



## Report on

# The STATE of HEALTH in MUMBAI

September 2018



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#### I. Foreword

There are two important aspects arising out of the data in this report: One, Inadequacy of Primary Health Care infrastructure and Second, Burden of Health spend on Annual Income of families. Both are interlinked and a testimonial to our health programmes and schemes.

Providing primary health care is an obligatory duty of the corporations of Mumbai as per the Mumbai Municipal Corporation Act, 1888. The main focus of Primary health care is to strengthen preventive measures by maintaining infrastructure, enough health personnel in dispensaries and hospitals and to have a strong disease surveillance mechanism. However, in spite of being the richest city government in the country, Public health Department, of Mumbai Corporation seems to be performing poorly in this aspect.

Primary health care relies extensively on the spread and the adequacy of the government dispensaries. While Mumbai has an infrastructure of 186 (174 municipal plus 12 police) government dispensaries most of them are situated in the city while the newer suburbs lack these facility. E.g. the city has an average density of 41,139 population per dispensary, while for the suburbs it is at 84,297, overall for the city it stands for 66,894. As per the National Building Code and National Urban Health Mission there should be a 'dispensary' for every 15,000 people. Clearly our infrastructure is inadequate. We need 830 dispensaries and we just have 186 currently.

The other aspect we want to share is the portion of income that an average Mumbaikar spends on health care.

In a survey of 20,078 households commissioned by us to Hansa Research, we see that 52% of households had to use private facilities. Further the estimates are that 9.1% of the total annual income was spent on hospitals/medical costs in 2018 i.e. an estimated city's overall household spend of Rs. 24,766 crores on hospitals/medical costs or a per household spend of Rs. 87,513.

In Wards like M/E which comprises of Govandi, one of the worst wards on most health indicators, the estimated annual health spent was highest at 12%. And with only 1 public hospital and 9 dispensaries, 56% of its population is accessing private health facilities. Thus resulting in a significant health/medical cost spend.

Overall in Mumbai its estimated that 76% households do not have any medical insurance. Also most of this medical insurance takes care of only hospitalisation costs in certain diseases/ailments and not the post hospitalisation costs and costs for 'common' medical ailments/diseases such as fever, malaria, etc. All this becomes a key reason why families are pushed further into poverty.

On the other hand, the data analysed shown that the prevalence of disease has been going up. E.g. TB (Tuberculosis) went up by 33% from 41,479 to 55,130 cases during Financial Year (FY) 2013-14 to FY 2017-18. While there was a 98% hike in dengue cases in five years from FY 2013-14 to FY 2017-18 with 7,261 and 14,345 cases respectively.

However, an important point to be considered here is that the above data on disease prevalence e.g. on malaria is patients who have availed government hospitals/dispensaries facilities and does not include those patients who did not go to government facility. Hence to get an estimate of cases for malaria and dengue we have extrapolated them through our household survey. The estimate shows a probable incidence of 1,15,268 cases of Malaria and 1,21,775 cases of Dengue.

This shows that government schemes and policies on prevention are not successful enough to combat communicable diseases in Mumbai.

While clearly our city's health is failing, our authorities are not aware and seemed to be not finding themselves accountable.



The prime responsibility of the Public Health Department is not just to make and implement health schemes, policies and programmes but also to track and understand efficiency of those. However, since January 2016, our authorities seem to be not aware of the causes of death in the city as per an RTI answer that we have received from them. Under the Registration of Birth and Death Act, 1969, it is the duty of Registrar (in case of Mumbai the Executive Health Officer) to register the cause of occurrence of death, while entering the death event. Such data is important for monitoring mortality and morbidity rate without which you can't monitor efficacy of health schemes, policies and programmes.

With lack of access to a robust health surveillance data, gaps in basic primary health care infrastructure it now has now become the key responsibility of Elected representatives to raise this issues in assembly and the corporation committees. We hope this report catches the eyes of our city custodians (our elected representatives) and prods them to act on this and hold the government accountable towards delivery good governance.

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.

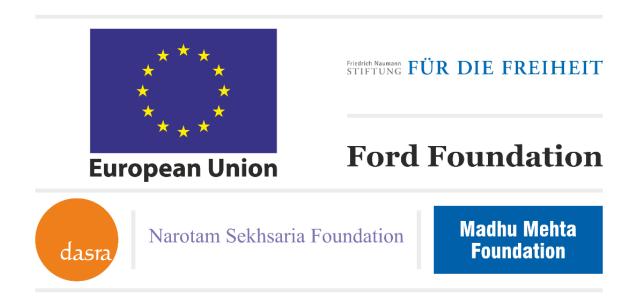
We would like to appreciate our stakeholders; particularly, our Elected Representatives & government officials, the Civil Society Organizations (CSOs) and the journalists who utilize and publicize our data and, by doing so, ensure that awareness regarding various issues that we discuss is distributed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

Praja Foundation appreciates the support given by our supporters and donors, namely European Union Fund, Friedrich Naumann Foundation, Ford Foundation, Dasra, 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 like to thank Hansa Cequity team for helping us with extrapolating the cause of death data and the team at Hansa Research for the citizen survey.

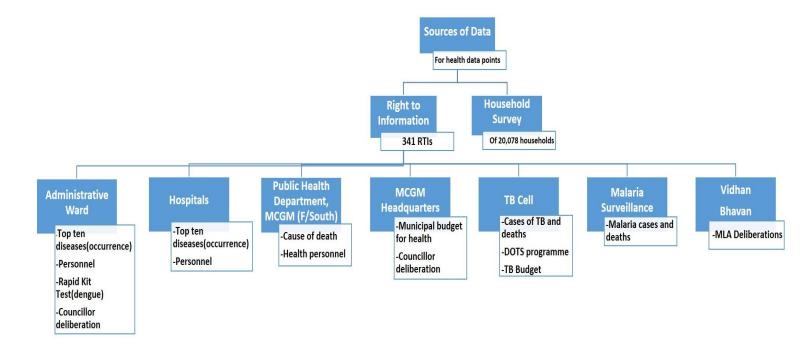
We would also like to thank our group of Advisors & Trustees and lastly but not the least, we would like to acknowledge the contributions of all members of Praja's team, who worked to make this white paper a reality.

Note: The contents of this publication are published by Praja Foundation and in no way can be taken to reflect the views of the European Union and other donors and sponsors.





#### **III.A Note on Public Health Department Data**



#### i. RTI data

In the sections given below, we have analysed data of diseases and ailments from April 2013 to March 2018 from Municipal/Government hospitals and dispensaries. Through this data, we have attempted to assess the performance of health services provided at various levels of government using government's own data. We have collected this information through the Right to Information Act (RTI), 2005.

#### a. Occurrences of diseases and ailments in municipal dispensaries and government hospitals

We received data from (174) municipal dispensaries, (26) municipal hospitals and (5) state hospitals from April 2013 to March 2018. Also, RTI data was obtained from (8) other government hospitals [which include Central Railway, Bombay Port Trust Hospital, Western Railway Hospital, Police Hospital (Nagpada and Naigaon), ESIS – Worli, Mulund, Kandivali, Marol)] and (12) Police Dispensaries from April'2013 to March'2018. Kindly refer to Annexure 1 for the list of Hospitals and dispensaries. This data relates to Out Patient Department (OPD) of dispensaries and In-Patient Department (IPD) of hospitals of MCGM.

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 section V of this report), 46% households in Mumbai use only government dispensaries/hospitals. The data on cases of diseases/ailments treated in private and charitable dispensaries/hospitals was not available under RTI. Hence, we have conducted the survey to estimate certain parameters to monitor status of health of Mumbai.



#### a. i) Dispensary Level: Issues related to functioning

Data on availability and reach of dispensaries is important as dispensaries are often the first point of contact for citizens. If dispensaries function effectively, then citizens can access health services closer to their homes. This will also ensure that a greater number of diseases are treated at an early stage, preventing them from assuming more serious proportions.

However, as of now, it is seen that the resources at the disposal of the municipal dispensaries are not being used to the fullest possible extent. For instance, the Senior Medical Officer of M/E ward stated that confirmed diagnosis of dengue cases does not happen at the dispensary level (please refer to annexure 6). Furthermore, the Senior Medical Officer of K/W ward mentioned that the cases which test positive are sent for ELISA (Enzme Linked Immunosorbent Assay) or Polymerase Chain Reaction (PCR) tests to diagnose dengue as the Rapid kit test does not give confirmatory result (Refer annexure 7).

This is surprising, considering the fact that every municipal dispensary is supposed to be equipped with the Rapid Test Kit, which is used to diagnose dengue. If the public health department is investing on Rapid Test Kits, then why is the diagnosis claimed to be suspected or probable and not confirmed? How are patients put on dengue treatment on the basis of the results of this kit, if it cannot be relied upon to provide a correct diagnosis? Dengue is a preventable disease, the diagnosis and treatment of which should be done at primary level of public health.

Apart from the above points, some major improvements which need to be made are proper maintenance of patient records and strengthening of the civic body's health management information system (HMIS) at the dispensary level. This way, hospitals and dispensaries will be able to view an individual patient's medical history when the patient comes with a health complaint, thus providing a better diagnosis of the ailment. Proper maintenance of the HMIS will enable various authorities to analyse the macro picture with respect to the state of health in the city.

Note: Of all the diseases studied in this paper, Malaria, Hepatitis A, Hepatitis B, Hepatitis C, Hypertension and Diabetes cases have been obtained for all 24 wards (Apr 2017 – Mar 2018). For all other diseases shown (Tuberculosis, Diarrhoea, Cholera, Typhoid, Dengue), data shown is for all 24 wards from Apr 2017 – Jul 2017. For the period Aug 2017 – Nov 2017, data from 4 wards (M/W, N, P/N and R/S) was not available. Also, for the period Dec 2017 – Mar 2018, data from 4 wards (M/W, N, P/N and R/S) was not available.

#### b. Causes of death

Data on cause of death is crucial to understand the extent to which various diseases pose a threat to public health. It can help set the policy agenda for the government in terms of identifying the diseases which need urgent attention and fix gaps in the public health delivery mechanism.

However, for several years after independence, there was no unified system for registering births and deaths in the country. Such a system only came into being in 1969 with enactment of the Registration of Births and Deaths Act. This legislation made registration of births and deaths mandatory and fixed the responsibility of coordinating the activities of registration throughout the country of the Registrar General, India. Implementation, however, is to be done by the state governments.



In Mumbai, each municipal ward has a Medical officer of health (MOH) who is the sub-registrar as provided under RBD Act 1969 and Maharashtra Rules 2000. MOH is responsible for births and deaths certificates in their wards. Data on causes of death in Mumbai helps to plan a city-level strategy for maintaining public health. When this data is disaggregated at the ward level, it can indicate what measures need to be taken in which localities. For example, if the number of diarrhoea deaths is high in a particular area, then it could call for an investigation into the quality of water there.

#### b. ii) Medical Certification of Cause of Death (MCCD)

The scheme of Medical Certification of Cause of Death (MCCD) under the registration of Births and Deaths (RBD) Act, 1969 provides information on causes of death, a prerequisite to monitoring health trends of the population. This scheme analyses data on causes of death according to age and sex. Data received in prescribed forms is tabulated as per the National List of Causes of Death based on Tenth Revision of International Classification of Disease (ICD- 10). ICD is the foundation for the identification of health trends and statistics globally, and the international standard for reporting diseases and health conditions. It is the diagnostic classification standard for all clinical and research purposes.

Until December 2015, information on cause of death was made available by all 24 wards of MCGM in System Application Protocol (SAP) software. SAP was a locally managed software by Public Health Department of MCGM. Due to the change in software from SAP to the centrally managed Civil Registration System (CRS), the information on cause of death is not available with the MOH of all 24 wards of Mumbai. Being the sub registrar, MOH should have access to the information on cause of death for their own ward. The information consists of cause specific deaths with ICD-10 coding and has age and gender wise segregation. This information is vital for understanding the mortality and disease trends in wards of MCGM. It was an excellent step taken to make the birth and death registration centralised under CRS wherein information could be accessed through single portal accessible to the administration as well as citizens, but the accessibility of this information was given in the form of D-1 report at the sub registrar level which does not have information in terms of ICD-10 coding, age and gender, but only the total number of deaths. According to the Registration of Births and Deaths Act, 1969, this data should have been made available at the Medical Officer Health (MOH) level who is the local registrar for births and deaths in Mumbai district, but since the data is now centrally managed, ward level data of cause of death is not available for Mumbai district.

#### c. Deliberations by councillors and MLAs

This section comprises of deliberations by elected representatives in Mumbai. Data in this section has been collected through the Right to Information (RTI), Act 2005. The information includes issues raised by MLAs in the Monsoon session 2016, Winter session 2016 and Budget session 2017; while the issues raised by councillors are from Public Health Committee meetings held between April 2017 and March 2018. Issues raised by councillors in Statutory and Special Committees meetings have also been taken. We have incorporated attendance of councillors from public health committee meetings for financial year 2012-13 and 2017-18.



#### d. i) MCGMs Public Health Committee

a) The Corporation under Section 38A (1) of the M.M.C. (Mumbai Municipal Corporation) Act, appoints the Public Health Committee out of its 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.

- b. 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.
- b. 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 in the Public Health Committee.

#### ii. Citizen Survey

Praja Foundation collects information on cases reported of diseases/ailments and causes of death from all 24 wards of Mumbai. This is government data collected under the Right to Information (RTI) Act, 2005. In this section, we are presenting a household survey mapping diseases and ailments, which should ideally be done by the Public Health Department to understand the perception of citizens about health care facilities.

The information received under RTI from various government institutions shows that dengue cases in Mumbai were 14,345 & 11,163 of malaria while the survey data across all 24 wards of Mumbai showed that the cases of dengue were as high as 1,21,775 and cases of malaria were 1,15,268. As per the government data collected through RTI, the total number of occurrences for Dengue and Malaria as exceedingly low, when compared to the data collected by the housing survey. Information under RTI is for government facilities, but if the public Health department starts mapping diseases and ailments, then these numbers would certainly come closer.

Hence, apart from the mapping of diseases and ailments Public Health department should also be responsible for maintaining of patient records and strengthening of the civic body's health management information system (HMIS) at the dispensary level. This way, hospitals and dispensaries will be able to view an individual patient's medical history when the patient comes with a health complaint, thus providing a better diagnosis of the ailment. Proper maintenance of the HMIS will enable various authorities to analyse the macro picture with respect to the state of health in the city.



