



# **What Do People Die Of in Chhattisgarh?**

**An Analysis of Community Reported Deaths during Year 2019  
in Chhattisgarh**

**Draft Report**

**Prepared by**

**State Health Resource Centre, Chhattisgarh**

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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.

**Objective:** 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. In order to adapt to the limited technical knowledge available at village level regarding diseases and their symptoms, the exercise focuses on common conditions with easily identifiable symptoms and conditions that CHW facilitators of community committees are trained to identify. e.g. community can easily identify a symptom like diarrhoea, fever, injury etc.

**Number of deaths covered:** For rural areas, this report analyses nearly 103970 deaths that were recorded by VHSNCs during the year 2019. The deaths covered in 2019 compilation constitute 61% 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	Expected Rural Deaths	No. of reported deaths in 2012	%	No. of reported deaths in 2013	%	No. of reported deaths in 2014	%	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	%
Overall Deaths	171643	39168	22.8 %	58556	34.1 %	74279	43%	91147	53 %	107194	62%	90927	53.0 %	91202	53.1 %	103970	60.6 %
Neonatal Deaths	17705	3391	19.2 %	4361	24.6 %	5194	29%	5895	33 %	6300	36%	5378	30.4 %	5687	32.1 %	5437	30.7 %
1-11 month age group Deaths	7290	1133	15.5 %	1240	17.0 %	1909	26%	2142	29 %	2626	36%	1676	23.0 %	1524	20.9 %	2401	32.9 %
1-4 year age group Deaths	8852	1159	13.1 %	1295	14.6 %	1701	19%	1885	21 %	2061	23%	1918	21.7 %	1319	14.9 %	1800	20.3 %
Maternal Deaths	734	230	31.3 %	244	33.2 %	326	44%	402	55 %	384	52%	317	43.2 %	263	35.8 %	274	37.3 %
Other groups	137062	33255	24.3 %	51416	37.5 %	65149	48%	80823	59 %	95823	70%	81638	59.6 %	82409	60.1 %	94058	68.6 %

In the urban-slum area, this report analyses 10762 deaths that were recorded by MAS during the year 2019. The deaths covered in 2019 compilation constitute 80% 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 Mitranin 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	%
<b>Overall Deaths</b>	<b>13461</b>	<b>2764</b>	<b>21%</b>	<b>8162</b>	<b>69%</b>	<b>9177</b>	<b>68%</b>	<b>8874</b>	<b>66%</b>	<b>10762</b>	<b>80%</b>
Neonatal Deaths	942	525	56%	743	89%	703	75%	659	70%	699	74%
1-11 month age group Deaths	494	97	20%	173	40%	158	32%	122	25%	178	36%
1-4 Year age group Deaths	135	60	44%	114	96%	127	94%	97	72%	110	81%
Maternal Deaths	63	14	22%	26	27%	35	56%	14	22%	28	44%
Other age groups	11827	2068	17%	7106	68%	8154	69%	7982	67%	9747	82%

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

### 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	15	51	263	432	4206	827	619	951	7364
2	Convulsions	210	153	144	82	229	53	43	77	991
3	Fever/ Malaria	52	178	167	163	411	125	154	496	1746
4	Neonatal Jaundice	185								185
5	Jaundice		115	98	143	816	188	120	123	1603
6	Low Birth Weight	485								485
7	Malnutrition		217	96	10	21	2	4	4	354
8	Diarrhea	33	127	98	71	191	68	95	191	874
9	Pneumonia	160	488	125	34	41	13	11	18	890
10	T.B.	4	4	13	23	728	325	373	356	1826
11	Snake Bite		9	45	109	343	77	54	45	682
12	Rabies			5	21	34	19	10	16	105
13	Birth Asphyxia	1378								1378
14	Neonatal Sepsis	528								528
15	Maternal causes					225				225
16	Murder					284	64	31	23	402
17	Suicide					3136	441	241	239	4057
18	Cancer	8	10	28	97	1688	1080	1088	1015	5014
19	HIV/AIDS				1	73	19	9	4	106
20	Congenital Heart Disease/Anomalies	84	169	130	234					617
21	Stroke					1310	1921	3893	10426	17550
22	Heart Disease					2748	2155	2538	3729	11170
23	High BP					219	186	274	557	1236
24	Digestive Diseases	56	92	80	129	1072	516	583	776	3304
25	Genito-urinary Diseases	9	13	5	6	130	89	65	103	420
26	Diabetes	5	7	9	33	752	805	1013	1438	4062
27	Sickle Cell Anemia	2	10	42	98	323	39	22	27	563
28	Others	2235	758	452	623	5656	3364	5354	17791	36233
	<b>Total</b>	<b>5449</b>	<b>2401</b>	<b>1800</b>	<b>2309</b>	<b>24636</b>	<b>12376</b>	<b>16594</b>	<b>38405</b>	<b>103970</b>

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 1378, Sepsis 528 and LBW 485 are the leading reported causes of death.
- In 1 to 11 months infants, Pneumonia 488, Malnutrition 217, Fever/Malaria 178, Congenital Heart Disease 169 are the leading reported causes of death.
- In 1 to 4 years children, Accident 263, Fever/Malaria 167, Convulsion 144, CHD 130 and Pneumonia 125 are the leading reported causes of death.
- In 5 to 14 year age group, Accidents 432, CHD 234, Fever/Malaria 163 and Jaundice 143 are the leading reported causes of death.
- In 15-49 years age group, Accidents 4206, Suicides 3136, Heart disease 2748, Cancer 1688 and Stroke 1310 are the leading reported causes of death.
- In 50-59 years age group, Heart Diseases 2155, Stroke 1921, Cancer 1080, Accidents 827 and Diabetes 805 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 and Accidents are the leading reported causes.

**Geographical Pattern in Rural Mortality Causes:** Mortality in tribal districts has greater share of infectious diseases (malaria, diarrhoea, pneumonia). Accidents are also a big contributor to mortality in tribal areas compared to non-tribal districts. Non-tribal districts record a big share of NCD deaths, presumably due to higher reporting there. Causes like suicides are common to both types of geographies but South Bastar and Urban areas have higher numbers.

**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	1	7	18	60	490	90	62	71	799
2	Convulsions	6	14	10	4	22	7	3	1	67
3	Fever/ Malaria	0	15	8	11	49	19	32	84	218
4	Neonatal Jaundice	1								1
5	Jaundice		4	6	5	93	11	12	14	145
6	Low Birth Weight	3								3
7	Malnutrition		9	6	0	1	0	1	0	17
8	Diarrhea	0	3	5	5	16	11	9	15	64
9	Pneumonia	0	28	20	2	14	2	7	6	79
10	Congenital Heart Disease/Anomalies	4	46	9	16					75
11	Stroke					90	152	345	585	1172
12	Heart Diseases/Heart attack					476	397	490	497	1860
13	High BP					26	39	61	82	208
14	Digestive Diseases	2	3	5	10	131	63	47	45	306
15	Genito-urinary Diseases	0	0	0	0	27	10	9	4	50
16	Diabetes	0	0	0	2	79	86	88	160	415
17	HIV/AIDS	0	0	0	1	41	7	0	4	53
18	T.B.	0	0	0	1	107	51	43	23	225
19	Snake Bite		0	1	4	6	1	1	0	13
20	Rabies			2	1	10	1	0	1	15
21	Birth Asphyxia	224								224
22	Neonatal Sepsis	48								48
23	Maternal causes					21				21
24	Murder					40	5	2	1	48
25	Suicide					464	33	31	27	555
26	Sickle Cell Anemia			2	2	25	1	0	2	32
27	Cancer	0	0	3	8	262	154	171	129	727
28	Others	410	49	15	54	491	292	465	1545	3322
<b>Total</b>		<b>699</b>	<b>178</b>	<b>110</b>	<b>186</b>	<b>2981</b>	<b>1432</b>	<b>1879</b>	<b>3296</b>	<b>10762</b>

In urban slum areas, Heart Disease/heart attack 1860, Stroke 1172, Accidents 799, Cancer 727, Suicide 555 and Diabetes 415 are leading reported cause of deaths. Amongst infectious diseases, TB 225 is the leading reported cause of death in urban slums.

## Trend in Causes of 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	%
1	Congenital Heart Disease/Anomalies	270	0.5%	155	0.3%	541	1.2%	617	1.3%
2	Stroke	3727	7.1%	403	0.9%	1333	3.0%	3231	6.6%
3	High BP/Heart Disease			6876	15.4%	6165	14.0%	5308	10.8%
4	Accident	5139	9.8%	5020	11.3%	5279	12.0%	5794	11.8%
5	Digestive Diseases	2166	4.1%	2578	5.8%	2920	6.6%	1945	4.0%
6	Suicide	3090	5.9%	2739	6.2%	2877	6.5%	3577	7.3%
7	Cancer	2718	5.2%	2591	5.8%	2712	6.1%	2911	5.9%
8	Birth Asphyxia	3747	7.2%	926	2.1%	1141	2.6%	1378	2.8%
9	Neonatal sepsis			433	1.0%	659	1.5%	528	1.1%
10	Diabetes	1339	2.6%	1188	2.7%	1233	2.8%	1611	3.3%
11	Jaundice	1785	3.4%	1412	3.2%	1207	2.7%	1360	2.8%
12	T.B.	1478	2.8%	1215	2.7%	1020	2.3%	1097	2.2%
13	Fever/ Malaria	2082	4.0%	1312	2.9%	951	2.2%	1096	2.2%
14	Pneumonia	1833	3.5%	969	2.2%	920	2.1%	861	1.8%
15	Convulsions	886	1.7%	710	1.6%	741	1.7%	871	1.8%
16	Low Birth Weight	1006	1.9%	711	1.6%	611	1.4%	485	1.0%
17	Diarrhoea	1000	1.9%	634	1.4%	527	1.2%	588	1.2%
18	Snake Bite	646	1.2%	529	1.2%	502	1.1%	583	1.2%
19	Sickel Cell Anemia	415	0.8%	455	1.0%	476	1.1%	514	1.0%
20	Murder	374	0.7%	373	0.8%	350	0.8%	348	0.7%
21	Malnutrition	653	1.3%	306	0.7%	276	0.6%	346	0.7%
22	Genito-urinary Diseases	44	0.1%	72	0.2%	233	0.5%	252	0.5%
23	Maternal causes	384	0.7%	272	0.6%	218	0.5%	225	0.5%
24	Neonatal Jaundice	263	0.5%	188	0.4%	207	0.5%	185	0.4%
25	HIV/AIDS	82	0.2%	101	0.2%	89	0.2%	93	0.2%
26	Rabies	87	0.2%	57	0.1%	65	0.1%	79	0.2%
27	Other	17006	32.6%	12288	27.6%	10870	24.6%	13087	26.7%
<b>Total</b>		<b>52220</b>	<b>100.0%</b>	<b>44513</b>	<b>100.0%</b>	<b>44123</b>	<b>100.0%</b>	<b>48970</b>	<b>100.0%</b>

### 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	%	No.of Deaths Reported in 2018	%	No.of Deaths Reported in 2019	%
1	Congenital Heart Disease/Anomalies	43	1.1%	46	1.1%	46	1.0%	75	1.3%
2	Stroke	569	14.9%	21	0.5%	92	1.9%	242	4.3%
3	High BP/Heart Disease			868	20.0%	909	18.8%	938	16.8%
4	Accident	419	11.0%	505	11.6%	516	10.7%	666	11.9%
5	Digestive Diseases	112	2.9%	264	6.1%	236	4.9%	214	3.8%
6	Suicide	383	10.0%	433	10.0%	386	8.0%	497	8.9%
7	Cancer	225	5.9%	328	7.6%	307	6.4%	427	7.6%
8	Birth Asphyxia	543	14.2%	131	3.0%	194	4.0%	224	4.0%
9	Neonatal sepsis			38	0.9%	77	1.6%	48	0.9%
10	Diabetes	131	3.4%	144	3.3%	116	2.4%	167	3.0%
11	Jaundice	112	2.9%	111	2.6%	116	2.4%	119	2.1%
12	T.B.	163	4.3%	189	4.4%	195	4.0%	159	2.8%
13	Fever/ Malaria	97	2.5%	120	2.8%	145	3.0%	102	1.8%
14	Pneumonia	59	1.5%	76	1.8%	62	1.3%	66	1.2%
15	Convulsions	37	1.0%	48	1.1%	40	0.8%	63	1.1%
16	Low Birth Weight	135	3.5%	50	1.2%	23	0.5%	3	0.1%
17	Diarrhoea	61	1.6%	53	1.2%	36	0.7%	40	0.7%
18	Snake Bite	13	0.3%	6	0.1%	10	0.2%	12	0.2%
19	Sickel Cell Anemia	45	1.2%	40	0.9%	48	1.0%	30	0.5%
20	Murder	30	0.8%	43	1.0%	29	0.6%	45	0.8%
21	Malnutrition	46	1.2%	18	0.4%	12	0.2%	16	0.3%
22	Genito-urinary Diseases	1	0.0%	0	0.0%	11	0.2%	37	0.7%
23	Maternal causes	26	0.7%	15	0.3%	14	0.3%	21	0.4%
24	Neonatal Jaundice	24	0.6%	15	0.3%	14	0.3%	1	0.0%
25	HIV/AIDS	50	1.3%	48	1.1%	36	0.7%	49	0.9%
26	Rabies	8	0.2%	10	0.2%	4	0.1%	14	0.3%
27	Other	493	12.9%	716	16.5%	1158	24.0%	1311	23.5%
<b>Total</b>		<b>3825</b>	<b>100.0%</b>	<b>4336</b>	<b>100.0%</b>	<b>4832</b>	<b>100.0%</b>	<b>5586</b>	<b>100.0%</b>

## Gender wise reported cause of rural deaths before Age of 60

S.N.	Reported Causes	Male	%	Female	%	Total
1	Congenital Heart Disease/Anomalies	342	55.4%	275	44.6%	617
2	Stroke	1909	59.1%	1322	40.9%	3231
3	High BP	197	48.6%	208	51.4%	405
4	Heart Disease/Heart Attack	3357	68.5%	1546	31.5%	4903
5	Accident	4404	76.0%	1390	24.0%	5794
6	Digestive Diseases	1240	63.8%	705	36.2%	1945
7	Suicide	2455	68.6%	1122	31.4%	3577
8	Cancer	1487	51.1%	1424	48.9%	2911
9	Birth Asphyxia	863	62.6%	515	37.4%	1378
10	Neonatal sepsis	315	59.7%	213	40.3%	528
11	Diabetes	947	58.8%	664	41.2%	1611
12	Jaundice	934	60.5%	611	39.5%	1545
13	T.B.	775	70.6%	322	29.4%	1097
14	Fever/ Malaria	560	51.1%	536	48.9%	1096
15	Pneumonia	489	56.8%	372	43.2%	861
16	Convulsions	475	54.5%	396	45.5%	871
17	Diarrhea	330	56.1%	258	43.9%	588
18	Snake Bite	318	54.5%	265	45.5%	583
19	Sickle Cell Anemia	228	44.4%	286	55.6%	514
20	Murder	226	64.9%	122	35.1%	348
21	Malnutrition including LBW	460	55.4%	371	44.6%	831
22	Genito-urinary Diseases	163	64.7%	89	35.3%	252
23	Maternal causes	0	0.0%	225	100.0%	225
24	HIV/AIDS	58	62.4%	35	37.6%	93
25	Rabies	47	59.5%	32	40.5%	79
<b>Total</b>		<b>22579</b>	<b>62.9%</b>	<b>13304</b>	<b>37.1%</b>	<b>35883</b>

- Congenital Heart disease, Stroke, Heart disease/heart attack, Accident, Digestive disease, Suicide, Birth Asphyxia, Neonatal Sepsis, Diabetes, Jaundice, TB, Pneumonia, Fever/malaria, Convulsion, Snake bite, Diarrhoea, Murder, Malnutrition, Genito-urinary disease, HIV-AIDS and Rabies are high in male.
- Sickle cell disease and High BP are high in female.

