
Ward	**Population 2011**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
A	185,014	6	0	0	47	137
B	127,290	0	0	27	51	43
C	166,161	0	0	3	17	14
D	346,866	0	0	0	35	60
E	393,286	0	0	1	25	42
F/N	529,034	0	3	2	54	29
F/S	360,972	0	0	0	34	22
G/N	599,039	0	0	10	64	35
G/S	377,749	0	0	0	0	1
H/E	557,239	0	1	0	22	67
H/W	307,581	0	0	3	11	13
K/E	823,885	0	16	29	67	198
K/W	748,688	1	0	3	35	12
L	902,225	0	0	12	11	43
M/E	807,720	0	0	0	24	2
M/W	411,893	0	1	14	4	2
N	622,853	0	1	2	38	155
P/N	941,366	0	0	0	12	56
P/S	463,507	3	1	11	2	15
R/C	562,162	0	0	0	19	31
R/N	431,368	0	0	0	26	132
R/S	691,229	0	2	24	81	30
S	743,783	0	1	0	28	308
T	341,463	0	0	6	1	4
Municipal Hospital		1749	4441	5952	7710	11484
State Hospital		120	289	732	1523	1776
Other Government Hospital			111	430	358	533
Total	**12,442,373**	**1879**	**4867**	**7261**	**10299**	**15244**

Reporting of Dengue cases have increased three times in K/E ward from 2014-15 to 2015-16. S ward has highest number of dengue cases with eleven times rise.

Table 27: Ward wise Tuberculosis Data

Ward	Population 2011	2011-12	2012-13	2013-14	2014-15	2015-16
A	185,014	348	342	452	369	274
B	127,290	130	117	110	121	95
C	166,161	106	120	115	141	134
D	346,866	259	250	237	233	234
E	393,286	704	748	572	561	408
F/N	529,034	1581	382	255	307	375
F/S	360,972	116	185	14	438	239
G/N	599,039	561	457	510	396	444
G/S	377,749	235	178	174	198	402
H/E	557,239	594	539	485	549	532
H/W	307,581	365	757	245	237	236
K/E	823,885	1703	1069	616	663	491
K/W	748,688	360	398	292	264	242
L	902,225	1037	994	1037	1182	1422
M/E	807,720	152	135	228	102	82
M/W	411,893	166	111	282	136	165
N	622,853	133	140	143	203	158
P/N	941,366	135	120	200	238	219
P/S	463,507	31	58	97	48	43
R/C	562,162	167	183	206	180	188
R/N	431,368	281	98	103	118	158
R/S	691,229	472	613	611	532	411
S	743,783	315	440	675	485	448
T	341,463	236	246	216	386	200
Municipal Hospital		19829	26198	31782	32439	31463
State Hospital		659	946	1216	1829	1645
Other Government Hospital			593	606	482	464
Total	**12,442,373**	**30675**	**36417**	**41479**	**42837**	**41172**

L ward shows highest number of Tuberculosis cases with 1422 in 2015-16 while it has also been a consistent ward in reporting of Tuberculosis cases.

Table 28: Ward wise Diabetes Data

Ward	Population 2011	2011-12	2012-13	2013-14	2014-15	2015-16
A	185,014	191	327	493	449	433
B	127,290	818	756	447	439	759
C	166,161	47	47	149	115	151
D	346,866	80	413	293	277	2034
E	393,286	669	327	600	411	704
F/N	529,034	136	618	505	1113	821
F/S	360,972	81	216	81	68	169
G/N	599,039	18	1068	1247	1963	2687
G/S	377,749	625	168	197	158	333
H/E	557,239	63	220	409	273	668
H/W	307,581	125	168	248	101	215
K/E	823,885	747	1770	1972	1018	1008
K/W	748,688	471	1146	1760	1105	569
L	902,225	369	1402	1222	878	1592
M/E	807,720	266	592	448	606	1699
M/W	411,893	217	303	267	178	222
N	622,853	144	579	715	558	573
P/N	941,366	77	155	176	132	582
P/S	463,507	88	311	272	107	143
R/C	562,162	250	367	324	201	560
R/N	431,368	140	78	135	129	1158
R/S	691,229	196	2420	5390	7540	831
S	743,783	184	586	858	329	1710
T	341,463	187	177	291	239	99
Municipal Hospital		14485	7424	18901	27319	4898
State Hospital		590	728	742	1135	832
Other Government Hospital			2579	2699	1869	5246
Total	**12,442,373**	**21264**	**24945**	**40841**	**48710**	**30696**

G/N and D ward show highest number of diabetes cases with 2687 and 2034 respectively. Lowest cases of Diabetes were reported from T ward.

Table 29: Ward wise Diarrhoea Data

Ward	Population 2011	2011-12	2012-13	2013-14	2014-15	2015-16
A	185,014	2051	1449	2002	2092	1620
B	127,290	1557	1077	1545	1783	1766
C	166,161	2203	1946	2431	3085	2972
D	346,866	5114	4649	4865	5302	6510
E	393,286	4605	2208	2474	2758	3414
F/N	529,034	2994	1547	1507	1695	1837
F/S	360,972	4753	4259	4120	3634	4085
G/N	599,039	4464	3073	2881	2923	3553
G/S	377,749	4864	4036	4691	4792	5387
H/E	557,239	3949	4224	6006	6884	7368
H/W	307,581	2567	1878	2028	2104	2204
K/E	823,885	7066	6641	7169	10428	7970
K/W	748,688	3354	3011	3792	2774	2325
L	902,225	10592	11967	9659	10143	12311
M/E	807,720	4433	2565	3248	5894	11805
M/W	411,893	3384	2656	2262	1856	1918
N	622,853	6321	5972	7079	8140	10239
P/N	941,366	3373	2790	3582	2911	3384
P/S	463,507	860	949	1073	949	692
R/C	562,162	1850	2633	3454	3851	3599
R/N	431,368	698	580	785	823	2329
R/S	691,229	1569	1925	1375	1606	1625
S	743,783	3686	3822	3507	4108	5070
T	341,463	1845	3252	2534	2067	3052
Municipal Hospital		10948	19358	31718	21857	9677
State Hospital		739	785	1561	1129	1741
Other Government Hospital			575	832	1169	889
Total	**12,442,373**	**99839**	**99827**	**118180**	**116757**	**119342**

Wards L (12311), M/E (11805) and N (10239) are the top three wards, having the maximum total number of diarrhoea cases. Wards C (2972), D (6510) and N (10239/622853) are the top three worst wards having the maximum number of diarrhoea cases in proportion to their ward population in year 2015.