#### **Survey Methodology**

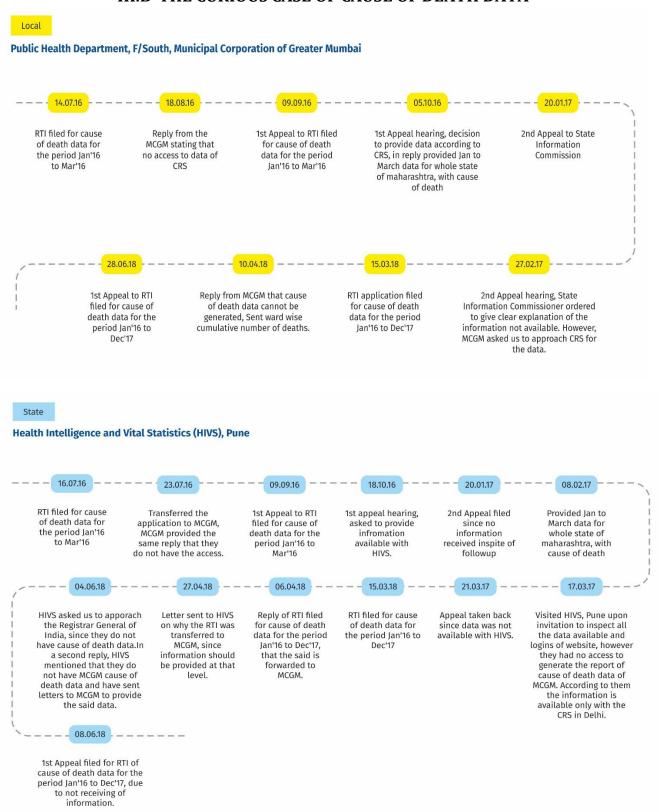
Praja Foundation had commissioned the **household survey** to Hansa Research and the survey methodology followed is as below:

- In order to meet the desired objectives of the study, we represented the city by covering a sample from each of its 227 wards. The 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
  representative in nature and ensured complete coverage.

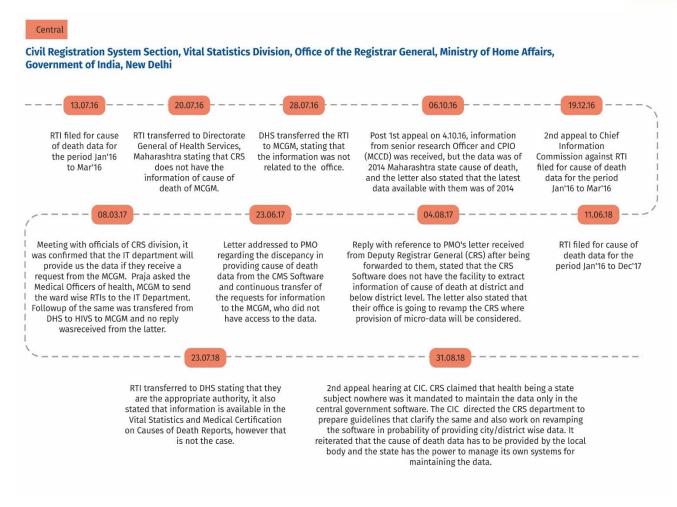
The total study sample was 20,078.



#### III.B THE CURIOUS CASE OF CAUSE OF DEATH DATA







In 2016, the Civil Registration System of the central government for registration of Births and Deaths in India was centralised. The software was to enable uniformity in registration and to improve the percentage of registered births and deaths data in compliance with WHO recommendations<sup>1</sup> and to enable better monitoring of SDGs.<sup>2</sup>

Maharashtra state began implementation of registration of the online CRS system from 1st January, 2016.3

In Mumbai, a software adopted by MCGM from 2007 called SAP software was used to record all the information online including the cause of death data by the Department of Public Health. However, from 1<sup>st</sup> January, 2016 the recording of birth and death registration was transferred to the CRS software of the central government.

Praja has been collecting cause of death data since 2011. We received the data on cause of death up to 31<sup>st</sup> December, 2015 from the MCGM through their SAP system. However, in 2016 when Praja filed an RTI for the information on cause of death in the city, we received a response stating that – "The causes of death gender wise, age wise, cause wise and month wise is generated under CRS system. However, ICD-10 code wise and

<sup>2</sup> World Health Organisation. (2017). '2017 Health SDG Profile India'. World Health Organisation. Retrieved from: http://www.searo.who.int/entity/health\_situation\_trends/countryprofile\_ind.pdf?ua=1

<sup>&</sup>lt;sup>1</sup> World Health Organisation. (2014). 'Covering every birth and death: Improving civil registration and vital statistics (CRVS)'. World Health Organisation. Retrieved from:

http://www.searo.who.int/entity/health\_situation\_trends/documents/sea-hsd-374.pdf

<sup>&</sup>lt;sup>3</sup> Ministry of Home Affairs. (2016). 'Vital Statistics of India Based on the Civil Registration System 2016'. Retrieved from: http://crsorgi.gov.in/web/uploads/download/crs\_report\_2016\_21062018.pdf



ward wise is not available at Registrar Level of MCGM. When reports were seen in CRS system, it is observed all the fields are showing zero figures. This typical problem has already been communicated to Officer of Registrar General and Census Commissioner of India via email. The matter will be discussed during the monthly review meeting at Deputy Director of Health Services and Deputy Registrar of Birth and Death, Maharashtra State on 19th August, 2016 as the CRS Software is not developed by MCGM" (Refer to Annexure 3). The MCGM claimed not to have access to cause of death data due to a technical issue. Further the online published data of the Department of Public health also stated that - 'Disclaimer: From 1st January 2016 Registration of Births & Deaths is doing in Central Government portal crsorgi.gov.in and Reports of Births & Deaths are retrieved from CRS Portal<sup>4</sup>. The said reports retrieved however only have information of the number of births and deaths and not the causes of the same. The first appeal to the Deputy Executive Health Officer and the second appeal to the State Information Commission were lost on the basis that MCGM does not have access to the said data and therefore cannot provide it under RTI. Following this Praja filed an RTI at the state government level to the Health Intelligence and Vital Statistics (HIVS), Pune who forwarded the same to MCGM, providing the same reply. In the first appeal the HIVS stated that they do not have access to the CRS software. They also allowed us to access the data available with them but that did not include the cause of death data. An RTI was filed to the Vital Statistics Division (VSD), New Delhi, requesting data directly from the CRS of the central government. The Vital Statistics Division forwarded the data to the state government at Director General of Health Services, Mumbai which further forwarded the same to the MCGM. Since both the state and local governments claimed that they did not have access to the cause of death data in the CRS software although at the local level, the MCGM had login access to enter the said data in the software, the software only provided output with reference to number of deaths. An RTI was thus filed at the Virtual Statistics Division for providing cause of death data for 2016, in reply to which a 2014 report on cause of death was provided. Further, our efforts to acquire cause of death data led the VSD department to assure that the said data will be provided by the IT department if a request for the same is provided by the MCGM. Accordingly, we requested the RTIs filed at ward level to be forwarded to Delhi. However, no information was provided. In the first appeal promise to provide the data was reiterated but without success. Finally, Praja filed an appeal at the Central Information Commission (CIC), where the CRS claimed that nowhere was it mandated to maintain the data only in the central government software and that health being a state subject, the respective states and local bodies could maintain their own management systems. The CIC seconded this view and also directed the CRS department to prepare guidelines that clarify the same and also work on revamping the software in probability of providing city/district wise data. It reiterated that the cause of death data has to be provided by the point source, that is the local body and the state has the power to manage its own systems for maintaining the data. A letter was also sent to the Prime Minister's Office (PMO), which through the home ministry was forwarded to the VSD which was directed to update their Management Information System, to solve the discrepancy. It was claimed that the said issue is being worked upon, however it has not yet been implemented.

In 2018, RTIs were filed at all the three levels of government. The MCGM provided us with the same reply, while HIVS, Pune forwarded the RTI back to MCGM, and the VSD in Delhi forwarded it to the state department. Thus the government shenanigans over the cause of death data continues.

Cause of death is an essential and basic data which is important for making and monitoring of any public health policy. Furthermore, Municipal Corporation has failed to abide by the rules and regulations under Registration

<sup>&</sup>lt;sup>4</sup>Municipal Corporation of Greater Mumbai. 'Births and Deaths Registration from 2014 to 201 Retrieved from: shorturl.at/jAB12



of Births and Death Act, 1969<sup>5</sup> (Refer Annexure 2). The data collected through RTI for Top 10 causes of death is till 2015 where the major cause of death was Acute Myocardial Infarction (Refer to table 12).

Praja's reports published in 2016 shows that for example, 19 people die of Tuberculosis daily. The evasion of providing this data in the public domain appears to be purposeful, in the face of the revealing status of health in the country that the cause of death data brings forth. The CRS Report, 2016 mentions, "For the country, the requirement of a complete CRS system is a must as it has important administrative and statistical uses. The data generated through a complete and up to date CRS is essential for socio-economic planning and to evaluate the effectiveness of various social sector programs." The government seems to go back upon its own objectives of providing an integrated software for the processing and analysis of data which would help in policy. The argument that the data is sensitive and thus centralised and available only at the central level for analysis and policy making does not hold good on the eve of 25 years of constitutional decentralisation adopted in the country. Although a centralised system of recording births and deaths, has its merits, it is imperative that the local government which acts as the primary provider of basic services, such as health has access to the cause of death data and is able to analyse the same in order to ensure effective delivery of this crucial service. When the MCGM's SAP system recorded the cause of death data, its analysis would enable the health department officers to study trends in the data and to map locality and area wise incidences to enable identifying problematic areas and better monitoring of the same. It is important for the government that implements a particular policy to have access to the information regarding the areas under its jurisdiction. By repeatedly transferring the RTI back to the local government inspite of being well aware that the latter does not have access to it, the central government is absolving itself of its responsibility. Inspite of an order from the Ministry to the VSD, if it is unable to provide simple access of data to the agency that is responsible for implementation of many centrallysponsored health policies, this reflects sheer insensitivity of the central government towards preventable deaths in its population.

It is interestingly funny, on how the government that on one hand advocates for a 'Digital Bharat' is unable to solve an internal technical discrepancy and hides behind the same, to deny the local authority its rightful access to data.

On the other hand, following the CIC appeal it comes to light that the state and the local body also cannot absolve themselves of the duty to maintain and provide the cause of death data using the pretext of lack of access to CRS, and that the local body should take responsibility of maintaining and providing the cause of death data. It would be severe negligence on the part of MCGM if inspite of being well aware of the fact that CRS is not mandatory and that it could maintain its own software, it has chosen the easy way out in the case of cause of death.

<sup>6</sup> Ministry of Home Affairs. (2016). 'Vital Statistics of India Based on the Civil Registration System 2016'. Retrieved from: http://crsorgi.gov.in/web/uploads/download/crs\_report\_2016\_21062018.pdf

<sup>&</sup>lt;sup>5</sup> India Code. (2016). 'India Code-Digital Repository of All Central and State Acts. Retrieved from: https://indiacode.nic.in/bitstream/123456789/1682/1/196918.pdf



# IV. Data on Diseases/Ailments & Health Personnel in Mumbai (Data got through RTI)

Table 1: Malaria number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018

Years	2013-14	2014-15	2015-16	2016-17	2017-18					
Number of Malaria Cases in government dispensaries and hospitals in Mumbai										
MCGM dispensaries and hospitals	15,987	13,865	12,516	9,679	9,676					
State hospitals	1,052	854	1,233	1,312	941					
Other government dispensaries										
and hospitals	1,359	964	882	616	546					
Total Cases	18,398	15,683	14,631	11,607	11,163					
Population /Total Cases	676	793	850	1,072	1,115					
Number of Deaths due to Malaria in Mumbai										
Total Deaths	202	103	*							
Total Cases/Total Deaths	91	152	-							

**Note:** (\*) The cause of death data has not been received from 2016 since both the MCGM and State government do not have access to the centralised Civil Registration System, the RTI to the Vital Statistics Division of the Central Government has been repeatedly transferred to the MCGM. (Refer to Page No. 13)

- Malaria cases have decreased by 39% from 2013-14 to 2017-18.
- The population per total number of cases has steadily increased in the same period (2013-14 to 2017-18) by 65%.



Table 2: Dengue number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018<sup>7</sup>

Years	2013-14	2014-15	2015-16	2016-17	2017-18				
Number of Dengue Cases in government dispensaries/hospitals in Mumbai									
MCGM dispensaries and hospitals	6,052	8,372	12,870	14,248	11,980				
State hospitals	732	1,523	1,776	2,529	1,743				
Other government dispensaries and hospitals	477	404	598	994	622				
Total Cases	7,261	10,299	15,244	17,771	14,345				
Population /Total Cases	1,714	1,208	816	700	867				
Number of Deaths due to Dengue in Mumbai									
Total Deaths	111	102	*						
Total Cases/Total Deaths	65	101							

- A 98% hike was seen in dengue cases in five years from 2013-14 to 2017-18 with 7,261 and 14,345 cases respectively.
- In the same period (2013-14 to 2017-18), number of Dengue cases in MCGM dispensaries and hospitals alone rose from 6,052 in 2013-14 to 11,980 in 2017-18 (a 98% increase)

 $<sup>^{7}</sup>$  12 dispensaries and 1 hospital have given 'suspected' cases in their data pertaining to Dengue.



Table 3: Tuberculosis number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018<sup>8</sup>

Years	2013-14	2014-15	2015-16	2016-17	2017-18				
Number of Tuberculosis Cases in government dispensaries & hospitals									
MCGM dispensaries and hospitals	39,644	40,525	39,060	47,672	51,198				
State hospitals	1,216	1,829	1,645	1,890	3,348				
Other government dispensaries									
and hospitals	619	483	467	439	584				
Total Cases	41,479	42,837	41,172	50,001	55,130				
Population /Total Cases	300	290	302	249	226				
Number of Deaths due to Tuberculosis in Mumbai									
Total Deaths	7,319	6,501	*						
Total Cases/Total Deaths	6	7							

- A total of 55,130 cases of Tuberculosis (TB) have been registered in governmental institutions in 2017-18, an increase of 10% from the previous year (2016-17), despite being a preventable disease.
- Number of TB cases in governmental institutions have increased by 33% from 2013-14 to 2017-18.