## Gender wise reported cause of urban deaths before Age of 60

S.N.	Reported Causes	Male	%	Female	%	Total
1	Congenital Heart Disease/Anomalies	37	49.3%	38	50.7%	75
2	Stroke	177	73.1%	65	26.9%	242
3	High BP	37	56.9%	28	43.1%	65
4	Heart Disease/Heart Attack	628	71.9%	245	28.1%	873
5	Accident	548	82.3%	118	17.7%	666
6	Digestive Diseases	149	69.6%	65	30.4%	214
7	Suicide	355	71.4%	142	28.6%	497
8	Cancer	210	49.2%	217	50.8%	427
9	Birth Asphyxia	138	61.6%	86	38.4%	224
10	Neonatal sepsis	30	62.5%	18	37.5%	48
11	Diabetes	96	57.5%	71	42.5%	167
12	Jaundice	77	64.2%	43	35.8%	120
13	T.B.	124	78.0%	35	22.0%	159
14	Fever/ Malaria	54	52.9%	48	47.1%	102
15	Pneumonia	44	66.7%	22	33.3%	66
16	Convulsions	38	60.3%	25	39.7%	63
17	Diarrhea	31	77.5%	9	22.5%	40
18	Snake Bite	9	75.0%	3	25.0%	12
19	Sickle Cell Anemia	10	33.3%	20	66.7%	30
20	Murder	32	71.1%	13	28.9%	45
21	Malnutrition including LBW	11	57.9%	8	42.1%	19
22	Genito-urinary Diseases	24	64.9%	13	35.1%	37
23	Maternal causes	0	0.0%	21	100.0%	21
24	HIV/AIDS	35	71.4%	14	28.6%	49
25	Rabies	12	85.7%	2	14.3%	14
<b>Total</b>		<b>2906</b>	<b>68.0%</b>	<b>1369</b>	<b>32.0%</b>	<b>4275</b>

- Stroke, Heart disease/heart attack, High BP, Accident, Digestive disease, Suicide, Birth Asphyxia, Neonatal Sepsis, Diabetes, Jaundice, TB, Fever/Malaria, Pneumonia, Convulsion, Diarrhoea, Snake bite, Murder, Malnutrition, Genito-urinary disease, HIV-AIDS and Rabies are high in male.
- Sickle cell disease and Congenital Heart disease are high in female.

## 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 Mitnin 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 Mitnin 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.

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

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 2019. It is important to note that Mitnins 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 2019.

Year	0-5 years Total deaths recorded	0-5 years Pneumonia related deaths	%	0-5 years Diarrhea related deaths	%
2016	10530	1675	15.9%	400	3.8%
2017	8972	853	9.5%	247	2.8%
2018	8530	826	9.7%	207	2.4%
2019	9650	773	8.0%	258	2.7%

## **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.

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:

<b>Death Register of VHSNC</b>										
Month:.....Year.....										
Sl.	Name of the person	Father's / Husband's name	Age	Caste	Sex	Village name	Panchayat	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 2019 (January to December), 103970 deaths have been documented.

In 2019, 61% 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 31% of the expected neonatal deaths, 33% of post-neonatal infant deaths and 20% of child deaths of the remaining age group up to 4 years for rural areas. Similarly it covers 37% 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	Expected Rural Deaths	No. of reported deaths in 2012	%	No. of reported deaths in 2013	%	No. of reported deaths in 2014	%	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	%
Overall Deaths	171643	39168	22.8 %	58556	34.1 %	74279	43%	91147	53 %	107194	62%	90927	53.0 %	91202	53.1 %	103970	60.6 %
Neonatal Deaths	17705	3391	19.2 %	4361	24.6 %	5194	29%	5895	33 %	6300	36%	5378	30.4 %	5687	32.1 %	5437	30.7 %
1-11 month age group Deaths	7290	1133	15.5 %	1240	17.0 %	1909	26%	2142	29 %	2626	36%	1676	23.0 %	1524	20.9 %	2401	32.9 %
1-4 year age group Deaths	8852	1159	13.1 %	1295	14.6 %	1701	19%	1885	21 %	2061	23%	1918	21.7 %	1319	14.9 %	1800	20.3 %
Maternal Deaths	734	230	31.3 %	244	33.2 %	326	44%	402	55 %	384	52%	317	43.2 %	263	35.8 %	274	37.3 %
Other groups	137062	33255	24.3 %	51416	37.5 %	65149	48%	80823	59 %	95823	70%	81638	59.6 %	82409	60.1 %	94058	68.6 %

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 or suspected-Malaria related Deaths:

VHSNCs have reported 1746 deaths during 2019 for which the cause is recorded as fever or malaria.

S.N.	District	Rural Projected Population 2020-21	No.of Fever/Malaria death reported by VHSNC in 2017	No.of Fever/Malaria death reported by VHSNC in 2018	No.of Fever/Malaria death reported by VHSNC in 2019
1	DANTEWADA	214015	42	29	86
2	SUKMA	220481	43	51	53
3	BIJAPUR	224129	128	62	43
4	BASTAR	795487	112	103	103
5	RAIGARH	1420262	181	120	186
6	BALODABAZAR	1399946	191	133	192
7	SURGUJA	811811	89	93	66
8	KORIA	500003	38	26	20
9	BALRAMPUR	802764	70	53	63
10	KONDAGAON	590867	17	31	35
11	NARAYANPUR	133797	10	14	10
12	JASHPUR	848666	87	99	61
13	BILASPUR	1777504	145	140	118
14	GARIYABAND	684569	59	39	39
15	RAIPUR	1087671	77	77	74
16	BEMETARA	853782	67	41	53
17	JANJGIR	1659430	113	80	138
18	MUNGELI	825791	55	29	41
19	MAHASAMUND	1092142	67	49	72
20	KANKER	729282	52	23	42
21	DHAMTARI	690469	68	43	47
22	RAJNANDGAON	1520827	67	42	79
23	DURG	730890	23	22	36
24	BALOD	854690	37	22	32
25	KORBA	896523	20	26	12
26	KAWARDHA	1001404	44	41	26
27	SURAJPUR	827798	25	39	19
<b>State Average</b>		<b>23195000</b>	<b>1927</b>	<b>1527</b>	<b>1746</b>

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

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	52	3%
2	1-11 month	178	10%
3	1-4 year	167	10%
4	5-14 year	163	9%
5	15-49year	411	24%
6	50-59year	125	7%
7	60-69year	154	9%
8	More than 70year	496	28%
<b>Total</b>		<b>1746</b>	<b>100%</b>

51% of the reported deaths due to Fever or suspected-Malaria are of male persons.

Gender	No.of Death Reported	Percentage
Male	894	51%
Female	852	49%
<b>Total</b>	<b>1746</b>	<b>100%</b>

There is a seasonal trend in deaths with 40% of the Fever or suspected-Malaria related deaths happening in months August to October.

Month	No.of Death Reported	Percentage
January	82	5%
February	74	4%
March	112	6%
April	113	6%
May	153	9%
June	145	8%
July	111	6%
August	218	12%
September	247	14%
October	249	14%
November	150	9%
December	92	5%
<b>Total</b>	<b>1746</b>	<b>100%</b>

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-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

It shows decline in death reported to this cause and the decline from 2015 to 2019 is especially dramatic.

## 2.2 Deaths due to Pneumonia:

VHSNCs have reported 890 deaths during 2019 for which the cause is recorded as pneumonia.

S.N.	District	Rural Projected Population 2020-21	No.of Pneumonia deaths reported by VHSNC in 2017	No.of Pneumonia deaths reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	BIJAPUR	224129	44	59	30
2	SUKMA	220481	23	33	34
3	BASTAR	795487	45	61	78
4	DANTEWADA	214015	34	16	22
5	GARIYABAND	684569	55	24	41
6	KAWARDHA	1001404	58	49	60
7	KONDAGAON	590867	43	37	25
8	BILASPUR	1777504	77	107	76
9	BEMETARA	853782	52	47	37
10	RAIPUR	1087671	57	45	48
11	NARAYANPUR	133797	2	6	6
12	MUNGELI	825791	43	24	30
13	KANKER	729282	39	26	28
14	RAJNANDGAON	1520827	69	68	77
15	DHAMTARI	690469	25	36	33
16	BALODABAZAR	1399946	58	34	48
17	DURG	730890	31	26	29
18	SURGUJA	811811	20	19	19
19	KORIA	500003	5	2	5
20	SURAJPUR	827798	41	23	21
21	KORBA	896523	18	25	9
22	JASHPUR	848666	16	19	16
23	JANJGIR	1659430	38	36	38
24	BALRAMPUR	802764	20	18	13
25	BALOD	854690	30	35	18
26	MAHASAMUND	1092142	33	40	23
27	RAIGARH	1420262	16	30	26
<b>State Average</b>		<b>23195000</b>	<b>992</b>	<b>945</b>	<b>890</b>

87% deaths due to pneumonia are in under-5 years age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	160	18%
2	1-11 month	488	55%
3	1-4 year	125	14%
4	5-14 year	34	4%
5	15-49year	41	5%
6	50-59year	13	1%
7	60-69year	11	1%
8	More than 70year	18	2%
<b>Total</b>		<b>890</b>	<b>100%</b>

57% of the deaths due to pneumonia are of male persons.

Gender	No.of Death Reported	Percentage
Male	505	57%
Female	385	43%
<b>Total</b>	<b>890</b>	<b>100%</b>

42% of deaths due to pneumonia happened in colder season – October to January.

Month	No.of Death Reported	Percentage
January	94	11%
February	70	8%
March	80	9%
April	48	5%
May	50	6%
June	40	4%
July	66	7%
August	69	8%
September	99	11%
October	84	9%
November	114	13%
December	76	9%
<b>Total</b>	<b>890</b>	<b>100%</b>

### 2.3 Deaths due to Diarrhea:

VHSNCs have reported 874 deaths during 2019 for which the cause is recorded as Diarrhea.

S.N.	District	Rural Projected Population 2020-21	No.of Diarrhea death reported by VHSNC in 2017	No.of Diarrhea death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	NARAYANPUR	133797	12	13	18
2	BIJAPUR	224129	26	22	22
3	BASTAR	795487	61	64	81
4	DANTEWADA	214015	17	4	26
5	BALRAMPUR	802764	54	49	60
6	SUKMA	220481	27	34	21
7	KONDAGAON	590867	32	28	31
8	JASHPUR	848666	43	54	45
9	KORIA	500003	17	14	11
10	SURGUJA	811811	55	51	35
11	GARIYABAND	684569	38	12	23
12	KAWARDHA	1001404	50	31	39
13	KANKER	729282	37	24	31
14	RAIGARH	1420262	64	71	50
15	RAJNANDGAON	1520827	53	46	71
16	MAHASAMUND	1092142	34	35	40
17	MUNGELI	825791	20	26	21
18	BALODABAZAR	1399946	37	47	50
19	JANJGIR	1659430	50	41	51
20	RAIPUR	1087671	25	15	25
21	BEMETARA	853782	27	8	18
22	SURAJPUR	827798	21	28	21
23	DHAMTARI	690469	33	17	22
24	BILASPUR	1777504	31	39	30
25	KORBA	896523	13	16	8
26	BALOD	854690	14	13	14
27	DURG	730890	14	20	10
<b>State Average</b>		<b>23195000</b>	<b>905</b>	<b>822</b>	<b>874</b>

22% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	33	4%
2	1-11 month	127	15%
3	1-4 year	98	11%
4	5-14 year	71	8%
5	15-49year	191	22%
6	50-59year	68	8%
7	60-69year	95	11%
8	More than 70year	191	22%
<b>Total</b>		<b>874</b>	<b>100%</b>

55% of the deaths due to Diarrhea are of male persons.

Category	No.of Death Reported	Percentage
Male	484	55%
Female	390	45%
<b>Total</b>	<b>874</b>	<b>100%</b>

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

Month	No.of Death Reported	Percentage
January	70	8%
February	64	7%
March	72	8%
April	61	7%
May	74	8%
June	61	7%
July	66	8%
August	94	11%
September	119	14%
October	86	10%
November	54	6%
December	53	6%
<b>Total</b>	<b>874</b>	<b>100%</b>

**The trend of Pneumonia and Diarrhea related deaths amongst the 0-5 years age groups is given below**

Year	0-5 yrs Total deaths	0-5 yrs Pneumonia	%	0-5 yrs Diarrhea	%
2016	10530	1675	15.9%	400	3.8%
2017	8972	853	9.5%	247	2.8%
2018	8530	826	9.7%	207	2.4%
2019	9650	773	8.0%	258	2.7%

## 2.4 Deaths due to TB:

VHSNCs have reported 1826 deaths during 2019 for which the cause is recorded as TB.