Table 30: Ward wise Hypertension Data

Ward	Population 2011	2011-12	2012-13	2013-14	2014-15	2015-16
A	185,014	1076	1225	1492	1409	1170
B	127,290	913	679	493	245	335
C	166,161	381	57	197	479	526
D	346,866	225	359	306	394	2309
E	393,286	1270	1079	896	447	1466
F/N	529,034	407	1121	1247	1276	1664
F/S	360,972	1305	768	215	161	299
G/N	599,039	548	937	1335	1507	2006
G/S	377,749	1970	469	390	343	645
H/E	557,239	1004	386	562	474	1381
H/W	307,581	456	285	226	88	181
K/E	823,885	1592	2102	1990	1344	1945
K/W	748,688	1122	804	1398	1417	1122
L	902,225	644	1365	1464	2185	2016
M/E	807,720	563	1010	691	688	1559
M/W	411,893	611	684	503	244	264
N	622,853	132	596	709	683	646
P/N	941,366	254	199	258	91	327
P/S	463,507	100	274	235	121	130
R/C	562,162	992	1122	735	586	896
R/N	431,368	297	61	203	142	601
R/S	691,229	287	1522	2582	3181	966
S	743,783	316	435	540	509	1035
T	341,463	370	207	206	228	290
Municipal Hospital		8031	6844	12182	17390	5048
State Hospital		652	921	821	1039	865
Other Government Hospital			3213	3761	1999	6269
Total	**12,442,373**	**25518**	**28724**	**35637**	**38670**	**35961**

Wards L (2016), D(2309) and K/E (1945) are the top three worst wards, having the maximum total number of Hypertension cases. Wards D(2309), E(1466), P/N(327) are the top three worst wards having the maximum number of hypertension cases in proportion to their ward population in year 2015.

Annexure 1 – Health Budget 2014-15

Note: Figures are thousands.

Table 31: Health budget of MCGM 2014-15

Sr. No.	Head	Budgeted (a)	Actuals spent (b)	Utilisation [(b/a) *100]
1	**Total Revenue expenditure**	**2,17,70,634**	**1,77,06,088**	**81%**
1a	Establishment expenses	1,60,89,484	1,37,75,895	86%
1b	Administrative expense	10,90,490	7,28,693	67%
1c	Operation and maintenance	38,51,532	26,44,556	69%
1d	Interest and Finance charges	14,235	13,718	96%
1e	Programme expenses	1,53,212	20,982	14%
1f	Revenue grants, contribution and subsidies	5,65,845	5,52,360	98%
1g	Other	5,836	-30,116	-516%
2	**Total Capital Expenditure**	**7,27,38.31**	**17,422.28**	**24%**
3	**Grand Total (1+2)**	**2,18,43,372.31**	**1,77,23,510.28**	**81%**

Annexure 2 –List of Government dispensaries/hospitals

Sr. No.	Government Hospitals	Sr. No.	Government Hospitals
1	Central Railway Hospital	5	E.S.I.S. Hospital, Worli
2	Port Trust Hospital, Wadala	6	E.S.I.S. Hospital, Mulund
3	Nagpada Police Hospital	7	E.S.I.S. Hospital, Kandivali
4	Naigaon Police Hospital	8	ESIC Model Hospital, Marol
Sr. No.	**Police Dispensaries**	**Sr. No.**	**Police Dispensaries**
1	Police Headquarters Awar Dispensary	7	Santacruz Police Dispensary
2	Police Dispensary, Tardeo	8	Andheri Police Dispensary
3	Dr. D.B. Marg Police Dispensary	9	Marol Police Dispensary
4	Dadar Police Dispensary	10	Kandivali Police Dispensary
5	LA-II HQ Police Dispensary, Worli	11	Police Dispensary, Neharu Nagar
6	Mahim Police Dispensary	12	Pant Nagar Dispensary

Sr. No.	Ward	Municipal Dispensaries	Sr. No.	Ward	Municipal Dispensaries
1	A	Colaba Municipal Dispensary	85	K/E	Koldongari Dispensary
2	A	Head Office H.O. Dispensary	86	K/E	Marol Dispensary
3	A	Maruti Lane Dispensary	87	K/E	Natwar Nagar Dispensary
4	A	Saboo Siddhique Road Dispensary	88	K/E	Paranjape Dispensary
5	A	Shahid Bhagat Singh Road Dispensary	89	K/E	Sambhaji Nagar Dispensary
6	B	Jail Road municipal Dispensary	90	K/E	Sambhji Nagar Ayurvedic Dispensary
7	B	Jail Road Unani Dispensary	91	K/E	Sunder Nagar Dispensary
8	B	Kolsa Mohalla Unani Dispensary	92	K/W	Banana Leaf Dispensary
9	B	S.V.P. Road Municipal Dispensary	93	K/W	Juhu Dispensary
10	B	Walpakhadi Muncipal Dispensary	94	K/W	Millat Nagar Dispensary
11	C	Chandanwadi Dispensary	95	K/W	N.J. Wadiya Dispensary
12	C	Duncan Road Dispensary	96	K/W	Oshivara Dispensary
13	C	Ghogar Mohalla Dispensary	97	K/W	Vileparle Market Dispensary
14	C	Panjarapol Mun. Dispensary	98	K/W	Versova Dispensary
15	C	Thakurdwar Dispensary	99	L	Asalpha Village Dispensary
16	D	Banganga Municipal Dispensary	100	L	Bail Bazar Mun. Dispensary
17	D	Nana Chowk Dispensary	101	L	Budda Colony Dispensary
18	D	R.S. Nimkar Marg Dispensary	102	L	Chandivali M.N.P. Dispensary
19	D	Raja Rammohan Roy Marg Dispensary	103	L	Christain Municipal Dispensary
20	D	Tardeo Flat Municipal Dispensary	104	L	Chunnabhatti Dispensary
21	D	Tulsiwadi Dispensary Bane Compound	105	L	Kajupada Muncipal Dispensary
22	E	D. P. Wadi Municipal Dispensary	106	L	Mohill Village Dispensary

