What Do People Die Of

in Chhattisgarh?

An Analysis of Community Reported Deaths during Year 2020

in Chhattisgarh

Draft Report

Prepared by

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Executive Summary

Introduction: In the rural areas of Chhattisgarh, Village Health Sanitation and Nutrition Committees (VHSNCs) are mandated to record the deaths happening in the villages. Similarly, in the urban-slum area of Chhattisgarh, Mahila Aarogya Samitis (MAS) are mandated to record the deaths. The death registers also record the cause of death as reported at community level. The national guidelines on Community Processes brought out by National Health Mission (NHM) emphasise this role of above committees promoted under it. Chhattisgarh was one of the first states in the country to implement this initiative. This process was piloted between 2008 and 2010. It was replicated across the state from 2011-12. Compiled analytical reports are available from 2012 onwards. The urban component was added from 2015 onwards after establishment of community processes in urban areas under NHM.

One of the key purposes of keeping a register of deaths in VHSNC and MAS are to enable health monitoring. The death registers of VHSNCs and MAS are compiled and computerized into a database at the state level by SHRC. This is meant to allow analysis of deaths and causes recorded and reported by community.

The causes of the deaths analysed in this report are as reported by the communities. Therefore the definitions of causes may not match with the technical definitions defined in specific Guidelines of reproductive & child health, National disease-control programmes or the International Classification of Diseases (ICD). Despite this limitation, the information available through VHSNC and MAS registers is still useful for understanding the approximate causes of a large share of deaths in the state.

Number of deaths covered: For rural areas, this report analyses nearly 131,363 deaths that were recorded by VHSNCs during the year 2020. The deaths covered in 2020 compilation constitute 77% of total no. of rural deaths expected according to Crude Death Rate of the state (as per Statistical Dept Govt of CG 2019-20).

Year wise comparison of rural death reporting percentage

Deaths	Expecte d Rural Deaths	No. of report ed deaths in 2012	%	No. of repor ted death s in 2013	%	No.of repor ted death s in 2014	%	No.of report ed deaths in 2015	%	No.of report ed deaths in 2016	%	No.of report ed deaths in 2017	%	No.of report ed deaths in 2018	%	No.of report ed deaths in 2019	%	No.of reporte d deaths in 2020	%
Overall Deaths	171643	39168	23	58556	34	74279	43	91147	53	107194	62	90927	53	91202	53	111120	65	131363	77

Reported Causes of deaths: The analysis of reported known causes shows the following as the common causes for reported deaths in different age categories:

Causes for deaths reported in different age categories in Rural Chhattisgarh (Population in 2020 – Around 220 lakh)

S.N.	Reported Causes	<1 month	1 to 11 months	1-4 yrs	5 to 14 yrs	15 to 49 yrs	50 to 59 yrs	60 to 69 yrs	Above 70 yrs	Total
1	Accident	34	98	326	529	4816	931	753	1205	8692
2	Convulsions	227	209	144	86	295	59	48	88	1156
3	Fever/ Malaria	61	229	152	137	564	168	239	568	2118
4	Neonatal Jaundice	182								182
5	Jaundice		111	81	163	1196	252	195	187	2185
6	Low Birth Weight	497								497
7	Malnutrition		217	89	18	13	2	2	18	359
8	Diarrhea	45	173	94	58	269	81	89	243	1052
9	Pneumonia	160	674	105	31	67	18	19	26	1100
10	T.B.	2	2	7	20	809	390	398	363	1991
11	Snake Bite		16	60	190	536	120	69	74	1065
12	Rabies			12	30	46	13	5	7	113
13	Birth Asphyxia	1685								1685
14	Neonatal Sepsis	788								788
15	Maternal causes					425				425
16	Murder					388	86	56	56	586
17	Suicide					4141	604	346	302	5393
18	Cancer	5	7	39	81	1933	1365	1264	1219	5913
19	HIV/AIDS				3	106	21	8	4	142
20	CHD/Anomalies	83	196	79	244					602
21	Stroke					1709	2373	4893	12473	21448
22	Heart Disease					3666	2786	3253	4589	14294
23	High BP					445	475	779	1518	3217
24	Digestive Diseases	53	138	104	186	1779	805	861	1286	5212
25	Kidney related diseases	10	24	16	39	1461	757	639	636	3582
26	Diabetes	6	5	9	34	985	1001	1320	2094	5454
27	Sickle Cell Anemia	1	8	33	76	433	56	25	36	668
28	Covid-19	3	4	0	4	307	200	253	248	1019
29	Cough & Cold	6	9	4	2	29	14	20	26	110
30	Respiratory diseases	65	36	17	35	556	533	950	3323	5515
31	Anemia	7	17	25	72	678	229	260	655	1943
32	Chicken pox/Measles	3	12	13	14	51	17	10	5	125
33	Epilepsy					504	101	62	59	726
34	Mental illness					315	102	80	155	652
35	Old age							701	8426	9127
36	Others	2900	1110	458	590	3916	2032	2690	8531	22227
	Total	6823	3295	1867	2642	32438	15591	20287	48420	131363

The leading causes of preventable mortality (the ones that communities can recognise) up to age of sixty years can be accessed from this data. Their relative importance is also clear from the analysis.

- ➤ In 0 to 1 month neonates, Birth Asphyxia 1685, Sepsis 788 and LBW 497 are the leading reported causes of death.
- ➤ In 1 to 11 months infants, Pneumonia 674, Fever/Malaria 229, Malnutrition 217, Convulsion 209, Congenital Heart Disease 196 are the leading reported causes of death.
- ➤ In 1 to 4 years children, Accident 326, Fever/Malaria 152, Convulsion 144, Pneumonia 105 and Diarrhoea 94 are the leading reported causes of death.
- ➤ In 5 to 14 year age group, Accidents 529, CHD 244, Snake bite 190, Digestive 186 and Jaundice 163 are the leading reported causes of death.
- ➤ In 15-49 years age group, Accidents 4816, Suicides 4141, Heart disease 3666, Cancer 1933 and Stroke 1709 are the leading reported causes of death.
- ➤ In 50-59 years age group, Heart Diseases 2786, Stroke 2373, Cancer 1365, Diabetes 1001 and Accidents 931 are the leading reported causes of death.
- ➤ For deaths in 60-69 years and 70 years and above age groups, Stroke, Heart Diseases, Cancer, Diabetes, Respiratory diseases and Accidents are the leading reported causes.

Trend in Causes of Rural Mortality:

Year wise comparison of reported cause of rural deaths before Age of 60

S.N.	Reported Causes	No.of Deaths Reported in 2016	%	No.of Deaths Reported in 2017	%	No.of Deaths Reported in 2018	%	No.of Deaths Reported in 2019	%	No.of Deaths Reported in 2020	%
1	CHD/Anomalies	270	0.5%	155	0.3%	541	1.2%	648	1.3%	602	1.0%
2	Stroke	2727	7.40/	403	0.9%	1333	3.0%	3515	6.8%	4,082	6.5%
3	High BP/Heart Disease	3727	7.1%	6876	15.4%	6165	14.0%	5743	11.1%	7,372	11.8%
4	Accident	5139	9.8%	5020	11.3%	5279	12.0%	6140	11.9%	6734	10.7%
5	Digestive Diseases	2166	4.1%	2578	5.8%	2920	6.6%	2257	4.4%	3,065	4.9%
6	Suicide	3090	5.9%	2739	6.2%	2877	6.5%	3710	7.2%	4,745	7.6%
7	Cancer	2718	5.2%	2591	5.8%	2712	6.1%	3109	6.0%	3,430	5.5%
8	Birth Asphyxia	2747	7.20/	926	2.1%	1141	2.6%	1394	2.7%	1,685	2.7%
9	Neonatal sepsis	3747	7.2%	433	1.0%	659	1.5%	581	1.1%	788	1.3%
10	Diabetes	1339	2.6%	1188	2.7%	1233	2.8%	1723	3.3%	2,040	3.3%
11	Jaundice	1785	3.4%	1412	3.2%	1207	2.7%	1446	2.8%	1,803	2.9%
12	T.B.	1478	2.8%	1215	2.7%	1020	2.3%	1173	2.2%	1,230	2.0%
13	Fever/ Malaria	2082	4.0%	1312	2.9%	951	2.2%	1219	2.4%	1,311	2.1%
14	Pneumonia	1833	3.5%	969	2.2%	920	2.1%	955	1.8%	1,055	1.7%
15	Convulsions	886	1.7%	710	1.6%	741	1.7%	935	1.8%	1,020	1.6%
16	Low Birth Weight	1006	1.9%	711	1.6%	611	1.4%	533	1.0%	497	0.8%
17	Diarrhea	1000	1.9%	634	1.4%	527	1.2%	612	1.2%	720	1.1%
18	Snake Bite	646	1.2%	529	1.2%	502	1.1%	609	1.2%	922	1.5%
19	Sickle Cell Anemia	415	0.8%	455	1.0%	476	1.1%	553	1.1%	607	1.0%
20	Murder	374	0.7%	373	0.8%	350	0.8%	369	0.7%	474	0.8%
21	Malnutrition	653	1.3%	306	0.7%	276	0.6%	381	0.7%	339	0.5%
22	Kidney related disease	44	0.1%	72	0.2%	233	0.5%	1843	3.6%	2,307	3.7%
23	Maternal causes	384	0.7%	272	0.6%	218	0.5%	259	0.5%	366	0.6%
24	Neonatal Jaundice	263	0.5%	188	0.4%	207	0.5%	196	0.4%	182	0.3%
25	HIV/AIDS	82	0.2%	101	0.2%	89	0.2%	101	0.2%	130	0.2%
26	Rabies	87	0.2%	57	0.1%	65	0.1%	86	0.2%	101	0.2%
27	Respiratory diseases							859	1.7%	1,242	2.0%
28	Mental Illness							285	0.6%	417	0.7%
29	Anemia							703	1.4%	1,028	1.6%
30	Chicken pox/Measles							48	0.1%	110	0.2%
31	Covid-19									518	0.8%
32	Cough & Cold							33	0.1%	64	0.1%
33	Epilepsy							426	0.8%	605	1.0%
34	Other	17006	32.6%	12288	27.6%	10870	24.6%	9348	18.0%	11,006	17.6%
	Total	52220	100.0%	44513	100.0%	44123	100.0%	51792	100.0%	62656	100.0%

Community reported mortality in urban slum population of Chhattisgarh

In the urban-slum area, this report analyses 14392 deaths that were recorded by MAS during the year 2020. The deaths covered in 2020 compilation constitute 98% of total no. of deaths expected according to Crude Death Rate of the state (as per SRS 2018). The urban data pertains to slums of 19 cities with around 24 lakh slum population (according to Mitanin Database).

Year wise comparison of Urban-Slum death reporting percentage

Deaths	Expected urban slum Deaths	No.of reported deaths in 2015	%	No.of reported deaths in 2016	%	No.of reported deaths in 2017	%	No.of reported deaths in 2018	%	No.of reported deaths in 2019	%	No.of reported deaths in 2020	%
Overall Deaths	14461	2764	21%	8162	69%	9177	68%	8874	66%	11459	85%	14392	98%

Causes for deaths reported in different age categories in Urban-Slum areas of Chhattisgarh (for urban slum population of around 24 lakh)

S.N.	Reported Causes	<1 month	1-11 months	1-4 yrs	5 to 14 years	15 to 49 years	50 to 59 yrs	60 to 69 yrs	Above 70 years	Total
1	Accident	3	8	19	45	469	112	90	122	868
2	Convulsions	21	20	8	4	21	3	1	4	82
3	Fever/ Malaria	7	7	9	11	69	25	24	70	222
4	Neonatal Jaundice	13								13
5	Jaundice		3	0	5	119	29	17	15	188
6	Low Birth Weight	77								77
7	Malnutrition		12	2	0	0	0	0	0	14
8	Diarrhea	2	4	2	5	28	13	10	18	82
9	Pneumonia	4	22	5	2	9	12	15	16	85
10	CHD/Anomalies	22	18	12	15					67
11	Stroke					171	249	461	807	1688
12	Heart Diseases/Heart attack					639	572	676	721	2608
13	High BP					90	103	203	283	679
14	Digestive Diseases	1	5	3	3	215	96	77	82	482
15	Kidney related Diseases	0	1	1	6	195	126	103	92	524
16	Diabetes	1	0	0	2	103	104	147	195	552
17	HIV/AIDS	0	0	0	2	54	6	5	1	68
18	T.B.	0	0	0	2	138	37	47	34	258
19	Snake Bite		1	0	4	5	0	1	1	12
20	Rabies			0	2	1	2	0	0	5
21	Birth Asphyxia	264								264
22	Neonatal Sepsis	35								35
23	Maternal causes					31				31
24	Murder					62	3	3	4	72
25	Suicide					571	67	29	25	692
26	Sickle Cell Anemia			3	6	47	6	1	1	64
27	Cancer	0	0	0	19	246	188	171	136	760
28	Respiratory Diseases	2	0	2	3	64	63	115	147	396
29	Covid-19	0	0	3	2	127	101	129	146	508
30	Cough & Cold	0	1	0	0	3	1	2	1	8
31	Anemia	0	1	1	0	29	5	16	9	61
32	Chicken pox/Measles	0	0	0	0	0	1	0	0	1
33	Epilepsy	0	0	0	0	21	7	1	4	33
34	Mental illness	0	0	1	3	31	13	11	11	70
35	Old age							60	824	884
36	Others	293	78	31	25	388	188	246	690	1939
	Total	745	181	102	166	3946	2132	2661	4459	14392

Trend in Causes of Mortality in Urban Slum Population:

Year wise comparison of reported cause of urban deaths before Age of 60

S.N.	Reported Causes	No.of Deaths Reported in 2016	%	No.of Deaths Reported in 2017	0/0	No.of Deaths Reported in 2018	%	No.of Deaths Reported in 2019	%	No.of Deaths Reported in 2020	%
1	CHD/Anomalies	43	1.1%	46	1.1%	46	1.0%	77	1.3%	67	0.9%
2	Stroke	5.00	4.4.00/	21	0.5%	92	1.9%	250	4.2%	420	5.8%
3	High BP/Heart Disease	569	14.9%	868	20.0%	909	18.8%	978	16.3%	1404	19.3%
4	Accident	419	11.0%	505	11.6%	516	10.7%	669	11.1%	656	9.0%
5	Digestive Diseases	112	2.9%	264	6.1%	236	4.9%	272	4.5%	323	4.4%
6	Suicide	383	10.0%	433	10.0%	386	8.0%	508	8.4%	638	8.8%
7	Cancer	225	5.9%	328	7.6%	307	6.4%	445	7.4%	453	6.2%
8	Birth Asphyxia	5.40	4.4.20/	131	3.0%	194	4.0%	232	3.9%	264	3.6%
9	Neonatal sepsis	543	14.2%	38	0.9%	77	1.6%	50	0.8%	35	0.5%
10	Diabetes	131	3.4%	144	3.3%	116	2.4%	169	2.8%	210	2.9%
11	Jaundice	112	2.9%	111	2.6%	116	2.4%	120	2.0%	156	2.1%
12	T.B.	163	4.3%	189	4.4%	195	4.0%	161	2.7%	177	2.4%
13	Fever/ Malaria	97	2.5%	120	2.8%	145	3.0%	142	2.4%	128	1.8%
14	Pneumonia	59	1.5%	76	1.8%	62	1.3%	67	1.1%	54	0.7%
15	Convulsions	37	1.0%	48	1.1%	40	0.8%	65	1.1%	77	1.1%
16	Low Birth Weight	135	3.5%	50	1.2%	23	0.5%	3	0.0%	77	1.1%
17	Diarrhea	61	1.6%	53	1.2%	36	0.7%	42	0.7%	54	0.7%
18	Snake Bite	13	0.3%	6	0.1%	10	0.2%	12	0.2%	10	0.1%
19	Sickle Cell Anemia	45	1.2%	40	0.9%	48	1.0%	32	0.5%	62	0.9%
20	Murder	30	0.8%	43	1.0%	29	0.6%	47	0.8%	65	0.9%
21	Malnutrition	46	1.2%	18	0.4%	12	0.2%	23	0.4%	14	0.2%
22	Kidney related Diseases							347	5.8%	329	4.5%
23	Maternal causes	26	0.7%	15	0.3%	14	0.3%	23	0.4%	31	0.4%
24	Neonatal Jaundice	24	0.6%	15	0.3%	14	0.3%	1	0.0%	13	0.2%
25	HIV/AIDS	50	1.3%	48	1.1%	36	0.7%	53	0.9%	62	0.9%
26	Rabies	8	0.2%	10	0.2%	4	0.1%	14	0.2%	5	0.1%
27	Respiratory Diseases							99	1.6%	134	1.8%
28	Covid-19									233	3.2%
29	Cough & Cold							15	0.2%	5	0.1%
30	Anemia							44	0.7%	36	0.5%
31	Chicken pox/Measles							1	0.0%	1	0.0%
32	Epilepsy							33	0.5%	28	0.4%
33	Mental illness							37	0.6%	48	0.7%
34	Other	493	12.9%	716	16.5%	1158	24.0%	992	16.5%	1003	13.8%
	Total	3825	100.0%	4336	100.0%	4832	100.0%	6023	100.0%	7272	100.0%

Discussion and Recommendations:

The state has made significant strides in reducing preventable mortality due to causes of malaria/fever, diarrhoea and to some extent childhood pneumonia. This improvement in mortality coincides with measures taken by the state in improving community-based management of above illnesses. There is a minor improvement in reducing snake-bite related mortality.

