

Sikkim and Nagaland States

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SIKKIM STATE

Figure 5(E) gives the Map of India highlighting Sikkim State and Figure 5(F) gives the Map of Sikkim State highlighting the Districts where the MAAR was above 36.2 /100,000.

Three of the four districts in Sikkim, viz., East, North and West met the criteria for tabulating the incidence rates, though the numbers of cancers were small, especially in the North and West districts. East and North Sikkim showed a similar pattern of cancer. Among males, cancer of the stomach was followed by cancer of liver and oesophagus, in these two districts. In West Sikkim cancer of the oesophagus was the leading site followed by cancer of the nasopharynx and stomach. In females in East Sikkim, cancer of the cervix uteri was followed by cancer of the oesophagus and breast. Female cancers in the other two districts were in too small numbers to decipher the leading sites of cancer.

NAGALAND STATE

Kohima was the only district in Nagaland State that had MAAR in both males and females higher than 36.2/100,000. This district has data only for the year 2001 and mainly from the Babina Diagnostic Centre in Imphal.

Cancer of the stomach was the leading site of cancer in both males and females constituting 38.7% and 17.5% of all cancers in males and females respectively. Cancer of the nasopharynx was the second leading site of cancer in males and the third leading site in females. Cancer of the breast was the second leading site in women and thyroid the fourth leading site.



FIGURE 5(E): Map of India highlighting Sikkim State

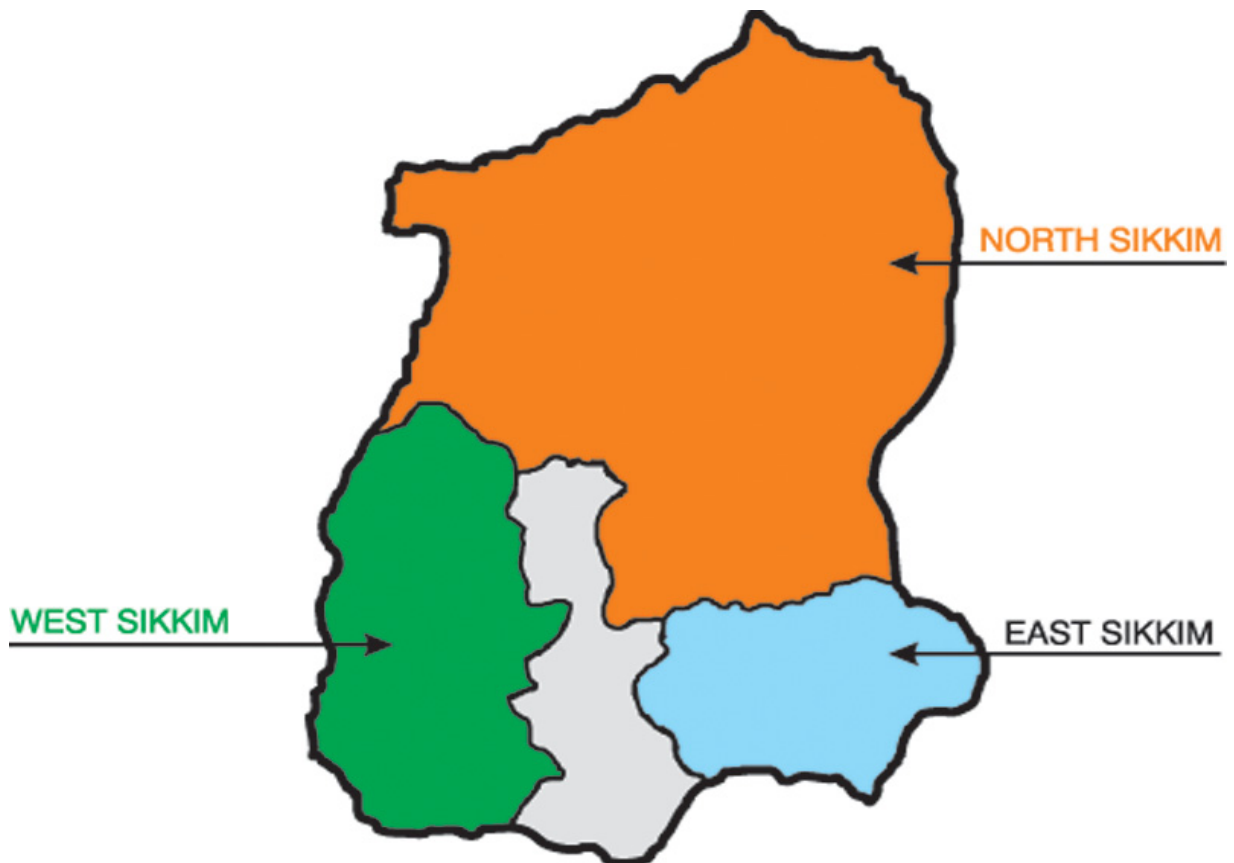


FIGURE 5(F): Map of Sikkim State highlighting the districts with MAAR above 36.2 per 100,000

5.14. EAST SIKKIM DISTRICT, Sikkim State

(Code 1104)