S.N.	District	Rural Projected Population 2020-21	No.of TB death reported by VHSNC in 2017	No.of TB death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	Sukma	220481	63	49	74
2	Narayanpur	133797	22	21	26
3	Dantewada	214015	30	31	50
4	Bijapur	224129	68	43	37
5	Jashpur	848666	94	105	102
6	Kanker	729282	102	67	97
7	Kondagaon	590867	48	32	48
8	Bastar	795487	80	100	93
9	Gariyaband	684569	59	53	53
10	Koria	500003	26	14	21
11	Raigarh	1420262	149	119	143
12	SURGUJA	811811	43	57	55
13	Mahasamund	1092142	104	83	98
14	Dhamtari	690469	102	64	83
15	Korba	896523	62	43	30
16	Balodabazar	1399946	130	106	117
17	Kawardha	1001404	71	48	65
18	Rajnandgaon	1520827	103	108	145
19	Raipur	1087671	77	71	66
20	Bemetara	853782	78	49	44
21	Bilaspur	1777504	75	104	84
22	Balod	854690	51	63	52
23	Balrampur	802764	48	55	35
24	Durg	730890	44	51	51
25	Surajpur	827798	80	76	42
26	Janjgir	1659430	96	82	87
27	Mungeli	825791	30	39	28
<b>State Average</b>		<b>23195000</b>	<b>1935</b>	<b>1733</b>	<b>1826</b>

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

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	4	0%
2	1-11 month	4	0%
3	1-4 year	13	1%
4	5-14 year	23	1%
5	15-49year	728	40%
6	50-59year	325	18%
7	60-69year	373	20%
8	More than 70year	356	19%
<b>Total</b>		<b>1826</b>	<b>100%</b>

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

Category	No.of Death Reported	Percentage
Male	1348	74%
Female	478	26%
<b>Total</b>	<b>1826</b>	<b>100%</b>

There is no seasonal pattern in TB deaths.

Month	No.of Death Reported	Percentage
January	167	9%
February	127	7%
March	158	9%
April	142	8%
May	160	9%
June	144	8%
July	140	8%
August	143	8%
September	218	12%
October	167	9%
November	156	9%
December	104	6%
<b>Total</b>	<b>1826</b>	<b>100%</b>

## 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 30573 deaths during 2019 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 due to Heart disease/stroke (including CHD/Anomalies) reported by VHSNC in 2017	No.of death due to Heart disease/stroke (including CHD/Anomalies) reported by VHSNC in 2018	No.of deaths due to Heart disease/stroke (including CHD/Anomalies) reported by VHSNC in 2019
1	BALOD	854690	1235	1210	1524
2	DURG	730890	1360	1489	1641
3	JANJIR	1659430	2527	2480	3116
4	RAJNANDGAON	1520827	1979	2289	3098
5	KAWARDHA	1001404	989	1229	1328
6	DHAMTARI	690469	1192	1346	1501
7	RAIGARH	1420262	1578	1603	2124
8	BALODABAZAR	1399946	1411	1375	2244
9	BILASPUR	1777504	1325	2206	2087
10	MUNGELI	825791	683	919	892
11	RAIPUR	1087671	1134	1082	1335
12	BEMETARA	853782	844	914	987
13	KORBA	896523	603	600	533
14	SURAJPUR	827798	688	1019	1119
15	MAHASAMUND	1092142	1085	1276	1533
16	KANKER	729282	673	593	918
17	JASHPUR	848666	874	933	907
18	SURGUJA	811811	611	785	788
19	GARIYABAND	684569	366	469	540
20	BALRAMPUR	802764	489	649	679
21	BASTAR	795487	503	622	748
22	KONDAGAON	590867	233	279	349
23	KORIA	500003	184	170	186
24	NARAYANPUR	133797	79	62	95
25	BIJAPUR	224129	108	121	113
26	DANTEWADA	214015	68	41	108
27	SUKMA	220481	75	86	80
<b>State Average</b>		<b>23195000</b>	<b>22896</b>	<b>25847</b>	<b>30573</b>

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

48% 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 due to High BP, Stroke and Heart Disease	Percentage
1	<1 month	84	0.3%
2	1-11 month	169	1%
3	1-4 year	130	0.4%
4	5-14 year	234	1%
5	15-49year	4277	14%
6	50-59year	4262	14%
7	60-69year	6705	22%
8	More than 70year	14712	48%
<b>Total</b>		<b>30573</b>	<b>100%</b>

57% of the deaths are of male persons.

Category	No.of Death Reported	Percentage
Male	17494	57%
Female	13079	43%
<b>Total</b>	<b>30573</b>	<b>100%</b>

The number of deaths per month is highest in September & January 10% .

Month	No.of Death Reported	Percentage
January	3052	10%
February	2411	8%
March	2301	8%
April	2094	7%
May	2703	9%
June	2244	7%
July	2168	7%
August	2853	9%
September	2942	10%
October	2752	9%
November	2854	9%
December	2199	7%
<b>Total</b>	<b>30573</b>	<b>100%</b>

### 3.2 Deaths due to Cancer:

VHSNCs have reported 5014 deaths during 2019 for which the cause is recorded as Cancer.

S.N.	District	Rural Projected Population 2020-21	No.of death due to Cancer reported by VHSNC in 2017	No.of death due to Cancer reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	MUNGELI	825791	173	188	194
2	BEMETARA	853782	227	200	214
3	RAIPUR	1087671	262	239	262
4	KAWARDHA	1001404	195	163	238
5	GARIYABAND	684569	72	116	133
6	MAHASAMUND	1092142	222	265	315
7	DURG	730890	214	221	242
8	BALOD	854690	188	206	223
9	RAIGARH	1420262	301	247	332
10	JANJGIR	1659430	405	366	441
11	RAJNANDGAON	1520827	344	311	471
12	KORBA	896523	89	89	89
13	BILASPUR	1777504	241	407	331
14	DHAMTARI	690469	198	200	217
15	BALODABAZAR	1399946	252	246	331
16	SURGUJA	811811	134	161	139
17	KANKER	729282	116	99	144
18	SURAJPUR	827798	159	206	159
19	KORIA	500003	58	34	37
20	JASHPUR	848666	157	150	137
21	BALRAMPUR	802764	92	107	117
22	KONDAGAON	590867	37	39	57
23	BASTAR	795487	90	108	117
24	BIJAPUR	224129	33	33	27
25	NARAYANPUR	133797	16	17	13
26	DANTEWADA	214015	22	12	22
27	SUKMA	220481	16	20	12
<b>State Average</b>		<b>23195000</b>	<b>4313</b>	<b>4450</b>	<b>5014</b>

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

34% of these deaths are in 15-59 year age group.

S.N.	Age Category	No. of Death reported	Percentage
1	<1 month	8	0.2%
2	1-11 month	10	0.2%
3	1-4 year	28	0.6%
4	5-14 year	97	1.9%
5	15-49year	1688	34%
6	50-59year	1080	22%
7	60-69year	1088	22%
8	More than 70year	1015	20%
<b>Total</b>		<b>5014</b>	<b>100%</b>

50% of the deaths are of male and 50% of the deaths are of female persons.

Category	No.of Death Reported	Percentage
Male	2531	50%
Female	2483	50%
<b>Total</b>	<b>5014</b>	<b>100%</b>

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

Month	No. of Death Reported	Percentage
January	362	7%
February	327	7%
March	448	9%
April	366	7%
May	431	9%
June	432	9%
July	435	9%
August	449	9%
September	490	10%
October	454	9%
November	499	10%
December	321	6%
<b>Total</b>	<b>5014</b>	<b>100%</b>

### **3.3 Deaths due to Diabetes:**

VHSNCs have reported 4062 deaths during 2019 for which the cause is recorded as Diabetes.

S.N.	District	Rural Projected Population 2020-21	No.of death due to Diabetes reported by VHSNC in 2017	No.of death due to Diabetes reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	KANKER	729282	177	147	234
2	BALOD	854690	149	151	230
3	DHAMTARI	690469	201	205	247
4	NARAYANPUR	133797	29	14	28
5	MUNGELI	825791	159	150	136
6	MAHASAMUND	1092142	180	196	250
7	RAIPUR	1087671	153	137	204
8	BEMETARA	853782	124	122	148
9	BALODABAZAR	1399946	187	166	313
10	GARIYABAND	684569	53	61	96
11	RAJNANDGAON	1520827	199	211	397
12	DURG	730890	159	131	188
13	RAIGARH	1420262	153	183	246
14	KORBA	896523	64	74	66
15	JASHPUR	848666	92	110	121
16	BILASPUR	1777504	162	237	232
17	JANJGIR	1659430	294	269	302
18	KAWARDHA	1001404	83	98	132
19	SURAJPUR	827798	88	150	126
20	BASTAR	795487	63	60	99
21	KONDAGAON	590867	30	42	47
22	BALRAMPUR	802764	50	64	82
23	SURGUJA	811811	98	85	77
24	KORIA	500003	38	42	21
25	BIJAPUR	224129	22	34	19
26	DANTEWADA	214015	15	6	12
27	SUKMA	220481	10	6	9
<b>State Average</b>		<b>23195000</b>	<b>3032</b>	<b>3151</b>	<b>4062</b>

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

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	5	0.1%
2	1-11 month	7	0.2%
3	1-4 year	9	0.2%
4	5-14 year	33	0.8%
5	15-49year	752	19%
6	50-59year	805	20%
7	60-69year	1013	25%
8	More than 70year	1438	35%
<b>Total</b>		<b>4062</b>	<b>100%</b>

57% of the reported deaths are of male persons.

Category	No.of Death Reported	Percentage
Male	2327	57%
Female	1735	43%
<b>Total</b>	<b>4062</b>	<b>100%</b>

The number of deaths per month is highest in September and lowest in April- not a clear pattern.

Month	No.of Death Reported	Percentage
January	368	9%
February	253	6%
March	297	7%
April	254	6%
May	333	8%
June	296	7%
July	341	8%
August	414	10%
September	477	12%
October	403	10%
November	344	8%
December	282	7%
<b>Total</b>	<b>4062</b>	<b>100%</b>

### **3.4 Deaths due to Digestive Disease:**

VHSNCs have reported 3304 deaths during 2019 for which the cause is recorded as Digestive disease.

S.N.	District	Rural Projected Population 2020-21	No.of death due to Digestive disease reported by VHSNC in 2017	No.of death due to Digestive disease reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	NARAYANPUR	133797	46	30	47
2	KORIA	500003	104	100	77
3	KONDAGAON	590867	87	87	135
4	BALRAMPUR	802764	207	244	192
5	BASTAR	795487	141	236	197
6	SURAJPUR	827798	207	333	218
7	SURGUJA	811811	215	227	165
8	DANTEWADA	214015	88	53	58
9	JASHPUR	848666	208	240	160
10	BIJAPUR	224129	96	77	39
11	KORBA	896523	122	120	71
12	KANKER	729282	233	194	124
13	SUKMA	220481	33	41	35
14	RAIGARH	1420262	269	265	200
15	DHAMTARI	690469	180	182	136
16	GARIYABAND	684569	120	99	67
17	MUNGELI	825791	88	125	82
18	RAJNANDGAON	1520827	260	367	267
19	BILASPUR	1777504	223	300	182
20	BALODABAZAR	1399946	192	182	166
21	KAWARDHA	1001404	110	113	93
22	MAHASAMUND	1092142	150	281	121
23	BEMETARA	853782	133	136	71
24	JANJGIR	1659430	260	310	165
25	RAIPUR	1087671	170	146	82
26	DURG	730890	141	151	83
27	BALOD	854690	127	123	71
<b>State Average</b>		<b>23195000</b>	<b>4210</b>	<b>4762</b>	<b>3304</b>

32% of these deaths are in 15-49 year age group.

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	56	2%
2	1-11 month	92	3%
3	1-4 year	80	2%
4	5-14 year	129	4%
5	15-49year	1072	32%
6	50-59year	516	16%
7	60-69year	583	18%
8	More than 70year	776	23%
<b>Total</b>		<b>3304</b>	<b>100%</b>

61% of the deaths are of male persons.

Gender	No.of Death Reported	Percentage
Male	2010	61%
Female	1294	39%
<b>Total</b>	<b>3304</b>	<b>100%</b>

The numbers of deaths are relatively higher during August & September.

Month	No.of Death Reported	Percentage
January	260	8%
February	253	8%
March	268	8%
April	212	6%
May	243	7%
June	280	8%
July	267	8%
August	349	11%
September	377	11%
October	289	9%
November	281	9%
December	225	7%
<b>Total</b>	<b>3304</b>	<b>100%</b>

### **3.5 Deaths due to Sickle Cell Anemia:**

VHSNCs have reported 563 deaths during 2019 for which the cause is recorded as Sickle Cell Anemia.

S.N.	District	Rural Projected Population 2020-21	No.of death due to Sickle Cell Anemia reported by VHSNC in 2017	No.of death due to Sickle Cell Anemia reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	NARAYANPUR	133797	3	3	14
2	GARIYABAND	684569	19	29	28
3	KONDAGAON	590867	3	12	18
4	MAHASAMUND	1092142	59	49	54
5	DANTEWADA	214015	3	5	10
6	BASTAR	795487	15	18	25
7	KANKER	729282	17	17	23
8	BALOD	854690	14	20	29
9	BEMETARA	853782	21	12	22
10	SURAJPUR	827798	23	18	25
11	RAIGARH	1420262	50	55	39
12	BALODABAZAR	1399946	25	30	41
13	RAIPUR	1087671	40	34	25
14	SURGUJA	811811	18	39	17
15	DHAMTARI	690469	23	19	25
16	KORIA	500003	3	3	5
17	KAWARDHA	1001404	13	14	18
18	JANJGIR	1659430	41	29	37
19	JASHPUR	848666	15	14	14
20	DURG	730890	28	18	18
21	MUNGELI	825791	11	14	10
22	KORBA	896523	12	16	6
23	BILASPUR	1777504	13	19	22
24	RAJNANDGAON	1520827	22	30	26
25	BALRAMPUR	802764	10	5	8
26	BIJAPUR	224129	5	2	2
27	SUKMA	220481	0	1	2
<b>State Average</b>		<b>23195000</b>	<b>506</b>	<b>525</b>	<b>563</b>

57% of these deaths are in 15-49 year age group and 26% 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	2	0.4%
2	1-11 month	10	1.8%
3	1-4 year	42	7%
4	5-14 year	98	17%
5	15-49year	323	57%
6	50-59year	39	6.9%
7	60-69year	22	3.9%
8	More than 70year	27	4.8%
<b>Total</b>		<b>563</b>	<b>100%</b>

55% of the deaths are of female persons.

Gender	No.of Death Reported	Percentage
Male	253	45%
Female	310	55%
<b>Total</b>	<b>563</b>	<b>100%</b>

The numbers of deaths are relatively higher during July to October.

Month	No.of Death Reported	Percentage
January	39	7%
February	46	8%
March	60	11%
April	23	4%
May	29	5%
June	38	7%
July	54	10%
August	63	11%
September	63	11%
October	69	12%
November	44	8%
December	35	6%
<b>Total</b>	<b>563</b>	<b>100%</b>

## 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 7364 deaths during 2019 for which the cause is recorded as accident.