In neonatal deaths, birth-asphyxia continues to be an unresolved challenge despite expansion of services for maternal and newborn care. TB related mortality has not shown much improvement. Overall, the state faces formidable challenges in form of large proportion of preventable and under-60 year age deaths due to accidents, suicides and chronic infectious and non-communicable diseases. Suicides show a worrying trend of increase each year. The suicide rate in the state now is among the highest in all states of the country. Further investigation is needed to understand the causes of high suicide mortality in Chhattisgarh.

In 2020, there is a considerable increase recorded in overall mortality. It could be due to several factors which need to be invested further a) better recording of deaths in 2020 in comparison to earlier years b) additional deaths due to Covid-19 infections, both among the detected and undetected cases c) additional deaths due to lockdown. Additional analysis and studies will be needed to assess the extent of excess mortality in 2020, the year of the pandemic.

This report shows that the state needs to maintain its rate of progress on communicable diseases while strengthening weak areas like – a) better labour practices to prevent birth-asphyxia and improvements in facility based management of birth-asphyxia b) measures to prevent accidents and to manage trauma c) measures to prevent suicides and to manage poisoning d) timely detection and primary clinical management for chronic non-communicable diseases like sickle-cell diseases, epilepsy, COPD, and conditions like hypertension and diabetes, thereby also achieving secondary prevention of more complicated conditions like stroke. Primary prevention of above Chronic Diseases through reducing risk factors like chewed/applied tobacco use and air pollution etc. e) stepping up the efforts to prevent, detect and treat TB

VHSNC and MAS based community-system of recording deaths and causes and its compilation and analysis continue to be useful in providing a picture of causes of mortality in rural and urban slum population of the state. This in turn can be used further for public health planning in Chhattisgarh.

Chapter 1: Introduction

Introduction: As per Guidelines of NHM, Village Health Sanitation and Nutrition Committees (VHSNCs) are mandated to record the deaths happening in the villages. The purpose of keeping a register of deaths in VHSNC is to enable health monitoring and planning at village and higher levels. The Format of the Death Register used by VHSNCs is as follows:

	Death Register of VHSNC									
							Month:		Year	
Sl.	Name of the perso n	Father's / Husban d's name	Ag e	Cast e	Sex	Village name	Pancha yat	Date of death	Community Reported Cause of Death	Pregnant women (Yes/ No)

For each death, VHSNC also tries to record the probable cause of death as reported by the community. It allows the community to keep a watch on the key causes of mortality in the village. The Death Register also gives them pointers on the issues which require action at various levels. Many of the actions require collective planning in the VHSNC. For example, the VHSNCs discuss in detail if they come across any Infant and Maternal deaths; deaths related to Fever/Malaria, Diarrhoea and TB. It allows them to assess the causes and remedies for the preventable causes of mortality in their village.

As a component of Community Action on Health (CAH), the records of deaths are used to carry out Community Audits of deaths.

Methodology: The death registers of VHSNCs are compiled and computerized into a database at the state level by SHRC. This is meant to allow analysis of deaths recorded by age, district and cause.

Regarding the causes of the deaths, it is very important to keep in mind that these are the causes as perceived and reported by the community in VHSNC meetings. Therefore the definitions may not match with the technical definitions laid out by the guidelines of Health ministry (MoHFW) or International Classification of Diseases (ICD). Despite the definitional issues, the information available through VHSNC registers is still useful in understanding the likely and approximate causes leading to a large share of the mortality in the state.

The proportion of the estimated deaths being reported through VHSNC Death Registers: The deaths analysed in the report are the ones recorded by VHSNCs in their death registers. The registers are compiled at the state level. There is a possibility that some of the information may not have got recorded or entered in state level computerisation.

The expected total rural deaths were estimated based on the population (as per Statistical Dept Govt of CG) and the Crude Death Rate for rural area (as per Statistical Dept Govt of CG) and for urban-slum (as per SRS 2018). As per the information compiled for 2020 (January to December), 131363 deaths have been documented.

In 2020, 77% of the total expected rural deaths have been collected and compiled through the VHSNC structure. The information thus is not based on any sampling process. This aspect also needs to be considered while interpreting the findings of this report. It also means that the number of deaths ascribed to any cause may be higher than the number reported here.

Similarly for deaths by age groups, the number of estimated deaths was calculated based on the Mortality figures given by Statistical Dept Govt of CG. This report covers only 39% of the expected neonatal deaths, 45% of post-neonatal infant deaths and 21% of child deaths of the remaining age group up to 4 years for rural areas. Similarly it covers 65% of the likely total number of maternal deaths in rural areas. Since the expected death number is based on Statistical Dept Govt of CG 2019-20, the decline in these mortality rates has not got incorporated, thus showing exaggerated number of expected deaths in the above categories.

Year wise Death Reporting Percentage

Deaths	Expecte d Rural Deaths	No. of report ed deaths in 2012	%	No. of repor ted death s in 2013	%	No.of repor ted death s in 2014	%	No.of report ed deaths in 2015	%	No.of report ed deaths in 2016	%	No.of report ed deaths in 2017	%	No.of report ed deaths in 2018	%	No.of report ed deaths in 2019	%	No.of reporte d deaths in 2020	%
Overall Deaths	171643	39168	23	58556	34	74279	43	91147	53	107194	62	90927	53	91202	53	111120	65	131363	77

A similar methodology is used for urban areas through recording of deaths by MAS which is explained in Chapter on analysis of urban-slum deaths.

Chapter 2: Analysis of Deaths suspected due to key infectious diseases (Malaria, Pneumonia, Diarrhoea, TB) in rural Chhattisgarh

2.1 Fever related Deaths:

VHSNCs have reported 2118 deaths during 2020 for which the cause is recorded as fever.

S.N.	District	Rural Projected Population 2020-21	No.of Fever death reported by VHSNC in 2017	No.of Fever death reported by VHSNC in 2018	No.of Fever death reported by VHSNC in 2019	No.of Fever death reported by VHSNC in 2020
1	RAIGARH	1420262	181	120	186	226
2	BALODABAZAR	1399946	191	133	192	172
3	JANJGIR	1659430	113	80	138	163
4	BILASPUR	1133881	145	140	118	139
5	GARIYABAND	684569	59	39	39	99
6	BASTAR	795487	112	103	103	98
7	RAIPUR	1087671	77	77	74	91
8	BALRAMPUR	802764	70	53	63	83
9	RAJNANDGAON	1520827	67	42	79	83
10	KORIA	500003	38	26	20	81
11	SURGUJA	811811	89	93	66	80
12	MAHASAMUND	1092142	67	49	72	76
13	DANTEWADA	214015	42	29	86	67
14	KANKER	729282	52	23	42	67
15	BEMETARA	853782	67	41	53	64
16	JASHPUR	848666	87	99	61	63
17	BALOD	854690	37	22	32	62
18	DHAMTARI	690469	68	43	47	55
19	KORBA	896523	20	26	12	47
20	KAWARDHA	1001404	44	41	26	44
21	KONDAGAON	590867	17	31	35	42
22	SUKMA	220481	43	51	53	41
23	BIJAPUR	224129	128	62	43	39
24	MUNGELI	825791	55	29	41	37
25	DURG	730890	23	22	36	28
26	GPM	405138				26
27	NARAYANPUR	133797	10	14	10	25
28	SURAJPUR	827798	25	39	19	20
S	tate Average	22956515	1927	1527	1746	2118

The deaths due to Fever is high in 15-49 years age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	61	3%
2	1-11 month	229	11%
3	1-4 year	152	7%
4	5-14 year	137	6%
5	15-49year	564	27%
6	50-59year	168	8%
7	60-69year	239	11%
8	More than 70year	568	27%
	Total	2118	100%

53% of the reported deaths due to Fever are of male persons.

Gender	No.of Death Reported	Percentage
Male	1129	53%
Female	989	47%
Total	2118	100%

There is a seasonal trend in deaths with 47% of the Fever related deaths happening in months August to November.

Month	No.of Death Reported	Percentage
January	122	6%
February	96	5%
March	113	5%
April	130	6%
May	164	8%
June	133	6%
July	191	9%
August	247	12%
September	226	11%
October	257	12%
November	253	12%
December	186	9%
Total	2118	100%

The trend of fever deaths over last 5 years amongst the 1-59 years age groups is given below. It also includes a trend for 88 tribal blocks, known to be malaria affected (mostly with reported API>5).

Year	Deaths 0-59 years	1-59 yrs (All Blocks)	1-59 yrs (88 Tribal blocks with API>5)
	Total Deaths	Fever related deaths	Fever related deaths
2013	29520	1717	1306
2014	37376	2226	1550
2015	42449	2061	1502
2016	52351	1685	1068
2017	44512	1032	507
2018	44123	779	433
2019	48970	866	399
2020	62656	1021	521

It shows decline in death reported to this cause and the decline from 2015 to 2020 is especially dramatic.

2.2 Deaths due to Pneumonia:

VHSNCs have reported 1100 deaths during 2020 for which the cause is recorded as pneumonia.

		Rural	No.of deaths	No.of deaths	No.of deaths	No.of deaths
S.N.	District	Projected	reported by	reported by	reported by	reported by
		Population 2020-21	VHSNC in 2017	VHSNC in 2018	VHSNC in 2019	VHSNC in 2020
1	240742		45	61	78	78
1	BASTAR	795487			77	
2	RAJNANDGAON	1520827	69	68		78
3	BILASPUR	1133881	77	107	76	74
4	KAWARDHA	1001404	58	49	60	72
5	GARIYABAND	684569	55	24	41	63
6	BALODABAZAR	1399946	58	34	48	57
7	BIJAPUR	224129	44	59	30	56
8	JANJGIR	1659430	38	36	38	56
9	SUKMA	220481	23	33	34	46
10	SURAJPUR	827798	41	23	21	46
11	KANKER	729282	39	26	28	44
12	KONDAGAON	590867	43	37	25	44
13	GPM	405138				42
14	BEMETARA	853782	52	47	37	35
15	DHAMTARI	690469	25	36	33	34
16	RAIPUR	1087671	57	45	48	31
17	SURGUJA	811811	20	19	19	31
18	DANTEWADA	214015	34	16	22	30
19	MUNGELI	825791	43	24	30	30
20	BALRAMPUR	802764	20	18	13	27
21	RAIGARH	1420262	16	30	26	24
22	BALOD	854690	30	35	18	22
23	MAHASAMUND	1092142	33	40	23	22
24	KORIA	500003	5	2	5	17
25	KORBA	896523	18	25	9	15
26	DURG	730890	31	26	29	11
27	JASHPUR	848666	16	19	16	10
28	NARAYANPUR	133797	2	6	6	5
S	tate Average	22956515	992	945	890	1100

86% deaths due to pneumonia are in under-5 years age group.

S.N.	Age Category	No.of Death reported	Percentage	
1	<1 month	160	15%	
2	1-11 month	674	61%	
3	1-4 year	105	10%	
4	5-14 year	31	3%	
5	15-49year	67	6%	
6	50-59year	18	2%	
7	60-69year	19	2%	
8	More than 70year	26	2%	
	Total	1100	100%	

59% of the deaths due to pneumonia are of male persons.

Gender	No.of Death Reported	Percentage
Male	653	59%
Female	447	41%
Total	1100	100%

44% of deaths due to pneumonia happened in colder season – October to January.

Month	No.of Death Reported	Percentage
January	107	10%
February	73	7%
March	80	7%
April	64	6%
May	92	8%
June	60	5%
July	70	6%
August	100	9%
September	82	7%
October	140	13%
November	119	11%
December	113	10%
Total	1100	100%

2.3 Deaths due to Diarrhea:

VHSNCs have reported 1052 deaths during 2020 for which the cause is recorded as Diarrhea.

S.N.	District	Rural Projected Population 2020-21	No.of death reported by VHSNC in 2017	No.of death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	BASTAR	795487	61	64	81	93
2	RAIGARH	1420262	64	71	50	93
3	JASHPUR	848666	43	54	45	58
4	SURAJPUR	827798	21	28	21	55
5	RAJNANDGAON	1520827	53	46	71	54
6	SURGUJA	811811	55	51	35	51
7	KANKER	729282	37	24	31	49
8	KORIA	500003	17	14	11	49
9	JANJGIR	1659430	50	41	51	43
10	BALODABAZAR	1399946	37	47	50	42
11	GARIYABAND	684569	38	12	23	42
12	MAHASAMUND	1092142	34	35	40	40
13	BALRAMPUR	802764	54	49	60	37
14	DHAMTARI	690469	33	17	22	34
15	KONDAGAON	590867	32	28	31	31
16	SUKMA	220481	27	34	21	30
17	KAWARDHA	1001404	50	31	39	29
18	RAIPUR	1087671	25	15	25	29
19	NARAYANPUR	133797	12	13	18	25
20	DANTEWADA	214015	17	4	26	23
21	BALOD	854690	14	13	14	22
22	BEMETARA	853782	27	8	18	22
23	BIJAPUR	224129	26	22	22	22
24	BILASPUR	1133881	31	39	30	19
25	GPM	405138				19
26	DURG	730890	14	20	10	16
27	MUNGELI	825791	20	26	21	15
28	KORBA	896523	13	16	8	10
St	ate Average	22956515	905	822	874	1052

26% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	%
1	<1 month	45	4%
2	1-11 month	173	16%
3	1-4 year	94	9%
4	5-14 year	58	6%
5	15-49year	269	26%
6	50-59year	81	8%
7	60-69year	89	8%
8	More than 70year	243	23%
	Total	1052	100%

52% of the deaths due to Diarrhea are of male persons.

Category	Category No.of Death Reported	
Male	552	52%
Female	500	48%
Total	1052	100%

The number of deaths per month is slightly higher in November.

Month	Month No.of Death Reported	
January	62	6%
February	55	5%
March	72	7%
April	58	6%
May	90	9%
June	77	7%
July	79	8%
August	107	10%
September	96	9%
October	120	11%
November	122	12%
December	114	11%
Total	1052	100%

<u>The trend of Pneumonia and Diarrhea related deaths amongst the 0-5 years age groups is given below</u>

Year	0-5 years Total deaths recorded	0-5 years Pneumonia related deaths	%	0-5 years Diarrhea related deaths	0/0
2016	10530	1675	15.90%	400	3.80%
2017	8972	853	9.50%	247	2.80%
2018	8530	826	9.70%	207	2.40%
2019	9650	773	8.00%	258	2.70%
2020	11985	939	7.83%	312	2.60%

2.4 Deaths due to TB:

VHSNCs have reported 1991 deaths during 2020 for which the cause is recorded as TB.

S.N.	District	Rural Projected Population 2020-21	No.of death reported by VHSNC in 2017	No.of death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	Raigarh	1420262	149	119	143	183
2	Bastar	795487	80	100	93	129
3	Rajnandgaon	1520827	103	108	145	124
4	Kanker	729282	102	67	97	115
5	Balodabazar	1399946	130	106	117	105
6	Mahasamund	1092142	104	83	98	101
7	Jashpur	848666	94	105	102	92
8	Raipur	1087671	77	71	66	89
9	Dhamtari	690469	102	64	83	77
10	Gariyaband	684569	59	53	53	77
11	Bilaspur	1133881	75	104	84	76
12	Balod	854690	51	63	52	69
13	Durg	730890	44	51	51	66
14	Janjgir	1659430	96	82	87	65
15	Kawardha	1001404	71	48	65	65
16	Sukma	220481	63	49	74	61
17	SURGUJA	811811	43	57	55	61
18	Kondagaon	590867	48	32	48	55
19	Balrampur	802764	48	55	35	54
20	Korba	896523	62	43	30	46
21	Koria	500003	26	14	21	42
22	Bijapur	224129	68	43	37	41
23	Dantewada	214015	30	31	50	37
24	Surajpur	827798	80	76	42	37
25	Bemetara	853782	78	49	44	32
26	Narayanpur	133797	22	21	26	32
27	GPM	405138				30
28	Mungeli	825791	30	39	28	30
St	ate Average	22956515	1935	1733	1826	1991

41% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage	
1	<1 month	2	0%	
2	1-11 month	2	0%	
3	1-4 year	7	0%	
4	5-14 year	20	1%	
5	15-49year	809	41%	
6	50-59year	390	20%	
7	60-69year	398	20%	
8	More than 70year	363	18%	
	Total	1991	100%	

74% of the deaths due to TB are of male persons.