Sr. No.	Ward	Municipal Dispensaries	Sr. No.	Ward	Municipal Dispensaries
23	E	ES Pathanwala Municipal Dispensary	107	L	Nehru Nagar Dispensary
24	E	Gaurabhai Dispensary	108	L	Qureshi Nagar Dispensary
25	E	Huzaria Street Dispensary	109	L	Safad Pool Dispensary
26	E	Motishah Dispensary	110	M/E	Anik Nagar Dispensary
27	E	N.M. Joshi Marg Dispensary	111	M/E	Ayodhya Nagar Dispensary
28	E	R.J. Compound Dispensary	112	M/E	Deonar Colony Dispensary
29	E	Siddarth Nagar Dispensary	113	M/E	Gavanpada Dispensary
30	E	Souter Street Dispensary	114	M/E	Kamala Raman Nagar Municipal Dispensary
31	E	Tadwadi Municipal Dispensary	115	M/E	Lallubhai Compound Municipal Dispensary
32	E	Tank Square Garden Dispensary	116	M/E	Trombay Municipal Dispensary
33	F/N	Antop Hill Municipal Dispensary	117	M/E	Maharashtra Nagar Municipal Dispensary
34	F/N	Korba Mithagar Dispensary	118	M/E	R.B.K. International Municipal Dispensary
35	F/N	L. B. Shastri Dispensary	119	M/W	Chembur Colony Dispensary
36	F/N	Raoli Camp Dispensary	120	M/W	Chembur Naka Municipal Dispensary
37	F/N	Transit Camp Dispensary	121	M/W	Labour Camp Dispensary
38	F/N	Wadala Dispensary	122	M/W	Lal Dongar Dispensary
39	F/S	A.D. Marg Dispensary	123	M/W	Mahul Dispensary
40	F/S	Abhyday Nagar Dispensary	124	N	Kirol Dispensary
41	F/S	Ambewadi Dispensary	125	N	Pant Nagar Dispensary
42	F/S	Gautam Nagar Dispensary	126	N	Parksite Dispensary
43	F/S	Kidwai Nagar Dispensary	127	N	Parshiwadi Dispensary
44	F/S	Naigaon Dispensary	128	N	Ramabai Colony Dispensary
45	F/S	Parel Dispensary	129	N	Sainath Nagar Dispensary
46	F/S	Sewree Cross Road Dispensary	130	N	Sarvodaya Pantnagar Dispensary
47	F/S	Triveni Sadan Dispensary	131	P/N	Choksey Municipal Dispensary
48	G/N	Dharavi Main Road Dispensary	132	P/N	Goshala Municipal Dispensary
49	G/N	Dharavi Transit Camp Dispensary	133	P/N	Kurar Village Municipal Dispensary
50	G/N	Gulbai Dispensary	134	P/N	Malvani Municipal Dispensary
51	G/N	Kumbharwada Dispensary	135	P/N	Manori Dispensary
52	G/N	Matunga Labour camp Dispensary	136	P/N	Nimani Municipal Dispensary
53	G/N	Pilla Bunglow Dispensary	137	P/N	Pathanwadi Dispensary
54	G/N	Shahu Nagar Dispensary	138	P/N	Riddhi Garden Municipal Dispensary
55	G/N	Welfare Camp Shri Cinema Dispensary	139	P/N	School Road Municipal Dispensary
56	G/N	Welkarwadi Dispensary	140	P/N	Valnai Municipal Dispensary
57	G/S	B.D.D. Chawl Dispensary	141	P/S	Chincholi Square Garden Dispensary

Sr. No.	Ward	Municipal Dispensaries	Sr. No.	Ward	Municipal Dispensaries
58	G/S	Beggar Home Dispensary	142	P/S	Topiwala Lane Dispensary
59	G/S	Curry Road Dispensary	143	R/C	Charkop Sector 5 Dispensary
60	G/S	Fergusson Road Dispensary	144	R/C	Eksar Road Dispensary
61	G/S	Jijamata Nagar K. Moses Dispensary	145	R/C	Gorai MHADA Dispensary
62	G/S	Maharashtra High school Compound Dispensary	146	R/C	Gorai Village Dispensary
63	G/S	Prabhadevi Dispensary	147	R/C	K.K. Municipal Dispensary
64	G/S	Prbhadevi Ayurvedic Municipal Dispensary	148	R/C	M.H.B. Dispensary
65	G/S	Sasmira Dispensary	149	R/N	Anand Nagar Municipal Dispensary
66	G/S	Senapati Bapat Marg, Hilly Cross, 633 Dispensary	150	R/N	L.T. Road Dispensary
67	G/S	Welfare Center Dispensary	151	R/N	Shastri Nagar Municipal Dispensary
68	G/S	Worli Koliwada Dispensary	152	R/N	Y.R. Tawade Nagar Dispensary
69	G/S	Zandu Ayurvedic Mun. Dispensary	153	R/S	Akurli Road Municipal Dispensary
70	H/E	Bharat Nagar Dispensary	154	R/S	Babrekar Nagar Municipal Dispensary
71	H/E	Jawahar Nagar Dispensary	155	R/S	Charcop Sector- I Muncipal Dispensary
72	H/E	Kalina Dispensary	156	R/S	Dahanuwadi Municipal Dispensary
73	H/E	Kherwadi Dispensary	157	R/S	Hanuman Nagar Dispensary
74	H/E	Kolekalyan Dispensary	158	S	Kanjur Village Dispensary
75	H/E	Prabhat Colony Municipal Dispensary	159	S	M.V. R Shinde Dispensary
76	H/E	S.V. Nagar Dispensary	160	S	ShivajiTalav Mumbai Dispensary
77	H/W	G.N. Station Road Dispensary	161	S	Tagor Nagar Dispensary
78	H/W	Guru Nanak Dr. Ambedkar Road Dispensary	162	S	Tebhipada Shivaji Nagar Dispensary
79	H/W	Khar-Danda Dispensary	163	S	Tirandaz Village Dispensary
80	H/W	Old Khar Dispensary	164	S	Tulshetpada Dispensary
81	H/W	Shastri Nagar Linking Road Dispensary	165	T	Dindayal Upadhyay DDU Dispensary
82	K/E	Caves Road Dispensary	166	T	Mulund Colony Dispensary
83	K/E	Gundawali Dispensary	167	T	P.J.K. Dispensary
84	K/E	Hari Nagar Dispensary			

Annexure 3 – Registration of Birth and Death Act 1969

- Provides for registration of births and deaths and for matters connected.
- 'Source of demographic data for socio-economic planning, development of health systems and population control' *(as per 2012 Training Manual for Civil Registration Functionaries in India, Office of Register General of India, Ministry of Home Affairs, Government of India).*

Medical Certification of Causes of Death (MCCD)

In Maharashtra, on every 10th of the month monthly reports are received at state office of Deputy Chief Registrar of Birth and Death at Pune. The strategy they follow:

- It is the duty of Registrar (in the case of Mumbai it is Executive Health Officer of MCGM), to ask about form No.4 & 4A according to occurrence of death, while entering the death event.
- Deputy Director is responsible for compilation, coding & analysis of data received through MCCD according to ICD (International Cause of Death) – 10 (http://www.who.int/whosis/icd10/).

Source: http://www.maha-arogya.gov.in/programs/other/sbhivs/strategy.htm

FORM NO. 4

(See Rule 7)

MEDICAL CERTIFICATE OF CAUSE OF DEATH

(Hospital In-patients. Not to be used for still births)

To be sent to Registrar along with Form No. 2 (Death Report)

Name of the Hospital .....

I hereby certify that the person whose particulars are given below died in the hospital in Ward No.....

on ..... at .....AM/PM

NAME OF DECEASED					
Sex	Age at Death				For use of Statistical Office
	If 1 year or more, age in years	If less than 1 year, age in month	If less than one month, age in days	If less than one day, age in hours	
1. Male 2. Female					

CAUSE OF DEATH		Interval between onset and death approx.
I Immediate cause State the disease, injury or complication which caused death, not the mode of dying such as heart failure, asthenia, etc.	(a) ..... due to (or as a consequences of)	
Antecedent cause Morbid conditions, if any, giving rise to the above cause, stating underlying conditions last	(b) ..... due to (or as a consequences of)	
II Other significant conditions contributing to the death but not related to the disease or condition causing it	(c)	

Manner of Death How did the injury occur?

1. Natural 2. Accident 3. Suicide 4. Homicide
5. Pending investigation

If deceased was a female, was pregnancy the death associated with? 1. Yes 2. No

If yes, was there a delivery? 1. Yes 2. No

Name and signature of the Medical Attendant certifying the cause of death

Date of verification.....

SEE REVERSE FOR INSTRUCTIONS

(To be detached and handed over to the relative of the deceased)

Certified that Shri/Smt/Kum..... S/W/D of Shri .....