<sup>&</sup>lt;sup>8</sup> 1 dispensary had given 'Suspected cases' in their data pertaining to number of tuberculosis cases.



Figure 1: Discrepancy in reporting system of Tuberculosis deaths (data is as per calendar year)

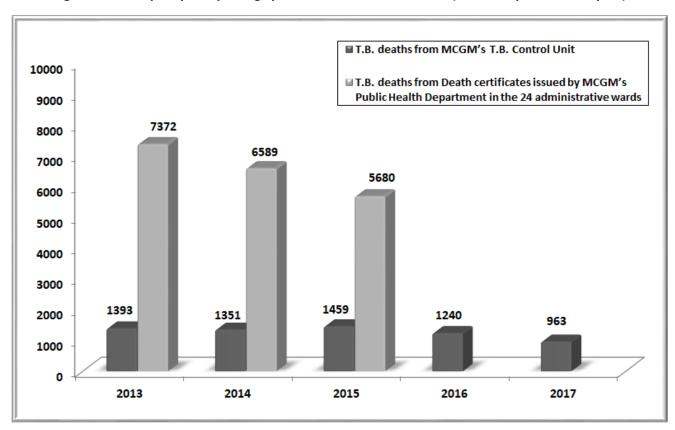




Table 4: Budget for Revised National Tuberculosis Control Programme (RNTCP) (Figures are in lakhs)

	Es	timates (	(a)	Actuals (b)			Utilisation [a/b] (in %)		
Account Heads	2015- 16	2016- 17	2017- 18	2015- 16	2016- 17	2017- 18	2015- 16	2016- 17	2017- 18
Civil Works	31	40	82	13	7	82	43%	19%	100%
Laboratory Materials	155	107	77	85	62	74	55%	58%	96%
Honorarium	64	62	30	20	21	23	31%	34%	76%
IEC	21	27	15	7	15	15	32%	57%	100%
Equipment Maintenance	28	31	30	16	19	19	55%	61%	62%
Training	7	10	27	2	11	15	28%	108%	56%
Vehicle Maintenance & Vehicle hiring	93	109	108	82	90	99	88%	83%	91%
NGO/PP Support	633	349	862	609	484	344	96%	138%	40%
Medical college & Contractual Services (salary of staff)	841	1137	772	510	510	762	61%	45%	99%
Printing, Research & studies	53	43	35	2	30	34	3%	71%	98%
Procurement of Drugs	79	93	64	22	101	36	27%	109%	56%
Procurement of Vehicle	16	16	78	0	0	0	0%	0%	0%
Procurement of Equipment	19	66	11	7	28	10	37%	43%	91%
Patient support & Transportation	10	12	2	0	0	0	3%	1%	4%
Supervision & Monitoring	37	55	64	15	21	62	41%	38%	97%
Office Operations	91	95	115	55	85	115	61%	89%	100%
Total	2,180	2,251	2,373	1,444	1,486	1,691	66%	66%	71%
NHM Additionality B Part									
Laboratory Technician	NA	NA	58	NA	NA	58	NA	NA	100%
Medical Officers (all)	NA	NA	111	NA	NA	110	NA	NA	100%
Statistical Assistant	NA	NA	24	NA	NA	24	NA	NA	100%
Counsellor	NA	NA	5	NA	NA	5	NA	NA	99%
Microbiologist	NA	NA	0	NA	NA	0	NA	NA	0%
Pharmacist	NA	NA	3	NA	NA	2	NA	NA	79%
Store Assistant	NA	NA	3	NA	NA	2	NA	NA	75%
Grand Total B			203			202			99%
Innovation (NUHM)									
Nutritional Supplements, NGO or Agency for delivery, Outsourcing X ray chest for pvt. Sect. pts. Notification, Address verification, Adherence counselling and contact tracing of pvt. Sect. pts. Promoting Uptake of TB daily regimen FDC in pvt. Sect. pts.	NA	NA	546	NA	NA	108	NA	NA	20%

Estimated Budget for 2017-18 was 2,373 lakhs and the utilisation was 71%. There is a decrease in budget utilisation for procurement of drugs and training which was exceeding 100% for the year 2016-17 but is down to 56% for the year 2017-18.



Table 5: Defaulters cases from Directly Observed Treatment, Short Course (DOTS) programme for calendar year<sup>9</sup>

Year	2013	2014	2015	2016	2017
No. of cases from Hospitals and Dispensaries (a)	40,149	42,573	41,825	46,422	55,127
Cases registered under DOTS (b)	21,550	21,703	19,115	15,767	15,550
Defaulters from DOTS Programme (c)*	2,575	2,264	2,823	2,927	2,258
Defaulter cases in % (c*100/b)	12%	10%	15%	19%	15%

Note (\*) Registered in the previous year and reported in the next year. E.g. 2,258 defaulters were registered in the year 2016 and reported in the year 2017.

- Total number of Tuberculosis cases has increased from 40,149 in 2013 to 55,127 in 2017 (Refer Annexure 9).
- The number of defaulters from DOTS programme in 2013 was 12% and has risen to 15% in 2017.
- Number of cases registered under DOTS decreased from 21,550 in 2013 to 15,550 in 2017, which is a 28% decrease.

<sup>&</sup>lt;sup>9</sup> This information related to tuberculosis is calendar year-wise, while the information in Table 3 is financial year-wise. This is because the information for defaulters was provided by the TB control unit in calendar year-wise.



Table 6: Diarrhoea number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018<sup>10</sup>

Years	2013-14	2014-15	2015-16	2016-17	2017-18					
Number of Diarrhoea Cases in government dispensaries and hospitals in Mumbai										
MCGM dispensaries and hospitals	1,14,666	1,13,236	1,15,759	97,392	90,955					
State hospitals	1,561	1,129	1,741	1,162	2,421					
Other government dispensaries										
and hospitals	1,953	2,392	1,842	2,089	1,848					
Total Cases	1,18,180	1,16,757	1,19,342	1,00,643	95,224					
Population /Total Cases	105	107	104	124	131					
Number of Deaths due to Diarrhoea in Mumbai										
Total Deaths	260	260	*							
Total Cases/Total Deaths	455	449								

In 2017-18, reported cases of diarrhoea were 95,224, but the existing trend shows that diarrhoea cases have fallen across the past five years by 19%.

Table 7: Cholera number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018

Years	2013-14	2014-15	2015-16	2016-17	2017-18				
Number of Cholera Cases in government dispensaries/hospitals in Mumbai									
MCGM dispensaries/hospitals	89	19	187	104	27				
State hospitals	7	11	6	5	0				
Other government									
dispensaries/hospitals	0	1	14	0	0				
Total Cases	96	31	207	109	27				
Population /Total Cases	1,29,608	4,01,367	60,108	1,14,150	4,60,829				
Number of Deaths due to Cholera in Mumbai									
Total Deaths	7	3	*						
Total Cases/Total Deaths	14	10							

**Note:** (\*) The cause of death data has not been received from 2016 since both the MCGM and State government do not have access to the centralised Civil Registration System, the RTI to the Vital Statistics Division of the Central Government has been repeatedly transferred to the MCGM. (Refer to Page No. 13)

The number of cholera cases was 31 in 2014-15 from the governmental institutions, but this number went up to 207 in 2015-16; and in the year 2016-17, cholera cases were 109. This number dropped further to 27 in 2017-18. This trend shows an inconsistency in the eradication of cholera, and a higher emphasis needs to be put on the eradication of this disease.

 $<sup>^{10}</sup>$  1 dispensary had 'Suspected cases' against their data on cases pertaining to Diarrhoea.



Table 8: Typhoid number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018<sup>11</sup>

Years	2013-14	2014-15	2015-16	2016-17	2017-18				
Number of Cases in government dispensaries and hospitals in Mumbai									
MCGM dispensaries and hospitals	6,492	4,355	4,486	3,483	2,767				
State hospitals	232	193	538	433	916				
Other government dispensaries									
and hospitals	607	390	306	497	956				
Total Cases	7,331	4,938	5,330	4,413	4,639				
Population /Total Cases	1,697	2,520	2,334	2,819	2,682				
Number of Deaths due to Typhoid in Mumbai									
Total Deaths	10	3	*						
Total Cases/Total Deaths	733	1646							

There were 4,639 cases of typhoid in governmental institutions in 2017-18. Number of typhoid cases in governmental institutions seems to be on the decline, showing a 37% decrease from 2013-14 to 2017-18.

Table 9: Diabetes number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018<sup>12</sup>

Years	2013-14	2014-15	2015-16	2016-17	2017-18				
Number of Diabetes Cases in government dispensaries and hospitals in Mumbai									
MCGM dispensaries and hospitals	35,118	43,265	20,449	22,669	17,996				
State hospitals	742	1,135	832	957	3,444				
Other government dispensaries									
and hospitals	4,981	4,310	9,415	8,894	8,839				
Total Cases	40,841	48,710	30,696	32,520	30,279				
Population /Total Cases	305	255	405	383	411				
Number of Deaths due to Diabetes in Mumbai									
Total Deaths	2,421	2,493	*						
Total Cases/Total Deaths	17	20							

**Note:** (\*) The cause of death data has not been received from 2016 since both the MCGM and State government do not have access to the centralised Civil Registration System, the RTI to the Vital Statistics Division of the Central Government has been repeatedly transferred to the MCGM. (Refer to Page No. 13)

Number of diabetes cases registered in government hospitals and dispensaries decreased by 26% from 2013-14 to 2017-18.

<sup>&</sup>lt;sup>11</sup> 1 dispensary had 'Suspected cases' against their data on cases pertaining to Typhoid.

<sup>&</sup>lt;sup>12</sup> 18 dispensaries had 'suspected cases' in the number of cases pertaining to Diabetes.



Table 10: Hypertension number of cases in government dispensaries and hospitals and total deaths in Mumbai from April'2013-March'2018

Years	2013-14	2014-15	2015-16	2016-17	2017-18			
Number of Hypertension Cases in government dispensaries and hospitals in Mumbai								
MCGM dispensaries and hospitals	26,901	31,960	22,499	24,261	20,238			
State hospitals	821	1,039	865	1,199	3,609			
Other government dispensaries								
and hospitals	7,915	5,671	12,597	11,297	10,281			
Total Cases	35,637	38,670	35,961	36,757	34,128			
Population /Total Cases	349	322	346	339	365			
Number of Deaths due to Hypertension in Mumbai								
Total Deaths	4,618	5,061	*					
Total Cases/Total Deaths	8	8	-					

Registered number of hypertension cases in government institutions is 34,128 in 2017-18. It is a cause of concern that more than 4,000 people died of hypertension in the year 2013-14 and 2014-15.



Table 11: Causes of death in Mumbai from 2013 - 2017

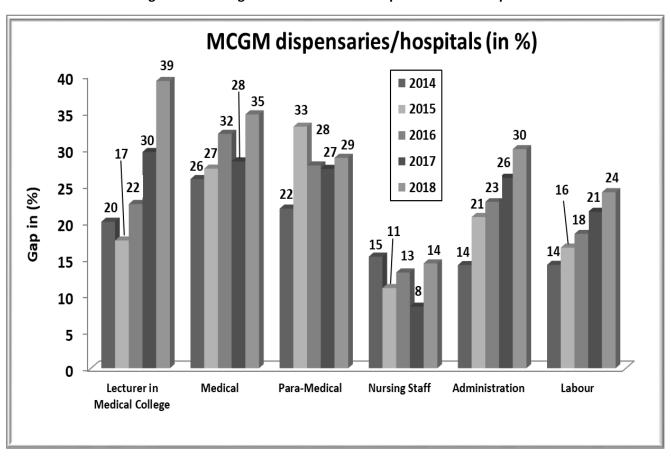
	201	3	201	4	201	.5	2016 2017			7	
Cause of Death	No. of Deaths	In %	No. of Deaths	In %	No. of Deaths	In %	No. of Deaths	In %	No. of Deaths	In %	
Malaria (B50 TO B54)	204	0.2	112	0.1	92	0.1					
Dengue (A90)	107	0.1	104	0.1	129	0.2	The cause of death data has no been received from 2016 since both the MCGM and State government do not have acces to the centralised Civ Registration System, the RTI to the Vital Statistics Division of the				
Tuberculosis (A- 15,16,17,18,19,)	7,372	8.2	6,589	7.4	5,693	6.9					
Diarrhoea (A09)	265	0.3	262	0.3	169	0.2					
Cholera (A00)	8	0.0	1	0.0	5	0.0					
Typhoid (A01)	11	0.0	3	0.0	8	0.0					
Diabetes (E10-E14)	2,460	2.7	2,428	2.7	2,544	3.1		Central Government has be			
Hypertension (I10-I15)	4,449	4.9	5,030	5.6	4,486	5.5	repeatedly transferred to the MCGM. (Refer to Page No. 11)				
HIV / AIDS (B20-24)	509	0.6	379	0.4	346	0.4					
Other Cause of deaths	75,042	83.0	74,663	83.4	68,497	83.6					
Total Deaths	90,427	100	89,571	100	81,969	100	86,642	100	88,845	100	

Table 12: Top 10 causes of death in Mumbai from 2013 - 2017

Cause of Death	2013	2014	2015	2016	2017			
Acute Myocardial Infarction (I21-I22)	10,319	10,121	9,210					
Other Forms of Heart Diseases (I30-I51)	7,518	8,566	7,272	The cause of death data ha				
Septicaemia (A40-A41)	7,372	6,589	5,693	not been rec	eived from 2016			
Tuberculosis (A15-A19)	5,685	5,845	5,323	since both the MC				
All Other Ischemic Heart Diseases (I20 & I23-I25)	4,403	4,430	4,448	State government do in have access to see the centralised Civil Registrat System, the RTI to the V Statistics Division of the second control of the second				
All Other Hypertensive Diseases (I10,I12-I15)	3,959	4,524	4,145					
All Other Diseases of the Respiratory System (J60-J86, J92-J98)	4,227	4,232	3,674	-	edly transferred  M. (Refer to Page			
Pneumonia (J12-J18)	3,046	3,039	3,218	No. 11)	, ,			
Renal Failure (N17-N19)	3,563	3,238	3,064					
Diseases of the Liver (K70-K76)	2,850	2,980	2,955					



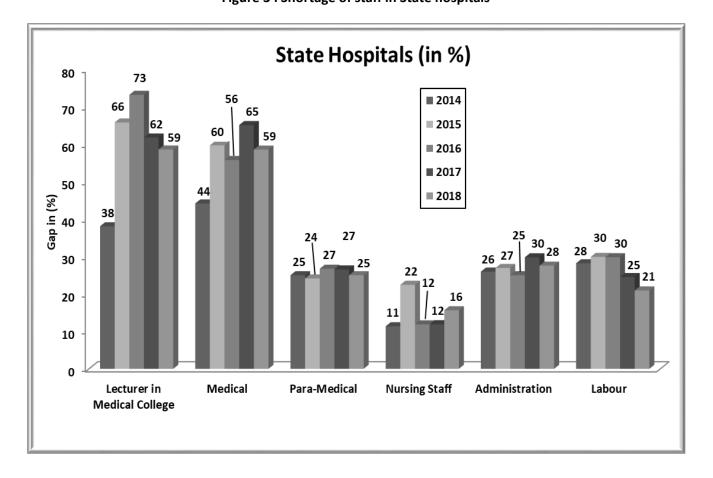
Figure 2: Shortage of staff in MCGM's dispensaries and hospitals



Shortage of medical staff in 2018 is the highest (35%) among medical and administrative positions in the MCGM hospitals and dispensaries, whereas there is a 39% shortage of lecturers in medical colleges of the government.