Category	No.of Death Reported	Percentage	
Male	1479	74%	
Female	512	26%	
Total	1991	100%	

There is no seasonal pattern in TB deaths.

Month	No.of Death Reported	Percentage
January	148	7%
February	150	8%
March	144	7%
April	164	8%
May	210	11%
June	188	9%
July	194	10%
August	163	8%
September	139	7%
October	139	7%
November	178	9%
December	174	9%
Total	1991	100%

Chapter 3: Analysis of Deaths reported as due to High BP/Heart Disease, Stroke, Cancer, Diabetes and Sickle Cell Anemia in Rural Chhattisgarh

3.1 Deaths due to High BP, Heart Diseases, Stroke (including congenital heart disease & anomalies):

VHSNCs have reported 39569 deaths during 2020 for which the cause is recorded as High BP, Stroke and Heart Disease (including congenital heart disease & anomalies).

S.N.	District	Rural Projected Population 2020-21	No.of death reported by VHSNC in 2017	No.of death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	JANJGIR	1659430	2527	2480	3116	4249
2	RAJNANDGAON	1520827	1979	2289	3098	3319
3	RAIGARH	1420262	1578	1603	2124	3273
4	BALODABAZAR	1399946	1411	1375	2244	2452
5	BALOD	854690	1235	1210	1524	2205
6	RAIPUR	1087671	1134	1082	1335	2137
7	BILASPUR	1133881	1325	2206	2087	2093
8	DURG	730890	1360	1489	1641	2093
9	DHAMTARI	690469	1192	1346	1501	1735
10	KAWARDHA	1001404	989	1229	1328	1685
11	MAHASAMUND	1092142	1085	1276	1533	1676
12	KANKER	729282	673	593	918	1314
13	BEMETARA	853782	844	914	987	1232
14	MUNGELI	825791	683	919	892	1118
15	JASHPUR	848666	874	933	907	1080
16	SURAJPUR	827798	688	1019	1119	1015
17	BASTAR	795487	503	622	748	982
18	SURGUJA	811811	611	785	788	975
19	GARIYABAND	684569	366	469	540	972
20	KORBA	896523	603	600	533	944
21	BALRAMPUR	802764	489	649	679	898
22	KORIA	500003	184	170	186	567
23	KONDAGAON	590867	233	279	349	523
24	GPM	405138				493
25	NARAYANPUR	133797	79	62	95	163
26	SUKMA	220481	75	86	80	146
27	BIJAPUR	224129	108	121	113	132
28	DANTEWADA	214015	68	41	108	98
St	ate Average	22956515	22896	25847	30573	39569

Stroke and BP/heart disease deaths in non-tribal areas are much higher, presumably due to difference in reporting in urban areas.

47% of these deaths due to High BP, Stroke and Heart Disease are in above 70 year age group. The deaths which are of greater concern are in under-60 year age and they constitute 30% of the deaths due to this composite category of causes.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	83	0%
2	1-11 month	196	0%
3	1-4 year	79	0%
4	5-14 year	244	1%
5	15-49year	5828	15%
6	50-59year	5634	14%
7	60-69year	8925	23%
8	More than 70year	18580	47%
	Total	39569	100%

58% of the deaths are of male persons.

Category	No.of Death Reported	Percentage
Male	23015	58%
Female	16554	42%
Total	39569	100%

The number of deaths per month is highest in October to December.

Month	No.of Death Reported	Percentage
January	3384	9%
February	2884	7%
March	2732	7%
April	2518	6%
May	3118	8%
June	2954	7%
July	2974	8%
August	3286	8%
September	3214	8%
October	3823	10%
November	4410	11%
December	4272	11%
Total	39569	100%

3.2 Deaths due to Cancer:

VHSNCs have reported 5913 deaths during 2020 for which the cause is recorded as Cancer.

S.N.	District	Rural Projected Population 2020-21	No.of death reported by VHSNC in 2017	No.of death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	RAIGARH	1420262	301	247	332	504
2	JANJGIR	1659430	405	366	441	450
3	RAJNANDGAON	1520827	344	311	471	438
4	BALODABAZAR	1399946	252	246	331	363
5	BILASPUR	1133881	241	407	331	359
6	RAIPUR	1087671	262	239	262	341
7	BALOD	854690	188	206	223	323
8	MAHASAMUND	1092142	222	265	315	310
9	KAWARDHA	1001404	195	163	238	305
10	BEMETARA	853782	227	200	214	241
11	DURG	730890	214	221	242	226
12	JASHPUR	848666	157	150	137	223
13	DHAMTARI	690469	198	200	217	212
14	MUNGELI	825791	173	188	194	188
15	KANKER	729282	116	99	144	187
16	SURAJPUR	827798	159	206	159	173
17	SURGUJA	811811	134	161	139	159
18	GARIYABAND	684569	72	116	133	139
19	BALRAMPUR	802764	92	107	117	130
20	KORBA	896523	89	89	89	126
21	BASTAR	795487	90	108	117	124
22	KORIA	500003	58	34	37	115
23	KONDAGAON	590867	37	39	57	98
24	GPM	405138				79
25	BIJAPUR	224129	33	33	27	29
26	NARAYANPUR	133797	16	17	13	28
27	DANTEWADA	214015	22	12	22	25
28	SUKMA	220481	16	20	12	18
S	tate Average	22956515	4313	4450	5014	5913

Cancer deaths in non-tribal areas are much higher, presumably due to better availability of medical facilities in urban areas.

33% of these deaths are in 15-59 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	5	0.1%
2	1-11 month	7	0.1%
3	1-4 year	39	0.7%
4	5-14 year	81	1.4%
5	15-49year	1933	33%
6	50-59year	1365	23%
7	60-69year	1264	21%
8	More than 70year	1219	21%
Total		5913	100%

49% of the deaths are of male and 51% of the deaths are of female persons.

Category	No.of Death Reported	Percentage
Male	2879	49%
Female	3034	51%
Total	5913	100%

The number of deaths per month does not have an obvious seasonal pattern. $\boldsymbol{.}$

Month	No.of Death Reported	Percentage
January	449	8%
February	388	7%
March	440	7%
April	417	7%
May	574	10%
June	544	9%
July	601	10%
August	556	9%
September	500	8%
October	508	9%
November	458	8%
December	478	8%
Total	5913	100%

3.3 Deaths due to Diabetes:

VHSNCs have reported 5454 deaths during 2020 for which the cause is recorded as Diabetes.

S.N.	District	Rural Projected Population 2020-21	No.of death reported by VHSNC in 2017	No.of death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	JANJGIR	1659430	294	269	302	436
2	RAIGARH	1420262	153	183	246	412
3	RAJNANDGAON	1520827	199	211	397	386
4	BALOD	854690	149	151	230	362
5	BALODABAZAR	1399946	187	166	313	357
6	MAHASAMUND	1092142	180	196	250	304
7	KANKER	729282	177	147	234	291
8	RAIPUR	1087671	153	137	204	288
9	DHAMTARI	690469	201	205	247	274
10	BILASPUR	1133881	162	237	232	257
11	KAWARDHA	1001404	83	98	132	240
12	MUNGELI	825791	159	150	136	215
13	BEMETARA	853782	124	122	148	205
14	DURG	730890	159	131	188	194
15	JASHPUR	848666	92	110	121	157
16	BASTAR	795487	63	60	99	145
17	GARIYABAND	684569	53	61	96	137
18	SURAJPUR	827798	88	150	126	134
19	SURGUJA	811811	98	85	77	127
20	KORBA	896523	64	74	66	113
21	GPM	405138				85
22	BALRAMPUR	802764	50	64	82	82
23	KONDAGAON	590867	30	42	47	74
24	KORIA	500003	38	42	21	62
25	NARAYANPUR	133797	29	14	28	51
26	BIJAPUR	224129	22	34	19	30
27	SUKMA	220481	10	6	9	20
28	DANTEWADA	214015	15	6	12	16
S	tate Average	22956515	3032	3151	4062	5454

62% of these deaths are in 60 years and above groups.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	6	0.1%
2	1-11 month	5	0.1%
3	1-4 year	9	0.2%
4	5-14 year	34	0.6%
5	15-49year	985	18%
6	50-59year	1001	18%
7	60-69year	1320	24%
8	More than 70year	2094	38%
	Total	5454	100%

60% of the reported deaths are of male persons.

Category	No.of Death Reported	Percentage
Male	3255	60%
Female	2199	40%
Total	5454	100%

The number of deaths per month is slightly higher in October to December.

Month	No.of Death Reported	Percentage
January	403	7%
February	336	6%
March	426	8%
April	397	7%
May	425	8%
June	427	8%
July	452	8%
August	479	9%
September	467	9%
October	558	10%
November	549	10%
December	535	10%
Total	5454	100%

3.4 Deaths due to Digestive Disease:

VHSNCs have reported 5212 deaths during 2020 for which the cause is recorded as Digestive disease.

S.N.	District	Rural Projected Population 2020-21	No.of death reported by VHSNC in 2017	No.of death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	RAIGARH	1420262	269	265	200	503
2	JANJGIR	1659430	260	310	165	316
3	RAJNANDGAON	1520827	260	367	267	315
4	BASTAR	795487	141	236	197	283
5	KANKER	729282	233	194	124	243
6	BALRAMPUR	802764	207	244	192	219
7	SURGUJA	811811	215	227	165	216
8	BALODABAZAR	1399946	192	182	166	214
9	MAHASAMUND	1092142	150	281	121	209
10	SURAJPUR	827798	207	333	218	209
11	JASHPUR	848666	208	240	160	203
12	KONDAGAON	590867	87	87	135	194
13	KORBA	896523	122	120	71	193
14	KAWARDHA	1001404	110	113	93	184
15	RAIPUR	1087671	170	146	82	181
16	DURG	730890	141	151	83	174
17	BALOD	854690	127	123	71	171
18	KORIA	500003	104	100	77	171
19	BILASPUR	1133881	223	300	182	152
20	BEMETARA	853782	133	136	71	136
21	GARIYABAND	684569	120	99	67	120
22	DHAMTARI	690469	180	182	136	118
23	GPM	405138				113
24	MUNGELI	825791	88	125	82	105
25	DANTEWADA	214015	88	53	58	78
26	BIJAPUR	224129	96	77	39	69
27	NARAYANPUR	133797	46	30	47	67
28	SUKMA	220481	33	41	35	56
S	tate Average	22956515	4210	4762	3304	5212

34% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	53	1%
2	1-11 month	138	3%
3	1-4 year	104	2%
4	5-14 year	186	4%
5	15-49year	1779	34%
6	50-59year	805	15%
7	60-69year	861	17%
8	More than 70year	1286	25%
	Total	5212	100%

64% of the deaths are of male persons.

Gender	No.of Death Reported	Percentage	
Male	3321	64%	
Female	1891	36%	
Total	5212	100%	

The numbers of deaths are relatively higher during August.

Month	No.of Death Reported	Percentage
January	387	7%
February	353	7%
March	458	9%
April	393	8%
May	395	8%
June	466	9%
July	488	9%
August	504	10%
September	448	9%
October	456	9%
November	440	8%
December	424	8%
Total	5212	100%

3.5 Deaths due to Sickle Cell Anemia:

VHSNCs have reported 668 deaths during 2020 for which the cause is recorded as Sickle Cell Anemia.

S.N.	District	Rural Projected Population 2020-21	No.of death reported by VHSNC in 2017	No.of death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	MAHASAMUND	1092142	59	49	54	75
2	RAIGARH	1420262	50	55	39	70
3	JANJGIR	1659430	41	29	37	48
4	GARIYABAND	684569	19	29	28	37
5	BALODABAZAR	1399946	25	30	41	36
6	RAJNANDGAON	1520827	22	30	26	36
7	SURGUJA	811811	18	39	17	33
8	RAIPUR	1087671	40	34	25	32
9	BALOD	854690	14	20	29	30
10	BILASPUR	1133881	13	19	22	27
11	BASTAR	795487	15	18	25	26
12	KANKER	729282	17	17	23	25
13	SUKMA	220481	0	1	2	23
14	SURAJPUR	827798	23	18	25	22
15	DHAMTARI	690469	23	19	25	21
16	DURG	730890	28	18	18	17
17	KAWARDHA	1001404	13	14	18	17
18	BALRAMPUR	802764	10	5	8	15
19	BEMETARA	853782	21	12	22	11
20	JASHPUR	848666	15	14	14	11
21	KONDAGAON	590867	3	12	18	11
22	MUNGELI	825791	11	14	10	11
23	DANTEWADA	214015	3	5	10	9
24	KORBA	896523	12	16	6	9
25	NARAYANPUR	133797	3	3	14	9
26	KORIA	500003	3	3	5	4
27	GPM	405138				3
28	BIJAPUR	224129	5	2	2	0
S	tate Average	22956515	506	525	563	668

65% of these deaths are in 15-49 year age group and 17% deaths are at age below 15 years. Many of the early deaths due to sickle-cell caused infections and conditions are likely to be under-reported because of lack of detection facilities at local level.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	1	0.1%
2	1-11 month	8	1.2%
3	1-4 year	33	5%
4	5-14 year	76	11%
5	15-49year	433	65%
6	50-59year	56	8.4%
7	60-69year	25	3.7%
8	More than 70year	36	5.4%
	Total	668	100%

51% of the deaths are of female persons.

Gender	No.of Death Reported	Percentage
Male	329	49%
Female	339	51%
Total	668	100%

The numbers of deaths are relatively higher during July.

Month	No.of Death Reported	Percentage
January	33	5%
February	50	7%
March	44	7%
April	36	5%
May	52	8%
June	59	9%
July	78	12%
August	63	9%
September	62	9%
October	65	10%
November	65	10%
December	61	9%
Total	668	100%

Chapter 4: Analysis of other important causes of deaths in rural Chhattisgarh – Accidents, Suicides, Snake-bite and Rabies

4.1 Deaths due to Accident:

VHSNCs have reported 8692 deaths during 2020 for which the cause is recorded as accident.

S.N.	District	Rural Projected Population 2020-21	No.of deaths reported by VHSNC in 2017	No.of deaths reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	Janjgir	1659430	505	521	638	650
2	Raigarh	1420262	312	320	408	638
3	Rajnandgaon	1520827	352	436	565	539
4	Bilaspur	1133881	354	514	495	457
5	Balodabazar	1399946	448	332	473	450
6	Raipur	1087671	373	291	306	449
7	Jashpur	848666	358	369	334	392
8	Mahasamund	1092142	321	337	427	383
9	Surajpur	827798	292	407	385	362
10	Balrampur	802764	233	344	334	355
11	Bastar	795487	208	243	284	325
12	Kawardha	1001404	200	232	218	320
13	Dhamtari	690469	238	240	263	319
14	SURGUJA	811811	278	335	256	312
15	Balod	854690	223	214	215	305
16	Kanker	729282	192	168	248	299
17	Durg	730890	234	233	237	296
18	Korba	896523	184	186	140	261
19	Bemetara	853782	176	237	224	250
20	Koria	500003	107	74	92	229
21	Kondagaon	590867	130	86	143	219
22	Gariyaband	684569	101	126	145	205
23	Mungeli	825791	170	211	208	202
24	GPM	405138				121
25	Bijapur	224129	112	111	91	108
26	Dantewada	214015	96	38	104	103
27	Narayanpur	133797	31	39	48	81
28	Sukma	220481	78	57	83	62
St	ate Average	22956515	6306	6701	7364	8692

Tribal districts have a big number of accidents in their mortality. Most districts have growing trend of accidents. One reason for that is greater proportion of drowning (28% Bijapur, 21% Jashpur) and fall related deaths (Narayanpur, Dantewada, Balrampur, Sarguja, Surajpur, GPM) in some tribal districts.