S.N.	District	Rural Projected Population 2020-21	No.of Accident death reported by VHSNC in 2017	No.of Accident death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	Balrampur	802764	233	344	334
2	Koria	500003	107	74	92
3	Bijapur	224129	112	111	91
4	Surajpur	827798	292	407	385
5	Jashpur	848666	358	369	334
6	Dantewada	214015	96	38	104
7	Narayanpur	133797	31	39	48
8	SURGUJA	811811	278	335	256
9	Kondagaon	590867	130	86	143
10	Bastar	795487	208	243	284
11	Mahasamund	1092142	321	337	427
12	Korba	896523	184	186	140
13	Sukma	220481	78	57	83
14	Kanker	729282	192	168	248
15	Bilaspur	1777504	354	514	495
16	Janjgir	1659430	505	521	638
17	Mungeli	825791	170	211	208
18	Raipur	1087671	373	291	306
19	Bemetara	853782	176	237	224
20	Balodabazar	1399946	448	332	473
21	Gariyaband	684569	101	126	145
22	Raigarh	1420262	312	320	408
23	Rajnandgaon	1520827	352	436	565
24	Dhamtari	690469	238	240	263
25	Kawardha	1001404	200	232	218
26	Durg	730890	234	233	237
27	Balod	854690	223	214	215
<b>State Average</b>		<b>23195000</b>	<b>6306</b>	<b>6701</b>	<b>7364</b>

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 (26% Bijapur, 20% Bastar) and fall related deaths (Dantewada, Sarguja, Surajpur, Bastar, Balrampur) in some tribal districts.

**Classification of Accidents deaths:**

S.N.	Type of Accidental Death	No.of Deaths	%
1	Road Accidents	3929	53.4%
2	Falling (from roof, trees etc)	1183	16.1%
3	Drowning	817	11.1%
5	Burning	570	7.7%
4	Electrocution	516	7.0%
9	Other injury	101	1.4%
6	Lightening	101	1.4%
8	Animal bites	73	1.0%
7	Buried	65	0.9%
11	Suffocated	3	0.0%
10	Floods	6	0.1%
<b>Total</b>		<b>7364</b>	<b>100.0%</b>

**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 Electrocutation
1	Balod	66%	7%	10%	10%	4%
2	Balodabazar	57%	11%	13%	9%	6%
3	Balrampur	42%	<b>24%</b>	16%	4%	7%
4	Bastar	44%	<b>25%</b>	<b>20%</b>	3%	4%
5	Bemetara	61%	12%	11%	5%	6%
6	Bijapur	44%	13%	<b>26%</b>	10%	2%
7	Bilaspur	52%	16%	8%	11%	8%
8	Dantewada	38%	<b>32%</b>	14%	11%	0%
9	Dhamtari	56%	16%	11%	7%	6%
10	Durg	64%	9%	8%	5%	9%
11	Gariyaband	52%	21%	7%	11%	6%
12	Janjgir	50%	14%	12%	10%	9%
13	Jashpur	49%	14%	16%	3%	9%
14	Kanker	65%	13%	9%	4%	5%
15	Kawardha	57%	12%	12%	6%	9%
16	Kondagaon	48%	19%	<b>13%</b>	7%	8%
17	Korba	49%	11%	14%	11%	9%
18	Koria	40%	<b>22%</b>	16%	11%	8%
19	Mahasamund	60%	16%	7%	7%	6%
20	Mungeli	56%	11%	7%	13%	9%
21	Narayanpur	50%	19%	<b>13%</b>	17%	0%
22	Raigarh	53%	12%	10%	9%	11%
23	Raipur	66%	11%	7%	8%	5%
24	Rajnandgaon	58%	16%	7%	8%	7%
25	Sukma	39%	<b>23%</b>	19%	12%	0%
26	Surajpur	47%	<b>25%</b>	8%	7%	5%
27	Surguja	37%	<b>30%</b>	13%	5%	10%
<b>TOTAL</b>		<b>53%</b>	<b>16%</b>	<b>11%</b>	<b>8%</b>	<b>7%</b>

**57% of these deaths are in 15-49 year age group.**

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	15	0%
2	1-11 month	51	1%
3	1-4 year	263	4%
4	5-14 year	432	6%
5	15-49year	4206	57%
6	50-59year	827	11%
7	60-69year	619	8%
8	More than 70year	951	13%
<b>Total</b>		<b>7364</b>	<b>100%</b>

**73% of the deaths due to accident are of male persons.**

Gender	No.of Death Reported	Percentage
Male	5342	73%
Female	2022	27%
<b>Total</b>	<b>7364</b>	<b>100%</b>

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

Month	No.of Death Reported	Percentage
January	609	8%
February	572	8%
March	682	9%
April	602	8%
May	734	10%
June	664	9%
July	618	8%
August	591	8%
September	643	9%
October	694	9%
November	544	7%
December	411	6%
<b>Total</b>	<b>7364</b>	<b>100%</b>

## 4.2 Deaths due to suicide:

VHSNCs have reported 4057 deaths during 2019 for which the cause is recorded as suicide.

S.N.	District	Rural Projected Population 2020-21	No.of Suicide deaths reported by VHSNC in 2017	No.of Suicide deaths reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	Dantewada	214015	63	32	86
2	Sukma	220481	48	39	66
3	Kanker	729282	127	81	191
4	Korba	896523	76	107	97
5	Raipur	1087671	217	184	236
6	Kondagaon	590867	83	65	82
7	Bijapur	224129	65	46	44
8	Dhamtari	690469	186	206	220
9	Balod	854690	155	143	202
10	Koria	500003	43	24	43
11	Gariyaband	684569	75	106	105
12	Mahasamund	1092142	183	215	241
13	Balodabazar	1399946	172	196	292
14	Jashpur	848666	99	135	140
15	Surajpur	827798	126	143	156
16	Durg	730890	180	152	176
17	Bilaspur	1777504	145	202	254
18	Raigarh	1420262	165	140	233
19	Surguja	811811	98	121	107
20	Balrampur	802764	69	120	105
21	Janjgir	1659430	210	233	289
22	Rajnandgaon	1520827	193	197	300
23	Bemetara	853782	79	97	103
24	Narayanpur	133797	22	25	17
25	Kawardha	1001404	86	81	109
26	Bastar	795487	79	85	90
27	Mungeli	825791	61	68	73
<b>State Average</b>		<b>23195000</b>	<b>3105</b>	<b>3243</b>	<b>4057</b>

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	1530	38%
2	26 to 35 years	869	21%
3	36 to 49 years	737	18%
4	50-59year	441	11%
5	60-69year	241	6%
6	More than 70year	239	6%
<b>Total</b>		<b>4057</b>	<b>100%</b>

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	928	61%	602	39%	1530
2	26 to 35 years	606	70%	263	30%	869
3	36 to 49 years	572	78%	165	22%	737
4	50 to 59 years	349	79%	92	21%	441
5	60 to 69 years	171	71%	70	29%	241
6	More than 70 years	185	77%	54	23%	239
<b>Total</b>		<b>2811</b>	<b>69%</b>	<b>1246</b>	<b>31%</b>	<b>4057</b>

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

Month	No.of Death Reported	Percentage
January	273	7%
February	306	8%
March	395	10%
April	325	8%
May	410	10%
June	353	9%
July	351	9%
August	360	9%
September	405	10%
October	333	8%
November	334	8%
December	212	5%
<b>Total</b>	<b>4057</b>	<b>100%</b>

### 4.3 Deaths due to snake bite:

VHSNCs have reported 682 deaths during 2019 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
1	Sukma	220481	18	14	31
2	Dantewada	214015	22	9	27
3	Bijapur	224129	22	31	18
4	Balrampur	802764	43	64	45
5	Narayanpur	133797	6	1	8
6	Kondagaon	590867	19	6	18
7	Korba	896523	20	19	19
8	Kanker	729282	33	8	31
9	Surajpur	827798	14	25	32
10	Bastar	795487	22	19	26
11	Bilaspur	1777504	33	42	49
12	Surguja	811811	21	11	20
13	Mungeli	825791	25	17	19
14	Gariyaband	684569	13	7	15
15	Kawardha	1001404	28	30	26
16	Janjgir	1659430	61	51	55
17	Balodabazar	1399946	20	17	42
18	Bemetara	853782	14	20	19
19	Raigarh	1420262	35	46	37
20	Mahasamund	1092142	26	20	30
21	Jashpur	848666	18	26	16
22	Koria	500003	17	7	4
23	Rajnandgaon	1520827	37	50	40
24	Dhamtari	690469	10	11	19
25	Raipur	1087671	16	20	15
26	Durg	730890	11	14	14
27	Balod	854690	7	7	7
<b>State Average</b>		<b>23195000</b>	<b>611</b>	<b>592</b>	<b>682</b>

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	0	0%
2	1-11 month	9	1%
3	1-4 year	45	7%
4	5-14 year	109	16%
5	15-49year	343	50%
6	50-59year	77	11%
7	60-69year	54	8%
8	More than 70year	45	7%
<b>Total</b>		<b>682</b>	<b>100%</b>

54% of the deaths due to snake bite are of male persons.

Gender	No.of Death Reported	Percentage
Male	367	54%
Female	315	46%
<b>Total</b>	<b>682</b>	<b>100%</b>

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

Month	No.of Death Reported	Percentage
January	13	2%
February	15	2%
March	21	3%
April	35	5%
May	55	8%
June	106	16%
July	123	18%
August	109	16%
September	111	16%
October	64	9%
November	21	3%
December	9	1%
<b>Total</b>	<b>682</b>	<b>100%</b>

#### 4.4 Deaths due to Rabies:

VHSNCs have reported 105 deaths during 2019 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
1	Dantewada	214015	0	1	10
2	Sukma	220481	0	1	8
3	Bastar	795487	6	1	9
4	Mungeli	825791	1	4	6
5	Narayanpur	133797	0	1	1
6	Surguja	811811	4	7	4
7	Balrampur	802764	1	1	4
8	Surajpur	827798	2	4	5
9	Balodabazar	1399946	3	6	9
10	Bilaspur	1777504	7	5	8
11	Kondagaon	590867	3	2	2
12	Korba	896523	3	0	2
13	Mahasamund	1092142	4	1	6
14	Durg	730890	4	4	5
15	Janjgir	1659430	4	4	9
16	Kanker	729282	1	3	3
17	Jashpur	848666	10	6	3
18	Kawardha	1001404	3	2	3
19	Bemetara	853782	2	3	2
20	Rajnandgaon	1520827	5	6	3
21	Raigarh	1420262	4	5	2
22	Dhamtari	690469	1	4	1
23	Balod	854690	1	0	0
24	Bijapur	224129	2	1	0
25	Gariyaband	684569	0	2	0
26	Koria	500003	3	0	0
27	Raipur	1087671	2	4	0
<b>State Average</b>		<b>23195000</b>	<b>76</b>	<b>78</b>	<b>105</b>

32% 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	0	0%
3	1-4 year	5	5%
4	5-14 year	21	20%
5	15-49year	34	32%
6	50-59year	19	18%
7	60-69year	10	10%
8	More than 70year	16	15%
<b>Total</b>		<b>105</b>	<b>100%</b>

58% of the deaths due to Rabies are of male persons.

Gender	No.of Death Reported	Percentage
Male	61	58%
Female	44	42%
<b>Total</b>	<b>105</b>	<b>100%</b>

The number of deaths per month is slightly higher during April and November.

Month	No.of Death Reported	Percentage
January	3	3%
February	3	3%
March	10	10%
April	15	14%
May	10	10%
June	4	4%
July	12	11%
August	12	11%
September	8	8%
October	6	6%
November	17	16%
December	5	5%
<b>Total</b>	<b>105</b>	<b>100%</b>

**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 2019

The report covers 5449 of the total 17181 estimated neonatal deaths in the rural areas of the state. Thus the overall reporting percentage for neonatal deaths is 33%. The reporting percentage is higher from districts like Bijapur, Bastar, Sukm and is low from districts like Korba, Kororia and Kawardha.

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	Reporting %
1	Sukma	220481	153	76	95	101	62%
2	Gariyaband	684569	615	170	178	186	29%
3	Bastar	795487	422	152	286	266	68%
4	Koria	500003	385	92	57	61	15%
5	Bemetara	853782	469	237	226	213	48%
6	Kawardha	1001404	1167	194	214	256	18%
7	Mahasamund	1092142	914	348	330	336	36%
8	Surguja	811811	580	156	207	188	36%
9	Rajnandgaon	1520827	1337	460	475	584	36%
10	Bijapur	224129	156	77	124	56	79%
11	Durg	730890	402	228	246	275	61%
12	Balrampur	802764	574	185	223	176	39%
13	Bilaspur	1777504	1111	307	441	365	40%
14	Dantewada	214015	149	93	55	63	37%
15	Mungeli	825791	516	227	204	147	40%
16	Surajpur	827798	592	178	260	197	44%
17	Janjgir	1659430	1092	352	338	435	31%
18	Raipur	1087671	977	313	302	211	31%
19	Korba	896523	830	136	114	83	14%
20	Kondagaon	590867	313	93	103	77	33%
21	Balodabazar	1399946	1258	338	253	312	20%
22	Balod	854690	470	181	180	184	38%
23	Dhamtari	690469	510	192	211	199	41%
24	Jashpur	848666	646	152	182	144	28%
25	Raigarh	1420262	1087	312	270	249	25%
26	Narayanpur	133797	70	14	19	18	27%
27	Kanker	729282	383	115	94	67	25%
<b>State Average</b>		<b>23195000</b>	<b>17181</b>	<b>5378</b>	<b>5687</b>	<b>5449</b>	<b>33%</b>

The neonatal deaths recorded monthly are slightly higher in November.

<b>MONTH</b>	<b>No. of Neonatal Deaths Reported 2019</b>	<b>%</b>
January	489	9%
February	426	8%
March	412	8%
April	427	8%
May	490	9%
June	448	8%
July	458	8%
August	445	8%
September	498	9%
October	454	8%
November	533	10%
December	369	7%
<b>TOTAL</b>	<b>5449</b>	<b>100%</b>

61% of the neonatal deaths recorded were of female children.

<b>Gender</b>	<b>No. of Neonatal Deaths Reported 2019</b>	<b>%</b>
Male	3349	61%
Female	2100	39%
<b>Total</b>	<b>5449</b>	<b>100%</b>

The causes for 35% of reported neonatal deaths are due to neonatal conditions (Birth Asphyxia & sepsis). Low Birth Weight and Pneumonia were also important causes of neonatal deaths.