Figure 3 : Shortage of staff in State hospitals



Overall gap in State hospitals with regard to shortage of staff is 22% with most significant gap in medical department 59% in the year 2018.



### V. Citizen Survey Data<sup>13</sup>

100 79 80 66 65 60 30 25 26 20 2016 2017 2018 2016 2017 2018 2016 2017 2018 2016 2017 2018 2016 2017 2018 2016 2017 2018 Overall SEC A SEC B SEC C SEC E SEC D Only Government dispensaries/ hospitals Only Private or charitable clinics/ hospitals Using both private and government hospitals

Figure 4: Type of Facilities used by the citizens across different Socio-Economic Classes (SEC), 2018<sup>14</sup>

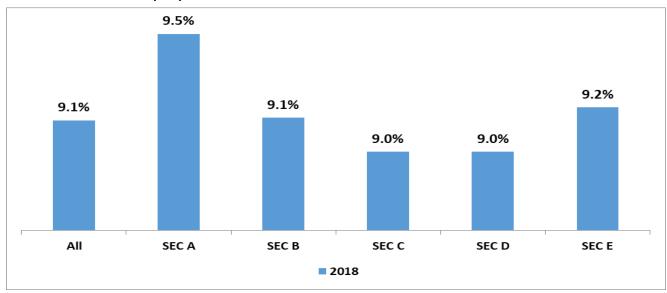
In 2018, 52% households accessed private or charitable clinic/hospitals from the overall SECs. On the other hand, in the same year 46% households had accessed government dispensaries/hospitals. Overall while there is not much of a percentage difference in access to government vis a vis private hospitals, there is a clear socio-economic divide. While 65% of people in the lowest SEC access government hospitals and 35% access private services, it is the opposite in the highest SEC, where 30% accessed government services and 68% accessed private in 2018.

<sup>&</sup>lt;sup>13</sup> The survey data covered questions related to type of diseases each family member suffered, type of healthcare facility accessed for the treatment, average income spent to avail health services and access to medical insurance in the last year.

<sup>&</sup>lt;sup>14</sup> As of July 2018

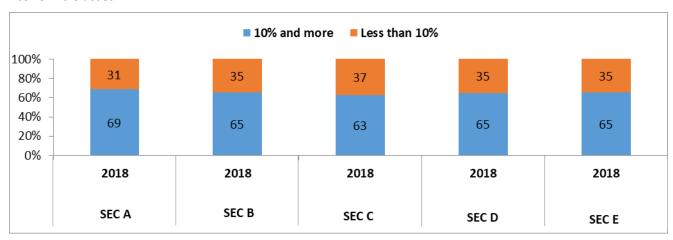


Figure 5: Estimated average percentage of Annual Family Income spent on hospital/medical costs across Socio-Economic Classes (SEC)<sup>15</sup>



- Estimated annual income spent on hospital/medical costs was 9.1% across all SECs in 2018.
- The percentage of income spent on health services is shown not to vary across socio-economic classes, however the burden of accessing health services is much higher towards the lower SECs and the impact of subsidised services is not evident.

Figure 6: Estimated percentage of Annual Family Income spent on hospital/medical costs across Socio-Economic Classes



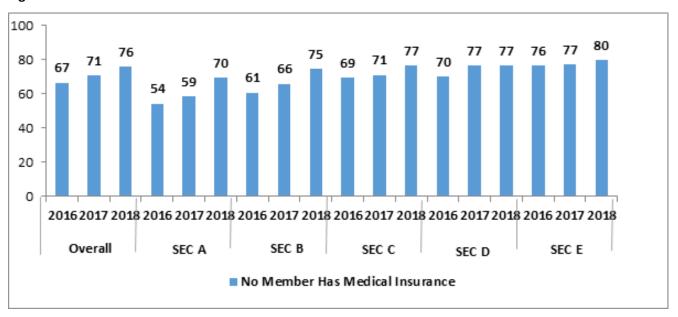
A majority of households spend 10% or more of their income on health services, across socio-economic categories.

The survey data covered questions related to type of diseases each family member suffered, type of healthcare facility accessed for the treatment, average income spent to avail health services and access to medical insurance in the last year.

<sup>&</sup>lt;sup>15</sup> Refer Annexure 4 for Socio-Economic Classification



Figure 7: Number of households across Socio-Economic Classes' with no Medical Insurance



In 70% of households in SEC A and 80% of households in SEC E, no member has medical insurance. This is an appalling number, given that the government has been shifting its focus from a supply driven health service to demand driven insurance based health subsidies.

The survey data covered questions related to type of diseases each family member suffered, type of healthcare facility accessed for the treatment, average income spent to avail health services and access to medical insurance in the last year.



Table 13: Ward wise access to insurance compared with health expenses and type of service accessed.

	%	% of annual	Type of healt	h facilities accessed by th	ne population
Ward	households where no member has insurance	family income spent on health	% accessing public hospitals/dispensaries	% accessing private hospitals/dispensaries	% accessing both private and govt. hospitals/dispensaries
Α	82%	6%	30%	67%	3%
В	74%	6%	75%	25%	0%
С	71%	9%	92%	6%	2%
D	73%	10%	41%	58%	1%
Е	78%	9%	49%	51%	0%
F/N	77%	10%	54%	45%	1%
F/S	76%	8%	72%	28%	0%
G/N	70%	8%	35%	64%	1%
G/S	75%	6%	68%	32%	0%
H/E	77%	9%	56%	29%	15%
H/W	72%	9%	57%	43%	0%
K/E	74%	8%	31%	68%	0%
K/W	78%	9	43%	52%	5%
L	75%	8%	49%	51%	0%
M/E	76%	12%	38%	56%	7%
M/W	78%	10%	55%	45%	0%
N	71%	9%	20%	80%	0%
P/N	81%	9%	40%	54%	6%
P/S	78%	11%	44%	56%	0%
R/C	80%	8%	58%	42%	0%
R/N	79%	10%	80%	20%	0%
R/S	74%	10%	25%	72%	3%
S	71%	10%	27%	73%	0%
Т	70%	10%	45%	55%	0%

- The percentage of annual family income spent on accessing health services is highest (12%) among the population residing in M/E (Govandi) ward and 76% of its population does not have health insurance.
- In N ward, 80% of households accessed private health services and 71% of its residents doesn't have insurance. This is certainly an appalling percentage of households that have made Out of Pocket Expenditure on private health services.
- Majority of Respondents from C, F/S, R/N accessed public health care and still they spent an average of 9% their annual income on health services.
- Majority of respondents from R/S and S Ward accessed private healthcare and spent 10% of their annual income on health. Per dispensary population was for R/S and S ward which shows that there is a need for more public dispensaries to reduce the high Out of Pocket spending of the households.



Table 14: Estimated spent on Hospitals/Medical costs

	Table 14: Estimated spent on Hospitals/ Medical Costs							
2014	-15		015-16		016-17			
		Estimated		Estimated				
		Annual Per		Annual Per				
Estimated Annual		Capita		Capita				
Per Capita Income		Income in		Income in				
in Mumbai	Rs. 2,36,627 <sup>16</sup>	Mumbai	Rs. 2,56,391 <sup>17</sup>	Mumbai	Rs. 2,79,965 <sup>18</sup>			
		Less 25% (		Less 25% (				
Less 25% (		Estimated		Estimated				
Estimated		accounting		accounting				
accounting for		for savings		for savings				
savings and		and		and				
taxation)	Rs. 1,77,470	taxation)	Rs. 1,92,293	taxation)	Rs. 2,09,974			
		Estimated		Estimated				
		Annual		Annual				
Estimated Annual		Income per		Income per				
Income per		household		household				
household = Per		= Per Capita		= Per Capita				
Capita X 4.58	Rs. 8,12,813	X 4.58	Rs. 8,80,702	X 4.58	Rs. 9,61,681			
		Estimated		Estimated				
		Annual		Annual				
		Expenditure		Expenditure				
Estimated Annual		on Health		on Health				
Expenditure on		per		per				
Health per		household		household				
household = 8.4%	Rs. 68,276	= 7.8%	Rs. 68,695	= 9.1%	Rs. 87,513			
		Estimated		Estimated				
		Overall		Overall				
Estimated Overall		Household		Household				
Household Annual		Annual		Annual				
Expenditure on		Expenditure		Expenditure				
Health = Rs.		on Health =		on Health =				
68,276/- X		Rs. 68,695/-		Rs. 87,513/-				
2,830,000	Rs. 19,322 Crores	X 2,830,000	Rs. 19,441 Crores	X 2,830,000	Rs. 24,766 Crores			

As per the household survey conducted by Hansa Research (commissioned by us), the above table indicates that the average annual spent by citizens on medical expenses is 9.1% of their total household income. Therefore, it figures an estimated annual spent of Rs. 24,766 crores on hospital/medical costs by the overall households in Mumbai.

16 17 & 18 Per Capita Gross District Value Added as per the Economic Survey of Maharashtra 2017-18 for the years 2014-15, 2015-16 and 2016-17 respectively. The directorate of Economics and statistics revised the Per Capita Gross District Value Added to the above numbers.



Table 15: Estimated cases of Diseases and Ailments across different Socio-Economic Classes in 2018

Diseases & Ailments	Malaria	Dengue	Diabetes	Cancer	Chikungunya	Hypertension
Overall	1,15,268	1,21,775	1,40,962	12,911	9,941	68,529
SEC A	13,968	24,375	16,340	1,683	2,437	10,832
SEC B	19,881	24,953	23,898	3,191	1,765	15,778
SEC C	28,422	32,910	33,421	4,474	2,259	14,184
SEC D	27,842	25,998	41,991	2,113	1,862	16,774
SEC E	25,156	13,539	25,312	1,451	1,619	10,961

Cases of diseases, both communicable and non-communicable are the highest among SEC C and D. Non-Communicable diseases such as diabetes, cancer and hypertension show considerable numbers across socio-economic classification.

Table 16: Gender and Age-wise estimated cases of Diseases and Ailments across different socio-economic classes in 2018

Diseases and	Total Estimated Cases							
Ailments	Overall	Males	Males Females		26 - 40 years	40+ years		
Malaria	1,15,268	65,174	50,094	35,578	48,650	31,040		
Diabetes	1,40,962	75,049	65,912	33,644	41,798	65,519		
Hypertension	68,529	37,052	31,477	20,094	24,964	23,471		
Cancer	12,911	8,262	4,649	4,293	4,981	3,637		
Dengue	1,21,775	73,961	47,814	42,458	41,007	38,309		
Chikungunya	9,941	5,206	4,736	1,909	5,550	2,482		

Number of cases affecting the youth population is high, 31% of total malaria cases and 35% of total dengue cases were in ages 18-25 years, whereas 29% of hypertension and 33% of cancer cases affected the youth.

The survey data covered questions related to type of diseases each family member suffered, type of healthcare facility accessed for the treatment, average income spent to avail health services and access to medical insurance in the last year.



Table 17: Estimated number of cases availing Type of Facilities by diseases

	Year	Malaria	Dengue	Chikungunya	Cancer
	2016	63,025	13,965	NA	8,049
Only Government dispensaries/ hospitals	2017	39,811	33,653	17,462	5,541
disperisuries, riospitais	2018	52,197	49,621	5,411	3,524
	2016	65,678	18,570	NA	2,925
Only Private or Charitable clinics/ hospitals	2017	46,104	72,343	12,991	3,098
cliffics/ flospitals	2018	53,899	66,794	4,221	4,901
Using both private and government hospitals	2016	45,786	5,589	NA	2,850
	2017	4,788	3,447	2,701	894
	2018	1,336	490	155	3,859

Table 18: Comparison of Dengue and Malaria cases as per RTI and survey data

Disease	Cases as per RTI data	Cases as per Survey data
Malaria	11,163	1,15,268
Dengue	14,345	1,21,775

**Note:** Cases as per RTI data are from government hospitals and dispensaries, whereas cases as per survey data includes estimated data of government and private hospitals and dispensaries, based on survey respondents. While looking at the number of cases as per survey data, it is advisable to only look at the data for Malaria and Dengue considering the fact that there tends to be an over claim for other diseases and the claim of having suffered from Malaria and Dengue is generally backed by the process of having undergone tests.



## VI. Deliberations by Municipal Councillors and MLAs on Health Issues

Table 19: Total numbers of Meeting, Attendance and Questions from March'2012 to March'2013 & April'2017 to March'2018

Public Health Committee	Total Meetings	Attendance (%)	Total Questions Asked
March 2012 to March 2013	16	68%	56
April 2017 to March 2018	13	70%	154

The number of Public Health Committee meetings held in 2017-18 have decreased. The number of questions asked has significantly increased. Highest number of questions (41) asked on infrastructure (for detailed breakup refer to table no. 21).