R/O ..... was admitted to this hospital on .....

and expired on .....

Doctor .....

(Medical Supdt.
Name of Hospital)

MEDICAL CERTIFICATE OF CAUSE OF DEATH

Directions for completing the form

Name of deceased: To be given in full. Do not use initials. If deceased is an infant, not yet named at time of death, write 'Son of (S/o)' or 'Daughter of (D/o)', followed by names of mother and father.

Age: If the deceased was over 1 year of age, give age in completed years. If the deceased was below 1 year of age, give age in months and if below 1 month give age in completed number of days, and if below one day, in hours.

Cause of Death: This part of the form should always be completed by the attending physician personally.

The certificate of cause of death is divided into two parts, I and II. Part I is again divided into three parts, lines (a) (b) (c). If a single morbid condition completely explains the deaths, then this will be written on line (a) of Part I, and nothing more need be written in the rest of Part I or in Part II, for example, smallpox, lobar pneumonia, cardiac beriberi, are sufficient cause of death and usually nothing more is needed.

Often, however, a number of morbid conditions will have been present at death, and the doctor must then complete the certificate in the proper manner so that the correct underlying cause will be tabulated. First, enter in Part I(a) the immediate cause of death. This does not mean the mode of dying, e.g., heart failure, respiratory failure, etc. These terms should not be appear on the certificate at all since they are modes of dying and not causes of death. Next consider whether the immediate cause is a complication or delayed result of some other cause. If so, enter the antecedent cause in Part I, line (b). Sometimes there will be three stages in the course of events leading to death. If so, line (c) will be completed. The underlying cause to be tabulated is always written in last in Part I.

Morbid conditions or injuries may be present which were not directly related to the train of events causing death but which contributed in some way to the fatal outcome. Sometimes the doctor finds it difficult to decide, especially for infant deaths, which of several independent conditions was the primary cause of death; but only one cause can be tabulated, so the doctor must decide. If the other diseases are not effects of the underlying cause, they are entered in Part II.

Do not write two or more conditions on a single line. Please write the names of the diseases (in full) in the certificates as legibly as possible to avoid the risk of their being misread.

Onset: Complete the column for interval between onset and death whenever possible, even if very approximately, e.g., "from birth" "several years".

Accidental or violent deaths: Both the external cause and the nature of the injury are needed and should be stated. The doctor or hospital should always be able to describe the injury, stating the part of the body injured, and should give the external cause in full when this is shown. Example : (a) Hypostatic pneumonia; (b) Fracture of neck of femur; (c) Fall from ladder at home.

Maternal deaths: Be sure to answer the question on pregnancy and delivery. This information is needed for all women of child-bearing age, even though the pregnancy may have had nothing to do with the death.

Old age or senility: Old age (or senility) should not be given as a cause of death if a more specific cause is known. If old age was a contributory factor, it should be entered in Part II. Example : (a) Chronic bronchitis, II old age.

Completeness of information: A complete case history is not wanted, but, if the information is available, enough details should be given to enable the underlying cause to be properly classified.

Example: Anaemia – Give type of anaemia, if known. Neoplasm – Indicate whether benign or malignant, and site, with site of primary neoplasm, whenever possible. Heart disease – Describe the condition specifically; if congestive heart failure, chronic on pulmonale, etc., are mentioned, give the antecedent conditions. Tetanus – Describe the antecedent injury, if known. Operation – State the condition for which the operation was performed. Dysentery – Specify whether bacillary, amoebic, etc., if known. Complications of pregnancy or delivery – Describe the complication specifically. Tuberculosis – Give organs affected.

Symptomatic statement: Convulsions, diarrhea, fever, ascites, jaundice, debility, etc., are symptoms which may be due to any one of a number of different conditions. Sometimes nothing more is known, but whenever possible, give the disease which caused the symptom.

Manner of Death: Deaths not due to external cause should be identified as 'Natural'. If the cause of death is known, but it is not known whether it was the result of an accident, suicide or homicide and is subject to further investigation, the cause of death should invariably be filled in and the manner of death should be shown as 'Pending investigation'.

Annexure 4 - RTI response to Verbal Autopsy

BRIHANMUMBAI MAHANAGARPALIKA

Asst. Health Officer
(TB & H Ward)
Bawlawadi Municipal Bldg.
1st Floor, Dr. B. Ambedkar Road,
Opp. Voltas House, Chinchpokli,
Mumbai – 400 012.
Tel No. : 022 - 2372 6229
No. HO/584/ TB
Date: 21-06-2016

In Person

To,
Mr. Eknath Pawar
Praja Foundation ,
Victoriya Building,
1st Floor, Agiary Lane, Off. Mint Road,
Fort, Mumbai -400 001.

Sub: Details of Survey conducted by Verbal Autopsy by MCGM

Ref. : Your Application dt. 02/06/2015 Under RTI Act. 2005.

With reference to your application under RTI Act 2005 dt.03/06/2016 which is received to this office on 16/05/2015. The information is as under.

Period to which the information relates		Till date
Sr. No.	**Information**	**Answer**
1	Please Provide us the details on the Survey conducted by Verbal Autopsy method on the TB deaths by MCGM Health Department please give a copy of the Same if the report has been generated, and if the report is not be generated, please give the status of the same.	**VERBAL AUTOPSY REPORT OF TB DEATHS IN MUMBAI** Verbal autopsy is a research method that helps determine probable causes of death in cases where there was no medical record or formal medical attention given. It is usually undertaken in areas where births and deaths registration is not full proof. Verbal autopsy cannot give confirmatory evidence of cause of death. It is well known that its validity is confounded by recall bias. However, in 2014 it was suggested in one of the meetings to conduct a verbal autopsy in view of more TB deaths reported in Mumbai. Due to lack of proper scientific basis of the method it was debated whether the verbal autopsy would help in confirming the cause of death due to TB. But in 2015, the exercise was undertaken.

		Following are the findings:
		• Total deaths registered in SAP in 2014 due to TB were 7090.
		• 18.0% of registered TB deaths were from out of Mumbai.
		• A sample size of 434 deaths was drawn from the list of TB deaths registered in Mumbai.
		• A verbal autopsy was conducted in 370 cases (since 64 cases could not be traced due to migration/unavailability of relatives at the deceased address).
		• Of these 370 deaths, following observation is drawn:
		  ○ Death due to TB was reported in 68.3% cases i.e. 253 this is based on recall and interview with relatives and death certificate wherever available but not all supported by confirmatory evidence.
		  ○ In 18.3% deaths (68), cause of death was non-TB.
		  ○ In 13.2% deaths (49), data was not available and relatives could not give any information.

This disposes off you RTI application. If you are not satisfied with the answer you can appeal to first applicant authority whose Designation and address is as under.

Dy. Executive Health Officer
Bawlawadi Municipal Bldg.
1st Floor, Dr. B. Ambedkar Road,
Opp. Voltas House, Chinchpokli,
Mumbai – 400 012.