Reported Causes	No. of Neonatal Deaths reported	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accidental	15	0.3%	1%	1%	1%	1%	0%	0%
Convulsions	210	3.9%	4%	3%	4%	3%	3%	2%
Fever	52	1.0%	1%	2%	2%	2%	3%	2%
Neonatal Jaundice	185	3.4%	4%	3%	4%	3%	4%	3%
Low Birth Weight	485	8.9%	11%	13%	16%	17%	14%	11%
Diarrhea	33	0.6%	1%	1%	1%	1%	1%	1%
Pneumonia	160	2.9%	6%	6%	8%	7%	7%	8%
T.B.	4	0.1%	0%	0%	0%	0%	0%	0%
Birth Asphyxia	1378	25.3%	20%	23%	59%	61%	63%	60%
Neonatal sepsis	528	9.7%	12%	8%				
Congenital Heart Disease/Anomalies	84	1.5%	2%	1%	1%			
Digestive Diseases	56	1.0%	2%	2%	3%			
Genito-urinary Diseases	9	0.2%	0%	0%	0%			
Neonatal Diabetes	5	0.1%	0%	0%	0%			
Sickle Cell Anemia	2	0.0%	0%	0%	0%			
Neonatal Cancer	8	0.1%	0%	0%	0%			
Other	2235	41.0%	36%	37%	1%	5%	6%	12%
<b>Total</b>	<b>5449</b>	<b>100.0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Reported symptoms of Neonatal sepsis:**

Reported Symptoms	No.of Deaths	%
<i>Pus on umbilicus</i>	19	3.60%
<i>Distended abdomen</i>	78	14.77%
<i>Hypothermia</i>	18	3.41%
<i>Cry weak/stopped</i>	18	3.41%
<i>Increased Respiratory Rate</i>	57	10.80%
<i>Unconsciousness</i>	73	13.83%
<i>Feeding less/stopped</i>	265	50.19%
<b>Total</b>	<b>528</b>	<b>100%</b>

50% 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 2019**

The report covers 2401 of the total 7409 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 21%. The reporting percentage is higher from districts like Raipur, Bijapur, Sukma and is low from districts like Kanker, Koriya and Surajpur.

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	Reporting %
1	Dantewada	214015	77	34	19	119	25%
2	Bijapur	224129	81	49	35	79	43%
3	Sukma	220481	79	35	31	74	39%
4	Bastar	795487	219	61	41	146	19%
5	Narayanpur	133797	36	4	12	21	33%
6	Surajpur	827798	469	51	44	142	9%
7	Balrampur	802764	455	68	86	106	19%
8	Surguja	811811	460	70	41	95	9%
9	Kawardha	1001404	445	101	88	119	20%
10	Gariyaband	684569	130	58	31	66	24%
11	Kondagaon	590867	163	45	23	47	14%
12	Rajnandgaon	1520827	412	109	129	221	31%
13	Jashpur	848666	377	74	45	78	12%
14	Mungeli	825791	218	56	47	65	22%
15	Korba	896523	226	32	55	40	24%
16	Koria	500003	164	19	13	20	8%
17	Bilaspur	1777504	470	106	149	144	32%
18	Bemetara	853782	227	70	72	71	32%
19	Raipur	1087671	206	100	90	86	44%
20	Mahasamund	1092142	469	71	90	94	19%
21	Dhamtari	690469	165	70	60	79	36%
22	Balodabazar	1399946	265	103	73	118	28%
23	Raigarh	1420262	458	54	52	98	11%
24	Janjgir	1659430	450	92	77	130	17%
25	Durg	730890	194	65	67	66	35%
26	Kanker	729282	270	31	22	36	8%
27	Balod	854690	227	48	32	41	14%
<b>State Average</b>		<b>23195000</b>	<b>7409</b>	<b>1676</b>	<b>1524</b>	<b>2401</b>	<b>21%</b>

The post-neonatal infant deaths recorded monthly are slightly higher during September to November.

<b>Month</b>	<b>No. of Deaths Reported</b>	<b>%</b>
January	217	9%
February	183	8%
March	190	8%
April	168	7%
May	193	8%
June	143	6%
July	165	7%
August	183	8%
September	249	10%
October	229	10%
November	286	12%
December	195	8%
<b>Total</b>	<b>2401</b>	<b>100%</b>

55% of the post-neonatal deaths recorded were of male children.

<b>Gender</b>	<b>No. of Deaths Reported</b>	<b>%</b>
Male	1323	55%
Female	1078	45%
<b>Total</b>	<b>2401</b>	<b>100%</b>

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

<b>Reported Causes</b>	<b>No. of Post-Neonatal Deaths Reported</b>	<b>% in 2019</b>	<b>% in 2018</b>	<b>% in 2017</b>	<b>% in 2016</b>	<b>% in 2015</b>	<b>% in 2014</b>	<b>% in 2013</b>
Accident	51	2%	4.1%	3%	4%	5%	1%	4%
Convulsion	153	6%	5.7%	4%	5%	3%	2%	2%
Fever/Malaria	178	7%	6.1%	7%	9%	10%	13%	16%
Childhood Jaundice	115	5%	5.4%	4%	4%	3%	4%	5%
Malnutrition	217	9%	9.0%	8%	15%	8%	10%	8%
Pneumonia	488	20%	24.0%	19%	35%	30%	28%	20%
Snake bite	9	0%	0.3%	0%	0%	0%	0%	0%
Diarrhea	127	5%	5.1%	5%	7%	6%	6%	8%
T.B.	4	0%	0.3%	0%	0%	0%	0%	1%
Congenital Heart Disease/Anomalies	169	7%	8.3%	8%	10%			
Digestive Diseases	92	4%	5.1%	3%	5%			
Genito-urinary Diseases	13	1%	0.5%	0%	0%			
Diabetes	7	0%	0.2%	0%	0%			
Sickle Cell Anemia	10	0%	0.7%	0%	0%			
Cancer	10	0%	0.9%	1%	0%			
Other	758	32%	24.3%	37%	4%	35%	35%	35%
<b>Total</b>	<b>2401</b>	<b>100%</b>	<b>100.0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

### 5.3 District wise no. of Child Deaths (1 to 4 years) in 2019

The report covers 1800 of the total 8,664 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 15%. The reporting percentage is higher from districts like Sukma, Bijapur, Narayanpur and is low from districts like Surguja, Surajpur and Koriya.

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	Reporting %
1	Dantewada	214015	91	42	20	56	22%
2	Sukma	220481	99	34	43	42	43%
3	Bijapur	224129	91	47	31	33	34%
4	Koria	500003	173	28	15	27	9%
5	Balrampur	802764	811	106	80	86	10%
6	Bastar	795487	203	92	43	98	21%
7	Narayanpur	133797	39	20	13	14	33%
8	Kondagaon	590867	163	33	21	38	13%
9	Kawardha	1001404	445	77	66	88	15%
10	Gariyaband	684569	210	53	41	48	19%
11	Bilaspur	1777504	641	111	82	137	13%
12	Bemetara	853782	162	100	36	64	22%
13	Raipur	1087671	360	98	67	84	19%
14	Surguja	811811	860	74	50	56	6%
15	Korba	896523	189	64	35	32	19%
16	Surajpur	827798	857	65	63	70	7%
17	Balodabazar	1399946	397	101	79	124	20%
18	Mungeli	825791	318	63	45	48	14%
19	Jashpur	848666	538	75	69	55	13%
20	Rajnandgaon	1520827	309	104	90	149	29%
21	Durg	730890	152	88	48	72	32%
22	Dhamtari	690469	124	60	38	62	31%
23	Kanker	729282	241	39	16	43	7%
24	Balod	854690	146	56	30	49	21%
25	Janjgir	1659430	385	128	78	101	20%
26	Raigarh	1420262	401	68	61	69	15%
27	Mahasamund	1092142	258	92	59	55	23%
<b>State Average</b>		<b>23195000</b>	<b>8664</b>	<b>1918</b>	<b>1319</b>	<b>1800</b>	<b>15%</b>

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

<b>Month</b>	<b>No. of Deaths Reported</b>	<b>%</b>
January	109	6%
February	132	7%
March	136	8%
April	149	8%
May	117	7%
June	129	7%
July	134	7%
August	195	11%
September	216	12%
October	196	11%
November	165	9%
December	122	7%
<b>Total</b>	<b>1800</b>	<b>100%</b>

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

<b>Gender</b>	<b>No. of Deaths Reported</b>	<b>%</b>
Male	970	54%
Female	830	46%
<b>Total</b>	<b>1800</b>	<b>100%</b>

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

Reported Causes	No. of Child Deaths Reported	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accident	263	15%	15.6%	14%	14%	12%	10%	12%
Convulsion	144	8%	7.5%	7%	7%	5%	3%	4%
Fever/Malaria	167	9%	11.0%	11%	17%	17%	21%	20%
Jaundice	98	5%	6.4%	6%	8%	6%	6%	6%
Malnutrition	96	5%	6.7%	6%	10%	6%	5%	5%
Pneumonia	125	7%	7.7%	10%	13%	10%	10%	7%
Snake bite	45	3%	1.9%	2%	2%	1%	2%	2%
Diarrhea	98	5%	4.5%	6%	8%	7%	6%	5%
T.B.	13	1%	0.5%	1%	0%	1%	1%	1%
Rabies	5	0%	0.5%	0%	0%	1%	1%	1%
Congenital Heart Disease/Anomalies	130	7%	6.5%	7%	8%			
Digestive Diseases	80	4%	4.8%	6%	7%			
Genito-urinary Diseases	5	0%	0.4%	0%	0%			
Diabetes	9	1%	0.5%	0%	0%			
Sickle Cell Anemia	42	2%	2.4%	2%	2%			
Cancer	28	2%	2.5%	2%	1%			
Other	452	25%	20.8%	20%	2%	35%	35%	37%
<b>Total</b>	<b>1800</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Analysis of age groups older than 5 yrs age is available in Annexure - II**

## Chapter 6: Analysis of Maternal Deaths in rural Chhattisgarh

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

VHSNCs have reported 274 deaths during 2019 for which the cause is recorded as maternal death.

S.N.	District	Rural Projected Population 2020-21	No.of Maternal Death reported by VHSNC in 2017	No.of Maternal Death reported by VHSNC in 2018	No.of deaths reported by VHSNC in 2019
1	Bijapur	224129	4	6	10
2	Koria	500003	5	2	8
3	Kondagaon	590867	8	4	9
4	Balrampur	802764	18	15	14
5	Gariyaband	684569	12	3	10
6	Bilaspur	1777504	23	23	28
7	Dantewada	214015	2	1	5
8	Balodabazar	1399946	18	14	27
9	Mahasamund	1092142	23	20	19
10	Dhamtari	690469	22	7	15
11	Mungeli	825791	20	15	8
12	Kanker	729282	4	5	9
13	Surguja	811811	4	10	8
14	Jashpur	848666	7	4	9
15	Kawardha	1001404	11	11	10
16	Janjgir	1659430	25	28	21
17	Korba	896523	3	10	4
18	Raipur	1087671	25	10	9
19	Bemetara	853782	6	6	6
20	Surajpur	827798	9	12	7
21	Bastar	795487	5	6	6
22	Rajnandgaon	1520827	19	11	16
23	Raigarh	1420262	16	10	10
24	Balod	854690	10	7	4
25	Sukma	220481	8	6	1
26	Durg	730890	9	15	1
27	Narayanpur	133797	1	2	0
<b>State Average</b>		<b>23195000</b>	<b>317</b>	<b>263</b>	<b>274</b>

### Month wise no. of Maternal Deaths reported:

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

Month	No.of Death Reported	Percentage
January	26	9%
February	9	3%
March	14	5%
April	15	5%
May	26	9%
June	26	9%
July	19	7%
August	35	13%
September	31	11%
October	29	11%
November	25	9%
December	19	7%
<b>Total</b>	<b>274</b>	<b>100%</b>

### Cause wise no. of Maternal death in 2019

S.N.	Reported Causes	No. of Deaths	%
1	Maternal causes	225	82%
2	Accidents	2	1%
3	Convulsions	15	5%
4	Fever/ Malaria	2	1%
5	Malnutrition	1	0%
6	TB	5	2%
7	Diarrhea	1	0%
8	Pneumonia	2	1%
9	Jaundice	3	1%
10	Heart Disease	2	1%
11	Digestive Disease	5	2%
12	Genito-urinary disease	1	0%
13	Diabetes	1	0%
14	Sickle Cell Disease	3	1%
15	High BP	4	1%
16	Cancer	2	1%
	<b>Total</b>	<b>274</b>	<b>100%</b>