Table 20: Health issues raised by Public Health Committee Councillors from April'2016 to March'2018

1	April'2016 to March'2017	April'2017 to
Issues Pudget	1	March'2018 1
Budget  Comparation / Comparation related		
Cemeteries /Crematorium related	1 12	3
Epidemic/Sensitive Diseases		
Malaria/Dengue	6	1
Diabetic/Hypertension	0	0
Diarrhoea/Typhoid/Cholera	0	0
Tuberculosis	3	2
Dispensary/Municipal Hospital/State Hospital	5	4
Equipments	11	6
Eradication programme	2	0
Fogging	1	0
Health Education/institute	2	2
Health related	0	4
Health Service Related	11	4
Human Resource	23	28
Infrastructure	29	41
Issue of Birth/Death certificates	1	0
License Related	3	4
Maternity homes / Primary Health Centre(PHC)	1	13
MCGM Related	7	2
Mortality rate	0	0
Medical Examination of Students	0	0
Naming/ Renaming Hospital/Health Centre/Cemeteries	5	12
Nuisance due to Pest Rodents, stray dogs, monkeys etc.	1	2
Pest Control Related	0	2
Private Health Services	1	1
Quacks	1	0
Reforms in health policies	0	0
Schemes / Policies in Health Related	5	7
Social Cultural Concerns Related	0	0
Treatment/Medicines	8	14
Total	131	154

Number of questions asked by councillors in the Public Health Committee has increased from 131 in 2016-17 to 154 in 2017-18. 12 Questions were asked on naming/ renaming of hospitals whereas only 1 question on malaria and dengue and only 2 questions on tuberculosis were raised in 2017-18, inspite of these being widespread diseases in Mumbai.



Table 21: Number of Questions asked on Health by Municipal Councillors ward-wise in all Committees from April'2016 to March'2018

Ward	No. of Councillors	April 2016 to March 2017	April 2017 to March 2018
Α	4	19	0
В	3	2	0
С	4	1	3
D	7	4	6
E	8	4	22
F/N	10	8	14
F/S	7	12	13
G/N	11	12	10
G/S	9	11	21
H/E	11	12	10
H/W	6	1	3
K/E	15	10	12
K/W	13	15	28
L	15	99	93
M/E	13	8	23
M/W	8	13	17
N	12	9	8
P/N	16	20	35
P/S	8	14	13
R/C	10	13	18
R/N	7	21	24
R/S	11	34	36
S	13	14	10
Т	6	9	16
Total	227	365	435



Table 22: Health issues raised by Municipal Councillors from April'2016 to March'2018

	April'2016 to	April'2017 to
Issues	March'2017	March'2018
Budget	1	1
Bio medical Waste	9	5
Cemeteries / Crematorium related	6	15
Compensation/Rehabilitation	1	0
Epidemic/Sensitive Diseases	87	57
Malaria/Dengue	40	18
Tuberculosis	6	8
Diarrhoea/Typhoid/Cholera	0	0
Diabetes/Hypertension	1	5
Dispensary/Municipal Hospital/State Hospital	5	12
Equipments	15	9
Eradication programme	2	2
Fogging	13	23
Health related	42	66
Human Resource	38	42
Health Service Related	19	13
Health Education/Institute Related	9	2
Infrastructure	44	57
Issue of Birth/Death certificates	4	1
License Related	5	15
Medical Examination Report	0	0
Maternity homes / Primary Health Centre(PHC)	11	34
MCGM related	7	2
Mortality rate	0	3
Naming/ Renaming Hospital/Health Centre/Cemeteries	9	13
Nuisance due to Pest Rodents, stray dogs, monkeys etc.	1	8
Negligence of officers	1	0
Private health services	3	1
Quacks	1	0
Reforms in health policies	0	3
Schemes / Policies in Health	21	25
Vaccination	0	0
Treatment/Medicines	11	26
Total	365	435

Total number of questions asked by municipal councillors on health issues was 435 in 2017-18, which has increased compared to 2016-17 when the number of questions raised was 365.



Table 23: Health issues raised by MLAs from following sessions: Monsoon 2015, Winter 2015, Budget 2016, Monsoon 2016, Winter 2016 and Budget 2017

		015, Winter 20 udget 2016	015 and	Monsoon 2016, Winter 2016 and Budget 2017			
Issues	Que. related to Mumbai & Schemes/ Policies	Other Health Questions	Total Health Que	Que. related to Mumbai & Schemes/ Policies	Other Health Questions	Total Health Que	
Bio Medical Waste	1	3	4	0	0	0	
Budget	1	0	1	1	1	2	
Cemeteries/Crematorium related	15	2	17	8	1	9	
Epidemic/Sensitive Diseases	74	73	147	76	39	115	
Diabetic/Hypertension	0	1	1	0	0	0	
Malaria/Dengue	12	28	40	20	13	33	
Diarrhoea/Typhoid/Cholera	7	3	10	0	3	3	
Tuberculosis	10	1	11	5	0	5	
Compensation/Rehabilitation	1	0	1	0	0	0	
Dispensary/Municipal Hospital/State Hospital	7	10	17	3	9	12	
Equipments	9	13	22	25	17	42	
Eradication programme	6	0	6	0	0	0	
Food Poison	8	3	11	4	3	7	
Health Education/Institute	5	17	22	6	13	19	
Health Insurance	4	2	6	0	10	10	
Health Related Issues	34	42	76	22	30	52	
Health Service Related	30	15	45	6	7	13	
Human Resource	16	73	89	19	34	53	
Infrastructure	31	40	71	27	22	49	
License Related	3	2	5	8	17	25	
Maternity homes / Primary Health Centre(PHC)	2	10	12	0	4	4	
Medical Examination of Students	1	2	3	0	9	9	
Mortality Rate	4	43	47	0	65	65	
Pollution	1	7	8	6	21	27	
Private Health Services	2	3	5	16	12	28	
Quacks	0	7	7	0	3	3	
Reforms in health policies	0	0	0	0	0	0	
Schemes / Policies in Health	51	0	51	2	37	39	
Treament/Medicines	19	88	107	8	37	45	
Total	325	455	780	237	391	628	



Table 24: Questions asked on health issues by MLAs from: Monsoon Session 2016, Winter Session 2016 & Budget Session 2017

Constit uency	Name of MLA	Political Party	Area	Que. related to Mumbai & Schemes/Poli cies	Other Health Que.	Total Health Que
	Manisha Ashok					
153	Chaudhari	BJP	Dahisar	9	12	21
154	Prakash Surve	SS	Magathane	8	3	11
155	Sardar Tara Singh	BJP	Mulund	4	17	21
156	Sunil Rajaram Raut	SS	Vikhroli	7	2	9
157	Ashok Patil	SS	Bhandup West	3	2	5
159	Sunil Prabhu	SS	Dindoshi	9	16	25
160	Atul Bhatkhalkar	BJP	Kandivali East	15	26	41
161	Yogesh Sagar	BJP	Charkop	5	3	8
162	Aslam Shaikh	INC	Malad West	17	46	63
164	Bharati Hemant Lavekar	ВЈР	Versova	1	3	4
165	Ameet Satam	ВЈР	Andheri West	6	2	8
166	Ramesh Latke	SS	Andheri East	0	0	0
167	Parag Alavani	ВЈР	Vile Parle	12	13	25
168	Md. Arif (Naseem) Khan	INC	Chandivali	14	29	43
169	Ram Kadam	ВЈР	Ghatkopar West	0	0	0
171	Abu Azmi	SP	Mankhurd Shivaji Nagar	10	16	26
172	Tukaram Kate	SS	Anushakti Nagar	6	0	6
173	Prakash Phaterpekar	SS	Chembur	1	3	4
174	Mangesh Kudalkar	SS	Kurla	5	5	10
175	Sanjay Potnis	SS	Kalina	7	12	19
176	Trupti Prakash Sawant	SS	Vandre (East)	1	4	5
177	Ashish Shelar	BJP	Vandre (West)	12	22	34
178	Varsha Gaikwad	INC	Dharavi	16	21	37
179	Captain R. Tamil Selvan	BJP	Sion Koliwada	1	0	1
180	Kalidas Nilkanth Kolambkar	INC	Wadala	9	8	17
181	Sada Sarvankar	SS	Mahim	2	3	5
182	Sunil Govind Shinde	SS	Worli	8	17	25
183	Ajay Choudhari	SS	Shivadi	5	6	11
184	Waris Pathan	AIMEIM	Byculla	1	2	3
185	Mangal Prabhat Lodha	ВЈР	Malabar Hill	5	5	10
186	Amin Patel	INC	Mumbadevi	33	90	123
187	Raj K. Purohit	ВЈР	Colaba	5	3	8
	To	otal		237	391	628

Ram Kadam and Ramesh Latke have asked zero questions on Health issues in Monsoon Session 2016, Winter Session 2016 & Budget Session 2017.



#### VII. Ward-wise Occurrence of Diseases

Table 25: Estimated proportion of usage of various Dispensaries and Hospitals from April'2017 to March'2018

					Density of	Type of hea	Ith facilities acc population*	cessed by the
Ward	Provisional Population 2011	Slum Populati on (in %) <sup>19</sup>	No. of Gover nment Hospit als	Availa ble Gover nment Dispen saries	governme nt dispensari es to populatio n	% of population accessing public hospitals/dispensarie s	% of population accessing private hospitals/dispensarie s	% of population accessing both private and government hospitals/dispensaries
Α	1,85,014	34%	4	6	30,836	30%	67%	3%
В	1,27,290	11%	0	5	25,458	75%	25%	0%
С	1,66,161	-	0	5	33,232	92%	6%	2%
D	3,46,866	10%	0	8	43,358	41%	58%	1%
Е	3,93,286	20%	6	11	35,753	49%	51%	0%
F/N	5,29,034	58%	3	7	75,576	54%	45%	1%
F/S	3,60,972	26%	3	9	40,108	72%	28%	0%
G/N	5,99,039	32%	0	10	59,904	35%	64%	1%
G/S	3,77,749	21%	1	14	26,982	68%	32%	0%
H/E	5,57,239	42%	1	8	69,655	56%	29%	15%
H/W	3,07,581	39%	1	5	61,516	57%	43%	0%
K/E	8,23,885	49%	1	12	68,657	31%	68%	0%
K/W	7,48,688	15%	1	7	1,06,955	43%	52%	5%
L	9,02,225	54%	1	15	60,148	49%	51%	0%
M/E	8,07,720	30%	1	9	89,747	38%	56%	7%
M/W	4,11,893	53%	1	6	68,649	55%	45%	0%
N	6,22,853	62%	3	9	69,206	20%	80%	0%
P/N	9,41,366	54%	3	11	85,579	40%	54%	6%
P/S	4,63,507	57%	2	2	2,31,754	44%	56%	0%
R/C	5,62,162	19%	1	6	93,694	58%	42%	0%
R/N	4,31,368	51%	1	4	1,07,842	80%	20%	0%
R/S	6,91,229	58%	2	6	1,15,205	25%	72%	3%
S	7,43,783	72%	0	8	92,973	27%	73%	0%
Т	3,41,463	33%	3	3	1,13,821	45%	55%	0%
Total	12,442,373	42%	39	186	66,894	46%	52%	3%

Note: (\*) Household Survey

<sup>•</sup> P/S ward has only 2 government hospitals and 2 government dispensaries for a population of 4,63,507 with 56% of its households accessing private health facilities.

<sup>•</sup> In 2017-2018, **52**% of the total households across all the Wards accessed private health services. This is more than half of the population accessing on private health facilities.

<sup>&</sup>lt;sup>19</sup> Source: Greater Mumbai Report on Draft Development Plan 2034 (May 2016), MCGM



Table 26: Ward wise Malaria Data

	Population					
Ward*	2011	2013-14	2014-15	2015-16	2016-17	2017-18
Α	1,85,014	303	183	156	139	238
В	1,27,290	33	31	25	31	32
С	1,66,161	113	92	97	76	186
D	3,46,866	100	90	94	67	40
E	3,93,286	160	89	44	93	104
F/N	5,29,034	238	176	168	152	106
F/S	3,60,972	568	960	812	441	908
G/N	5,99,039	310	272	141	162	120
G/S	3,77,749	100	64	76	150	116
H/E	5,57,239	179	186	114	152	102
H/W	3,07,581	205	177	121	125	104
K/E	8,23,885	381	368	315	172	166
K/W	7,48,688	205	132	133	170	279
L	9,02,225	386	285	232	145	146
M/E	8,07,720	112	149	87	209	58
M/W	4,11,893	78	53	58	37	38
N	6,22,853	228	186	130	102	84
P/N	9,41,366	83	79	127	153	154
P/S	4,63,507	43	54	42	29	30
R/C	5,62,162	84	103	97	89	49
R/N	4,31,368	73	78	90	52	45
R/S	6,91,229	130	99	88	107	106
S	7,43,783	137	117	128	122	85
Т	3,41,463	79	37	42	52	48
Municipal Hospital		11,918	9,961	9,150	6,741	6,397
State Hospital		1,052	854	1,233	1,312	941
Other Government Hospital		1,100	808	831	527	481
Total	1,24,42,373	18,398	15,683	14,631	11,607	11,163

- Total malaria cases have reduced by 39% from 2013-14 to 2017-18.
- In the last 5 consecutive years, F/S and K/E has been amongst the highest in malaria occurrences.
- F/S had the highest number of malaria cases in 2017-18, with 908 cases. Further, there was a 106% increase in the number of malaria cases registered in F/S ward from 2016-17 to 2017-18.