Classification of Accidents deaths:

S.N.	Type of Accidental Death	No.of Deaths	%
1	Road Accidents	4312	49.6%
2	Falling from roof, trees etc)	1422	16.4%
3	Drowning	1199	13.8%
4	Burning	630	7.2%
5	Electrocution	551	6.3%
6	Other injury	187	2.2%
7	Lightening	177	2.0%
8	Animal bites	87	1.0%
9	Buried	100	1.2%
10	Suffocated	13	0.1%
11	Flood	14	0.2%
Total		8692	100%

District wise relative proportion of deaths due to different kind of Accidents (Out of Accidents deaths reported by VHSNCs):

S.N.	District	% Death due to Road Accident	% Death due to Falling	% Death due to Drowning	% Death due to Burning	% of Death due to Electrocution
1	Balod	63%	6%	11%	7%	7%
2	Balodabazar	54%	14%	12%	9%	7%
3	Balrampur	34%	29%	20%	6%	4%
4	Bastar	44%	22%	19%	7%	3%
5	Bemetara	55%	12%	10%	10%	8%
6	Bijapur	45%	14%	28%	6%	2%
7	Bilaspur	49%	12%	13%	10%	11%
8	Dantewada	31%	30%	17%	12%	1%
9	Dhamtari	56%	14%	8%	8%	7%
10	Durg	54%	14%	11%	9%	6%
11	Gariyaband	46%	21%	9%	7%	8%
12	GPM	38%	24%	13%	7%	7%
13	Janjgir	48%	15%	14%	9%	8%
14	Jashpur	39%	16%	21%	8%	6%
15	Kanker	58%	17%	15%	2%	2%
16	Kawardha	47%	12%	18%	7%	10%
17	Kondagaon	47%	23%	16%	8%	3%
18	Korba	51%	15%	15%	3%	5%
19	Koria	42%	17%	20%	3%	4%
20	Mahasamund	54%	16%	8%	8%	10%
21	Mungeli	50%	6%	12%	12%	9%
22	Narayanpur	28%	31%	20%	4%	1%
23	Raigarh	53%	14%	12%	7%	8%
24	Raipur	63%	12%	8%	10%	4%
25	Rajnandgaon	61%	14%	7%	6%	7%
26	Sukma	50%	23%	15%	8%	3%
27	Surajpur	41%	25%	17%	2%	4%
28	Surguja	35%	27%	20%	4%	6%
	TOTAL	50%	16%	14%	7%	6%

55% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	34	0%
2	1-11 month	98	1%
3	1-4 year	326	4%
4	5-14 year	529	6%
5	15-49year	4816	55%
6	50-59year	931	11%
7	60-69year	753	9%
8	More than 70year	1205	14%
	Total	8692	100%

71% of the deaths due to accident are of male persons.

Gender	No.of Death Reported	Percentage
Male	6183	71%
Female	2509	29%
Total	8692	100%

The number of deaths per month does not have a seasonal pattern.

Month	No.of Death Reported	Percentage
January	654	8%
February	635	7%
March	616	7%
April	493	6%
May	706	8%
June	876	10%
July	898	10%
August	853	10%
September	695	8%
October	755	9%
November	747	9%
December	764	9%
Total	8692	100%

4.2 Deaths due to suicide:

VHSNCs have reported 5393 deaths during 2020 for which the cause is recorded as suicide.

S.N.	District	Rural Projected Population 2020-21	No.of deaths reported by VHSNC in 2017	No.of deaths reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	Janjgir	1659430	210	233	289	395
2	Raigarh	1420262	165	140	233	385
3	Rajnandgaon	1520827	193	197	300	338
4	Raipur	1087671	217	184	236	330
5	Balodabazar	1399946	172	196	292	295
6	Balod	854690	155	143	202	275
7	Bilaspur	1133881	145	202	254	266
8	Kanker	729282	127	81	191	261
9	Mahasamund	1092142	183	215	241	257
10	Dhamtari	690469	186	206	220	232
11	Durg	730890	180	152	176	213
12	Jashpur	848666	99	135	140	211
13	Gariyaband	684569	75	106	105	167
14	Kawardha	1001404	86	81	109	160
15	Balrampur	802764	69	120	105	157
16	Surajpur	827798	126	143	156	154
17	Surguja	811811	98	121	107	153
18	Korba	896523	76	107	97	152
19	Bastar	795487	79	85	90	149
20	Bemetara	853782	79	97	103	141
21	Koria	500003	43	24	43	141
22	Kondagaon	590867	83	65	82	140
23	Dantewada	214015	63	32	86	109
24	Mungeli	825791	61	68	73	105
25	GPM	405138				76
26	Bijapur	224129	65	46	44	65
27	Sukma	220481	48	39	66	45
28	Narayanpur	133797	22	25	17	21
Sta	ite Average	22956515	3105	3243	4057	5393

Some tribal districts, especially the 5 districts in southern part of Bastar division show higher suicide rates and also with an increasing trend. The pattern is mixed as these districts are closely followed by urban districts like Raipur and Durg.

77% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	15 to 25 years	2048	38%
2	26 to 35 years	1184	22%
3	36 to 49 years	909	17%
4	50-59year	604	11%
5	60-69year	346	6%
6	More than 70year	302	6%
	Total	5393	100%

69% of the deaths due to suicide are of male persons. There is some reduction in suicides by women with age, 25 year onwards.

			%		%	
S.N.	Age Category	Male		Female		Total
1	15 to 25 years	1274	62%	774	38%	2048
2	26 to 35 years	872	74%	312	26%	1184
3	36 to 49 years	665	73%	244	27%	909
4	50 to 59 years	464	77%	140	23%	604
5	60 to 69 years	261	75%	85	25%	346
6	More than 70 years	204	68%	98	32%	302
	Total	3740	69%	1653	31%	5393

The deaths are concentrated in younger age with 15-25 age group having most deaths due to suicide, followed by the 25-25 year age group.

S.N.	Age Category	Male	%	Female	%	Total
1	15 to 25 years	1274	34%	774	47%	2048
2	26 to 35 years	872	23%	312	19%	1184
3	36 to 49 years	665	18%	244	15%	909
4	50 to 59 years	464	12%	140	8%	604
5	60 to 69 years	261	7%	85	5%	346
6	More than 70 years	204	5%	98	6%	302
Total		3740	100%	1653	100%	5393

The number of deaths per month does not have a seasonal pattern.

Month	No.of Death Reported	Percentage
January	356	7%
February	325	6%
March	409	8%
April	368	7%
May	507	9%
June	655	12%
July	599	11%
August	510	9%
September	438	8%
October	462	9%
November	414	8%
December	350	6%
Total	5393	100%

4.3 Deaths due to snake bite:

VHSNCs have reported 1070 deaths during 2020 for which the cause is recorded as snake bite.

S.N.	District	Rural Projected Population 2020-21	No.of Deaths reported by VHSNC in 2017	No.of Deaths reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	Janjgir	1659430	61	51	55	100
2	Kawardha	1001404	28	30	26	71
3	Raigarh	1420262	35	46	37	68
4	Rajnandgaon	1520827	37	50	40	67
5	Balrampur	802764	43	64	45	52
6	Kanker	729282	33	8	31	51
7	Jashpur	848666	18	26	16	47
8	Bastar	795487	22	19	26	46
9	Dantewada	214015	22	9	27	40
10	Korba	896523	20	19	19	39
11	Surajpur	827798	14	25	32	39
12	Bijapur	224129	22	31	18	37
13	Surguja	811811	21	11	20	37
14	Balodabazar	1399946	20	17	42	36
15	Bilaspur	1133881	33	42	49	36
16	Mahasamund	1092142	26	20	30	33
17	Gariyaband	684569	13	7	15	32
18	Koria	500003	17	7	4	31
19	Raipur	1087671	16	20	15	30
20	Sukma	220481	18	14	31	30
21	Kondagaon	590867	19	6	18	28
22	Balod	854690	7	7	7	23
23	Bemetara	853782	14	20	19	22
24	Mungeli	825791	25	17	19	20
25	Dhamtari	690469	10	11	19	18
26	GPM	405138				14
27	Durg	730890	11	14	14	12
28	Narayanpur	133797	6	1	8	11
St	ate Average	22956515	611	592	682	1070

50% of these deaths are in 15-49 year age group. Deaths due to snake bite are also high in the 5-14 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	5	0%
2	1-11 month	16	1%
3	1-4 year	60	6%
4	5-14 year	190	18%
5	15-49year	536	50%
6	50-59year	120	11%
7	60-69year	69	6%
8	More than 70year	74	7%
	Total	1070	100%

53% of the deaths due to snake bite are of male persons.

Gender	No.of Death Reported	Percentage
Male	571	53%
Female	499	47%
Total	1070	100%

The number of deaths per month is slightly higher during June to September. It drops in October and is low otherwise till April.

Month	No.of Death Reported	Percentage
January	13	1%
February	13	1%
March	16	1%
April	49	5%
May	106	10%
June	175	16%
July	208	19%
August	210	20%
September	153	14%
October	80	7%
November	29	3%
December	18	2%
Total	1070	100%

4.4 Deaths due to Rabies:

VHSNCs have reported 114 deaths during 2020 for which the cause is recorded as Rabies

S.N.	District	Rural Projected Population 2020-21	No.of Deaths reported by VHSNC in 2017	No.of Deaths reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020
1	Raigarh	1420262	4	5	2	18
2	Kanker	729282	1	3	3	14
3	Korba	896523	3	0	2	9
4	Rajnandgaon	1520827	5	6	3	9
5	Bastar	795487	6	1	9	6
6	Balrampur	802764	1	1	4	5
7	Bilaspur	1133881	7	5	8	5
8	Dantewada	214015	0	1	10	5
9	Janjgir	1659430	4	4	9	5
10	Mungeli	825791	1	4	6	5
11	Surajpur	827798	2	4	5	5
12	GPM	405138				4
13	Mahasamund	1092142	4	1	6	4
14	Bijapur	224129	2	1	0	3
15	Jashpur	848666	10	6	3	3
16	Koria	500003	3	0	0	3
17	Bemetara	853782	2	3	2	2
18	Raipur	1087671	2	4	0	2
19	Surguja	811811	4	7	4	2
20	Balod	854690	1	0	0	1
21	Dhamtari	690469	1	4	1	1
22	Gariyaband	684569	0	2	0	1
23	Kawardha	1001404	3	2	3	1
24	Kondagaon	590867	3	2	2	1
25	Balodabazar	1399946	3	6	9	0
26	Durg	730890	4	4	5	0
27	Narayanpur	133797	0	1	1	0
28	Sukma	220481	0	1	8	0
St	ate Average	22956515	76	78	105	114

40% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	0	0%
2	1-11 month	1	1%
3	1-4 year	12	11%
4	5-14 year	30	26%
5	15-49year	46	40%
6	50-59year	13	11%
7	60-69year	5	4%
8	More than 70year	7	6%
	Total	114	100%

76% of the deaths due to Rabies are of male persons.

Gender	No.of Death Reported	Percentage
Male	87	76%
Female	27	24%
Total	114	100%

The number of deaths per month is slightly higher in May.

Month	No.of Death Reported	Percentage
January	5	4%
February	10	9%
March	11	10%
April	9	8%
May	28	25%
June	12	11%
July	7	6%
August	6	5%
September	9	8%
October	6	5%
November	6	5%
December	5	4%
Total	114	100%

Analysis for some other causes is available in Annexure - I

Chapter 5: Analysis of Under-5 Child Deaths in rural Chhattisgarh

5.1 District wise no. of Newborn Deaths (<1 month) in 2020

The report covers 6823 of the total 17434 estimated neonatal deaths in the rural areas of the state. Thus the overall reporting percentage for neonatal deaths is 39%. The reporting percentage is higher from districts like Durg, Bastar, Bemetara and is low from districts like Korba, GPM and Sarguja.

S.N.	District	Rural Projected Population 2020-21	Expected no. of Neonatal deaths	No. of Neonatal Deaths Reported in 2017	No. of Neonatal Deaths Reported in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020	Reporting %
1	Balod	854690	470	181	180	184	237	50%
2	Balodabazar	1399946	1258	338	253	312	399	32%
3	Balrampur	802764	574	185	223	176	268	47%
4	Bastar	795487	422	152	286	266	272	64%
5	Bemetara	853782	469	237	226	213	277	59%
6	Bijapur	224129	156	77	124	56	75	48%
7	Bilaspur	1133881	1111	307	441	365	365	33%
8	Dantewada	214015	149	93	55	63	78	52%
9	Dhamtari	690469	510	192	211	199	198	39%
10	Durg	730890	402	228	246	275	370	92%
11	Gariyaband	684569	615	170	178	186	323	53%
12	GPM	405138	253				52	21%
13	Janjgir	1659430	1092	352	338	435	550	50%
14	Jashpur	848666	646	152	182	144	182	28%
15	Kanker	729282	383	115	94	67	141	37%
16	Kawardha	1001404	1167	194	214	256	402	34%
17	Kondagaon	590867	313	93	103	77	113	36%
18	Korba	896523	830	136	114	83	152	18%
19	Koria	500003	385	92	57	61	174	45%
20	Mahasamund	1092142	914	348	330	336	362	40%
21	Mungeli	825791	516	227	204	147	183	35%
22	Narayanpur	133797	70	14	19	18	21	30%
23	Raigarh	1420262	1087	312	270	249	413	38%
24	Raipur	1087671	977	313	302	211	311	32%
25	Rajnandgaon	1520827	1337	460	475	584	460	34%
26	Sukma	220481	153	76	95	101	64	42%
27	Surajpur	827798	592	178	260	197	215	36%
28	Surguja	811811	580	156	207	188	166	29%
Sta	ate Average	22956515	17434	5378	5687	5449	6823	39%

The neonatal deaths recorded monthly are slightly higher in July & August.

MONTH	No. of Neonatal Deaths Reported 2020	%
January	555	8%
February	415	6%
March	460	7%
April	489	7%
May	576	8%
June	557	8%
July	683	10%
August	649	10%
September	641	9%
October	579	8%
November	619	9%
December	600	9%
TOTAL	6823	100%

59% of the neonatal deaths recorded were of male children.

Gender	No. of Neonatal Deaths Reported 2020	%
Male	4057	59%
Female	2766	41%
Total	6823	100%

The causes for 36% of reported neonatal deaths are due to neonatal conditions (Birth Asphyxia & sepsis). Low Birth Weight, Jaundice and Pneumonia were also important causes of neonatal deaths.

Reported Causes	No. of Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accidental	34	0.5%	0.3%	1%	1%	1%	1%	0%	0%
Convulsions	227	3.3%	3.9%	4%	3%	4%	3%	3%	2%
Fever	61	0.9%	1.0%	1%	2%	2%	2%	3%	2%
Neonatal Jaundice	182	2.7%	3.4%	4%	3%	4%	3%	4%	3%
Low Birth Weight	497	7.3%	8.9%	11%	13%	16%	17%	14%	11%
Diarrhea	45	0.7%	0.6%	1%	1%	1%	1%	1%	1%
Pneumonia	160	2.3%	2.9%	6%	6%	8%	7%	7%	8%
T.B.	2	0.0%	0.1%	0%	0%	0%	0%	0%	0%
Birth Asphyxia	1685	24.7%	25.3%	20%	23%	59%	610/	620/	60%
Neonatal sepsis	788	11.5%	9.7%	12%	8%	39%	61%	63%	00%
Congenital Heart Disease/Anomalies	83	1.2%	1.5%	2%	1%	1%			
Digestive Diseases	53	0.8%	1.0%	2%	2%	3%			
Kidney related diseases	10	0.1%	0.2%	0%	0%	0%			
Neonatal Diabetes	6	0.1%	0.1%	0%	0%	0%			
Sickle Cell Anemia	1	0.0%	0.0%	0%	0%	0%			
Neonatal Cancer	5	0.1%	0.1%	0%	0%	0%			
Corona	3	0.0%							
Cough & Cold	6	0.1%							
Respiratory diseases	65	1.0%							
Anemia	7	0.1%							
Chicken pox	3	0.0%							
Other	2900	42.5%	41.0%	36%	37%	1%	5%	6%	12%
Total	6823	100%	100%	100%	100%	100%	100%	100%	100%

Reported symptoms of Neonatal sepsis:

Reported Symptoms	No.of Deaths	%
Pus on umbilicus	30	3.8%
Distended abdomen	118	15.0%
Hypothermia	16	2.0%
Cry weak/stopped	52	6.6%
Increased Respiratory Rate	47	6.0%
Unconsciousness	104	13.2%
Feeding less/stopped	421	53.4%
Total	788	100%

53% of deaths reported as feeding less or stopped, is the most common cause of neonatal sepsis deaths.