## **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, Mahasmond, 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 2019	% 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	2930	1.1%	0.6%	0.5%	2.4%	1.8%	7.3%	6.9%	0.3%	0.2%	0.0%	0.1%	6.3%	0.6%	0.4%	52.0%
2	BALODABAZAR	4913	3.9%	1.0%	1.0%	2.7%	2.4%	9.6%	5.9%	0.5%	0.9%	0.2%	0.5%	6.4%	1.1%	1.0%	45.7%
3	BALRAMPUR	2102	3.0%	0.6%	2.9%	2.6%	1.7%	15.9%	5.0%	0.9%	2.1%	0.2%	0.7%	8.4%	1.1%	0.9%	32.3%
4	BASTAR	2432	4.2%	3.2%	3.3%	3.2%	3.8%	11.7%	3.7%	0.8%	1.1%	0.4%	0.2%	10.9%	2.0%	2.8%	30.8%
5	BEMETARA	2288	2.3%	1.6%	0.8%	3.5%	1.9%	9.8%	4.5%	0.3%	0.8%	0.1%	0.3%	9.3%	1.4%	0.9%	43.1%
6	BIJAPUR	635	6.8%	4.7%	3.5%	3.0%	5.8%	14.3%	6.9%	2.0%	2.8%	0.0%	1.6%	8.8%	1.6%	2.0%	17.8%
7	BILASPUR	4638	2.5%	1.6%	0.6%	2.9%	1.8%	10.7%	5.5%	0.4%	1.1%	0.2%	0.6%	7.9%	1.1%	2.0%	45.0%
8	DANTEWADA	840	10.2%	2.6%	3.1%	3.8%	6.0%	12.4%	10.2%	1.7%	3.2%	1.2%	0.6%	7.5%	3.3%	3.6%	12.9%
9	DHAMTARI	3185	1.5%	1.0%	0.7%	2.9%	2.6%	8.3%	6.9%	0.5%	0.6%	0.0%	0.5%	6.2%	1.1%	0.7%	47.1%
10	DURG	3163	1.1%	0.9%	0.3%	2.0%	1.6%	7.5%	5.6%	0.3%	0.4%	0.2%	0.0%	8.7%	0.9%	0.6%	51.9%
11	GARIYABAND	1579	2.5%	2.6%	1.5%	3.2%	3.4%	9.2%	6.6%	0.4%	0.9%	0.0%	0.6%	11.8%	2.5%	1.7%	34.2%
12	JANJIGIR	6084	2.3%	0.6%	0.8%	2.5%	1.4%	10.5%	4.8%	0.2%	0.9%	0.1%	0.3%	7.1%	0.7%	1.1%	51.2%
13	JASHPUR	2385	2.6%	0.7%	1.9%	3.2%	4.3%	14.0%	5.9%	1.0%	0.7%	0.1%	0.4%	6.0%	1.3%	0.4%	38.0%
14	KANKER	2318	1.8%	1.2%	1.3%	2.5%	4.2%	10.7%	8.2%	0.4%	1.3%	0.1%	0.4%	2.9%	0.8%	0.5%	39.6%
15	KAWARDHA	2802	0.9%	2.1%	1.4%	1.7%	2.3%	7.8%	3.9%	0.6%	0.9%	0.1%	0.4%	9.1%	1.3%	2.6%	47.4%
16	KONDAGAON	1175	3.0%	2.1%	2.6%	3.4%	4.1%	12.2%	7.0%	0.8%	1.5%	0.2%	0.8%	6.6%	2.4%	1.5%	29.7%
17	KORBA	1242	1.0%	0.7%	0.6%	2.2%	2.4%	11.3%	7.8%	0.2%	1.5%	0.2%	0.3%	6.7%	1.1%	1.8%	42.9%
18	KORIA	639	3.1%	0.8%	1.7%	2.5%	3.3%	14.4%	6.7%	1.3%	0.6%	0.0%	1.3%	9.5%	2.5%	0.8%	29.1%
19	MAHASAMUND	3753	1.9%	0.6%	1.1%	2.1%	2.6%	11.4%	6.4%	0.2%	0.8%	0.2%	0.5%	9.0%	1.0%	1.1%	40.8%
20	MUNGELI	1997	2.1%	1.5%	1.1%	2.1%	1.4%	10.4%	3.7%	0.4%	1.0%	0.3%	0.4%	7.4%	1.4%	1.6%	44.7%
21	NARAYANPUR	388	2.6%	1.5%	4.6%	2.6%	6.7%	12.4%	4.4%	1.8%	2.1%	0.3%	0.0%	4.6%	3.1%	1.5%	24.5%
22	RAIGARH	4525	4.1%	0.6%	1.1%	2.1%	3.2%	9.0%	5.1%	0.6%	0.8%	0.0%	0.2%	5.5%	1.1%	1.5%	46.9%
23	RAIPUR	3077	2.4%	1.6%	0.8%	2.8%	2.1%	9.9%	7.7%	0.5%	0.5%	0.0%	0.3%	6.9%	0.9%	1.2%	43.4%
24	RAJNANDGAON	6532	1.2%	1.2%	1.1%	2.0%	2.2%	8.6%	4.6%	0.4%	0.6%	0.0%	0.2%	8.9%	1.1%	1.9%	47.4%
25	SUKMA	738	7.2%	4.6%	2.8%	2.4%	10.0%	11.2%	8.9%	3.4%	4.2%	1.1%	0.1%	13.7%	2.7%	8.3%	10.8%
26	SURAJPUR	2722	0.7%	0.8%	0.8%	1.7%	1.5%	14.1%	5.7%	1.0%	1.2%	0.2%	0.3%	7.2%	0.8%	1.2%	41.1%
27	SURGUJA	2100	3.1%	0.9%	1.7%	2.8%	2.6%	12.2%	5.1%	1.0%	1.0%	0.2%	0.4%	9.0%	0.9%	0.7%	37.5%
<b>State Average</b>		<b>71182</b>	<b>2.5%</b>	<b>1.3%</b>	<b>1.2%</b>	<b>2.5%</b>	<b>2.6%</b>	<b>10.3%</b>	<b>5.7%</b>	<b>0.6%</b>	<b>1.0%</b>	<b>0.1%</b>	<b>0.4%</b>	<b>7.7%</b>	<b>1.2%</b>	<b>1.4%</b>	<b>43.0%</b>

## 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 10762 deaths that were recorded by MAS during the year 2019. The deaths covered in 2019 compilation constitute 80% 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	%
<b>Overall Deaths</b>	<b>13461</b>	<b>2764</b>	<b>21%</b>	<b>8162</b>	<b>69%</b>	<b>9177</b>	<b>68%</b>	<b>8874</b>	<b>66%</b>	<b>10762</b>	<b>80%</b>
Neonatal Deaths	942	525	56%	743	89%	703	75%	659	70%	699	74%
1-11 month age group Deaths	494	97	20%	173	40%	158	32%	122	25%	178	36%
1-4 Year age group Deaths	135	60	44%	114	96%	127	94%	97	72%	110	81%
Maternal Deaths	63	14	22%	26	27%	35	56%	14	22%	28	44%
Other age groups	11827	2068	17%	7106	68%	8154	69%	7982	67%	9747	82%

### Urban-slum city wise no. of deaths reported

S.N.	Name of City	Expected no. of deaths	No. of Deaths Reported in 2015	%	No. of Deaths Reported in 2016	%	No. of Deaths Reported in 2017	%	No. of Deaths Reported in 2018	%	No. of Deaths Reported in 2019	%
1	Ambikapur	498	58	12%	75	15%	115	23%	121	24%	165	33%
2	Bhatapara	300	57	19%	206	69%	185	62%	195	65%	216	72%
3	Bhillai	1638	178	11%	733	45%	765	47%	958	58%	1256	77%
4	Bilaspur	1165	193	17%	697	60%	936	80%	696	60%	773	66%
5	Birgaon	557	28	5%	132	24%	196	35%	174	31%	238	43%
6	Charoda	412	140	34%	358	87%	336	82%	344	83%	414	100%
7	Chirmiri	452	97	21%	290	64%	250	55%	204	45%	257	57%
8	Dhamtari	439	150	34%	435	99%	380	87%	442	101%	471	107%
9	Durg	906	155	17%	840	93%	883	97%	844	93%	986	109%
10	Jagdalpur	374	50	13%	190	51%	295	79%	274	73%	327	88%
11	Janjgir	112	74	66%	154	137%	167	149%	162	145%	149	133%
12	Kanker	135	47	35%	162	120%	160	119%	128	95%	121	90%
13	Kawardha	154	48	31%	150	97%	125	81%	141	91%	144	93%
14	Korba	891	160	18%	501	56%	681	76%	645	72%	971	109%
15	Mahasamund	379	71	19%	160	42%	129	34%	170	45%	259	68%
16	Mungeli	195	51	26%	94	48%	118	61%	53	27%	117	60%
17	Raigarh	723	141	20%	545	75%	493	68%	528	73%	523	72%
18	Raipur	3383	942	28%	1930	57%	2300	68%	2229	66%	2551	75%
19	Rajnandgaon	749	124	17%	510	68%	663	89%	566	76%	824	110%
<b>TOTAL</b>		<b>13461</b>	<b>2764</b>	<b>21%</b>	<b>8162</b>	<b>61%</b>	<b>9177</b>	<b>68%</b>	<b>8874</b>	<b>66%</b>	<b>10762</b>	<b>80%</b>

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	1	7	18	60	490	90	62	71	799
2	Convulsions	6	14	10	4	22	7	3	1	67
3	Fever/ Malaria	0	15	8	11	49	19	32	84	218
4	Neonatal Jaundice	1								1
5	Jaundice		4	6	5	93	11	12	14	145
6	Low Birth Weight	3								3
7	Malnutrition		9	6	0	1	0	1	0	17
8	Diarrhea	0	3	5	5	16	11	9	15	64
9	Pneumonia	0	28	20	2	14	2	7	6	79
10	Congenital Heart Disease/Anomalies	4	46	9	16					75
11	Stroke					90	152	345	585	1172
12	Heart Diseases/Heart attack					476	397	490	497	1860
13	High BP					26	39	61	82	208
14	Digestive Diseases	2	3	5	10	131	63	47	45	306
15	Genito-urinary Diseases	0	0	0	0	27	10	9	4	50
16	Diabetes	0	0	0	2	79	86	88	160	415
17	HIV/AIDS	0	0	0	1	41	7	0	4	53
18	T.B.	0	0	0	1	107	51	43	23	225
19	Snake Bite		0	1	4	6	1	1	0	13
20	Rabies			2	1	10	1	0	1	15
21	Birth Asphyxia	224								224
22	Neonatal Sepsis	48								48
23	Maternal causes					21				21
24	Murder					40	5	2	1	48
25	Suicide					464	33	31	27	555
26	Sickle Cell Anemia			2	2	25	1	0	2	32
27	Cancer	0	0	3	8	262	154	171	129	727
28	Others	410	49	15	54	491	292	465	1545	3322
<b>Total</b>		<b>699</b>	<b>178</b>	<b>110</b>	<b>186</b>	<b>2981</b>	<b>1432</b>	<b>1879</b>	<b>3296</b>	<b>10762</b>

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

659 Neonatal deaths were reported by MAS. An attempt has been made to further unpack this category by causes. For this purpose, a sample of 48 deaths was drawn and details available regarding the specific primary cause of death were coded. It shows the following picture:

Reported Cause	No.of Deaths	%
Accident	1	0.14%
Convulsion	6	0.86%
Fever	0	0.00%
Neonatal Jaundice	1	0.14%
Low Birth Weight	3	0.43%
Diarrhea	0	0.00%
Pneumonia	0	0.00%
T.B.	0	0.00%
Congenital Heart Disease/Anomalies	4	0.57%
Digestive Diseases	2	0.29%
Genito-urinary Diseases	0	0.00%
Neonatal Diabetes	0	0.00%
Sickle Cell Anemia	0	0.00%
Neonatal Cancer	0	0.00%
Birth Asphyxia	224	32.05%
Neonatal sepsis	48	6.87%
Other	410	58.66%
<b>Total</b>	<b>699</b>	<b>100.00%</b>

32% deaths due birth asphyxia, is the most common cause of neonatal deaths. Sepsis 7% is also an important reported cause of neonatal deaths.

Reported Symptoms	No.of Deaths	%
Pus on umbilicus	2	4.17%
Distended abdomen	9	18.75%
Hypothermia	2	4.17%
Cry weak/stopped	6	12.50%
Increased Respiratory Rate	14	29.17%
Unconsciousness	6	12.50%
Feeding less/stopped	9	18.75%
<b>Total</b>	<b>48</b>	<b>100.00%</b>

29% deaths reported as increased respiratory rate and 18% deaths reported as feeding less or stopped & distended abdomen, is the most common cause of neonatal sepsis deaths.

<b>Year</b>	<b>0-59 yrs Total deaths</b>	<b>0-59 yrs Fever/Malaria</b>	<b>%</b>	<b>Total Fever/Malaria in 19 city</b>	<b>Total Fever/Malaria in 5 city</b>	<b>%</b>	<b>0-59 yrs Pneumonia</b>	<b>%</b>	<b>0-59 yrs Diarrhea</b>	<b>%</b>
2015	2067	100	4.8%	149	28	1.4%	67	3.2%	32	1.5%
2016	7092	97	1.4%	156	34	0.5%	59	0.8%	61	0.9%
2017	7239	120	1.7%	189	46	0.6%	76	1.0%	53	0.7%
2018	6715	145	2.2%	228	27	0.4%	62	0.9%	36	0.5%
2019	4749	102	2%	218	27	0.6%	66	1.4%	40	0.8%

## 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	15	51	263	432	4206	827	619	951	7364
2	Convulsions	210	153	144	82	229	53	43	77	991
3	Fever/ Malaria	52	178	167	163	411	125	154	496	1746
4	Neonatal Jaundice	185								185
5	Jaundice		115	98	143	816	188	120	123	1603
6	Low Birth Weight	485								485
7	Malnutrition		217	96	10	21	2	4	4	354
8	Diarrhea	33	127	98	71	191	68	95	191	874
9	Pneumonia	160	488	125	34	41	13	11	18	890
10	T.B.	4	4	13	23	728	325	373	356	1826
11	Snake Bite		9	45	109	343	77	54	45	682
12	Rabies			5	21	34	19	10	16	105
13	Birth Asphyxia	1378								1378
14	Neonatal Sepsis	528								528
15	Maternal causes					225				225
16	Murder					284	64	31	23	402
17	Suicide					3136	441	241	239	4057
18	Cancer	8	10	28	97	1688	1080	1088	1015	5014
19	HIV/AIDS				1	73	19	9	4	106
20	Congenital Heart Disease/Anomalies	84	169	130	234					617
21	Stroke					1310	1921	3893	10426	17550
22	Heart Disease					2748	2155	2538	3729	11170
23	High BP					219	186	274	557	1236
24	Digestive Diseases	56	92	80	129	1072	516	583	776	3304
25	Genito-urinary Diseases	9	13	5	6	130	89	65	103	420
26	Diabetes	5	7	9	33	752	805	1013	1438	4062
27	Sickle Cell Anemia	2	10	42	98	323	39	22	27	563
28	Others	2235	758	452	623	5656	3364	5354	17791	36233
<b>Total</b>		<b>5449</b>	<b>2401</b>	<b>1800</b>	<b>2309</b>	<b>24636</b>	<b>12376</b>	<b>16594</b>	<b>38405</b>	<b>103970</b>

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.

- In 0 to 1 month neonates, Birth Asphyxia 1378, Sepsis 528 and LBW 485 are the leading reported causes of death.
- In 1 to 11 months infants, Pneumonia 488, Malnutrition 217, Fever/Malaria 178, Congenital Heart Disease 169 are the leading reported causes of death.
- In 1 to 4 years children, Accident 263, Fever/Malaria 167, Convulsion 144, CHD 130 and Pneumonia 125 are the leading reported causes of death.
- In 5 to 14 year age group, Accidents 432, CHD 234, Fever/Malaria 163 and Jaundice 143 are the leading reported causes of death.
- In 15-49 years age group, Accidents 4206, Suicides 3136, Heart disease 2748, Cancer 1688 and Stroke 1310 are the leading reported causes of death.
- In 50-59 years age group, Heart Diseases 2155, Stroke 1921, Cancer 1080, Accidents 827 and Diabetes 805 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 and Accidents are the leading reported causes.**

## 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	1	7	18	60	490	90	62	71	799
2	Convulsions	6	14	10	4	22	7	3	1	67
3	Fever/ Malaria	0	15	8	11	49	19	32	84	218
4	Neonatal Jaundice	1								1
5	Jaundice		4	6	5	93	11	12	14	145
6	Low Birth Weight	3								3
7	Malnutrition		9	6	0	1	0	1	0	17
8	Diarrhea	0	3	5	5	16	11	9	15	64
9	Pneumonia	0	28	20	2	14	2	7	6	79
10	Congenital Heart Disease/Anomalies	4	46	9	16					75
11	Stroke					90	152	345	585	1172
12	Heart Diseases/Heart attack					476	397	490	497	1860
13	High BP					26	39	61	82	208
14	Digestive Diseases	2	3	5	10	131	63	47	45	306
15	Genito-urinary Diseases	0	0	0	0	27	10	9	4	50
16	Diabetes	0	0	0	2	79	86	88	160	415
17	HIV/AIDS	0	0	0	1	41	7	0	4	53
18	T.B.	0	0	0	1	107	51	43	23	225
19	Snake Bite		0	1	4	6	1	1	0	13
20	Rabies			2	1	10	1	0	1	15
21	Birth Asphyxia	224								224
22	Neonatal Sepsis	48								48
23	Maternal causes					21				21
24	Murder					40	5	2	1	48
25	Suicide					464	33	31	27	555
26	Sickle Cell Anemia			2	2	25	1	0	2	32
27	Cancer	0	0	3	8	262	154	171	129	727
28	Others	410	49	15	54	491	292	465	1545	3322
<b>Total</b>		<b>699</b>	<b>178</b>	<b>110</b>	<b>186</b>	<b>2981</b>	<b>1432</b>	<b>1879</b>	<b>3296</b>	<b>10762</b>

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.