**Table 27: Ward wise Dengue Data** 

	Population					
Ward*	2011	2013-14	2014-15	2015-16	2016-17	2017-18
Α	1,85,014	0	47	137	42	36
В	1,27,290	27	51	43	25	24
С	1,66,161	3	17	14	26	45
D	3,46,866	0	35	60	84	35
E	3,93,286	1	25	42	3	6
F/N	5,29,034	2	54	29	35	47
F/S	3,60,972	0	34	22	11	20
G/N	5,99,039	10	64	35	21	21
G/S	3,77,749	0	0	1	9	16
H/E	5,57,239	0	22	67	1	20
H/W	3,07,581	3	11	13	16	73
K/E	8,23,885	29	67	198	224	184
K/W	7,48,688	3	35	12	0	0
L	9,02,225	12	11	43	144	19
M/E	8,07,720	0	24	2	0	21
M/W	4,11,893	14	4	2	27	0
N	6,22,853	2	38	155	70	0
P/N	9,41,366	0	12	56	3	12
P/S	4,63,507	11	2	15	3	2
R/C	5,62,162	0	19	31	53	37
R/N	4,31,368	0	26	132	108	109
R/S	6,91,229	24	81	30	39	41
S	7,43,783	0	28	308	95	52
T	3,41,463	6	1	4	0	5
Municipal Hospital		5,952	7,710	11,484	13,323	11,252
State Hospital		732	1,523	1,776	2,529	1,743
Other Government Hospital		430	358	533	880	525
Total	1,24,42,373	7,261	10,299	15,244	17,771	14,345

- Over the last five years (2013-14 to 2017-18) the overall dengue occurrences have increased by 98%.
- K/W, M/W and N wards registered **0** dengue cases in 2017-18.



Table 28: Positive dengue cases as per rapid kit test

	201	6-17	2017	7-18
Ward	Dengue Cases in Dispensary	Dengue Positive Cases	Dengue Cases in Dispensary	Dengue Positive Cases
Α	42	51	36	44
В	25	6	24	40
С	26	26	45	40
D	82	73	33	33 <sup>20</sup>
Е	3	18	6	O <sup>21</sup>
F/N	33	79	7	0
F/S	11	31	20	15
G/N	12	62	14	48
G/S	9	176	16	85
H/E	1	20	20	25
H/W	16	29	73	71
K/E	182	179	144	151
K/W	0	5	0	49
L	124	134	1	0
M/E	0	41	21	21
M/W	27	0	0	0
N	70	76	0	16 <sup>22</sup>
P/N*	3	30	12	
P/S	3	5	2	2
R/C	53	38	37	33
R/N	108	96	109	0
R/S	0	38	0	58 <sup>23</sup>
S	95	105	52	0
Т	0	3	5	10
Total	925	1,321	677	741

Note: (\*) Data has not been obtained from P/N ward for the year 2017-18.

- K/W ward had stated dengue cases in their wards as zero in 2017-18 (Refer table 20). However, the results of Rapid Test Kits showed the number of positive dengue cases as 49 cases in 2017-18.
- On the other hand, R/N and S wards showed dengue cases in their wards as 109 and 52 respectively, while results of Rapid Test kits showed number of positive cases as zero in both in 2017-18.
- This shows the discrepancy in the data between the cases reported by dispensary and the cases reported as positive based on the rapid kit test.

<sup>20 18 19 &</sup>amp; 20 Represents suspected cases.



**Table 29: Ward wise Tuberculosis Data** 

	Population					
Ward*	2011	2013-14	2014-15	2015-16	2016-17	2017-18
Α	1,85,014	452	369	274	238	290
В	1,27,290	110	121	95	252	70
С	1,66,161	115	141	134	73	98
D	3,46,866	237	233	234	201	146
E	3,93,286	572	561	408	376	258
F/N	5,29,034	255	307	375	161	162
F/S	3,60,972	14	438	239	176	207
G/N	5,99,039	510	396	444	434	456
G/S	3,77,749	174	198	402	229	257
H/E	5,57,239	485	549	532	659	614
H/W	3,07,581	245	237	236	205	202
K/E	8,23,885	616	663	491	327	251
K/W	7,48,688	292	264	242	162	205
L	9,02,225	1,037	1,182	1,422	1,254	792
M/E	8,07,720	228	102	82	148	184
M/W	4,11,893	282	136	165	95	98
N	6,22,853	143	203	158	143	38
P/N	9,41,366	200	238	219	310	135
P/S	4,63,507	97	48	43	21	16
R/C	5,62,162	206	180	188	195	198
R/N	4,31,368	103	118	158	201	172
R/S	6,91,229	611	532	411	493	136
S	7,43,783	675	485	448	369	496
T	3,41,463	216	386	200	108	156
Municipal Hospital		31,782	32,439	31,463	40,849	45,566
State Hospital		1,216	1,829	1,645	1,890	3,348
Other Government Hospital		606	482	464	432	579
Total	1,24,42,373	41,479	42,837	41,172	50,001	55,130

<sup>•</sup> L saw the highest number of Tuberculosis occurrences (792) in 2017-18.

<sup>•</sup> From 2013-14 to 2017-18, there has been a 33% increase in the occurrences of tuberculosis.



**Table 30: Ward wise Diabetes Data** 

Table 50: Ward wise Diabet	Population					
Ward*	2011	2013-14	2014-15	2015-16	2016-17	2017-18
A	1,85,014	493	449	433	639	664
В	1,27,290	447	439	759	823	726
С	1,66,161	149	115	151	334	586
D	3,46,866	293	277	2,034	2,058	1,947
E	3,93,286	600	411	704	936	865
F/N	5,29,034	505	1,113	821	807	725
F/S	3,60,972	81	68	169	302	173
G/N	5,99,039	1,247	1,963	2,687	1,470	932
G/S	3,77,749	197	158	333	619	580
H/E	5,57,239	409	273	668	1,157	1,171
H/W	3,07,581	248	101	215	148	189
K/E	8,23,885	1,972	1,018	1,008	1,134	1,008
K/W	7,48,688	1,760	1,105	569	1,700	1,336
L	9,02,225	1,222	878	1,592	1,175	1,646
M/E	8,07,720	448	606	1,699	1,805	1,265
M/W	4,11,893	267	178	222	268	172
N	6,22,853	715	558	573	2,353	642
P/N	9,41,366	176	132	582	494	649
P/S	4,63,507	272	107	143	125	82
R/C	5,62,162	324	201	560	1,333	834
R/N	4,31,368	135	129	1,158	387	351
R/S	6,91,229	5,390	7,540	831	1,512	1,605
S	7,43,783	858	329	1,710	1,154	654
T	3,41,463	291	239	99	127	131
Municipal Hospital		18,901	27,319	4,898	4,605	4,157
State Hospital		742	1,135	832	957	3,444
Other Government Hospital		2,699	1,869	5,246	4,098	3,745
Total	1,24,42,373	40,841	48,710	30,696	32,520	30,279

<sup>•</sup> D and L wards show the highest number of diabetes cases with 1,947 and 1,646 respectively in 2017-18.

<sup>•</sup> The least cases of diabetes were reported from P/S ward with 82 cases.



Table 31: Ward wise Diarrhoea Data

	Population					
Ward*	2011	2013-14	2014-15	2015-16	2016-17	2017-18
Α	1,85,014	2,002	2,092	1,620	1,310	1,883
В	1,27,290	1,545	1,783	1,766	870	1,295
С	1,66,161	2,431	3,085	2,972	2,630	2,928
D	3,46,866	4,865	5,302	6,510	6,927	1,395
E	3,93,286	2,474	2,758	3,414	2,848	3,766
F/N	5,29,034	1,507	1,695	1,837	2,500	2,816
F/S	3,60,972	4,120	3,634	4,085	4,827	4,500
G/N	5,99,039	2,881	2,923	3,553	5,673	6,868
G/S	3,77,749	4,691	4,792	5,387	5,659	6,293
H/E	5,57,239	6,006	6,884	7,368	6,396	6,305
H/W	3,07,581	2,028	2,104	2,204	1,522	1,518
K/E	8,23,885	7,169	10,428	7,970	5,841	5,612
K/W	7,48,688	3,792	2,774	2,325	1,724	2,548
L	9,02,225	9,659	10,143	12,311	11,535	12,090
M/E	8,07,720	3,248	5,894	11,805	4,908	5,036
M/W	4,11,893	2,262	1,856	1,918	1,896	768
N	6,22,853	7,079	8,140	10,239	8,121	2,686
P/N	9,41,366	3,582	2,911	3,384	3,415	1,159
P/S	4,63,507	1,073	949	692	658	729
R/C	5,62,162	3,454	3,851	3,599	2,576	3,923
R/N	4,31,368	785	823	2,329	1,836	2,253
R/S	6,91,229	1,375	1,606	1,625	1,674	818
S	7,43,783	3,507	4,108	5,070	4,322	6,088
Т	3,41,463	2,534	2,067	3,052	1,873	1,652
Municipal Hospital		31,718	21,857	9,677	6,947	7,044
State Hospital		1,561	1,129	1,741	1,162	2,421
Other Government Hospital		832	1,169	889	993	830
Total	1,24,42,373	1,18,180	1,16,757	1,19,342	1,00,643	95,224

<sup>•</sup> Diarrhoea cases have increased consistently in D ward with 6,927 cases in 2016-17 compared to 4,865 in 2013-14. However, it showed a big drop in cases, with 1,395 cases in 2017-18.

<sup>•</sup> L ward, which comprises of Kurla, has the highest number of diarrhoea cases, with 12,090 cases.



**Table 32: Ward wise Hypertension Data** 

<i>.</i> .	Population					
Ward*	2011	2013-14	2014-15	2015-16	2016-17	2017-18
Α	1,85,014	1,492	1,409	1,170	1,658	1,300
В	1,27,290	493	245	335	408	313
С	1,66,161	197	479	526	440	807
D	3,46,866	306	394	2,309	2,326	2,258
E	3,93,286	896	447	1,466	1,718	629
F/N	5,29,034	1,247	1,276	1,664	1,580	1,170
F/S	3,60,972	215	161	299	576	301
G/N	5,99,039	1,335	1,507	2,006	2,070	1,706
G/S	3,77,749	390	343	645	654	799
H/E	5,57,239	562	474	1,381	1,327	1,425
H/W	3,07,581	226	88	181	136	186
K/E	8,23,885	1,990	1,344	1,945	1,663	1,379
K/W	7,48,688	1,398	1,417	1,122	2,744	1,963
L	9,02,225	1,464	2,185	2,016	1,441	1,723
M/E	8,07,720	691	688	1,559	1,874	1,633
M/W	4,11,893	503	244	264	254	206
N	6,22,853	709	683	646	992	967
P/N	9,41,366	258	91	327	427	563
P/S	4,63,507	235	121	130	97	88
R/C	5,62,162	735	586	896	1,293	847
R/N	4,31,368	203	142	601	258	210
R/S	6,91,229	2,582	3,181	966	1,362	1,249
S	7,43,783	540	509	1,035	1,387	623
T	3,41,463	206	228	290	224	182
Municipal Hospital		12,182	17,390	5,048	4,615	4,922
State Hospital		821	1,039	865	1,199	3,609
Other Government Hospital		3,761	1,999	6,269	4,034	3,070
Total	1,24,42,373	35,637	38,670	35,961	36,757	34,128

D ward has the highest number of cases (2,258), followed by K/W (1,963) and L (1,723) for 2017-18.



### Annexure 1: List of Government dispensaries/hospitals

Sr. No.		Government Hospitals	Sr. No.	Government Hospitals		
1	Central	Railway Hospital	5	E.S.I.S. H	Hospital, Worli	
2	Westerr	Railway Hospital	6	E.S.I.S. Hospital, Mulund		
3	Mumba	Port Trust Hospital, Wadala	7	E.S.I.S. H	Hospital, Kandivali	
4	Nagpada	a & Naigaon Police Hospital	8	ESIC Mo	odel Hospital, Marol	
Sr. No.	Police D	ispensaries	Sr. No.	Police D	Dispensaries	
1	Police H	eadquarters Awar Dispensary	7	Santacr	uz Police Dispensary	
2	Police D	ispensary, Tardeo	8	Andheri	Police Dispensary	
3	Dr. D.B.	Marg Police Dispensary	9	Marol P	olice Dispensary	
4	Dadar P	olice Dispensary	10	Kandiva	li Police Dispensary	
5	LA-II HQ	Police Dispensary, Worli	11	Police D	ispensary, Neharu Nagar	
6	Mahim I	Police Dispensary	12	Pant Na	gar Dispensary	
Sr. No.	Munici	oal Hospitals	Sr. No.	Municipal Hospitals		
1	Acworth	Municipal Hospital	14	M.W. Desai Hospital		
2	B.Y. L. N	air Charitable Hospital	15	Maa Hospital, Diwalabai Mohanlal Mehta Hospital		
3	Centena	ry Hospital, Govandi	16	Mahatma Jyotiba Phule Hospital		
4	Dr. Babasaheb Ambedkar Hospital Kandivali (W) (Centenary Hospital)			Municip	oal Group of T.B. Hospital	
5	Dr. R.N.	Cooper Hospital	18	S. V. D. Sawarkar Hospital		
6	E.N.T Ho	spital	19	S.K Pati	Hospital	
7	Eye Hos	pital	20	Sant Mu	uktabai Hospital	
8	K. B. Bha	abha Hospital, Bandra	21	Seth V.0 Hospita	C. Gandhi & M. A. Vora Rajawadi I	
9	K.B. Bha	bha Hospital	22	Shri Ha	rilal Bhagwati Hospital	
10	Kasturba	a Hospital	23	Siddarth	n Hospital	
11	Kasturba	a X (Cross) Road Hospital (Borivali)	24	Smt. Ma	ansadevi T. Agarwal Hospital	
12	King Edv	vard Memorial Hospital	25	Trauma	Care Hospital Jogeshwari East	
13	Lokman	ya Tilak Hospital	26	V. N. De	esai Hospital	
Sr. No.	State H	ospitals	Sr. No.	State H	lospitals	
1	Gokulda	s Tejpal Hospital	4	St. Geor	ge's Hospital	
2	Cama ar	nd Albless Hospital	5	General	Hospital (Malwani)	
3	Sir J.J. G	roup of Hospitals				
Sr. No.	Ward	Municipal Dispensaries	Sr. No.	Ward	Municipal Dispensaries	
1	Α	Colaba Municipal Dispensary	88	K/E	Natwar Nagar Dispensary	
2	Α	Head Office (H.O.) Dispensary	89	K/E	Paranjape Dispensary	
3	Α	Maruti Lane Dispensary	90	K/E Sambhaji Nagar Dispensary		