5.2 District wise no. of Post-Neonatal Infant Deaths (1 to 11 months age group) in 2020

The report covers 3295 of the total 7516 estimated deaths in the 1-11 month age group in rural areas of the state. Thus the overall reporting percentage for this set of deaths is 44%. The reporting percentage is higher from districts like Dantewada, Bijapur, Sukma and is low from districts like Mahasamund, Jashpur and Raigarh.

S.N.	District	Rural Projected Population 2020-21	Expected no. of post- neonatal deaths	No. of Post- Neonatal Deaths Reported in 2017	No. of Post- Neonatal Deaths Reported in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020	Reporting %
1	Balod	854690	227	48	32	41	75	33%
2	Balodabazar	1399946	265	103	73	118	134	51%
3	Balrampur	802764	455	68	86	106	185	41%
4	Bastar	795487	219	61	41	146	178	81%
5	Bemetara	853782	227	70	72	71	84	37%
6	Bijapur	224129	81	49	35	79	90	112%
7	Bilaspur	1133881	470	106	149	144	153	33%
8	Dantewada	214015	77	34	19	119	180	234%
9	Dhamtari	690469	165	70	60	79	69	42%
10	Durg	730890	194	65	67	66	80	41%
11	Gariyaband	684569	130	58	31	66	117	90%
12	GPM	405138	107				103	96%
13	Janjgir	1659430	450	92	77	130	161	36%
14	Jashpur	848666	377	74	45	78	88	23%
15	Kanker	729282	270	31	22	36	113	42%
16	Kawardha	1001404	445	101	88	119	172	39%
17	Kondagaon	590867	163	45	23	47	85	52%
18	Korba	896523	226	32	55	40	75	33%
19	Koria	500003	164	19	13	20	120	73%
20	Mahasamund	1092142	469	71	90	94	97	21%
21	Mungeli	825791	218	56	47	65	50	23%
22	Narayanpur	133797	36	4	12	21	35	96%
23	Raigarh	1420262	458	54	52	98	135	29%
24	Raipur	1087671	206	100	90	86	88	43%
25	Rajnandgaon	1520827	412	109	129	221	154	37%
26	Sukma	220481	79	35	31	74	81	102%
27	Surajpur	827798	469	51	44	142	213	45%
28	Surguja	811811	460	70	41	95	180	39%
St	ate Average	22956515	7516	1676	1524	2401	3295	44%

The post-neonatal infant deaths recorded monthly are slightly higher during October to December.

Month	No. of Post-Neonatal Deaths Reported 2020	%
January	268	8%
February	199	6%
March	243	7%
April	251	8%
May	263	8%
June	236	7%
July	220	7%
August	275	8%
September	285	9%
October	363	11%
November	367	11%
December	325	10%
Total	3295	100%

57% of the post-neonatal deaths recorded were of male children.

Gender	No. of Post-Neonatal Deaths Reported 2020	%
Male	1880	57%
Female	1415	43%
Total	3295	100%

Information regarding the specific cause of death has been recorded by VHSNCs. Pneumonia, Malnutrition, Fever/Malaria, Convulsion and Congenital Heart Disease/Anomalies were the most common causes of deaths. Diarrhea and digestive diseases were also important causes.

Reported Causes	No. of Post- Neonatal Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accident	98	3%	2%	4.1%	3%	4%	5%	1%	4%
Convulsion	209	6%	6%	5.7%	4%	5%	3%	2%	2%
Fever/Malaria	229	7%	7%	6.1%	7%	9%	10%	13%	16%
Childhood Jaundice	111	3%	5%	5.4%	4%	4%	3%	4%	5%
Malnutrition	217	7%	9%	9.0%	8%	15%	8%	10%	8%
Pneumonia	674	20%	20%	24.0%	19%	35%	30%	28%	20%
Snake bite	16	0%	0%	0.3%	0%	0%	0%	0%	0%
Diarrhea	173	5%	5%	5.1%	5%	7%	6%	6%	8%
T.B.	2	0%	0%	0.3%	0%	0%	0%	0%	1%
Congenital Heart Disease/Anomalies	196	6%	7%	8.3%	8%	10%			
Digestive Diseases	138	4%	4%	5.1%	3%	5%			
Kidney related diseases	24	1%	1%	0.5%	0%	0%			
Diabetes	5	0%	0%	0.2%	0%	0%			
Sickle Cell Anemia	8	0%	0%	0.7%	0%	0%			
Cancer	7	0%	0%	0.9%	1%	0%			
Corona	4	0%							
Cough & Cold	9	0%							
Respiratory diseases	36	1%							
Anemia	17	1%							
Chicken pox	12	0%							
Other	1110	34%	32%	24.3%	37%	4%	35%	35%	35%
Total	3295	100%	100%	100%	100%	100%	100%	100%	100%

5.3 District wise no. of Child Deaths (1 to 4 years) in 2020

The report covers 1867 of the total 8,810 estimated deaths in the 1-4 year age group (older than 1 year and yet to complete 5 years age) in rural areas of the state. Thus the overall reporting percentage for this set of deaths is 21%. The reporting percentage is higher from districts like Dantewada, Bijapur, Durg and is low from districts like Surguja, Surajpur and Balrampur.

S.N.	District	Rural Projected Population 2020-21	Expected no. of under 5 deaths	No. of Child Deaths Reported in 2017	No. of Child Deaths Reported in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020	Reporting %
1	Balod	854690	146	56	30	49	36	25%
2	Balodabazar	1399946	397	101	79	124	108	27%
3	Balrampur	802764	811	106	80	86	81	10%
4	Bastar	795487	203	92	43	98	85	42%
5	Bemetara	853782	162	100	36	64	49	30%
6	Bijapur	224129	91	47	31	33	45	50%
7	Bilaspur	1133881	641	111	82	137	73	11%
8	Dantewada	214015	91	42	20	56	53	58%
9	Dhamtari	690469	124	60	38	62	38	31%
10	Durg	730890	152	88	48	72	75	49%
11	Gariyaband	684569	210	53	41	48	78	37%
12	GPM	405138	146				36	25%
13	Janjgir	1659430	385	128	78	101	126	33%
14	Jashpur	848666	538	75	69	55	76	14%
15	Kanker	729282	241	39	16	43	60	25%
16	Kawardha	1001404	445	77	66	88	100	22%
17	Kondagaon	590867	163	33	21	38	71	44%
18	Korba	896523	189	64	35	32	49	26%
19	Koria	500003	173	28	15	27	45	26%
20	Mahasamund	1092142	258	92	59	55	71	28%
21	Mungeli	825791	318	63	45	48	62	20%
22	Narayanpur	133797	39	20	13	14	15	38%
23	Raigarh	1420262	401	68	61	69	89	22%
24	Raipur	1087671	360	98	67	84	70	19%
25	Rajnandgaon	1520827	309	104	90	149	114	37%
26	Sukma	220481	99	34	43	42	37	37%
27	Surajpur	827798	857	65	63	70	62	7%
28	Surguja	811811	860	74	50	56	63	7%
St	ate Average	22956515	8810	1918	1319	1800	1867	21%

The 1-4 year age group deaths recorded monthly are slightly higher during July, August and October.

Month	No. of Deaths Reported 2020	%
January	153	8%
February	102	5%
March	149	8%
April	133	7%
May	174	9%
June	156	8%
July	189	10%
August	181	10%
September	143	8%
October	181	10%
November	156	8%
December	150	8%
Total	1867	100%

54% of the 1-4 year age group deaths recorded were of male children.

Gender	No. of Deaths Reported 2020	%
Male	1000	54%
Female	867	46%
Total	1867	100%

Accidents were the most common cause. Fever/Malaria, Convulsion, Fever/Malaria and Pneumonia were also important causes.

Reported Causes	No. of Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accident	326	17%	15%	15.6%	14%	14%	12%	10%	12%
Convulsion	144	8%	8%	7.5%	7%	7%	5%	3%	4%
Fever/Malaria	152	8%	9%	11.0%	11%	17%	17%	21%	20%
Jaundice	81	4%	5%	6.4%	6%	8%	6%	6%	6%
Malnutrition	89	5%	5%	6.7%	6%	10%	6%	5%	5%
Pneumonia	105	6%	7%	7.7%	10%	13%	10%	10%	7%
Snake bite	60	3%	3%	1.9%	2%	2%	1%	2%	2%
Diarrhea	94	5%	5%	4.5%	6%	8%	7%	6%	5%
T.B.	7	0%	1%	0.5%	1%	0%	1%	1%	1%
Rabies	12	1%	0%	0.5%	0%	0%	1%	1%	1%
Congenital Heart Disease/Anomalies	79	4%	7%	6.5%	7%	8%			
Digestive Diseases	104	6%	4%	4.8%	6%	7%			
Genito-urinary Diseases	16	1%	0%	0.4%	0%	0%			
Diabetes	9	0%	1%	0.5%	0%	0%			
Sickle Cell Anemia	33	2%	2%	2.4%	2%	2%			
Cancer	39	2%	2%	2.5%	2%	1%			
Corona	0	0%							
Cough & Cold	4	0%							
Respiratory diseases	17	1%							
Anemia	25	1%							
Chicken pox	13	1%							
Other	458	25%	25%	20.8%	20%	2%	35%	35%	37%
Total	1867	100%	100%	100%	100%	100%	100%	100%	100%

Analysis of age groups older than 5 yrs age is available in Annexure - ${\bf II}$

Chapter 6: Analysis of Maternal Deaths in rural Chhattisgarh

District wise no. of Maternal (14-49 yrs) Deaths reported:

VHSNCs have reported 474 deaths during $2020\,\mathrm{for}$ which the cause is recorded as maternal death.

S.N.	District	Rural Projected Population 2020-21	Total reported deaths by VHSNC in 2019	No.of Death reported by VHSNC in 2017	No.of Death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019	No.of deaths reported by VHSNC in 2020	%
1	Balrampur	802764	3521	18	15	14	47	1.3%
2	Koria	500003	2385	5	2	8	29	1.2%
3	GPM	405138	1798				15	0.8%
4	Bijapur	224129	1255	4	6	10	9	0.7%
5	Surajpur	827798	3570	9	12	7	19	0.5%
6	Korba	896523	3492	3	10	4	16	0.5%
7	Balodabazar	1399946	7746	18	14	27	35	0.5%
8	Bilaspur	1133881	6235	23	23	28	28	0.4%
9	Mungeli	825791	3000	20	15	8	13	0.4%
10	Janjgir	1659430	11049	25	28	21	46	0.4%
11	Gariyaband	684569	4104	12	3	10	16	0.4%
12	Mahasamund	1092142	6686	23	20	19	26	0.4%
13	Rajnandgaon	1520827	9434	19	11	16	34	0.4%
14	Narayanpur	133797	854	1	2	0	3	0.4%
15	Bastar	795487	4352	5	6	6	14	0.3%
16	Kondagaon	590867	2798	8	4	9	9	0.3%
17	Kawardha	1001404	5431	11	11	10	14	0.3%
18	Raipur	1087671	6316	25	10	9	16	0.3%
19	Durg	730890	5019	9	15	1	12	0.2%
20	Dhamtari	690469	5185	22	7	15	11	0.2%
21	Raigarh	1420262	9875	16	10	10	19	0.2%
22	Bemetara	853782	4202	6	6	6	8	0.2%
23	Dantewada	214015	1671	2	1	5	3	0.2%
24	Balod	854690	6353	10	7	4	11	0.2%
25	Sukma	220481	1308	8	6	1	2	0.2%
26	Jashpur	848666	4853	7	4	9	7	0.1%
27	Kanker	729282	5164	4	5	9	7	0.1%
28	Surguja	811811	3707	4	10	8	5	0.1%
St	tate Average	22956515	131363	317	263	274	474	0.4%

Month wise no. of Maternal Deaths reported:

The number of deaths per month is slightly higher during May & July.

Month	No.of Death Reported	Percentage
January	28	6%
February	24	5%
March	38	8%
April	36	8%
May	60	13%
June	32	7%
July	59	12%
August	49	10%
September	42	9%
October	40	8%
November	41	9%
December	25	5%
Total	474	100%

Cause wise no. of Maternal death in 2020

S.N.	Reported Causes	No. of Deaths	%
1	Maternal cause	425	90%
2	Jaundice	6	1%
3	Sickle Cell	6	1%
4	Fever	5	1%
5	Digestive Disease	4	1%
6	Heart Disease	4	1%
7	Other	4	1%
8	Corona	3	1%
9	Diarrhea	3	1%
10	Electrocution	3	1%
11	Respiratory diseases	2	0%
12	Suicide	2	0%
13	Burning	1	0%
14	Cough & Cold	1	0%
15	Malaria	1	0%
16	Murder	1	0%
17	Pneumonia	1	0%
18	Road Accident	1	0%
19	Snake bite	1	0%
	Total	474	100%

Chapter 7 : District wise variation of cause of deaths in rural Chhattisgarh

The Table below gives the proportion of deaths suspected due to 17 specific causes for each district. It helps to assess the proportion of preventable premature deaths for districts. Bijapur, Sukma, Dantewada, Koriya and Balrampur have relatively high proportion of deaths due to preventable causes. The pattern shows that districts in Bastar and Surguja divisions along with Kwardha have more deaths reported as being due to preventable causes. The pattern also shows that among such reasons, communicable diseases like Malaria. Diarrhea, Pneumonia are most important contributors.

On the other hand, Balod, Durg, Rajnandgaon, Mahasmund, Dhamtari and Janjgir districts have lower proportion of deaths reported as being due to preventable causes. Most of the districts in Raipur and Durg division followed by Bilaspur division have reported relatively less deaths due to preventable causes.