## Annexure – I

**Table No.1 District wise no. of Deaths reported as Jaundice (including Neonatal Jaundice):**

VHSNCs have reported 1788 deaths during 2019 for which the cause is recorded as jaundice.

S.N.	District	No.of Death reported	Death Reporting %
1	Balod	70	4%
2	Balodabazar	133	7%
3	Balrampur	55	3%
4	Bastar	77	4%
5	Bemetara	79	4%
6	Bijapur	19	1%
7	Bilaspur	134	7%
8	Dantewada	32	2%
9	Dhamtari	91	5%
10	Durg	64	4%
11	Gariyaband	50	3%
12	Janjgir	152	9%
13	Jashpur	76	4%
14	Kanker	59	3%
15	Kawardha	49	3%
16	Kondagaon	40	2%
17	Korba	27	2%
18	Koria	16	1%
19	Mahasamund	78	4%
20	Mungeli	42	2%
21	Narayanpur	10	1%
22	Raigarh	94	5%
23	Raipur	86	5%
24	Rajnandgaon	133	7%
25	Sukma	18	1%
26	Surajpur	45	3%
27	Surguja	59	3%
	<b>TOTAL</b>	<b>1788</b>	<b>100%</b>

**Table No.2 Age wise no. of Deaths reported as Jaundice (including Neonatal Jaundice):**

46% 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	185	10%
2	1-11 month	115	6%
3	1-4 year	98	5%
4	5-14 year	143	8%
5	15-49year	816	46%
6	50-59year	188	11%
7	60-69year	120	7%
8	More than 70year	123	7%
<b>Total</b>		<b>1788</b>	<b>100%</b>

**Table No.3 Gender wise no. of Deaths reported as Jaundice (including Neonatal Jaundice):**

61% of the deaths due to jaundice are of males.

Gender	No.of Death Reported	Percentage
Male	1090	61%
Female	698	39%
<b>Total</b>	<b>1788</b>	<b>100%</b>

**Table No.4 Month wise no. of Deaths reported as Jaundice (including Neonatal Jaundice):**

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

Month	No.of Death Reported	Percentage
January	117	7%
February	85	5%
March	123	7%
April	134	7%
May	140	8%
June	132	7%
July	139	8%
August	198	11%
September	233	13%
October	201	11%
November	171	10%
December	115	6%
<b>Total</b>	<b>1788</b>	<b>100%</b>

**Table No.5 District wise no. of Deaths reported as Malnutrition and Low Birth Weight:**

VHSNCs have reported 839 deaths during 2019 for which the cause is recorded as malnutrition.

S.N.	District	No.of Death reported	Death Reporting %
1	Balod	19	2%
2	Balodabazar	53	6%
3	Balrampur	23	3%
4	Bastar	48	6%
5	Bemetara	31	4%
6	Bijapur	10	1%
7	Bilaspur	51	6%
8	Dantewada	28	3%
9	Dhamtari	34	4%
10	Durg	28	3%
11	Gariyaband	40	5%
12	Janjgir	41	5%
13	Jashpur	32	4%
14	Kanker	18	2%
15	Kawardha	37	4%
16	Kondagaon	28	3%
17	Korba	14	2%
18	Koria	16	2%
19	Mahasamund	38	5%
20	Mungeli	28	3%
21	Narayanpur	12	1%
22	Raigarh	49	6%
23	Raipur	29	3%
24	Rajnandgaon	72	9%
25	Sukma	20	2%
26	Surajpur	22	3%
27	Surguja	18	2%
<b>TOTAL</b>		<b>839</b>	<b>100%</b>

**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	485	58%
2	1-11 month	217	26%
3	1-4 year	96	11%
4	5-14 year	10	1%
5	15-49year	21	3%
6	50-59year	2	0%
7	60-69year	4	0%
8	More than 70year	4	0%
<b>Total</b>		<b>839</b>	<b>100%</b>

**Table No.7 Gender wise no. of Deaths reported as Malnutrition and Low Birth Weight:**

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

Gender	No.of Death Reported	Percentage
Male	463	55%
Female	376	45%
<b>Total</b>	<b>839</b>	<b>100%</b>

**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 October.

Month	No.of Death Reported	Percentage
January	77	9%
February	63	8%
March	58	7%
April	63	8%
May	63	8%
June	65	8%
July	80	10%
August	77	9%
September	82	10%
October	95	11%
November	64	8%
December	52	6%
<b>Total</b>	<b>839</b>	<b>100%</b>

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

VHSNCs have reported 402 deaths during 2019 for which the cause is recorded as murder.

<b>S.N.</b>	<b>District</b>	<b>No.of Death reported</b>	<b>Death Reporting %</b>
1	Balod	10	2%
2	Balodabazar	24	6%
3	Balrampur	19	5%
4	Bastar	20	5%
5	Bemetara	8	2%
6	Bijapur	13	3%
7	Bilaspur	19	5%
8	Dantewada	14	3%
9	Dhamtari	16	4%
10	Durg	11	3%
11	Gariyaband	7	2%
12	Janjgir	12	3%
13	Jashpur	24	6%
14	Kanker	10	2%
15	Kawardha	16	4%
16	Kondagaon	9	2%
17	Korba	2	0%
18	Koria	8	2%
19	Mahasamund	9	2%
20	Mungeli	8	2%
21	Narayanpur	7	2%
22	Raigarh	26	6%
23	Raipur	14	3%
24	Rajnandgaon	24	6%
25	Sukma	25	6%
26	Surajpur	26	6%
27	Surguja	21	5%
<b>TOTAL</b>		<b>402</b>	<b>100%</b>

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

71% 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	284	71%
2	50-59year	64	16%
3	60-69year	31	8%
4	More than 70year	23	6%
<b>Total</b>		<b>402</b>	<b>100%</b>

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

63% of the deaths due to murder are of male persons.

Gender	No.of Death Reported	Percentage
Male	252	63%
Female	150	37%
<b>Total</b>	<b>402</b>	<b>100%</b>

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

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

Month	No.of Death Reported	Percentage
January	21	5%
February	14	3%
March	42	10%
April	36	9%
May	41	10%
June	44	11%
July	35	9%
August	35	9%
September	41	10%
October	39	10%
November	30	7%
December	24	6%
<b>Total</b>	<b>402</b>	<b>100%</b>

### **3.6 Deaths due to HIV-AIDS:**

VHSNCs have reported 106 deaths during 2019 for which the cause is recorded as HIV-AIDS

<b>S.N.</b>	<b>District</b>	<b>No.of Death reported</b>	<b>Death Reporting %</b>
1	Balod	4	4%
2	Balodabazar	4	4%
3	Balrampur	0	0%
4	Bastar	5	5%
5	Bemetara	5	5%
6	Bijapur	0	0%
7	Bilaspur	6	6%
8	Dantewada	2	2%
9	Dhamtari	2	2%
10	Durg	8	8%
11	Gariyaband	1	1%
12	Janjgir	3	3%
13	Jashpur	1	1%
14	Kanker	3	3%
15	Kawardha	12	11%
16	Kondagaon	0	0%
17	Korba	3	3%
18	Koria	0	0%
19	Mahasamund	9	8%
20	Mungeli	3	3%
21	Narayanpur	0	0%
22	Raigarh	8	8%
23	Raipur	15	14%
24	Rajnandgaon	10	9%
25	Sukma	0	0%
26	Surajpur	0	0%
27	Surguja	2	2%
<b>TOTAL</b>		<b>106</b>	<b>100%</b>

68% 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	1	0.9%
5	15-49year	73	68.9%
6	50-59year	19	17.9%
7	60-69year	9	8.5%
8	More than 70year	4	3.8%
<b>Total</b>		<b>106</b>	<b>100.0%</b>

**63% of the deaths are of male persons.**

Gender	No.of Death Reported	Percentage
Male	67	63%
Female	39	37%
<b>Total</b>	<b>106</b>	<b>100%</b>

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

Month	No.of Death Reported	Percentage
January	10	9%
February	4	4%
March	11	10%
April	7	7%
May	7	7%
June	9	8%
July	11	10%
August	11	10%
September	8	8%
October	12	11%
November	11	10%
December	5	5%
<b>Total</b>	<b>106</b>	<b>100%</b>

### **3.7 Deaths due to Genito-Urinary Disease:**

VHSNCs have reported 420 deaths during 2019 for which the cause is recorded as Genito-urinary disease

<b>S.N.</b>	<b>District</b>	<b>No.of Death reported</b>	<b>Death Reporting %</b>
1	Balod	19	5%
2	Balodabazar	25	6%
3	Balrampur	16	4%
4	Bastar	9	2%
5	Bemetara	5	1%
6	Bijapur	9	2%
7	Bilaspur	12	3%
8	Dantewada	4	1%
9	Dhamtari	11	3%
10	Durg	28	7%
11	Gariyaband	7	2%
12	Janjgir	42	10%
13	Jashpur	27	6%
14	Kanker	21	5%
15	Kawardha	22	5%
16	Kondagaon	8	2%
17	Korba	5	1%
18	Koria	2	0%
19	Mahasamund	35	8%
20	Mungeli	7	2%
21	Narayanpur	1	0%
22	Raigarh	21	5%
23	Raipur	11	3%
24	Rajnandgaon	42	10%
25	Sukma	2	0%
26	Surajpur	8	2%
27	Surguja	21	5%
<b>TOTAL</b>		<b>420</b>	<b>100%</b>

31% of these deaths are in 15-49 year age group

S.N.	Age Category	No.of Death reported	Percentage
1	<1 month	9	2.1%
2	1-11 month	13	3.1%
3	1-4 year	5	1.2%
4	5-14 year	6	1.4%
5	15-49year	130	31.0%
6	50-59year	89	21.2%
7	60-69year	65	15.5%
8	More than 70year	103	24.5%
<b>Total</b>		<b>420</b>	<b>100.0%</b>

69% of the deaths are of male persons.

Gender	No.of Death Reported	Percentage
Male	288	69%
Female	132	31%
<b>Total</b>	<b>420</b>	<b>100%</b>

The number of deaths per month is highest in July and March.

Month	No.of Death Reported	Percentage
January	5	1%
February	37	9%
March	88	21%
April	30	7%
May	14	3%
June	17	4%
July	114	27%
August	15	4%
September	33	8%
October	19	5%
November	32	8%
December	16	4%
<b>Total</b>	<b>420</b>	<b>100%</b>

## Annexure – II

**Table No.13 District wise no. of Deaths in 5 to 14 years age group in 2019**

The report covers 2309 deaths in the 5-14 year age group in rural areas of the state.

S.N.	District	No.of Death reported	%
1	Balod	38	2%
2	Balodabazar	162	7%
3	Balrampur	129	6%
4	Bastar	129	6%
5	Bemetara	93	4%
6	Bijapur	42	2%
7	Bilaspur	166	7%
8	Dantewada	41	2%
9	Dhamtari	63	3%
10	Durg	44	2%
11	Gariyaband	40	2%
12	Janjgir	190	8%
13	Jashpur	121	5%
14	Kanker	71	3%
15	Kawardha	118	5%
16	Kondagaon	53	2%
17	Korba	36	2%
18	Koria	27	1%
19	Mahasamund	107	5%
20	Mungeli	85	4%
21	Narayanpur	33	1%
22	Raigarh	111	5%
23	Raipur	67	3%
24	Rajnandgaon	156	7%
25	Sarguja	58	2%
26	Sukma	48	2%
27	Surajpur	82	4%
<b>TOTAL</b>		<b>2309</b>	<b>100%</b>

**Table No.14 Month wise no. of Deaths in 5 to 14 years age group in 2019**

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

<b>Month</b>	<b>No.of Death Reported</b>	<b>%</b>
January	115	5%
February	136	6%
March	184	8%
April	179	8%
May	225	10%
June	214	9%
July	220	10%
August	257	11%
September	229	10%
October	271	12%
November	168	7%
December	111	5%
<b>Total</b>	<b>2309</b>	<b>100%</b>

**Table No.15 Gender wise no. of Deaths in 5 to 14 years age group in 2019**

56% of the 5-14 year age group deaths recorded were of male children.

<b>Category</b>	<b>No.of Death Reported</b>	<b>%</b>
Male	1286	56%
Female	1023	44%
<b>Total</b>	<b>2309</b>	<b>100%</b>

**Table No.16 Cause wise no. of Deaths in 5 to 14 years age group in 2019**

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

<b>Reported Causes</b>	<b>No. of Neonatal Deaths Reported</b>	<b>% in 2019</b>	<b>% in 2018</b>	<b>% in 2017</b>	<b>% in 2016</b>	<b>% in 2015</b>	<b>% in 2014</b>	<b>% in 2013</b>
Accident	432	19%	21%	21%	18%	15%	12%	14%
Convulsion	82	4%	4%	4%	3%	2%	2%	1%
Fever/Malaria	163	7%	6%	10%	12%	14%	16%	17%
Jaundice	143	6%	7%	7%	7%	6%	7%	6%
Malnutrition	10	0%	1%	1%	1%	1%	1%	1%
Pneumonia	34	1%	2%	2%	2%	2%	2%	1%
Snake bite	109	5%	5%	5%	4%	5%	5%	4%
Diarrhea	71	3%	3%	4%	4%	3%	4%	3%
T.B.	23	1%	1%	1%	1%	1%	1%	1%
Rabies	21	1%	1%	1%	1%	1%	1%	2%
Congenital Heart Disease/Anomalies	234	10%	9%	8%	3%			
Digestive Disease	129	6%	8%	7%	5%			
Genito-urinary disease	6	0%	0%	0%	0%			
Diabetes	33	1%	1%	1%	1%			
Cancer	97	4%	4%	3%	3%			
Sickle Cell Anemia	98	4%	4%	4%	2%			
HIV/AIDS	1	0%	0%	0%	0%			
Other	623	27%	24%	23%	33%	49%	49%	50%
<b>Total</b>	<b>2309</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table No.17 District wise no. of Deaths in 15 to 49 years age group in 2019**

The report covers 24636 deaths in the 15-49 year age group in rural areas of the state.