Sr. No.	Ward	Municipal Dispensaries		Ward	Municipal Dispensaries	
4	А	Saboo Siddhique Road Dispensary, Paltan Road (S.S. Road)	91	K/E	Sambhji Nagar Ayurvedic Dispensary	
5	Α	Shahid Bhagat Singh Road Dispensary	92	K/E	Sunder Nagar Dispensary*	
6	Α	Ayurvedic Head Office (H.O.) Dispensary	93	K/W	Banana Leaf Dispensary*	
7	В	Jail Road Municipal Dispensary	94	K/W	Juhu Dispensary	
8	В	Jail Road Unani Dispensary	95	K/W	Millat Nagar Dispensary*	
9	В	Kolsa Mohalla Unani Dispensary	96	K/W	N.J. Wadiya Dispensary	
10	В	S.V.P. Road Municipal Dispensary	97	K/W	Oshivara Dispensary	
11	В	Walpakhadi Muncipal Dispensary	98	K/W	Vileparle Market Dispensary	
12	С	Chandanwadi Dispensary	99	K/W	Varsova Dispensary	
13	С	Duncan Road Dispensary	100	L	Asalpha Village Dispensary	
14	С	Ghogari Mohalla Dispensary	101	L	Bail Bazar Mun. Dispensary	
15	С	Panjarapol Mun. Dispensary	102	L	Budda Colony Dispensary	
16	С	Thakurdwar Dispensary	103	L	Chandivali M.N.P. Dispensary	
17	D	Banganga Municipal Dispensary	104	L	Christain Municipal Dispensary*	
18	D	Nana Chowk Dispensary	105	L	Chunnabhatti Dispensary	
19	D	R.S. Nimkar Marg Dispensary	106	L	Himalaya Society Municipal Dispensary*	
20	D	Raja Rammohan Roy Marg Dispensary (R.R.R Marg)	107	L	Kajupada Muncipal Dispensary	
21	D	Tardeo Flat Municipal Dispensary	108	L	Mohill Village Dispensary	
22	D	Tulsiwadi Dispensary (Bane Compound)	109	L	Nahar Amrut Shakti Dispensary	
23	Е	D.P.Wadi Municipal Dispensary	110	L	Nehru Nagar Dispensary	
24	Е	ES Pathanwala Municipal Dispensary	111	L	Qureshi Nagar Dispensary	
25	Е	Gaurabhai Dispensary	112	L	Safad Pool Dispensary	
26	Е	Huzaria Street Dispensary	113	L	Tilak Nagar Dispensary	
27	Е	Motishah Dispensary	114	M/E	Anik Nagar Dispensary*	
28	E	N.M. Joshi Marg Dispensary	115	M/E	Ayodhya Nagar Dispensary	
29	Е	R.J. Compound Dispensary*	116	M/E	Deonar Colony Dispensary	
30	Е	Siddarth Nagar Dispensary	117	M/E	Gavanpada Dispensary	
31	E	Souter Street Dispensary*	118	M/E	Kamala Raman Nagar Municipal Dispensary/Baiganwadi Dispensary	
32	E	Tadwadi Municipal Dispensary	119	M/E	Lallubhai Compound Municipal Dispensary*	
33	E	Tank Square Garden Municipal Dispensary	120	M/E	Maharashtra Nagar Municipal Dispensary	
34	F/N	Antop Hill Municipal Dispensary	121	M/E	R.B.K. International Municipal Dispensary*	
35	F/N	Korba Mithagar Dispensary	122	M/E	Trombay Municipal Dispensary	



Sr.	Ward	Municipal Dispensaries	Sr.	Ward	Municipal Dispensaries
<b>No.</b> 36	F/N		<b>No.</b> 123	M/W	Chembur Colony Dispensary
30	F/IN	L. B. Shastri Dispensary	123	IVI/ VV	Chembur Naka Municipal
37	F/N	Raoli Camp Dispensary	124	M/W	Dispensary*
38	F/N	Transit Camp Dispensary*	125	M/W	Labour Camp Dispensary
39	F/N	Wadala Dispensary	126	M/W	Lal Dongar Dispensary
40	F/S	A.D. Marg Dispensary	127	M/W	Mahul Dispensary
41	F/S	Abhuyday Nagar Dispensary	128	M/W	Mahul SRA Dispensary
42	F/S	Ambewadi Dispensary	129	N	Kirol Dispensary
43	F/S	Gautam Nagar Dispensary	130	N	Pant Nagar Dispensary
44	F/S	Kidwai Nagar Dispensary*	131	N	Parksite Dispensary
45	F/S	Naigaon Dispensary	132	N	Parshiwadi Dispensary
46	F/S	Parel Dispensary	133	N	Ramabai Colony Dispensary
47	F/S	Sewree Cross Road Dispensary	134	N	Sainath Nagar Dispensary
48	F/S	Triveni Sadan Dispensary	135	N	Sarvodaya Pantnagar Dispensary*
49	G/N	Dharavi Main Road Dispensary*	136	N	Nath Pai Nagar, Garodia Nagar Dispensary (Started from June 2017)*
50	G/N	Dharavi Transit Camp Dispensary	137	P/N	Choksey Municipal Dispensary
51	G/N	Gulbai Dispensary	138	P/N	Goshala Municipal Dispensary
52	G/N	Kumbharwada Dispensary	139	P/N	Kurar Village Municipal Dispensary
53	G/N	Matunga Labour camp Dispensary	140	P/N	Malvani Municipal Dispensary
54	G/N	Pilla Bunglow Dispensary	141	P/N	Manori Dispensary
55	G/N	Shahu Nagar Dispensary	142	P/N	Nimani Municipal Dispensary
56	G/N	Welfare Camp (Shri Cinema) Dispensary	143	P/N	Pathanwadi Dispensary
57	G/N	Welkarwadi Dispensary	144	P/N	Rathodi Village Dispensary
58	G/S	B.D.D. Chawl Dispensary	145	P/N	Riddhi Garden Mun Dispensary*
59	G/S	Beggar Home Dispensary	146	P/N	School Road Municipal Dispensary
60	G/S	Curry Road Dispensary	147	P/N	Valnai Municipal Dispensary
61	G/S	Fergusson Road Dispensary	148	P/S	Chincholi Square Garden Dispensary*
62	G/S	Jijamata Nagar K. Moses Dispensary	149	P/S	Topiwala Lane Dispensary
63	G/S	Maharashtra High school Compound Dispensary	150	R/C	Charkop Sector 5 Dispensary
64	G/S	Prabhadevi Dispensary	151	R/C	Eksar Road Dispensary*
65	G/S	Prbhadevi Ayurvedic Municipal Dispensary	152	R/C	Gorai MHADA Dispensary
66	G/S	Sasmira Dispensary	153	R/C	Gorai Village Dispensary
67	G/S	Senapati Bapat Marg, Hilly Cross, 633 Dispensary	154	R/C	K.K. Municipal Dispensary
68	G/S	Welfare Center Dispensary	155	R/C	M.H.B. Dispensary
69	G/S	Worli Koliwada Dispensary*	156	R/N	Anand Nagar Municipal Dispensary*



Sr. No.	Ward	Municipal Dispensaries	Sr. No.	Ward	Municipal Dispensaries
70	G/S	Zandu Ayurvedic Mun. Dispensary	157	R/N	L.T. Road Dispensary
71	H/E	Bharat Nagar Dispensary	158	R/N	Shastri Nagar Municipal Dispensary*
72	H/E	Jawahar Nagar Dispensary	159	R/N	Y.R. Tawade Nagar Dispensary*
73	H/E	Kalina Dispensary*	160	R/S	Akurli Road Municipal Dispensary
74	H/E	Kherwadi Dispensary	161	R/S	Babrekar Nagar Municipal Dispensary
75	H/E	Kolekalyan Dispensary*	162	R/S	Charcop Sector- I Muncipal Dispensary
76	H/E	Prabhat Colony Municipal Dispensary	163	R/S	Dahanuwadi Municipal Dispensary
77	H/E	S.V. Nagar Dispensary	164	R/S	Hanuman Nagar Dispensary*
78	H/W	G.N. Station Road Dispensary	165	S	Kanjur Village Dispensary
79	H/W	Guru Nanak (Dr. Ambedkar Road) Dispensary	166	S	M.V. R Shinde Dispensary
80	H/W	Khar-Danda Dispensary	167	S	Shivaji Talav Mumbai Dispensary*
81	H/W	Old Khar Dispensary*	168	S	Tagor Nagar Dispensary
82	H/W	Shastri Nagar Linking Road Dispensary	169	S	Tembhipada Shivaji Nagar Dispensary
83	K/E	Caves Road Dispensary	170	S	Tirandaz Village Dispensary
84	K/E	Gundawali Dispensary	171	S	Tulshetpada Dispensary
85	K/E	Hari Nagar Dispensary	172	S	Nahur East Dispensary*
86	K/E	Koldongari Dispensary	173	Т	Dindayal Upadhyay (DDU) Dispensary
87	K/E	Marol Dispensary	174	Т	Mulund Colony Dispensary*
			175	T	P.J.K. Dispensary

Note: (\*) Upgraded dispensaries with laboratories. The total number of upgraded dispensaries is 30.



#### Annexure 2: 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 (<a href="http://www.who.int/whosis/icd10/">http://www.who.int/whosis/icd10/</a>).

Source: <a href="http://www.maha-arogya.gov.in/programs/other/sbhivs/strategy.htm">http://www.maha-arogya.gov.in/programs/other/sbhivs/strategy.htm</a>



#### FORM NO. 4

(See Rule 7)

217 311 112 111 111 111 111 1		atAN	I/PM		
NAME OF D	ECEASED				20
Sex	Age at Death				For use of
	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	Statistical Office
1. Male 2. Female					
caused d heart fail Antecedent Morbid or above ca II Other sig the death	disease, injury or complication eath, not the mode of dying si ure, asthenia, etc.	the ons last g to (c)	a consequences of) a consequences of)	onset and death approx.	
L. Natural 2 5. Pending in	2. Accident 3. Suicide 4. Hor evestigation	nicide			
	was a female, was pregnancy ere a delivery?	the death associated with?	1. Yes 2. No 1. Yes 2. No		
	gnature of the Medical Attend	48 L (1175 F ) L (1175 L )			
	E FOR INSTRUCTIONS				
SEE REVERS		vi tviti i i i i i i i i i i i i i i i i			
	ned and handed over to the re	lative of the deceased)			
To be detach	ned and handed over to the re	500-0.0			
To be detach					



#### 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 3: Reply of MCGM to cause of death data

# BRIHANMUMBAI MAHANAGARPALIKA PUBLIC HEALTH DEPARTMENT HO/144/MIS ded

From:

Or (Smt.)Pranita Tipre
Assistant Health Officer
Public Information Officer

To:

Mr.Eknath Pawar Praja Foundation, Victoria Building, 1<sup>st</sup> floor, Agairy Lane, Off, Mint Road, Fort, Mumbai 400 001

Sub: Right to Information Act-2005.
Your application dtd.13.7.2016
(Information about number of death and cause of death registered in all 24 wards of Mumbai.)

Ref: १. राआशिवसीव/आस्था/माहितीअधिकार/२७५८-५९/१६ दि.१९.७ २०१६ २. आमाजिआ/कञ्च -८४/माहितीअधिकार/८१४३-८१४६ /१६ दि.२३.७.२०१६

Please refer to your application addressed to Dy.Director, Health Services.

Pune dtd.13.7.2016 under Right To Information Act 2005 on the above subject matter. The same application has been received in Public Health Department, Head Office. F/South Ward office on 1.8.2016.

Sr.No.	Subject	Information
	Please provide us with the information about number of death registered in all 24 wards under your jurisdiction, please also provide the causes of the death with gender wise, age wise, ICD CODE wise. ward-wise and month wise from 1st January 2016 to 31st March 2016 seperately. Hopefully this information is available in softcopy, so please provide us with a softcopy.	Information about the number of deaths registered in all 24 wards of MCGM as required by you.  "The Causes of Deaths gender wise, age wise, cause wise and month wise is generated under CRS System. However, ICD -10 Codewise and Ward wise is not available at Registrar Level of MCGM.  When Reports were seen in CRS System, it is observed all the fields are showing zero(0) figures. This typical problem has already been communicated to Office of Registrar General and Census Commissioner of India via email. The Matter will also be discussed during monthly review meeting at Dy. Director of Health Services and Dy. Registrar of Birth and Death, Maharashtra State on 19th August 2016 as the CRS Software is not developed by MCGM.



#### Reply of Vital Statistics Division, Central Government.





No.4/15/2017-VS-(CRS)

Speed Post

GOVERNMENT OF INDIA गृहमंत्रालय

MINISTRY OF HOME AFFAIRS भारत के महारजिस्ट्रार का कार्यालय

जीवनांकप्रभाग, पश्चिमी खण्ड-1, रामकृष्णपुरम्, नईदिल्ली - 110066

OFFICE OF THE REGISTRAR GENERAL, INDIA

V.S. Division, West Block -I, R.K. Puram, New Delhi - 110066

Tele: 26100678 E-mail – sandhya.singh@nic.in ajayk.rgi@nic.in D

Dated: 04.08.2017

To,

Mr. EknathPawar Praja Foundation, Victoria Building 1st Floor, Agairy lane, Off. Mint Road, Fort MUMBAI- 400001

Subject: Petition of Shri Eknath Pawar, Mumbai forwarded by Ministry of Home Affairs vide O.M. No.15012/01/2017-CSR.III (Vol. II) dated 28-07-2017 regarding information on registration of death in Mumbai.

Sir,

This is in reference to aforesaid Ministry of Home Affairs O.M. dated 28-07-2017 through which a PMO's reference no. PMOPG/D/2017/0300410 dated 23-06-2017 has been forwarded to this office along with your application (dated NIL) addressed to the Hon'ble Prime Minister of India on the above mentioned subject.

- 2. In this connection, it is informed that table D-10 under CRS software, shows the sex wise-age group wise data on specific cause of death in a prescribed format (based upon ICD-10). In addition to this it is also informed that Annual Report on Medical Certification of Cause of Death (MCCD), published data in Table-10 comprising total percentage distribution of Medically Certified Deaths by Sex and major cause groups of all States/ UTs. Further, such data for particular State is also released in the said report. In reference to the matter raised by you, it is clarified that the facility to view the information on cause of death at district and below district (Registration unit) level is not available at present in the existing CRS portal.
- 3. In this regard, this is bring to your notice that in order to build a robust system of registration of births and deaths in the country, this office has taken the initiative to revamp the existing Civil Registration System (CRS) through an IT enabled backbone under which the option/facility of viewing the cause of death information at district and below district level and other relevant issues will considered.