S.N.	District	Total reported deaths by VHSNC in 2020	% of Fever/Malaria deaths	% of Pneumonia deaths	% of Diarrhea deaths	% of Jaundice deaths	% of TB deaths	% of Accident deaths	% of Suicide deaths	% of Murder deaths	% of Snake Bite deaths	% of Rabies deaths	% of Maternal deaths	% of Neonatal causes deaths	% of Malnutrition deaths	% of Convulsion deaths	% of Cardiovascular deaths
1	BALOD	6353	1.0%	0.3%	0.3%	1.3%	1.1%	4.8%	4.3%	0.2%	0.4%	0.0%	0.2%	3.7%	0.3%	0.2%	34.7%
2	BALODABAZAR	7746	2.2%	0.7%	0.5%	2.0%	1.4%	5.8%	3.8%	0.5%	0.5%	0.0%	0.5%	5.2%	0.5%	0.7%	31.7%
3	BALRAMPUR	3521	2.4%	0.8%	1.1%	2.2%	1.5%	10.1%	4.5%	0.6%	1.5%	0.1%	1.3%	7.6%	0.9%	0.7%	25.5%
4	BASTAR	4352	2.3%	1.8%	2.1%	2.2%	3.0%	7.5%	3.4%	0.4%	1.1%	0.1%	0.3%	6.3%	1.4%	1.4%	22.6%
5	BEMETARA	4202	1.5%	0.8%	0.5%	1.8%	0.8%	5.9%	3.4%	0.3%	0.5%	0.0%	0.2%	6.6%	0.6%	1.0%	29.3%
6	BIJAPUR	1255	3.1%	4.5%	1.8%	1.8%	3.3%	8.6%	5.2%	1.4%	2.9%	0.2%	0.7%	6.0%	0.5%	0.5%	10.5%
7	BILASPUR	6235	2.2%	1.2%	0.3%	2.1%	1.2%	7.3%	4.3%	0.6%	0.6%	0.1%	0.4%	5.9%	0.8%	1.0%	33.6%
8	DANTEWADA	1671	4.0%	1.8%	1.4%	2.3%	2.2%	6.2%	6.5%	0.7%	2.4%	0.3%	0.2%	4.7%	1.2%	2.2%	5.9%
9	DHAMTARI	5185	1.1%	0.7%	0.7%	1.8%	1.5%	6.2%	4.5%	0.2%	0.3%	0.0%	0.2%	3.8%	0.6%	0.5%	33.5%
10	DURG	5019	0.6%	0.2%	0.3%	1.2%	1.3%	5.9%	4.2%	0.3%	0.2%	0.0%	0.2%	7.4%	0.3%	1.3%	41.7%
11	GARIYABAND	4104	2.4%	1.5%	1.0%	2.7%	1.9%	5.0%	4.1%	0.2%	0.8%	0.0%	0.4%	7.9%	1.3%	0.8%	23.7%
12	GPM	1798	1.4%	2.3%	1.1%	0.9%	1.7%	6.7%	4.2%	0.7%	0.8%	0.2%	0.8%	2.9%	0.9%	0.8%	27.4%
13	JANJGIR	11049	1.5%	0.5%	0.4%	1.5%	0.6%	5.9%	3.6%	0.3%	0.9%	0.0%	0.4%	5.0%	0.5%	0.8%	38.5%
14	JASHPUR	4853	1.3%	0.2%	1.2%	1.8%	1.9%	8.1%	4.3%	0.8%	1.0%	0.1%	0.1%	3.8%	0.7%	0.4%	22.3%
15	KANKER	5164	1.3%	0.9%	0.9%	1.8%	2.2%	5.8%	5.1%	0.3%	1.0%	0.3%	0.1%	2.7%	0.6%	0.5%	25.4%
16	KAWARDHA	5431	0.8%	1.3%	0.5%	1.4%	1.2%	5.9%	2.9%	0.3%	1.3%	0.0%	0.3%	7.4%	0.7%	1.7%	31.0%
17	KONDAGAON	2798	1.5%	1.6%	1.1%	2.4%	2.0%	7.8%	5.0%	0.7%	1.0%	0.0%	0.3%	4.0%	0.7%	1.3%	18.7%
18	KORBA	3492	1.3%	0.4%	0.3%	1.8%	1.3%	7.5%	4.4%	0.4%	1.1%	0.3%	0.5%	4.4%	0.8%	1.0%	27.0%
19	KORIA	2385	3.4%	0.7%	2.1%	1.0%	1.8%	9.6%	5.9%	0.9%	1.3%	0.1%	1.2%	7.3%	0.4%	0.9%	23.8%
20	MAHASAMUND	6686	1.1%	0.3%	0.6%	1.7%	1.5%	5.7%	3.8%	0.2%	0.5%	0.1%	0.4%	5.4%	0.5%	0.6%	25.1%
21	MUNGELI	3000	1.2%	1.0%	0.5%	1.6%	1.0%	6.7%	3.5%	0.5%	0.7%	0.2%	0.4%	6.1%	0.8%	0.9%	37.3%
22	NARAYANPUR	854	2.9%	0.6%	2.9%	2.8%	3.7%	9.5%	2.5%	0.7%	1.3%	0.0%	0.4%	2.5%	1.4%	1.9%	19.1%
23	RAIGARH	9875	2.3%	0.2%	0.9%	2.2%	1.9%	6.5%	3.9%	0.4%	0.7%	0.2%	0.2%	4.2%	0.8%	1.1%	33.1%
24	RAIPUR	6316	1.4%	0.5%	0.5%	1.8%	1.4%	7.1%	5.2%	0.2%	0.5%	0.0%	0.3%	4.9%	0.5%	0.7%	33.8%
25	RAJNANDGAON	9434	0.9%	0.8%	0.6%	1.7%	1.3%	5.7%	3.6%	0.3%	0.7%	0.1%	0.4%	4.9%	0.5%	1.0%	35.2%
26	SUKMA	1308	3.1%	3.5%	2.3%	1.8%	4.7%	4.7%	3.4%	1.0%	2.3%	0.0%	0.2%	4.9%	1.1%	4.4%	11.2%
27	SURAJPUR	3570	0.6%	1.3%	1.5%	1.4%	1.0%	10.1%	4.3%	0.8%	1.1%	0.1%	0.5%	6.0%	0.6%	0.8%	28.4%
28	SURGUJA	3707	2.2%	0.8%	1.4%	1.9%	1.6%	8.4%	4.1%	1.1%	1.0%	0.1%	0.1%	4.5%	0.6%	0.6%	26.3%
S	tate Average	131363	1.6%	0.8%	0.8%	1.8%	1.5%	6.6%	4.1%	0.4%	0.8%	0.1%	0.4%	5.2%	0.7%	0.9%	30.1%

Chapter 8: Analysis of Urban-Slum Deaths in Chhattisgarh

Mahila Aarogya Samitis (MAS) i.e. Women's Health Committees are formed at each Mitanin's Urban-Slum area in 19 city of Chhattisgarh under the National Urban Health Mission (NUHM). The objectives of MAS is to Monitor the Health, Nutrition and Sanitation of the ward, Available the information of Govt. Schemes to community, To build-up a local level work plan through the participation of community, To help the more poor and remotest family, To help for access the health services and To improve the participation on Health, Nutrition and Sanitation related issues.

MAS are mandated to record the deaths happening in their area. One of the key purposes of keeping a register of deaths in MAS is to enable health monitoring. The death registers of MAS are compiled and computerized into a database at the state level by SHRC.

The causes of the deaths analysed in this report are as perceived and reported by the communities in MAS meetings. Therefore the definitions may not match with the technical definitions. Despite this issue, the information available through MAS registers is still useful for understand the likely and approximate causes of a large share of deaths in the state.

This report analyses 14392 deaths that were recorded by MAS during the year 2020. The deaths covered in 2020 compilation constitute 107% of total no. of deaths expected according to Crude Death Rate of the state (as per SRS 2018). The urban data pertains to slums of 19 cities with 2243583 slum population (according to Mitanin Database).

MAS based system of recording deaths and causes and its compilation and analysis is a new step. Soon, it will mature and be more useful in providing a clearer picture of mortality in urban-slum parts the state.

Deaths	Expected urban slum Deaths	No.of reported deaths in 2015	%	No.of reported deaths in 2016	%	No.of reported deaths in 2017	%	No.of reported deaths in 2018	%	No.of reported deaths in 2019	%	No.of reported deaths in 2020	%
Overall Deaths	14461	2764	21	8162	69	9177	68	8874	66	11459	85	14392	98

The analysis of causes recorded by MAS shows the following as the common causes for majority of deaths in different age categories:

Table: Causes for deaths reported in different age categories

In urban slum areas, Heart Disease/stroke, Neonatal conditions, Accidents, Suicide, Cancer and Diabetes are leading cause of deaths. Amongst infectious diseases, TB and Fever/Malaria are the leading cause of death in urban slums.

S.N.	Reported Causes	<1 month	1-11 months	1-4 yrs	5 to 14 years	15 to 49 years	50 to 59 yrs	60 to 69 yrs	Above 70 years	Total
1	Accident	3	8	19	45	469	112	90	122	868
2	Convulsions	21	20	8	4	21	3	1	4	82
3	Fever/ Malaria	7	7	9	11	69	25	24	70	222
4	Neonatal Jaundice	13	_	_	_					13
5	Jaundice		3	0	5	119	29	17	15	188
6	Low Birth Weight	77								77
7	Malnutrition		12	2	0	0	0	0	0	14
8	Diarrhea	2	4	2	5	28	13	10	18	82
9	Pneumonia	4	22	5	2	9	12	15	16	85
10	CHD/Anomalies	22	18	12	15	474	240	464	207	67
11	Stroke					171	249	461	807	1688
12	Heart Diseases/Heart attack					639	572	676	721	2608
13	High BP	1	_	2	2	90	103	203	283	679
14	Digestive Diseases	1	5	3	3	215	96	77	82	482
15	Kidney related Diseases	0	1	0	6	195	126	103	92	524
16	Diabetes	1	0	0	2	103	104	147	195	552
17	HIV/AIDS	0	0		2	54	6	5	1	68
18	T.B.	0	0	0	2	138	37	47	34	258
19	Snake Bite		1	0	4	5	0	1	1	12
20	Rabies			0	2	1	2	0	0	5
21	Birth Asphyxia	264								264
22	Neonatal Sepsis	35								35
23	Maternal causes					31				31
24	Murder					62	3	3	4	72
25	Suicide					571	67	29	25	692
26	Sickle Cell Anemia			3	6	47	6	1	1	64
27	Cancer	0	0	0	19	246	188	171	136	760
28	Respiratory Diseases	2	0	2	3	64	63	115	147	396
29	Covid-19	0	0	3	2	127	101	129	146	508
30	Cough & Cold	0	1	0	0	3	1	2	1	8
31	Anemia	0	1	1	0	29	5	16	9	61
32	Chicken pox	0	0	0	0	0	1	0	0	1
33	Epilepsy	0	0	0	0	21	7	1	4	33
34	Mental illness	0	0	1	3	31	13	11	11	70
35	Old age							60	824	884
36	Others	293	78	31	25	388	188	246	690	1939
	Total	745	181	102	166	3946	2132	2661	4459	14392

Urban Slum: Trend of deaths due to fever, diarrhea and pneumonia

Year	0-59 yrs Total deaths	0-59 yrs Fever/Malaria	%	0-59 yrs Pneumonia	%	0-59 yrs Diarrhea	%
2015	2067	100	4.8%	67	3.2%	32	1.5%
2016	7092	97	1.4%	59	0.8%	61	0.9%
2017	7239	120	1.7%	76	1.0%	53	0.7%
2018	6715	145	2.2%	62	0.9%	36	0.5%
2019	4749	102	2%	66	1.4%	40	0.8%
2020	6862	126	2%	54	0.8%	54	0.8%

It shows that deaths due to fever, diarrhea and pneumonia have reduced in less than 60 year population in urban slums.

Urban Slums: Classification of causes of Neonatal Deaths (below age of 1 month):

745 Neonatal deaths were reported by MAS. An attempt has been made to further unpack this category by causes. It shows the following picture:

Reported Cause	No.of Deaths	%
Accident	3	0.40%
Convulsion	21	2.82%
Fever	7	0.94%
Neonatal Jaundice	13	1.74%
Low Birth Weight	77	10.34%
Diarrhea	2	0.27%
Pneumonia	4	0.54%
Congenital Heart Disease/Anomalies	22	2.95%
Digestive Diseases	1	0.13%
Neonatal Diabetes	1	0.13%
Respiratory Diseases	2	0.27%
Birth Asphyxia	264	35.44%
Neonatal Sepsis	35	4.70%
Other	293	39.33%
Total	745	100%

35% deaths due birth asphyxia, is the most common cause of neonatal deaths.

Chapter 9 : Conclusion

This analysis shows that compiling death Registers of VHSNCs and MAS is a useful tool to identify approximate causes of mortality. It helps in identifying the key public health problems on which the efforts need to be focused.

Most common reported causes of deaths by age groups: The below analysis of causes recorded shows the following situation in Chhattisgarh:

A. Causes for deaths reported in different age categories in Rural Chhattisgarh

S.N.	Reported Causes	<1 month	1 to 11 months	1-4 yrs	5 to 14 yrs	15 to 49 yrs	50 to 59 yrs	60 to 69 yrs	Above 70 yrs	Total
1	Accident	34	98	326	529	4816	931	753	1205	8692
2	Convulsions	227	209	144	86	295	59	48	88	1156
3	Fever/ Malaria	61	229	152	137	564	168	239	568	2118
4	Neonatal Jaundice	182								182
5	Jaundice		111	81	163	1196	252	195	187	2185
6	Low Birth Weight	497								497
7	Malnutrition		217	89	18	13	2	2	18	359
8	Diarrhea	45	173	94	58	269	81	89	243	1052
9	Pneumonia	160	674	105	31	67	18	19	26	1100
10	T.B.	2	2	7	20	809	390	398	363	1991
11	Snake Bite		16	60	190	536	120	69	74	1065
12	Rabies			12	30	46	13	5	7	113
13	Birth Asphyxia	1685								1685
14	Neonatal Sepsis	788								788
15	Maternal causes					425				425
16	Murder					388	86	56	56	586
17	Suicide					4141	604	346	302	5393
18	Cancer	5	7	39	81	1933	1365	1264	1219	5913
19	HIV/AIDS				3	106	21	8	4	142
20	CHD/Anomalies	83	196	79	244					602
21	Stroke					1709	2373	4893	12473	21448
22	Heart Disease					3666	2786	3253	4589	14294
23	High BP					445	475	779	1518	3217
24	Digestive Diseases	53	138	104	186	1779	805	861	1286	5212
25	Kidney related diseases	10	24	16	39	1461	757	639	636	3582
26	Diabetes	6	5	9	34	985	1001	1320	2094	5454
27	Sickle Cell Anemia	1	8	33	76	433	56	25	36	668
28	Covid-19	3	4	0	4	307	200	253	248	1019
29	Cough & Cold	6	9	4	2	29	14	20	26	110
30	Respiratory diseases	65	36	17	35	556	533	950	3323	5515
31	Anemia	7	17	25	72	678	229	260	655	1943
32	Chicken pox/Measles	3	12	13	14	51	17	10	5	125
33	Epilepsy					504	101	62	59	726
34	Mental illness					315	102	80	155	652
35	Old age							701	8426	9127
36	Others	2900	1110	458	590	3916	2032	2690	8531	22227
	Total	6823	3295	1867	2642	32438	15591	20287	48420	131363

The leading causes of preventable mortality (the ones that communities can recognise) up to age of sixty years can be accessed from this data. Their relative importance is also clear from the analysis.

- ➤ In 0 to 1 month neonates, Birth Asphyxia 1685, Sepsis 788 and LBW 497 are the leading reported causes of death.
- ➤ In 1 to 11 months infants, Pneumonia 674, Fever/Malaria 229, Malnutrition 217, Convulsion 209, Congenital Heart Disease 196 are the leading reported causes of death.
- ➤ In 1 to 4 years children, Accident 326, Fever/Malaria 152, Convulsion 144, Pneumonia 105 and Diarrhoea 94 are the leading reported causes of death.
- ➤ In 5 to 14 year age group, Accidents 529, CHD 244, Snake bite 190, Digestive 186 and Jaundice 163 are the leading reported causes of death.
- ➤ In 15-49 years age group, Accidents 4816, Suicides 4141, Heart disease 3666, Cancer 1933 and Stroke 1709 are the leading reported causes of death.
- ➤ In 50-59 years age group, Heart Diseases 2786, Stroke 2373, Cancer 1365, Diabetes 1001 and Accidents 931 are the leading reported causes of death.
- ➤ For deaths in 60-69 years and 70 years and above age groups, Stroke, Heart Diseases, Cancer, Diabetes, Respiratory diseases and Accidents are the leading reported causes.

In urban slum areas, Heart Disease/heart attack 2608, Stroke 1688, Accidents 868, Cancer 760, Suicide 692 and High BP 679 are leading reported cause of deaths. Amongst infectious diseases, TB 258 is the leading reported cause of death in urban slums.

B. Causes for deaths reported in different age categories in Urban-Slum areas of Chhattisgarh

S.N.	Reported Causes	<1 month	1-11 months	1-4 yrs	5 to 14 years	15 to 49 years	50 to 59 yrs	60 to 69 yrs	Above 70 years	Total
1	Accident	3	8	19	45	469	112	90	122	868
2	Convulsions	21	20	8	4	21	3	1	4	82
3	Fever/ Malaria	7	7	9	11	69	25	24	70	222
4	Neonatal Jaundice	13								13
5	Jaundice		3	0	5	119	29	17	15	188
6	Low Birth Weight	77								77
7	Malnutrition		12	2	0	0	0	0	0	14
8	Diarrhea	2	4	2	5	28	13	10	18	82
9	Pneumonia	4	22	5	2	9	12	15	16	85
10	CHD/Anomalies	22	18	12	15					67
11	Stroke					171	249	461	807	1688
12	Heart Diseases/Heart attack					639	572	676	721	2608
13	High BP					90	103	203	283	679
14	Digestive Diseases	1	5	3	3	215	96	77	82	482
15	Kidney related Diseases	0	1	1	6	195	126	103	92	524
16	Diabetes	1	0	0	2	103	104	147	195	552
17	HIV/AIDS	0	0	0	2	54	6	5	1	68
18	T.B.	0	0	0	2	138	37	47	34	258
19	Snake Bite		1	0	4	5	0	1	1	12
20	Rabies			0	2	1	2	0	0	5
21	Birth Asphyxia	264								264
22	Neonatal Sepsis	35								35
23	Maternal causes					31				31
24	Murder					62	3	3	4	72
25	Suicide					571	67	29	25	692
26	Sickle Cell Anemia			3	6	47	6	1	1	64
27	Cancer	0	0	0	19	246	188	171	136	760
28	Respiratory Diseases	2	0	2	3	64	63	115	147	396
29	Covid-19	0	0	3	2	127	101	129	146	508
30	Cough & Cold	0	1	0	0	3	1	2	1	8
31	Anemia	0	1	1	0	29	5	16	9	61
32	Chicken pox/Measles	0	0	0	0	0	1	0	0	1
33	Epilepsy	0	0	0	0	21	7	1	4	33
34	Mental illness	0	0	1	3	31	13	11	11	70
35	Old age							60	824	884
36	Others	293	78	31	25	388	188	246	690	1939
	Total	745	181	102	166	3946	2132	2661	4459	14392

The Trend of Fever, Pneumonia and Diarrhea related Deaths

The trend of fever deaths over last 5 years amongst the 1-59 years age groups is given below. It also includes a trend for 88 tribal blocks, known to be malaria affected (mostly with reported API>5 in year 2013). It shows decline in mortality related to this cause and the decline after 2015 onwards has been very impressive. It is significant to note that Mitanin CHWs were provided Rapid diagnostic test kits and ACT for diagnosing and treating malaria at community level from 2015 onwards. The skills as well supplies with Mitanin to detect and treat malaria were assessed to have crossed 90% mark in tribal areas by 2016. This seems to explain the dramatic change from 2015 onwards. Additionally, in 2018, health department distributed around 50 lakh LLIN (mosquito bed nets) achieving a high coverage in tribal areas/areas with high API. A special campaign was implemented in blocks with extremely high API in 2020. The campaign known as the Malaria Mukt Bastar campaign, conducted mass screening and testing of entire population of identified blocks in Basrar region.