Asst. Health Officer
(T.B. & H Ward)

Annexure 5- Hospital-wise number of IPD and OPD patients in the year 2015-16

Hospitals	Malaria			Tuberculosis			Diarrhoea			Hypertension		
	IPD	OPD	Total	IPD	OPD	Total	IPD	OPD	Total	IPD	OPD	Total
Nair	744	1395	2139	700	712	1412	43	374	417	0	0	0
Cama and Albless	5	1	6	1	0	1	0	0	0	0	0	0
Dr. Babasaheb Ambedkar	257	272	529	148	2234	2382	24	26	50	264	2034	2298
G.T	697	3616	4313	460	16454	16914	201	0	201	280	0	280
K.B.H.K. Bhabha, Kurla	48	182	230	20	56	76	176	0	176	6	11	17
Sir J.J.	328	3283	3611	895	0	895	356	7671	8027	5	0	5
K. B. Bhabha, Bandra	505	172	677	54	604	658	1131	1802	2933	536	6117	6653
King Edward Memorial	304	402	706	0	0	0	95	0	95	0	391	391
Kasturba X (Cross) Road	141	141	282	7	1659	1666	56	194	250	70	4317	4387
M.W. Desai	267	392	659	17	48	65	23	29	52	37	123	160
Maa (Diwalabai Mohanlal Mehta)	83	405	488	0	534	534	291	445	736	1	20	21
Mahatma Jyotiba Phule	103	103	206	0	152	152	188	213	401	162	1594	1756
General Hospital Malvani	24	4235	4259	1	1709	1710	715	251	966	1	31	32
Dr. R.N. Cooper	253	2183	2436	441	3892	4333	757	1934	2691	625	10503	11128
Rajawadi	645	311	956	190	2345	2535	1100	268	1368	763	161	924
S.K. Patil	46	273	319	0	338	338	0	0	0	12	37	49
S.V.D. Savarkar	73	182	255	0	28	28	433	1393	1826	18	55	73
Sant muktabai	242	196	438	8	743	751	766	1888	2654	27	5262	5289
Centenary Hospital, Govandi	475	539	1014	113	863	976	1225	2181	3406	173	295	468
Shri Harilal Bhagwati	522	666	1188	430	6510	6940	62	65	127	619	4424	5043
Siddarth	559	432	991	27	24	51	157	0	157	159	1675	1834
Smt. Mansadevi T. Agarwal	211	390	601	78	258	336	121	172	293	371	517	888
St. George	179	46	225	214	0	214	469	0	469	579	0	579
Municipal Group of T.B.	0	0	0	28848	35706	64554	0	0	0	0	0	0
Troma Care	280	167	447	0	0	0	0	0	0	38	3132	3170
V. N. Desai	529	113	642	114	47	161	576	1289	1865	253	4369	4622
Grand Total	**7520**	**20097**	**27617**	**32766**	**74916**	**107682**	**8965**	**20195**	**29160**	**4999**	**45068**	**50067**

Hospitals	Diabetes			Cholera			Typhoid			Dengue		
	IPD	OPD	Total	IPD	OPD	Total	IPD	OPD	Total	IPD	OPD	Total
Nair	74	751	825	0	0	0	494	44	538	620	26	646
Cama and Albless	0	0	0	0	0	0	46	8	54	29	4	33
Dr. Babasaheb Ambedkar	279	2202	2481	0	0	0	5	2	7	447	464	911
G.T	289	0	289	0	0	0	45	743	788	568	3369	3937
K.B.H.K. Bhabha, Kurla	4	20	24	0	0	0	40	0	40	38	88	126
Sir J.J.	4	7703	7707	0	0	0	20	13834	13854	510	112	622
K. B. Bhabha, Bandra	520	7156	7676	0	0	0	189	14	203	679	74	753
King Edward Memorial	0	3371	3371	0	0	0	4	6	10	968	10	978
Kasturba X (Cross) Road	53	3594	3647	164	193	357	22	22	44	340	340	680
M.W. Desai	27	92	119	0	0	0	134	142	276	166	168	334
Maa (Diwalabai Mohanlal Mehta)	0	46	46	0	0	0	358	554	912	137	137	274
Mahatma Jyotiba Phule	103	1605	1708	0	0	0	165	165	330	380	380	760
General Hospital Malvani	0	47	47	0	0	0	368	284	652	40	13	53
Dr. R.N. Cooper	684	13719	14403	5	2	7	174	464	638	411	1124	1535
Rajawadi	854	447	1301	0	0	0	579	0	579	879	0	879
S.K. Patil	0	15	15	0	0	0	5	41	46	15	29	44
S.V.D. Savarkar	0	77	77	0	0	0	139	307	446	163	16	179
Sant muktabai	25	2601	2626	0	0	0	312	193	505	491	133	624
Centenary Hospital, Govandi	74	1871	1945	0	0	0	426	509	935	206	228	434
Shri Harilal Bhagwati	631	5936	6567	2	0	2	9	9	18	863	966	1829
Siddarth	80	4258	4338	0	0	0	99	152	251	621	318	939
Smt. Mansadevi T. Agarwal	268	304	572	0	0	0	151	159	310	286	6	292
St. George	539	0	539	6	0	6	59	4	63	629	7	636
Municipal Group of T.B.	0	0	0	0	0	0	0	0	0	0	0	0
Troma Care	100	2360	2460	0	0	0	170	31	201	593	165	758
V. N. Desai	159	3308	3467	0	0	0	408	80	488	841	84	925
Grand Total	**4767**	**61483**	**66250**	**177**	**195**	**372**	**4421**	**17767**	**22188**	**10920**	**8261**	**19181**

Annexure 6 – Cause of Death data year wise for top 10 causes of death

Table 32: Top 10 causes of death for the year 2011-12

ICD Code	< 4 Years	%	5-19 Years	%	20-39 Years	%	40-59 Years	%	60 - Above	%	Not Stated	%	Grand Total
I121-I22	13	0.12	24	0.23	321	3.06	2520	24.06	7597	72.53	0	0.00	10475
A15-A19	85	1.01	519	6.20	2695	32.18	3205	38.27	1871	22.34	0	0.00	8375
I30-I51	602	7.83	227	2.95	672	8.74	1858	24.16	4327	56.27	4	0.05	7690
A40-A41	541	8.98	219	3.64	776	12.88	1492	24.77	2996	49.73	0	0.00	6024
I20 & I23-I25	24	0.52	5	0.11	92	2.00	937	20.41	3532	76.95	0	0.00	4590
J12-J18	846	20.78	216	5.30	400	9.82	628	15.42	1982	48.67	0	0.00	4072
J60-J86, J92-J98	460	11.69	223	5.67	569	14.46	905	23.00	1774	45.09	3	0.08	3934
N17-N19	70	1.87	89	2.38	415	11.11	1017	27.24	2143	57.39	0	0.00	3734
R54	5	0.14	6	0.17	19	0.54	59	1.66	3455	97.49	0	0.00	3544
I10,I12-I15	15	0.42	8	0.23	69	1.95	558	15.76	2891	81.64	0	0.00	3541
Total	2661	4.75	1536	2.74	6028	10.77	13179	23.54	32568	58.18	7	0.01	55979