Yours faithfully

(Sandhya Singh)

Dy. Registrar General (CRS)

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प्रत्येक जन्म एवम् मृत्यु का पंजीकरण सुनिश्चित करें/ "Ensure Registration of Every Birth and Death"



#### Annexure 4: 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:

OCCUPATION		Illiterate	literate but no formal schooling / School up to 4 <sup>th</sup>	School 5 <sup>th</sup> – 9 <sup>th</sup>	SSC/ HSC	Some College but not Grad	·	Grad/ Post- Grad Prof.
Unskilled Workers		E2	E2	E1	D	D	D	D
Skilled Workers		E2	E1	D	С	С	B2	B2
Petty Traders		E2	D	D	С	С	B2	В2
Shop Owners		D	D	С	B2	B1	A2	A2
Businessmen/	None	D	С	B2	B1	A2	A2	A1
Industrialists with	1-9	С	B2	B2	B1	A2	A1	A1
no. of employees	10 +	B1	B1	A2	A2	A1	A1	A1
Self employed Profes	sional	D	D	D	B2	B1	A2	A1
Clerical / Salesman		D	D	D	С	B2	B1	B1
Supervisory level		D	D	С	С	B2	B1	A2
Officers/ Executives Junior		С	С	С	B2	B1	A2	A2
Officers/Executives N	/liddle/ Senior	B1	B1	B1	B1	A2	A1	A1

<sup>\*</sup>CWE is defined as the person who takes the main responsibility of the household expense



#### **Annexure 5: Guidelines for dispensaries**

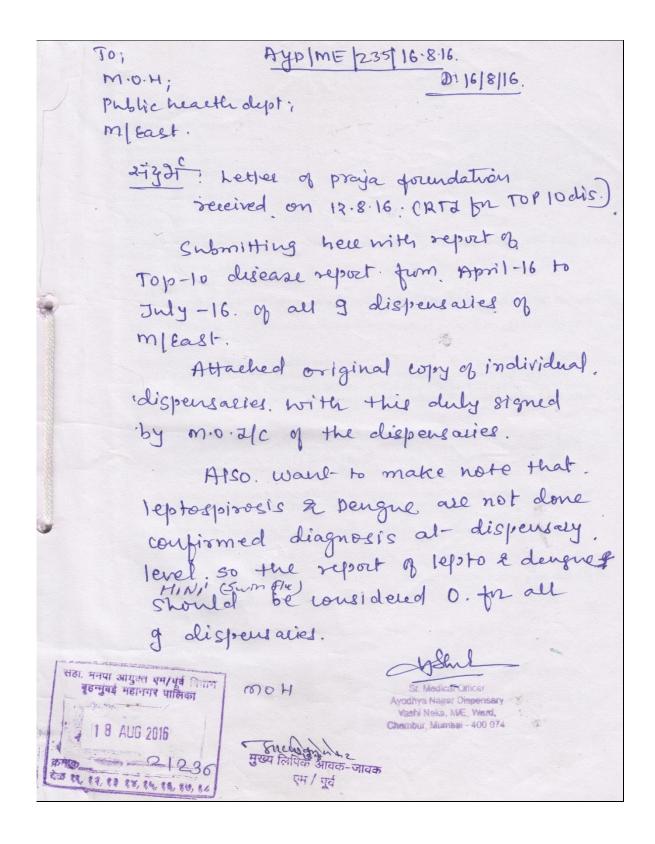
Table 33: Ward wise dispensary requirements for dispensaries in MCGM

Ward	Ward Name	Population census 2011	Dispensary (1 for 50,000) <sup>24</sup>	Dispensary (1 For 15,000) <sup>25</sup>	Available Municipal Dispensaries
Α	Colaba	1,85,014	4	12	5
В	Sandhurst	1,27,290	3	8	5
С	Marine Lines	1,66,161	3	11	5
D	Grant Road	3,46,886	7	23	6
E	Byculla	3,93,286	8	26	11
F/N	Matunga	5,29,034	11	35	6
F/S	Parel	3,60,972	7	24	9
G/N	Dadar	5,99,039	12	40	9
G/S	Elphinstone	3,77,749	8	25	13
H/E	Santa Cruz	5,57,239	11	37	7
H/W	Bandra	3,07,581	6	21	5
K/E	Andheri East	8,23,885	16	55	10
K/W	Andheri West	7,48,688	15	50	7
L	Kurla	9,02,225	18	60	14
M/E	Govandi	8,07,720	16	54	9
M/W	Chembur	4,11,893	8	27	6
N	Ghatkopar	6,22,853	12	42	8
P/N	Malad	9,41,366	19	63	11
P/S	Goregaon	4,63,507	9	31	2
R/C	Borivali	5,62,162	11	37	6
R/N	Dahisar	4,31,368	9	29	4
R/S	Kandivali	6,91,229	14	46	5
S	Bhandup	7,43,783	15	50	8
Т	Mulund	3,41,463	7	23	3
	Total	1,24,42,393	249	830	174

 $<sup>^{24}</sup>$  The Rindani committee report of 1977 suggested that there has to be one dispensary for a population of 50,000 or 1.5 km radius.

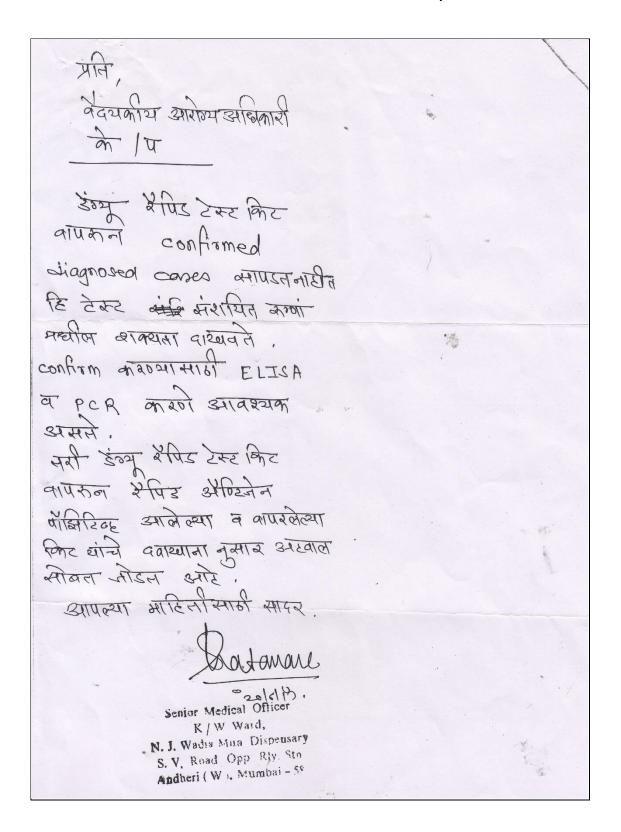
<sup>&</sup>lt;sup>25</sup> The National Urban Health Mission (NUHM) and National Building Code (NBC) suggests that one dispensary is required for a population of 15,000.

#### Annexure 6: Letter from Senior Medical Officer M/E ward



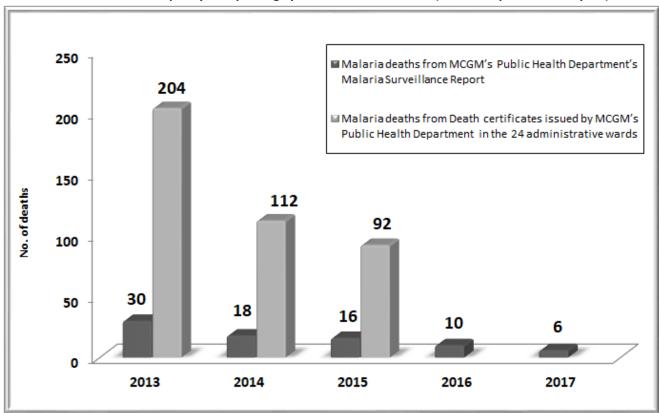


#### Annexure 7: Letter from Senior Medical officer of K/W ward





Annexure 8: Discrepancy in reporting system of Malaria death (data is as per calendar year)



The cause of death data has not been received from 2016 since both the MCGM and State government do not have access to the centralised Civil Registration System, the RTI to the Vital Statistics Division of the Central Government has been repeatedly transferred to the MCGM. (Refer to Page No. 13)



#### Annexure 9: RTIs filed for obtaining data on Tuberculosis cases and DOTs Defaulters.

#### Annexure A

[See rule 3]

Format for obtaining information under the Right to Information Act 2005

To, Public Information Officer/DEHO TB, Bawalawadi MCGM Bldg, First Floor, Dr. B.R. Ambedkar Road, Chinchpokali, Mumbai- 400012.



- 1) Full Name of the Applicant: Mr. Eknath Pawar.
- 2) Address: Praja Foundation, Victoria Building, 1st Floor, Agiary Lane, Off Mint Road, Fort, Mumbai -400001
- 3) Particular of information: -
  - (i) Subject matter of information: Total number of defaulters from DOTS program year wise separately from 2012-2017.
  - (ii) Period to which the information relates: 2012, 2013, 2014, 2015, 2016 and 2017 separately.
  - (iii) Description of the information required: Please provide us the total number of defaulters from DOTS program in last Six years (2012, 2013, 2014, 2015, 2016 and 2017) separately.
- 4) Whether the information is required by post or in person: In Person
- 5) In case by post (Ordinary, Registered or Speed): No
- 6) Weather the applicant is below poverty line (if yes, attach the photocopy of the proof thereof): No

Note: If the above information is available in soft copy, we request you to give it to us in a soft copy.

7) Purpose of information is required: In public interest

Signature of the applicant

Eknath Pawar (022-22618042 / 9930199110)

Place: Mumbai

Court fee Stamp of Rs. 10/- affixed

mbai Date: 25/04/2018

बृह-सुंबई महानगरपालिका उप कार्यकर्षा आरोग्य अधिकारी (क्ष्यरोग नियंत्रण विभाग)

2 7 APR 2018

के.आ.अ./ बृ.सुं.स.पा.कार्यालय, बाबलावाडी, उला सजला, चिंचपोकळी, मुंबई-१२



#### Annexure A

[See rule 31

#### Format for obtaining information under the Right to Information Act 2005

To,

Public Information Officer/DEHO TB, Bawalawadi MCGM Bldg. First Floor, Dr. B.R. Ambedkar Road, Chinchpokli, Mumbai- 400012.



Date: 20/11/2017

1) Full Name of the Applicant: Mr. Eknath Pawar

2) Address: Praja Foundation, Victoria Building, 1st Floor, Agiary Lane, Off Mint Road, Fort, Mumbai -400001

3) Particular of information: -

Subject matter of information: Number of new tuberculosis cases and deaths (registered ward wise and TB units wise), copies of supervision document report, list of DOTS service providers, personnel sanctioned and available in 2017.

Period to which the information relates: April 2017 to September 2017 (ii)

Description of the information required:

- 1. Please provide number of new tuberculosis cases and deaths registered month wise (center/zone/ward wise) from April 2017 to September 2017
- 2. Please give us the quarterly report prepared by TB control cell (April 2017 to September 2017)
- 3. Please provide copies of supervision document report of all TB units (April 2017 to September 2017)
- 4. Please provide list of new DMCs and any other TB centers. (Edited after March 2017)
- 5. Please provide list and number of Community based D.O.T.S providers related to Mumbai. (Edited after March 2017)
- 4) Whether the information is required by post or in person: In Person

5) In case by post (Ordinary, Registered or Speed): No

6) Weather the applicant is below poverty line (if yes, attach the photocopy of the proof thereof): No

7) Purpose of information is required: In public interest

Signature of the applicant

Eknath Pawar (022-22618042 / 9930199110)

Place: Mumbai

Court fee Stamp of Rs. 10/- affixed

Note: If the above information is available in soft copy, we request you to give it to us in a soft copy.

बृहन्गुंबई महानगरपालिया उप कार्यकारी आरोब्द अधिकारी (क्षयरोग नियंत्रण दिभाग बृ.मुं.म.पा.कार्यालय, बाबलावाडी १ता मजला, घिंचपोकळी, मुंबई-१



#### Annexure A

[See rule 3]

## Format for obtaining information under the Right to Information Act 2005

To, Public Information Officer/DEHO TB, Bawalawadi MCGM Bldg, First Floor, Dr. B.R. Ambedkar Road, Chinchpokali, Mumbai- 400012.



Date: 25/04/2018

- 1) Full Name of the Applicant: Mr. Eknath Pawar
- 2) Address: Praja Foundation, Victoria Building, 1st Floor, Agiary Lane, Off Mint Road, Fort, Mumbai -400001

3) Particular of information: -

- (i) Subject matter of information: List of Dot services providers, personnel sanctioned, TB deaths and available, Tuberculosis cases registered ward wise /TB units 2016 and copies of Supervision Document report.
- (ii) Period to which the information relates: 1st October 2017 to 31st March 2018

(iii) Description of the information required:

- Please provide the new Tuberculosis cases registered and Tuberculosis deaths month wise (Center/zone/ Ward wise from 1<sup>st</sup> October 2017 to 31<sup>st</sup> March 2018)
- 2. Please give us the quarterly/yearly report prepared by TB control cell (1st October 2017 to 31st March 2018)

3. Please provide list of new DMCs and any other TB centers. (Edited after 2016)

- 4. Please provide list and number of Community based D.O.T.S providers related to Mumbai. (Edited after 2016)
- Please provide copies of Supervision Document report of all TB units quarterly (1st October 2017 to 31st March 2018).
- 4) Whether the information is required by post or in person: In Person

5) In case by post (Ordinary, Registered or Speed): No

6) Weather the applicant is below poverty line (if yes, attach the photocopy of the proof thereof): No

7) Purpose of information is required: In public interest

Signature of the applicant

Eknath Pawar (022-22618042 / 9930199110)

Place: Mumbai

Court fee Stamp of Rs. 10/- affixed

Note: If the above information is available in soft copy, we request you to give it to us in a soft copy.

बृहत्मुंबई महानगरपालिका
उप वार्यकार्य आरोब अधिकारी (क्षप्रतेण नियंत्रण विभाग)

2 7 APR 2018

क..आ.आ./ /शय
खु.चुं.ब.पा.कार्यालय. बाबलाबाडी, कुला मजला. विधायोककी, सुबई-१२