S.N.	District	No.of Death reported	%
1	Balod	964	4%
2	Balodabazar	1641	7%
3	Balrampur	753	3%
4	Bastar	903	4%
5	Bemetara	763	3%
6	Bijapur	293	1%
7	Bilaspur	1673	7%
8	Dantewada	426	2%
9	Dhamtari	1035	4%
10	Durg	903	4%
11	Gariyaband	600	2%
12	Janjgir	1915	8%
13	Jashpur	890	4%
14	Kanker	1033	4%
15	Kawardha	813	3%
16	Kondagaon	609	2%
17	Korba	500	2%
18	Koria	299	1%
19	Mahasamund	1419	6%
20	Mungeli	619	3%
21	Narayanpur	165	1%
22	Raigarh	1430	6%
23	Raipur	1111	5%
24	Rajnandgaon	1989	8%
25	Sarguja	693	3%
26	Sukma	353	1%
27	Surajpur	845	3%
<b>TOTAL</b>		<b>24636</b>	<b>100%</b>

**Table No.18 Month wise no. of Deaths in 15 to 49 years age group in 2019**

The 15-49 year age group deaths recorded monthly are slightly higher in September.

<b>Month</b>	<b>No.of Death Reported</b>	<b>%</b>
January	1833	7%
February	1704	7%
March	2165	9%
April	1873	8%
May	2274	9%
June	2070	8%
July	2148	9%
August	2307	9%
September	2557	10%
October	2318	9%
November	1956	8%
December	1430	6%
<b>Total</b>	<b>24636</b>	<b>100%</b>

**Table No.19 Gender wise no. of Deaths in 15 to 49 years age group in 2019**

65% of the 15-49 year age group deaths recorded were of male persons.

<b>Gender</b>	<b>No.of Death Reported</b>	<b>%</b>
Male	16041	65%
Female	8595	35%
<b>Total</b>	<b>24636</b>	<b>100%</b>

**Table No.20 Cause wise no. of Deaths in 15 to 49 years age group in 2019**

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 Neonatal Deaths Reported	% in 2019	% in 2018	% in 2017	% in 2016	% in 2015	% in 2014	% in 2013
Accidental	4206	17%	17%	16%	13%	14%	13%	12%
Convulsion	229	1%	1%	1%	1%	1%	1%	1%
Fever/Malaria	411	2%	2%	2%	3%	5%	6%	6%
Jaundice	816	3%	3%	4%	4%	4%	4%	3%
Malnutrition	21	0%	0%	0%	0%	0%	0%	0%
Murder	284	1%	1%	1%	1%	1%	1%	1%
Pneumonia	41	0%	0%	0%	0%	0%	0%	0%
Snake bite	343	1%	1%	1%	2%	2%	2%	2%
Diarrhea	191	1%	1%	1%	1%	1%	1%	2%
T.B.	728	3%	3%	4%	4%	5%	4%	4%
Suicide	3136	13%	11%	11%	10%	13%	12%	11%
Rabies	34	0%	0%	0%	0%	0%	0%	0%
Maternal cause	225	1%	1%	1%	1%	2%	2%	2%
High BP	219	1%						
Stroke	1310	5%						
Heart Attack/Disease	2748	11%	17%	16%	8%			
Cancer	1688	7%	7%	7%	6%			
Digestive Disease	1072	4%	7%	6%	4%			
Diabetes	752	3%	3%	3%	2%			
Sickle Cell Anemia	323	1%	1%	1%	1%			
HIV/AIDS	73	0%	0%	0%	0%			
Genito-urinary disease	130	1%	1%	0%	0%			
Other	5656	23%	21%	24%	37%	52%	54%	56%
<b>Total</b>	<b>24636</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table No.21 District wise no. of Deaths in 50 to 59 years age group in 2019**

The report covers 12376 deaths in the 50-59 year age group in rural areas of the state.

S.N.	District	No.of Death reported	%
1	Balod	597	5%
2	Balodabazar	878	7%
3	Balrampur	312	3%
4	Bastar	391	3%
5	Bemetara	413	3%
6	Bijapur	107	1%
7	Bilaspur	698	6%
8	Dantewada	124	1%
9	Dhamtari	626	5%
10	Durg	538	4%
11	Gariyaband	317	3%
12	Janjgir	979	8%
13	Jashpur	441	4%
14	Kanker	499	4%
15	Kawardha	389	3%
16	Kondagaon	243	2%
17	Korba	217	2%
18	Koria	85	1%
19	Mahasamund	678	5%
20	Mungeli	249	2%
21	Narayanpur	91	1%
22	Raigarh	747	6%
23	Raipur	559	5%
24	Rajnandgaon	1279	10%
25	Sarguja	361	3%
26	Sukma	125	1%
27	Surajpur	434	4%
<b>TOTAL</b>		<b>12376</b>	<b>100%</b>

**Table No.22 Month wise no. of Deaths in 50 to 59 years age group in 2019**

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

<b>Month</b>	<b>No.of Death Reported</b>	<b>%</b>
January	1009	8%
February	926	7%
March	1020	8%
April	942	8%
May	1044	8%
June	974	8%
July	1018	8%
August	1154	9%
September	1193	10%
October	1196	10%
November	1126	9%
December	775	6%
<b>Total</b>	<b>12376</b>	<b>100%</b>

**Table No.23 Gender wise no. of Deaths in 50 to 59 years age group in 2019**

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

<b>Gender</b>	<b>No.of Death Reported</b>	<b>%</b>
Male	7762	63%
Female	4614	37%
<b>Total</b>	<b>12376</b>	<b>100%</b>

**Table No.24 Cause wise no. of Deaths in 50 to 59 years age group in 2019**

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.

<b>Reported Causes</b>	<b>No. of Neonatal Deaths Reported</b>	<b>% in 2019</b>	<b>% in 2018</b>	<b>% in 2017</b>	<b>% in 2016</b>	<b>% in 2015</b>	<b>% in 2014</b>	<b>% in 2013</b>
Accidental	827	7%	7%	6%	6%	6%	5%	5%
Convulsion	53	0%	0%	0%	0%	0%	0%	0%
Fever/Malaria	125	1%	1%	1%	2%	4%	5%	4%
Jaundice	188	2%	1%	2%	2%	2%	2%	1%
Malnutrition	2	0%	0%	0%	0%	0%	0%	0%
Murder	64	1%	1%	0%	1%	1%	1%	0%
Pneumonia	13	0%	0%	0%	0%	0%	0%	0%
Snake bite	77	1%	1%	1%	1%	1%	1%	1%
Diarrhea	68	1%	1%	1%	1%	1%	1%	1%
T.B.	325	3%	3%	4%	4%	5%	4%	5%
Suicide	441	4%	3%	3%	3%	4%	3%	4%
Rabies	19	0%	0%	0%	0%	0%	0%	0%
High BP	186	2%						
Stroke	1921	16%						
Heart Attack/Disease	2155	17%	33%	31%	12%			
Cancer	1080	9%	9%	9%	8%			
Diabetes	805	7%	5%	5%	6%			
Digestive Disease	516	4%	8%	6%	4%			
Sickle Cell Anemia	39	0%	0%	0%	0%			
Genito-urinary disease	89	1%	1%	0%	0%			
HIV/AIDS	19	0%	0%	0%	0%			
Other	3364	27%	26%	29%	50%	76%	78%	79%
<b>Total</b>	<b>12376</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table No.25 District wise no. of Deaths in 60 to 69 years age group in 2019**

The report covers 16594 deaths in the 60-69 year age group in rural areas of the state.

<b>S.N.</b>	<b>District</b>	<b>No.of Death reported</b>	<b>%</b>
1	Balod	824	5%
2	Balodabazar	1168	7%
3	Balrampur	409	2%
4	Bastar	443	3%
5	Bemetara	483	3%
6	Bijapur	75	0%
7	Bilaspur	1029	6%
8	Dantewada	130	1%
9	Dhamtari	884	5%
10	Durg	813	5%
11	Gariyaband	322	2%
12	Janjgir	1583	10%
13	Jashpur	613	4%
14	Kanker	568	3%
15	Kawardha	561	3%
16	Kondagaon	221	1%
17	Korba	314	2%
18	Koria	94	1%
19	Mahasamund	912	5%
20	Mungeli	472	3%
21	Narayanpur	89	1%
22	Raigarh	1166	7%
23	Raipur	716	4%
24	Rajnandgaon	1531	9%
25	Sarguja	478	3%
26	Sukma	84	1%
27	Surajpur	610	4%
	<b>TOTAL</b>	<b>16594</b>	<b>100%</b>

**Table No.26 Month wise no. of Deaths in 60 to 69 years age group in 2019**

The 60-69 year age group deaths recorded monthly are slightly higher during August to September.

<b>Month</b>	<b>No.of Death Reported</b>	<b>%</b>
January	1537	9%
February	1227	7%
March	1320	8%
April	1163	7%
May	1467	9%
June	1248	8%
July	1289	8%
August	1603	10%
September	1658	10%
October	1528	9%
November	1475	9%
December	1079	7%
<b>Total</b>	<b>16594</b>	<b>100%</b>

**Table No.27 Gender wise no. of Deaths in 60 to 69 years age group in 2019**

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

<b>Gender</b>	<b>No.of Death Reported</b>	<b>%</b>
Male	9400	57%
Female	7194	43%
<b>Total</b>	<b>16594</b>	<b>100%</b>

**Table No.28 Cause wise no. of Deaths in 60 to 69 years age group in 2019**

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.

<b>Reported Causes</b>	<b>No. of Neonatal Deaths Reported</b>	<b>% in 2019</b>	<b>% in 2018</b>	<b>% in 2017</b>	<b>% in 2016</b>	<b>% in 2015</b>	<b>% in 2014</b>	<b>% in 2013</b>
Accidental	619	4%	4%	4%	4%	3%	2%	2%
Convulsion	43	0%	0%	0%	0%	0%	0%	0%
Fever/Malaria	154	1%	1%	1%	3%	4%	5%	4%
Jaundice	120	1%	1%	1%	1%	1%	1%	1%
Malnutrition	4	0%	0%	0%	0%	0%	0%	0%
Murder	31	0%	0%	0%	0%	0%	0%	0%
Pneumonia	11	0%	0%	0%	0%	0%	0%	0%
Snake bite	54	0%	0%	0%	0%	0%	0%	0%
Diarrhea	95	1%	1%	1%	1%	1%	1%	1%
T.B.	373	2%	2%	3%	3%	3%	3%	2%
Suicide	241	1%	1%	1%	1%	2%	1%	1%
Rabies	10	0%	0%	0%	0%	0%	0%	0%
High BP	274	2%						
Stroke	3893	23%						
Heart Attack/Disease	2538	15%	39%	35%	11%			
Cancer	1088	7%	6%	6%	6%			
Diabetes	1013	6%	5%	6%	5%			
Digestive Disease	583	4%	6%	5%	4%			
Sickle Cell Anemia	22	0%	0%	0%	0%			
HIV/AIDS	9	0%	0%	0%	0%			
Genito-urinary disease	65	0%	0%	0%	0%			
Other	5354	32%	32%	36%	61%	84%	86%	89%
<b>Total</b>	<b>16594</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table No.29 District wise no. of Deaths in above 70 years age group in 2019**

The report covers 38405 deaths in the more than 70 year age group in rural areas of the state.

S.N.	District	No.of Death reported	%
1	Balod	1662	4%
2	Balodabazar	2882	8%
3	Balrampur	1036	3%
4	Bastar	1019	3%
5	Bemetara	1222	3%
6	Bijapur	151	0%
7	Bilaspur	2565	7%
8	Dantewada	123	0%
9	Dhamtari	1764	5%
10	Durg	2010	5%
11	Gariyaband	632	2%
12	Janjgir	3762	10%
13	Jashpur	1114	3%
14	Kanker	1073	3%
15	Kawardha	1796	5%
16	Kondagaon	332	1%
17	Korba	568	1%
18	Koria	289	1%
19	Mahasamund	1835	5%
20	Mungeli	1299	3%
21	Narayanpur	108	0%
22	Raigarh	2966	8%
23	Raipur	1675	4%
24	Rajnandgaon	3659	10%
25	Sarguja	1114	3%
26	Sukma	123	0%
27	Surajpur	1626	4%
<b>TOTAL</b>		<b>38405</b>	<b>100%</b>

**Table No.30 Month wise no. of Deaths in above 70 years age group in 2019**

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

<b>Month</b>	<b>No.of Death reported</b>	<b>%</b>
January	3898	10%
February	2869	7%
March	2850	7%
April	2377	6%
May	3253	8%
June	2854	7%
July	2763	7%
August	3549	9%
September	4048	11%
October	3402	9%
November	3706	10%
December	2836	7%
<b>Total</b>	<b>38405</b>	<b>100%</b>

**Table No.31 Gender wise no. of Deaths in above 70 years age group in 2019**

55% of the More than 70 year age group deaths recorded were of male persons.

<b>Gender</b>	<b>No.of Death reported</b>	<b>%</b>
Male	21146	55%
Female	17259	45%
<b>Total</b>	<b>38405</b>	<b>100%</b>

**Table No.32 Cause wise no. of Deaths in above 70 years age group in 2019**

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.

<b>Reported Causes</b>	<b>No. of Neonatal Deaths Reported</b>	<b>% in 2019</b>	<b>% in 2018</b>	<b>% in 2017</b>	<b>% in 2016</b>	<b>% in 2015</b>	<b>% in 2014</b>	<b>% in 2013</b>
Accidental	951	2%	3%	2%	2%	1%	1%	1%
Convulsion	77	0%	0%	0%	0%	0%	0%	0%
Fever/Malaria	496	1%	1%	1%	3%	3%	3%	2%
Jaundice	123	0%	0%	1%	0%	0%	0%	0%
Malnutrition	4	0%	0%	0%	0%	0%	0%	0%
Murder	23	0%	0%	0%	0%	0%	0%	0%
Pneumonia	18	0%	0%	0%	0%	0%	0%	0%
Snake bite	45	0%	0%	0%	0%	0%	0%	0%
Diarrhea	191	0%	1%	1%	1%	1%	1%	0%
T.B.	356	1%	1%	1%	1%	1%	1%	1%
Suicide	239	1%	1%	1%	0%	1%	1%	0%
Rabies	16	0%	0%	0%	0%	0%	0%	0%
High BP	557	1%						
Stroke	10426	27%						
Heart Attack/Disease	3729	10%	37%	32%	6%			
Diabetes	1438	4%	4%	3%	3%			
Digestive Disease	776	2%	3%	3%	2%			
Cancer	1015	3%	3%	3%	2%			
Genito-urinary disease	103	0%	0%	0%	0%			
Sickle Cell Anemia	27	0%	0%	0%	0%			
HIV/AIDS	4	0%	0%	0%	0%			
Other	17791	46%	46%	52%	78%	92%	93%	95%
<b>Total</b>	<b>38405</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>