Table 33: Top 10 Cause of Death for the year 2012-13

ICD Code	< 4 Years	%	5-19 Years	%	20-39 Years	%	40-59 Years	%	60 - Above	%	Not Stated	%	Grand Total
I121-I22	9	0.09	25	0.25	348	3.52	2324	23.48	7191	72.66	0	0.00	9897
I30-I51	527	7.04	230	3.07	517	6.90	1656	22.12	4557	60.86	1	0.01	7488
A15-A19	62	0.86	433	6.04	2218	30.93	2734	38.13	1723	24.03	0	0.00	7170
A40-A41	570	10.16	212	3.78	653	11.64	1362	24.27	2814	50.15	0	0.00	5611
I20 & I23-I25	19	0.43	8	0.18	87	1.99	783	17.90	3478	79.50	0	0.00	4375
J60-J86, J92-J98	571	14.00	189	4.63	470	11.53	939	23.03	1907	46.76	2	0.05	4078
R54	8	0.20	2	0.05	22	0.55	42	1.06	3892	98.13	0	0.00	3966
I10,I12-I15	13	0.36	2	0.06	70	1.95	565	15.76	2935	81.87	0	0.00	3585
N17-N19	65	1.89	79	2.30	364	10.61	921	26.84	2002	58.35	0	0.00	3431
J12-J18	719	21.59	167	5.02	384	11.53	507	15.23	1552	46.61	1	0.03	3330
Total	2563	4.84	1347	2.54	5133	9.70	11833	22.36	32051	60.55	4	0.01	52931

Table 34: Top 10 Causes of death for 2013-14

ICD Code	< 4 Years	%	5-19 Years	%	20-39 Years	%	40-59 Years	%	60 - Above	%	Not Stated	%	Grand Total
I121-I22	8975	88.10	9	0.09	21	0.21	120	1.18	251	2.46	811	7.96	10187
I30-I51	6549	87.24	133	1.77	35	0.47	40	0.53	125	1.67	625	8.33	7507
A15-A19	6166	84.25	31	0.42	100	1.37	119	1.63	62	0.85	841	11.49	7319
A40-A41	4866	86.12	116	2.05	42	0.74	61	1.08	124	2.19	441	7.81	5650
I20 & I23-I25	3907	89.49	3	0.07	6	0.14	17	0.39	108	2.47	325	7.44	4366
J60-J86, J92-J98	3551	85.96	114	2.76	27	0.65	28	0.68	65	1.57	346	8.38	4131
I10,I12-I15	3705	89.97	2	0.05	0	0.00	9	0.22	89	2.16	313	7.60	4118
R54	3303	88.93	1	0.03	3	0.08	1	0.03	62	1.67	344	9.26	3714
N17-N19	2930	86.76	17	0.50	10	0.30	30	0.89	87	2.58	303	8.97	3377
J12-J18	2443	83.18	179	6.09	37	1.26	20	0.68	56	1.91	202	6.88	2937
Total	46395	87.04	605	1.13	281	0.53	445	0.83	1029	1.93	4551	8.54	53306

Table 35: Top 10 causes of death for 2014-15

ICD Code	< 4 Years	%	5-19 Years	%	20-39 Years	%	40-59 Years	%	60 - Above	%	Not Stated	%	Grand Total
I121-I22	195	1.90	24	0.23	380	3.70	2333	22.73	7314	71.27	17	0.17	10263
I30-I51	782	8.91	181	2.06	604	6.88	1790	20.38	5404	61.54	20	0.23	8781
A15-A19	192	2.95	406	6.25	1962	30.18	2349	36.13	1582	24.33	10	0.15	6501
A40-A41	601	9.99	227	3.77	681	11.32	1359	22.60	3138	52.18	8	0.13	6014
I10,I12-I15	144	3.13	9	0.20	94	2.04	711	15.44	3637	79.00	9	0.20	4604
I20 & I23-I25	82	1.80	3	0.07	68	1.49	807	17.72	3582	78.66	12	0.26	4554
J60-J86, J92-J98	492	11.35	200	4.61	545	12.57	930	21.45	2161	49.84	8	0.18	4336
N17-N19	152	4.59	62	1.87	261	7.89	868	26.24	1957	59.16	8	0.24	3308
R54	66	2.03	1	0.03		0.00		0.00	3172	97.72	7	0.22	3246
J12-J18	706	21.96	168	5.23	354	11.01	492	15.30	1491	46.38	4	0.12	3215
Total	3412	6.22	1281	2.34	4949	9.03	11639	21.23	33438	60.99	103	0.19	54822

Table 36: Top 10 Causes of April 2015-December 2015

ICD Code	< 4 Years	%	5-19 Years	%	20-39 Years	%	40-59 Years	%	60 - Above	%	Not Stated	%	Grand Total
I121-I22	4	0.06	12	0.18	233	3.59	1440	22.16	4809	74.01	0	0.00	6498
I30-I51	377	7.24	106	2.04	351	6.74	1072	20.59	3300	63.39	0	0.00	5206
A15-A19	35	0.86	236	5.79	1236	30.32	1552	38.07	1018	24.97	0	0.00	4077
A40-A41	335	8.68	121	3.14	512	13.27	869	22.52	2021	52.38	0	0.00	3858
I20 & I23-I25	1	0.03	2	0.06	67	2.07	551	17.03	2614	80.80	0	0.00	3235
I10,I12-I15	6	0.20	4	0.14	47	1.59	520	17.61	2376	80.46	0	0.00	2953
J60-J86, J92-J98	311	11.70	124	4.67	346	13.02	610	22.96	1265	47.61	1	0.04	2657
J12-J18	476	20.44	118	5.07	260	11.16	398	17.09	1077	46.24	0	0.00	2329
N17-N19	40	1.76	44	1.93	188	8.26	631	27.74	1372	60.31	0	0.00	2275
K70-K76	23	1.08	43	2.03	422	19.89	1077	50.75	557	26.25	0	0.00	2122
Total	1608	4.57	810	2.30	3662	10.40	8720	24.77	20409	57.96	1	0.00	35210

Table 37: Top 10 Causes of death for children below 4

ICD Code	2011-12	%	2012-13	%	2013-14	%	2014-15	%	Apr'15 to Dec'15	%	Grand Total
P05-P07	814	23.72	796	23.20	554	16.15	750	21.86	517	15.07	3431
J12-J18	846	16.30	719	13.85	2443	47.07	706	13.60	476	9.17	5190
I30-I51	602	6.81	527	5.96	6549	74.11	782	8.85	377	4.27	8837
P20-P28	657	22.59	701	24.11	535	18.40	643	22.11	372	12.79	2908
A40-A41	541	7.83	570	8.25	4866	70.39	601	8.69	335	4.85	6913
J60-J86, J92-J98	460	8.54	571	10.60	3551	65.94	492	9.14	311	5.78	5385
P00-P04,P29-P54,P56-P57, P60-P96	203	19.37	227	21.66	304	29.01	168	16.03	146	13.93	1048
R00-R09,R11-R17, R19-R39,R41-R49	155	5.44	139	4.88	2216	77.73	213	7.47	128	4.49	2851
Q20-Q28	267	26.28	238	23.43	183	18.01	212	20.87	116	11.42	1016
Q38 - Q99	168	24.96	142	21.10	128	19.02	165	24.52	70	10.40	673
Total	4713	12.32	4630	12.10	21329	55.76	4732	12.37	2848	7.45	38252