Year	Deaths 0-59 years	1-59 yrs (All Blocks)	1-59 yrs (88 Tribal blocks with API>5)
	Total Deaths	Fever-Malaria related deaths	Fever-Malaria related deaths
2013	29520	1717	1306
2014	37376	2226	1550
2015	42449	2061	1502
2016	52351	1685	1068
2017	44512	1032	507
2018	44123	779	433
2019	48970	866	399
2020	62656	1021	521

The trend of Pneumonia caused child deaths shows a big decline in 2017 in comparison to 2016. Further decline has been recorded in pneumonia related child deaths from 2018 to 2020. It is important to note that Mitanins were provided Amoxicillin for treating childhood ARIs for the first time in January 2017. The trend of Diarrhea related child deaths shows a 35% decline between 2016 and 2020.

Year	0-5 years Total deaths recorded	0-5 years Pneumonia related deaths	%	0-5 years Diarrhea related deaths	0/0
2016	10530	1675	15.90%	400	3.80%
2017	8972	853	9.50%	247	2.80%
2018	8530	826	9.70%	207	2.40%
2019	9650	773	8.00%	258	2.70%
2020	11985	939	7.83%	312	2.60%

$\underline{Annexure - I}$

<u>Table No.1 District wise no. of Deaths reported as Jaundice (including Neonatal Jaundice):</u>

VHSNCs have reported 2367 deaths during 2020 for which the cause is recorded as jaundice.

S.N.	District	No.of Death reported	Death Reporting %
1	BAALOD	84	4%
2	BALODABAZAAR	156	7%
3	BALRAMPUR	78	3%
4	BASTAR	97	4%
5	BEMETARA	76	3%
6	BIJAPUR	23	1%
7	BILASPUR	130	5%
8	DANTEWADA	38	2%
9	DHAMTARI	91	4%
10	DURG	61	3%
11	GARIYABAND	111	5%
12	GPM	16	1%
13	JANJGIR	171	7%
14	JASHPUR	85	4%
15	KANKER	94	4%
16	KAWARDHA	74	3%
17	KONDAGAON	67	3%
18	KORBA	64	3%
19	KORIA	25	1%
20	MAHASAMUND	112	5%
21	MUNGELI	49	2%
22	NARAYANPUR	24	1%
23	RAIGARH	222	9%
24	RAIPUR	113	5%
25	RAJNANDGAON	162	7%
26	SUKAMA	24	1%
27	SURAJPUR	49	2%
28	SURGUJA	71	3%
	TOTAL	2367	100%

<u>Table No.2 Age wise no. of Deaths reported as Jaundice (including Neonatal Jaundice):</u>

51% of these deaths are in 15-49 year age group. Deaths due to neonatal jaundice are also large in number.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	182	8%
2	1-11 month	111	5%
3	1-4 year	81	3%
4	5-14 year	163	7%
5	15-49year	1196	51%
6	50-59year	252	11%
7	60-69year	195	8%
8	More than 70year	187	8%
	Total	2367	100%

<u>Table No.3 Gender wise no. of Deaths reported as Jaundice (including Neonatal</u> Jaundice):

62% of the deaths due to jaundice are of males.

Gender	No.of Death Reported	Percentage
Male	1467	62%
Female	900	38%
Total	2367	100%

<u>Table No.4 Month wise no. of Deaths reported as Jaundice (including Neonatal Jaundice):</u>

The number of deaths per month is slightly higher during August to November.

Month	No.of Death Reported	Percentage
January	155	7%
February	130	5%
March	142	6%
April	158	7%
May	161	7%
June	161	7%
July	212	9%
August	272	11%
September	290	12%
October	251	11%
November	243	10%
December	192	8%
Total	2367	100%

<u>Table No.5 District wise no. of Deaths reported as Malnutrition and Low Birth Weight:</u>

VHSNCs have reported 856 deaths during 2020 for which the cause is recorded as malnutrition.

S.N.	District	No.of Death reported	Death Reporting
1	BAALOD	17	2%
2	BALODABAZAAR	42	5%
3	BALRAMPUR	31	4%
4	BASTAR	60	7%
5	BEMETARA	24	3%
6	BIJAPUR	6	1%
7	BILASPUR	48	6%
8	DANTEWADA	20	2%
9	DHAMTARI	30	4%
10	DURG	16	2%
11	GARIYABAND	55	6%
12	GPM	16	2%
13	JANJGIR	54	6%
14	JASHPUR	32	4%
15	KANKER	29	3%
16	KAWARDHA	37	4%
17	KONDAGAON	20	2%
18	KORBA	27	3%
19	KORIA	10	1%
20	MAHASAMUND	33	4%
21	MUNGELI	23	3%
22	NARAYANPUR	12	1%
23	RAIGARH	79	9%
24	RAIPUR	31	4%
25	RAJNANDGAON	47	5%
26	SUKAMA	15	2%
27	SURAJPUR	21	2%
28	SURGUJA	21	2%
	TOTAL	856	100%

Table No.6 Age wise no. of Deaths reported as Malnutrition and Low Birth Weight:

The deaths due to low birth weights are concentrated amongst newborn as 58% of these deaths are in below 1 month age group. Deaths due to malnutrition are high in the 1month-1 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	497	58%
2	1-11 month	217	25%
3	1-4 year	89	10%
4	5-14 year	18	2%
5	15-49year	13	2%
6	50-59year	2	0%
7	60-69year	2	0%
8	More than 70year	18	2%
	Total	856	100%

<u>Table No.7 Gender wise no. of Deaths reported as Malnutrition and Low Birth Weight:</u>

55% of the deaths due to low birth weight and malnutrition are male.

Gender	No.of Death Reported	Percentage
Male	469	55%
Female	387	45%
Total	856	100%

Table No.8 Month wise no. of Deaths reported as Malnutrition and Low Birth Weight:

The number of deaths per month is slightly higher in December.

Month	No.of Death Reported	Percentage
January	57	7%
February	40	5%
March	48	6%
April	58	7%
May	84	10%
June	70	8%
July	76	9%
August	71	8%
September	74	9%
October	86	10%
November	91	11%
December	101	12%
Total	856	100%

Table No.9 District wise no. of Deaths reported as Murder:

VHSNCs have reported 586 deaths during 2020 for which the cause is recorded as murder.

S.N.	District	No.of Death reported	Death Reporting
1	BAALOD	14	2%
2	BALODABAZAAR	37	6%
3	BALRAMPUR	22	4%
4	BASTAR	17	3%
5	BEMETARA	14	2%
6	BIJAPUR	18	3%
7	BILASPUR	37	6%
8	DANTEWADA	11	2%
9	DHAMTARI	12	2%
10	DURG	15	3%
11	GARIYABAND	10	2%
12	GPM	13	2%
13	JANJGIR	35	6%
14	JASHPUR	37	6%
15	KANKER	18	3%
16	KAWARDHA	19	3%
17	KONDAGAON	20	3%
18	KORBA	14	2%
19	KORIA	21	4%
20	MAHASAMUND	14	2%
21	MUNGELI	14	2%
22	NARAYANPUR	6	1%
23	RAIGARH	42	7%
24	RAIPUR	14	2%
25	RAJNANDGAON	30	5%
26	SUKAMA	13	2%
27	SURAJPUR	29	5%
28	SURGUJA	40	7%
	TOTAL	586	100%

Table No.10 Age wise no. of Deaths reported as Murder:

66% of these deaths are in 15-49 year age group. Deaths due to murder are also high in the 50-59 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	15-49year	388	66%
2	50-59year	86	15%
3	60-69year	56	10%
4	More than 70year	56	10%
	Total	586	100%

Table No.11 Gender wise no. of Deaths reported as Murder:

66% of the deaths due to murder are of male persons.

Gender	No.of Death Reported	Percentage
Male	388	66%
Female	198	34%
Total	586	100%

Table No.12 Month wise no. of Deaths reported as Murder:

The number of deaths per month is slightly higher in July.

Month	No.of Death Reported	Percentage
January	31	5%
February	26	4%
March	48	8%
April	51	9%
May	52	9%
June	74	13%
July	82	14%
August	53	9%
September	39	7%
October	34	6%
November	57	10%
December	39	7%
Total	586	100%

3.6 Deaths due to HIV-AIDS:

VHSNCs have reported 142 deaths during 2020 for which the cause is recorded as HIV-AIDS $\,$

S.N.	District	No.of Death reported	Death Reporting %
1	Balod	3	2%
2	Balodabazar	9	6%
3	Balrampur	0	0%
4	Bastar	6	4%
5	Bemetara	8	6%
6	Bijapur	0	0%
7	Bilaspur	4	3%
8	Dantewada	0	0%
9	Dhamtari	2	1%
10	Durg	15	11%
11	GPM	6	4%
12	Gariyaband	0	0%
13	Janjgir	8	6%
14	Jashpur	1	1%
15	Kanker	0	0%
16	Kawardha	15	11%
17	Kondagaon	2	1%
18	Korba	3	2%
19	Koria	2	1%
20	Mahasamund	6	4%
21	Mungeli	8	6%
22	Narayanpur	0	0%
23	Raigarh	3	2%
24	Raipur	13	9%
25	Rajnandgaon	23	16%
26	Sukma	0	0%
27	Surajpur	3	2%
28	Surguja	2	1%
	TOTAL	142	100%

75% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	0	0.0%
2	1-11 month	0	0.0%
3	1-4 year	0	0.0%
4	5-14 year	3	2.1%
5	15-49year	106	74.6%
6	50-59year	21	14.8%
7	60-69year	8	5.6%
8	More than 70year	4	2.8%
	Total	142	100.0%

60% of the deaths are of male persons.

Gender	No.of Death Reported	Percentage
Male	85	60%
Female	57	40%
Total	142	100%

The number of deaths per month does not seem to have a seasonal pattern.

Month	No.of Death Reported	Percentage
January	11	8%
February	5	4%
March	12	8%
April	9	6%
May	21	15%
June	10	7%
July	14	10%
August	11	8%
September	12	8%
October	7	5%
November	15	11%
December	15	11%
Total	142	100%

3.7 Deaths due to Kidney Related Disease:

VHSNCs have reported 3582 deaths during 2020 for which the cause is recorded as Kidney related disease

S.N.	District	No.of Death reported	Death Reporting
1	BAALOD	162	5%
2	BALODABAZAAR	161	4%
3	BALRAMPUR	99	3%
4	BASTAR	54	2%
5	BEMETARA	75	2%
6	BIJAPUR	42	1%
7	BILASPUR	141	4%
8	DANTEWADA	9	0%
9	DHAMTARI	157	4%
10	DURG	128	4%
11	GARIYABAND	139	4%
12	GPM	31	1%
13	JANJGIR	292	8%
14	JASHPUR	134	4%
15	KANKER	351	10%
16	KAWARDHA	96	3%
17	KONDAGAON	61	2%
18	KORBA	116	3%
19	KORIA	32	1%
20	MAHASAMUND	281	8%
21	MUNGELI	53	1%
22	NARAYANPUR	21	1%
23	RAIGARH	262	7%
24	RAIPUR	211	6%
25	RAJNANDGAON	303	8%
26	SUKAMA	25	1%
27	SURAJPUR	68	2%
28	SURGUJA	78	2%
	TOTAL	3582	100%

41% of these deaths are in 15-49 year age group

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	10	0.3%
2	1-11 month	24	0.7%
3	1-4 year	16	0.4%
4	5-14 year	39	1.1%
5	15-49year	1461	40.8%
6	50-59year	757	21.1%
7	60-69year	639	17.8%
8	More than 70year	636	17.8%
	Total	3582	100.0%

71% of the deaths are of male persons.

Gender	No.of Death Reported	Percentage	
Male	2526	71%	
Female	1056	29%	
Total	3582	100%	

The number of deaths per month is highest in July to November.

Month	No.of Death Reported	Percentage
January	208	6%
February	197	5%
March	167	5%
April	284	8%
May	258	7%
June	321	9%
July	344	10%
August	388	11%
September	348	10%
October	374	10%
November	359	10%
December	334	9%
Total	3582	100%

Annexure – II

Table No.13 District wise no. of Deaths in 5 to 14 years age group in 2020

The report covers 2642 deaths in the 5-14 year age group in rural areas of the state.

S.N.	District	No. of Deaths Reported 2020	%
1	Balod	81	3%
2	Balodabazar	127	5%
3	Balrampur	116	4%
4	Bastar	90	3%
5	Bemetara	95	4%
6	Bijapur	50	2%
7	Bilaspur	123	5%
8	Dantewada	81	3%
9	Dhamtari	69	3%
10	Durg	48	2%
11	GPM	33	1%
12	Gariyaband	79	3%
13	Janjgir	171	6%
14	Jashpur	115	4%
15	Kanker	116	4%
16	Kawardha	107	4%
17	Kondagaon	97	4%
18	Korba	78	3%
19	Koria	68	3%
20	Mahasamund	98	4%
21	Mungeli	59	2%
22	Narayanpur	59	2%
23	Raigarh	168	6%
24	Raipur	118	4%
25	Rajnandgaon	144	5%
26	Sarguja	38	1%
27	Sukma	121	5%
28	Surajpur	93	4%
	TOTAL	2642	100%

Table No.14 Month wise no. of Deaths in 5 to 14 years age group in 2020

The 5-14 year age group deaths recorded monthly are higher during July to October.

Month	No. of Deaths Reported 2020	%
January	152	6%
February	135	5%
March	173	7%
April	166	6%
May	238	9%
June	248	9%
July	299	11%
August	316	12%
September	281	11%
October	262	10%
November	215	8%
December	157	6%
Total	2642	100%

Table No.15 Gender wise no. of Deaths in 5 to 14 years age group in 2020

55% of the 5-14 year age group deaths recorded were of male children.

Gender	No. of Deaths Reported 2020	%
Male	1444	55%
Female	1198	45%
Total	2642	100%

Table No.16 Cause wise no. of Deaths in 5 to 14 years age group in 2020

In 5 to 14 year age group, Accidents, Congenital Heart diseases/Anomalies, Fever/Malaria and Jaundice are the leading reported causes of death. Malaria is decreasing and Accidents are increasing

Reported Causes	No. of Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accident	529	20%	19%	21%	21%	18%	15%	12%	14%
Convulsion	86	3%	4%	4%	4%	3%	2%	2%	1%
Fever/Malaria	137	5%	7%	6%	10%	12%	14%	16%	17%
Jaundice	163	6%	6%	7%	7%	7%	6%	7%	6%
Malnutrition	18	1%	0%	1%	1%	1%	1%	1%	1%
Pneumonia	31	1%	1%	2%	2%	2%	2%	2%	1%
Snake bite	190	7%	5%	5%	5%	4%	5%	5%	4%
Diarrhea	58	2%	3%	3%	4%	4%	3%	4%	3%
T.B.	20	1%	1%	1%	1%	1%	1%	1%	1%
Rabies	30	1%	1%	1%	1%	1%	1%	1%	2%
Congenital Heart Disease/Anomalies	244	9%	10%	9%	8%	3%			
Digestive Disease	186	7%	6%	8%	7%	5%			
Kidney related diseases	39	1%	0%	0%	0%	0%			
Diabetes	34	1%	1%	1%	1%	1%			
Cancer	81	3%	4%	4%	3%	3%			
Sickle Cell Anemia	76	3%	4%	4%	4%	2%			
HIV/AIDS	3	0%	0%	0%	0%	0%			
Corona	4	0%							
Cough & Cold	2	0%							
Respiratory diseases	35	1%							
Anemia	72	3%							
Chicken pox	14	1%							
Other	590	22%	27%	24%	23%	33%	49%	49%	50%
Total	2642	100%	100%	100%	100%	100%	100%	100%	100%

Table No.17 District wise no. of Deaths in 15 to 49 years age group in 2020

The report covers 32438 deaths in the 15-49 year age group in rural areas of the state.