Table 38: Top 10 causes of death for age group 5-19 years

ICD Code	2011-12	%	2012-13	%	2013-14	%	2014-15	%	Apr'15 to Dec'15	%	Grand Total
(A15-A19)	519	31.94	433	26.65	31	1.91	406	24.98	236	14.52	1625
Other Injuries of Specified,Unspecified and Multiple Body Regions	338	30.48	288	25.97	70	6.31	238	21.46	175	15.78	1109
(R00-R09,R11-R17, R19-R39,R41-R49)	207	29.40	195	27.70	38	5.40	137	19.46	127	18.04	704
(J60-J86, J92-J98)	223	26.24	189	22.24	114	13.41	200	23.53	124	14.59	850
(A40-A41)	219	24.47	212	23.69	116	12.96	227	25.36	121	13.52	895
(J12-J18)	216	25.47	167	19.69	179	21.11	168	19.81	118	13.92	848
(I30-I51)	227	25.88	230	26.23	133	15.17	181	20.64	106	12.09	877
(C91-C95)	94	27.09	88	25.36	7	2.02	95	27.38	63	18.16	347
(R57)	78	24.15	81	25.08	27	8.36	81	25.08	56	17.34	323
(I60-I69)	61	25.00	61	25.00	17	6.97	59	24.18	46	18.85	244
Total	2182	27.90	1944	24.85	732	9.36	1792	22.91	1172	14.98	7822

Table 39: Top 10 causes of death for 20 to 39 years age group

ICD Code	2011-12	%	2012-13	%	2013-14	%	2014-15	%	Apr'15 to Dec'15	%	Grand Total
(A15-A19)	2695	32.82	2218	27.01	100	1.22	1962	23.89	1236	15.05	8211
Other Injuries of Specified, Unspecified and Multiple Body Regions	1488	31.21	1314	27.56	70	1.47	1094	22.94	802	16.82	4768
(R00-R09,R11-R17, R19-R39,R41-R49)	1192	32.49	1088	29.65	58	1.58	770	20.99	561	15.29	3669
(A40-A41)	776	29.13	653	24.51	42	1.58	681	25.56	512	19.22	2664
(K70-K76)	659	28.69	587	25.56	20	0.87	609	26.51	422	18.37	2297
(I30-I51)	672	30.84	517	23.73	35	1.61	604	27.72	351	16.11	2179
(J60-J86, J92-J98)	569	29.08	470	24.02	27	1.38	545	27.85	346	17.68	1957
(J12-J18)	400	27.87	384	26.76	37	2.58	354	24.67	260	18.12	1435
(I121-I22)	321	24.64	348	26.71	21	1.61	380	29.16	233	17.88	1303
(Y10-Y34)	311	24.82	385	30.73	2	0.16	343	27.37	212	16.92	1253
Total	9083	30.55	7964	26.78	412	1.39	7342	24.69	4935	16.60	29736

Table 40: Top 10 causes of death for 40-59 age group

ICD Code	2011-12	%	2012-13	%	2013-14	%	2014-15	%	Apr'15 to Dec'15	%	Grand Total
(A15-A19)	3205	32.18	2734	27.45	119	1.19	2349	23.59	1552	15.58	9959
(I121-I22)	2520	28.84	2324	26.60	120	1.37	2333	26.70	1440	16.48	8737
(K70-K76)	1570	27.25	1498	26.00	46	0.80	1571	27.26	1077	18.69	5762
(I30-I51)	1858	28.96	1656	25.81	40	0.62	1790	27.90	1072	16.71	6416
(A40-A41)	1492	29.01	1362	26.48	61	1.19	1359	26.42	869	16.90	5143
(N17-N19)	1017	29.33	921	26.56	30	0.87	868	25.04	631	18.20	3467
(J60-J86, J92-J98)	905	26.52	939	27.52	28	0.82	930	27.26	610	17.88	3412
(I60-I69)	821	28.25	712	24.50	32	1.10	769	26.46	572	19.68	2906
(I20 & I23-I25)	937	30.27	783	25.30	17	0.55	807	26.07	551	17.80	3095
(I10,I12-I15)	558	23.61	565	23.91	9	0.38	711	30.09	520	22.01	2363
Total	14883	29.03	13494	26.32	502	0.98	13487	26.31	8894	17.35	51260

Table 41: Top 10 causes of death for above 60 age group

ICD Code	2011-12	%	2012-13	%	2013-14	%	2014-15	%	Apr'15 to Dec'15	%	Grand Total
(I121-I22)	7597	27.97	7191	26.47	251	0.92	7314	26.93	4809	17.70	27162
(I30-I51)	4327	24.43	4557	25.73	125	0.71	5404	30.51	3300	18.63	17713
(I20 & I23-I25)	3532	26.53	3478	26.12	108	0.81	3582	26.90	2614	19.63	13314
(I10,I12-I15)	2891	24.24	2935	24.61	89	0.75	3637	30.49	2376	19.92	11928
(A40-A41)	2996	27.01	2814	25.37	124	1.12	3138	28.29	2021	18.22	11093
(R54)	3455	27.79	3892	31.31	62	0.50	3172	25.52	1850	14.88	12431
(E10-E14)	1672	24.07	1943	27.97	74	1.07	1873	26.97	1384	19.93	6946
(N17-N19)	2143	28.34	2002	26.48	87	1.15	1957	25.88	1372	18.15	7561
(J60-J86, J92-J98)	1774	24.74	1907	26.59	65	0.91	2161	30.13	1265	17.64	7172
(J22, J44 & J47)	1827	26.81	1742	25.57	68	1.00	2031	29.81	1146	16.82	6814
Total	32214	26.38	32461	26.58	1053	0.86	34269	28.06	22137	18.13	122134

ICD Code	Disease Name
A15-A19	Tuberculosis
A40-A41	Septicaemia
C91-C95	Leukaemia
E10-E14	Diabetes Mellitus
I10,I12-I15	All Other Hypertensive Diseases
I121-I22	Acute Nyocardial Infarction
I20 & I23-I25	All Otheer Ischaenic Heart Diseases
I30-I51	Other Forms of Heart Diseases
I60-I69	Cerebrovascular Diseases
J12-J18	Pneumonia
J22, J44 & J47	Other Lowery Respiratory Disorders
J60-J86, J92-J98	All Other Diseases of the Respiratory System
K70-K76	Diseases of the Liver
N17-N19	Renal Failure
P00-P04,P29-P54,P56-P57, P60-P96	All Other Conditions Originating In the Perinatal Period
P05-P07	Slow Fetal Growth, Fetal Malnutrition and Immaturity
P20-P28	Hypoxia, Birth Asphyxia and Other Respiratory Conditions
Q20-Q28	Congential Malformations of the Circulatory System
Q38 - Q99	All Other Congenital Malformations, Deformations and Chromosomal Abnormalities Not Elsewhere
R00-R09,R11-R17, R19-R39,R41-R49	All Other Symtpoms, Signs & Abnormal Clinical & Laboratory Findings Not Elsewhere Classified
R54	Senility
R57	Shock, Not Elsehwere Classified
S00-S01, S05,S09-S11,D15-S16,S19-S21,S25,S29,S31,S35, S39-S41,S45-S46,S49-S51, S55-S56, S59-S61,S65-S66, S69-S71,S75-S76,S79-S81, S85-S86,S89-S91,S95-S96, S99,T00,T01,T06-T07, T09,T11 & T13-T14	Other Injuries of Specified, Unspecified and Multiple Body Regions
Y10-Y34	Event of Undetermined Intent

Annexure 7 – Socio Economic Classification (SEC) Note

SEC is used to measure the affluence level of the sample, and to differentiate people on this basis and study their behaviour / attitude on other variables.