S.N.	District	No. of Deaths Reported 2020	%
1	Balod	1411	4%
2	Balodabazar	1744	5%
3	Balrampur	963	3%
4	Bastar	1260	4%
5	Bemetara	833	3%
6	Bijapur	479	1%
7	Bilaspur	1561	5%
8	Dantewada	634	2%
9	Dhamtari	1213	4%
10	Durg	1051	3%
11	Gariyaband	1041	3%
12	GPM	485	1%
13	Janjgir	2282	7%
14	Jashpur	1201	4%
15	Kanker	1540	5%
16	Kawardha	1165	4%
17	Kondagaon	876	3%
18	Korba	1009	3%
19	Koria	719	2%
20	Mahasamund	1490	5%
21	Mungeli	696	2%
22	Narayanpur	299	1%
23	Raigarh	2420	7%
24	Raipur	1572	5%
25	Rajnandgaon	2189	7%
26	Sarguja	531	2%
27	Sukma	851	3%
28	Surajpur	923	3%
	TOTAL	32438	100%

Table No.18 Month wise no. of Deaths in 15 to 49 years age group in 2020

The 15-49 year age group deaths recorded monthly are slightly higher in July to August.

Month	No. of Deaths Reported 2020	%		
January	2,071	6%		
February	2,035	6%		
March	2,219	7%		
April	2,097	6%		
May	2,706	8%		
June	2,970	9%		
July	3,174	10%		
August	3,170	10%		
September	2,915	9%		
October	3,059	9%		
November	3,120	10%		
December	2,902	9%		
Total	32438	100%		

Table No.19 Gender wise no. of Deaths in 15 to 49 years age group in 2020

64% of the 15-49 year age group deaths recorded were of male persons.

Gender	No. of Deaths Reported 2020	%	
Male	20864	64%	
Female	11574	36%	
Total	32438	100%	

Table No.20 Cause wise no. of Deaths in 15 to 49 years age group in 2020

In 15-49 years age group, Accidents, Suicides and Heart diseases are the leading reported causes of death. Deaths with Fever/Malaria are slightly decreased over last 5 years while Accidents increased.

Reported Causes	No. of Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accidental	4816	15%	17%	17%	16%	13%	14%	13%	12%
Convulsion	329	1%	1%	1%	1%	1%	1%	1%	1%
Fever/Malaria	564	2%	2%	2%	2%	3%	5%	6%	6%
Jaundice	1196	4%	3%	3%	4%	4%	4%	4%	3%
Malnutrition	13	0%	0%	0%	0%	0%	0%	0%	0%
Murder	388	1%	1%	1%	1%	1%	1%	1%	1%
Pneumonia	67	0%	0%	0%	0%	0%	0%	0%	0%
Snake bite	536	2%	1%	1%	1%	2%	2%	2%	2%
Diarrhea	269	1%	1%	1%	1%	1%	1%	1%	2%
T.B.	809	2%	3%	3%	4%	4%	5%	4%	4%
Suicide	4141	13%	13%	11%	11%	10%	13%	12%	11%
Rabies	46	0%	0%	0%	0%	0%	0%	0%	0%
Maternal cause	366	1%	1%	1%	1%	1%	2%	2%	2%
High BP	453	1%	1%						
Stroke	1709	5%	5%						
Heart Attack/Disease	3666	11%	11%	17%	16%	8%			
Cancer	1933	6%	7%	7%	7%	6%			
Digestive Disease	1779	5%	4%	7%	6%	4%			
Diabetes	985	3%	3%	3%	3%	2%			
Sickle Cell Anemia	433	1%	1%	1%	1%	1%			
HIV/AIDS	106	0%	0%	0%	0%	0%			
Kidney related diseases	1461	5%	1%	1%	0%	0%			
Corona	307	1%							
Cough & Cold	29	0%							
Respiratory diseases	556	2%							
Anemia	695	2%							
Chicken pox	51	0%							
Epilepsy	504	2%							
Mental illness	315	1%							
Other	3916	12%	23%	21%	24%	37%	52%	54%	56%
Total	32438	100%	100%	100%	100%	100%	100%	100%	100%

Table No.21 District wise no. of Deaths in 50 to 59 years age group in 2020

The report covers 15591 deaths in the 50-59 year age group in rural areas of the state.

S.N.	District	No. of Deaths Reported 2020	%
1	Balod	788	5%
2	Balodabazar	898	6%
3	Balrampur	399	3%
4	Bastar	611	4%
5	Bemetara	459	3%
6	Bijapur	159	1%
7	Bilaspur	705	5%
8	Dantewada	165	1%
9	Dhamtari	667	4%
10	Durg	546	4%
11	Gariyaband	460	3%
12	GPM	249	2%
13	Janjgir	1234	8%
14	Jashpur	607	4%
15	Kanker	753	5%
16	Kawardha	557	4%
17	Kondagaon	387	2%
18	Korba	413	3%
19	Koria	287	2%
20	Mahasamund	789	5%
21	Mungeli	314	2%
22	Narayanpur	120	1%
23	Raigarh	1194	8%
24	Raipur	726	5%
25	Rajnandgaon	1087	7%
26	Sarguja	161	1%
27	Sukma	405	3%
28	Surajpur	451	3%
	TOTAL	15591	100%

Table No.22 Month wise no. of Deaths in 50 to 59 years age group in 2020

The 50-59 year age group deaths recorded monthly are slightly higher in October & November.

Month	No. of Deaths Reported 2020	%
January	1,141	7%
February	994	6%
March	1,107	7%
April	1,047	7%
May	1,189	8%
June	1,289	8%
July	1,371	9%
August	1,476	9%
September	1,409	9%
October	1,522	10%
November	1,595	10%
December	1,451	9%
Total	15591	100%

Table No.23 Gender wise no. of Deaths in 50 to 59 years age group in 2020

63% of the 50-59 year age group deaths recorded were of male persons.

Gender	No. of Deaths Reported 2020	%
Male	9800	63%
Female	5791	37%
Total	15591	100%

Table No.24 Cause wise no. of Deaths in 50 to 59 years age group in 2020

In 50-59 years age group, Heart Diseases, Stroke, Cancer, Dibetes and Accidents are the leading reported causes of death. Deaths with Fever/Malaria has halved over last 5 years.

Reported Causes	No. of Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accidental	931	6%	7%	7%	6%	6%	6%	5%	5%
Convulsion	59	0%	0%	0%	0%	0%	0%	0%	0%
Fever/Malaria	168	1%	1%	1%	1%	2%	4%	5%	4%
Jaundice	252	2%	2%	1%	2%	2%	2%	2%	1%
Malnutrition	2	0%	0%	0%	0%	0%	0%	0%	0%
Murder	86	1%	1%	1%	0%	1%	1%	1%	0%
Pneumonia	18	0%	0%	0%	0%	0%	0%	0%	0%
Snake bite	120	1%	1%	1%	1%	1%	1%	1%	1%
Diarrhea	81	1%	1%	1%	1%	1%	1%	1%	1%
T.B.	390	3%	3%	3%	4%	4%	5%	4%	5%
Suicide	604	4%	4%	3%	3%	3%	4%	3%	4%
Rabies	13	0%	0%	0%	0%	0%	0%	0%	0%
High BP	475	3%	2%						
Stroke	2373	15%	16%						
Heart Attack/Disease	2786	18%	17%	33%	31%	12%			
Cancer	1365	9%	9%	9%	9%	8%			
Diabetes	1001	6%	7%	5%	5%	6%			
Digestive Disease	805	5%	4%	8%	6%	4%			
Sickle Cell Anemia	56	0%	0%	0%	0%	0%			
Kidney related diseases	757	5%	1%	1%	0%	0%			
HIV/AIDS	21	0%	0%	0%	0%	0%			
Corona	200	1%							
Cough & Cold	14	0%							
Respiratory diseases	533	3%							
Anemia	229	1%							
Chicken pox	17	0%							
Epilepsy	101	1%							
Mental illness	102	1%							
Other	2032	13%	27%	26%	29%	50%	76%	78%	79%
Total	15591	100%	100%	100%	100%	100%	100%	100%	100%

Table No.25 District wise no. of Deaths in 60 to 69 years age group in 2020

The report covers 20287 deaths in the 60-69 year age group in rural areas of the state.

S.N.	District	No. of Deaths Reported 2020	9/0
1	Balod	1175	6%
2	Balodabazar	1198	6%
3	Balrampur	477	2%
4	Bastar	684	3%
5	Bemetara	609	3%
6	Bijapur	136	1%
7	Bilaspur	940	5%
8	Dantewada	210	1%
9	Dhamtari	827	4%
10	Durg	875	4%
11	Gariyaband	641	3%
12	GPM	283	1%
13	Janjgir	1831	9%
14	Jashpur	686	3%
15	Kanker	787	4%
16	Kawardha	692	3%
17	Kondagaon	452	2%
18	Korba	550	3%
19	Koria	325	2%
20	Mahasamund	981	5%
21	Mungeli	456	2%
22	Narayanpur	136	1%
23	Raigarh	1669	8%
24	Raipur	1015	5%
25	Rajnandgaon	1498	7%
26	Sarguja	198	1%
27	Sukma	472	2%
28	Surajpur	484	2%
	TOTAL	20287	100%

Table No.26 Month wise no. of Deaths in 60 to 69 years age group in 2020

The 60-69 year age group deaths recorded monthly are slightly higher during November.

Month	No. of Deaths Reported 2020	%
January	1482	7%
February	1349	7%
March	1426	7%
April	1430	7%
May	1620	8%
June	1519	7%
July	1708	8%
August	1792	9%
September	1700	8%
October	2009	10%
November	2178	11%
December	2074	10%
Total	20287	100%

Table No.27 Gender wise no. of Deaths in 60 to 69 years age group in 2020

57% of the 60-69 year age group deaths recorded were of male persons.

Gender	No. of Deaths Reported 2020	%
Male	11483	57%
Female	8804	43%
Total	20287	100%

Table No.28 Cause wise no. of Deaths in 60 to 69 years age group in 2020

For deaths in 60-69 years and 70 years and above age groups, Stroke, Heart Diseases, Cancer, Diabetes and Accidents are the leading reported causes. Deaths with Fever/Malaria have decreased and Accidents tripled over last 5 years.

Reported Causes	No. of Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accidental	753	4%	4%	4%	4%	4%	3%	2%	2%
Convulsion	48	0%	0%	0%	0%	0%	0%	0%	0%
Fever/Malaria	239	1%	1%	1%	1%	3%	4%	5%	4%
Jaundice	195	1%	1%	1%	1%	1%	1%	1%	1%
Malnutrition	2	0%	0%	0%	0%	0%	0%	0%	0%
Murder	56	0%	0%	0%	0%	0%	0%	0%	0%
Pneumonia	19	0%	0%	0%	0%	0%	0%	0%	0%
Snake bite	69	0%	0%	0%	0%	0%	0%	0%	0%
Diarrhea	89	0%	1%	1%	1%	1%	1%	1%	1%
T.B.	398	2%	2%	2%	3%	3%	3%	3%	2%
Suicide	346	2%	1%	1%	1%	1%	2%	1%	1%
Rabies	5	0%	0%	0%	0%	0%	0%	0%	0%
High BP	779	4%	2%						
Stroke	4893	24%	23%						
Heart Attack/Disease	3253	16%	15%	39%	35%	11%			
Cancer	1264	6%	7%	6%	6%	6%			
Diabetes	1320	7%	6%	5%	6%	5%			
Digestive Disease	861	4%	4%	6%	5%	4%			
Sickle Cell Anemia	25	0%	0%	0%	0%	0%			
HIV/AIDS	8	0%	0%	0%	0%	0%			
Kidney related diseases	639	3%	0%	0%	0%	0%			
Corona	253	1%							
Cough & Cold	20	0%							
Respiratory diseases	950	5%							
Anemia	260	1%							
Chicken pox	10	0%							
Epilepsy	62	0%							
Mental illness	80	0%							
Old age	701	3%							
Other	2690	13%	32%	32%	36%	61%	84%	86%	89%
Total	20287	100%	100%	100%	100%	100%	100%	100%	100%

Table No.29 District wise no. of Deaths in above 70 years age group in 2020

The report covers 48420 deaths in the more than 70 year age group in rural areas of the state.

S.N.	District	No. of Deaths Reported 2020	%
1	Balod	2550	5%
2	Balodabazar	3138	6%
3	Balrampur	1032	2%
4	Bastar	1172	2%
5	Bemetara	1796	4%
6	Bijapur	221	0%
7	Bilaspur	2315	5%
8	Dantewada	270	1%
9	Dhamtari	2104	4%
10	Durg	1974	4%
11	Gariyaband	1365	3%
12	GPM	557	1%
13	Janjgir	4694	10%
14	Jashpur	1898	4%
15	Kanker	1654	3%
16	Kawardha	2236	5%
17	Kondagaon	717	1%
18	Korba	1166	2%
19	Koria	647	1%
20	Mahasamund	2798	6%
21	Mungeli	1180	2%
22	Narayanpur	169	0%
23	Raigarh	3787	8%
24	Raipur	2416	5%
25	Rajnandgaon	3788	8%
26	Sarguja	198	0%
27	Sukma	1231	3%
28	Surajpur	1347	3%
	TOTAL	48420	100%

Table No.30 Month wise no. of Deaths in above 70 years age group in 2020

Deaths recorded monthly for this age group are slightly higher in December.

Month	No. of Deaths Reported 2020	%
January	4540	9%
February	3580	7%
March	3301	7%
April	2995	6%
May	3727	8%
June	3247	7%
July	3823	8%
August	3944	8%
September	3692	8%
October	4638	10%
November	5317	11%
December	5616	12%
Total	48420	100%

Table No.31 Gender wise no. of Deaths in above 70 years age group in 2020

53% of the More than 70 year age group deaths recorded were of male persons.

Gender	No. of Deaths Reported 2020	%		
Male	25579	53%		
Female	22841	47%		
Total	48420	100%		

Table No.32 Cause wise no. of Deaths in above 70 years age group in 2020

For these deaths, Stroke, Heart disease, Diabetes, Cancer, Digestive diseases and Accidents are most common reported causes of death. Deaths with Fever/Malaria is constant and reported Accidents has increased 5 fold in the last 5 years.

Reported Causes	No. of Deaths Reported 2020	% in 2020	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accidental	1205	2%	2%	3%	2%	2%	1%	1%	1%
Convulsion	88	0%	0%	0%	0%	0%	0%	0%	0%
Fever/Malaria	568	1%	1%	1%	1%	3%	3%	3%	2%
Jaundice	187	0%	0%	0%	1%	0%	0%	0%	0%
Malnutrition	18	0%	0%	0%	0%	0%	0%	0%	0%
Murder	56	0%	0%	0%	0%	0%	0%	0%	0%
Pneumonia	26	0%	0%	0%	0%	0%	0%	0%	0%
Snake bite	74	0%	0%	0%	0%	0%	0%	0%	0%
Diarrhea	243	1%	0%	1%	1%	1%	1%	1%	0%
T.B.	363	1%	1%	1%	1%	1%	1%	1%	1%
Suicide	302	1%	1%	1%	1%	0%	1%	1%	0%
Rabies	7	0%	0%	0%	0%	0%	0%	0%	0%
High BP	1518	3%	1%						
Stroke	12473	26%	27%						
Heart Attack/Disease	4589	9%	10%	37%	32%	6%			
Diabetes	2094	4%	4%	4%	3%	3%			
Digestive Disease	1286	3%	2%	3%	3%	2%			
Cancer	1219	3%	3%	3%	3%	2%			
Genito-urinary disease	636	1%	0%	0%	0%	0%			
Sickle Cell Anemia	36	0%	0%	0%	0%	0%			
HIV/AIDS	4	0%	0%	0%	0%	0%			
Corona	248	1%							
Cough & Cold	26	0%							
Respiratory diseases	3323	7%							
Anemia	655	1%							
Chicken pox	5	0%							
Epilepsy	59	0%							
Mental illness	155	0%							
Old age	8426	17%							
Other	8531	18%	46%	46%	52%	78%	92%	93%	95%
Total	48420	100%	100%	100%	100%	100%	100%	100%	100%