While income (either monthly household or personal income) appears to be an obvious choice for such a purpose, it comes with some limitations:

- Respondents are not always comfortable revealing sensitive information such as income.
- The response to the income question can be either over-claimed (when posturing for an interview) or under-claimed (to avoid attention). Since there is no way to know which of these it is and the extent of over-claim or under-claim, income has a poor ability to discriminate people within a sample.
- Moreover, affluence may well be a function of the attitude a person has towards consumption rather than his (or his household's) absolute income level.

Attitude to consumption is empirically proven to be well defined by the education level of the Chief Wage Earner (CWE*) of the household as well as his occupation. The more educated the CWE, the higher is the likely affluence level of the household. Similarly, depending on the occupation that the CWE is engaged in, the affluence level of the household is likely to differ – so a skilled worker will be lower down on the affluence hierarchy as compared to a CWE who is businessman.

Socio Economic Classification or SEC is thus a way of classifying households into groups' basis the education and occupation of the CWE. The classification runs from A1 on the uppermost end thru E2 at the lower most end of the affluence hierarchy. The SEC grid used for classification in market research studies is given below:

EDUCATION / **OCCUPATION**		Illiterate	literate but no formal schooling / School up to 4th	School 5th – 9th	SSC/ HSC	Some College but not Grad	Grad/ Post-Grad Gen.	Grad/ Post-Grad Prof.
Unskilled Workers		E2	E2	E1	D	D	D	D
Skilled Workers		E2	E1	D	C	C	B2	B2
Petty Traders		E2	D	D	C	C	B2	B2
Shop Owners		D	D	C	B2	B1	A2	A2
Businessmen/ Industrialists with no. of employees	None	D	C	B2	B1	A2	A2	A1
	1 – 9	C	B2	B2	B1	A2	A1	A1
	10 +	B1	B1	A2	A2	A1	A1	A1
Self employed Professional		D	D	D	B2	B1	A2	A1
Clerical / Salesman		D	D	D	C	B2	B1	B1
Supervisory level		D	D	C	C	B2	B1	A2
Officers/ Executives Junior		C	C	C	B2	B1	A2	A2
Officers/Executives Middle/ Senior		B1	B1	B1	B1	A2	A1	A1

**CWE is defined as the person who takes the main responsibility of the household expenses*

Annexure 8 – Public Health Committee Elected (Councillors) Members for 2012-16

Ward	Party	2012-13	2013-14	2014-15	2015-16
A	INC	Sushama Salunkhe	Sushama Salunkhe	Sushama Salunkhe	Sushama Salunkhe
E	ABS	Geeta Gawli	Geeta Gawli	Geeta Gawli	Geeta Gawli
F/N	INC	Lalita Yadav	Lalita Yadav	Lalita Yadav	Lalita Yadav
G/N	IND	Vishnu Gaikwad	Vishnu Gaikwad	Vishnu Gaikwad	Vishnu Gaikwad
G/S	SS	Mansi Dalvi	Mansi Dalvi	Mansi Dalvi	Mansi Dalvi
G/S	MNS	Santosh Dhuri	Santosh Dhuri	Santosh Dhuri	Santosh Dhuri
H/E	MNS	Snehal Shinde	Snehal Shinde	Snehal Shinde	Snehal Shinde
H/E	INC	Gulistan Shaikh	Gulistan Shaikh	Gulistan Shaikh	Gulistan Shaikh
H/W	INC	Karen D'mello Allen	Karen D'mello Allen	Karen D'mello Allen	Karen Allen D'mello
K/E	SS	Manisha Panchal	Manisha Panchal	Manisha Panchal	Manisha Panchal
K/E	SS	Sandhya Yadav	Sandhya Yadav	Sandhya Yadav	Sandhya Yadav
K/E	BJP	Ujjwala Modak	Ujjwala Modak		
K/E	SS	Pramod Sawant	Pramod Sawant	Pramod Sawant	Pramod Sawant
L	SP	Dilshad Azmi	Dilshad Azmi	Dilshad Azmi	Dilshad Azmi
L	NCP	Saeeda Khan	Saeeda Khan	Saeeda Khan	Saeeda Khan
L	SS	Anuradha Pednekar	Anuradha Pednekar	Anuradha Pednekar	Anuradha Pednekar
M/E	SP	Reshma Nevrekar	Reshma Nevrekar	Reshma Nevrekar	Reshma Nevrekar
M/W	SS	Suprada Phaterpekar	Suprada Phaterpekar	Suprada Phaterpekar	Suprada Phaterpekar
N	SS	Bharti Bawadane	Bharti Bawadane	Bharti Bawadane	Bharti Bawadane
N	BJP			Falguni Dave	Falguni Dave
P/N	SS	Prashant Kadam	Prashant Kadam	Prashant Kadam	Prashant Kadam
P/N	BJP	Ramnarayan Barot	Ramnarayan Barot	Ramnarayan Barot	Ramnarayan Barot
P/N	INC	Parminder Bhamra	Parminder Bhamra	Parminder Bhamra	Parminder Bhamra
P/S	SS	Pramila Shinde	Pramila Shinde	Pramila Shinde	Pramila Shinde
R/N	SS	Sheetal Mhatre	Sheetal Mhatre	Sheetal Mhatre	Sheetal Mhatre
R/N	SS	Shubha Raul	Shubha Raul	Shubha Raul	Shubha Raul
R/S	BJP	Sunita Yadav	Sunita Yadav	Sunita Yadav	Sunita Yadav
R/S	BJP	Shailaja Girkar	Shailaja Girkar	Shailaja Girkar	Shailaja Girkar
R/S	INC	Yogesh Bhoir	Yogesh Bhoir	Yogesh Bhoir	Yogesh Bhoir
R/S	INC	Ajanta Yadav	Ajanta Yadav	Ajanta Yadav	Ajanta Yadav
S	SS	Tavaji Gorule	Tavaji Gorule	Tavaji Gorule	Tavaji Gorule
S	MNS	Rupesh Waingankar	Rupesh Waingankar	Rupesh Waingankar	Rupesh Waingankar
S	MNS	Avinash Sawant	Avinash Sawant	Avinash Sawant	
T	MNS	Sujata Pathak	Sujata Pathak	Sujata Pathak	Sujata Pathak
T	NCP	Nandakumar Vaity	Nandakumar Vaity	Nandakumar Vaity	Nandakumar Vaity