**TABLE 5.14(a) : Profile of East Sikkim District
(2001 Census)**

Area (in sq. kms.)	954.0
Decadal Growth Rate (1991-2001)	37.17%
Literacy Rate	
Males	82.05%
Females	67.74%
Sex Ratio (females per 1000 males)	844
Density (persons per sq. km)	257

Source: NCRP, Bangalore

**TABLE 5.14(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)**

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Sir TN Memorial Hospital, Gangtok (129)	59	77.6	81	86.2	140	82.4
CCWH, Kolkata (105)	10	13.2	11	11.7	21	12.4
HBCR - Mumbai (1008)	7	9.2	0	0.0	7	4.1
All Other Centres	0	0.0	2	2.1	2	1.2
Total Cancers	76	100.0	94	100.0	170	100.0

Source: NCRP, Bangalore

TABLE 5.14(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	1,32,137	1,11,558	1,35,763	1,14,478	2,67,900	2,26,036
Total Cancers (All sites)	29	47	51	43	80	90
Min. Crude IR	22.0	42.1	37.6	37.6	29.9	39.8
Min. Age Adjusted IR	36.4	82.2	81.2	83.5	59.1	82.8
Min. Truncated IR	64.3	168.0	94.3	154.2	79.3	161.0

Source: NCRP, Bangalore

Min. = Minimum IR = Incidence Rate / 100,000

5.15. NORTH SIKKIM DISTRICT, Sikkim State

(Code 1101)

**TABLE 5.15(a) : Profile of North Sikkim District
(2001 Census)**

Area (in sq. kms.)	4,226.0
Decadal Growth Rate (1991-2001)	31.32%
Literacy Rate	
Males	77.32%
Females	57.65%
Sex Ratio (females per 1000 males)	752
Density (persons per sq. km)	10

Source: NCRP, Bangalore

TABLE 5.15(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Sir TN Memorial Hospital, Gangtok (129)	8	88.9	7	46.7	15	62.5
PBCR - Delhi (1011)	0	0.0	7	46.7	7	29.2
CCWH, Kolkata (105)	1	11.1	1	6.7	2	8.3
Total Cancers	9	100.0	15	100.0	24	100.0

Source: NCRP, Bangalore

TABLE 5.15(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	23,486	17,586	24,114	17,930	47,600	35,516
Total Cancers (All sites)	7	2	9	6	16	8
Min. Crude IR	29.8	11.4	37.3	33.5	33.6	22.5
Min. Age Adjusted IR	57.3	26.3	75.5	65.1	66.5	45.9
Min. Truncated IR	144.8	84.8	92.5	210.2	118.3	148.0

Source: NCRP, Bangalore

Min. = Minimum IR = Incidence Rate / 100,000

5.16. WEST SIKKIM DISTRICT, Sikkim State

(Code 1102)

**TABLE 5.16(a) : Profile of West Sikkim District
(2001 Census)**

Area (in sq. kms.)	1,166.0
Decadal Growth Rate (1991-2001)	25.48%
Literacy Rate	
Males	67.21%
Females	50.75%
Sex Ratio (females per 1000 males)	930
Density (persons per sq. km)	106

Source: NCRP, Bangalore

TABLE 5.16(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Sir TN Memorial Hospital, Gangtok (129)	21	91.3	15	88.2	36	90.0
CCWH, Kolkata (105)	2	8.7	2	11.8	4	10.0
Total Cancers	23	100.0	17	100.0	40	100.0

Source: NCRP, Bangalore

TABLE 5.16(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	63,040	58,770	64,274	59,995	1,27,314	1,18,765
Total Cancers (All sites)	15	8	8	9	23	17
Min. Crude IR	23.8	13.6	12.5	15.0	18.1	14.3
Min. Age Adjusted IR	39.7	18.0	14.5	32.2	27.0	25.2
Min. Truncated IR	70.8	36.3	37.7	61.5	54.1	49.0

Source: NCRP, Bangalore

Min. = Minimum IR = Incidence Rate / 100,000

5.17. KOHIMA DISTRICT, Nagaland State

(Code 1307)

TABLE 5.17(a) : Profile of Kohima District (2001 Census)

Area (in sq. kms.)	Source: NCRP, Bangalore	3,114.0
Decadal Growth Rate (1991-2001)		49.96%
Literacy Rate		
Males		81.44%
Females		66.64%
Sex Ratio (females per 1000 males)		944
Density (persons per sq. km)		101

TABLE 5.17(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Babina Diagnostic Centre, Imphal (112)	94	92.2	0	0.0	94	77.0
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	14	70.0	14	11.5
HBCR - Mumbai (1008)	6	5.9	5	25.0	11	9.0
HBCR - Dibrugarh (1003)	2	2.0	0	0.0	2	1.6
PBCR - Delhi (1011)	0	0.0	1	5.0	1	0.8
Total Cancers	102	100.0	20	100.0	122	100.0

TABLE 5.17(c) : Salient features of Cancer Incidence (2001)

Year	Males	Females
Estimated Population	1,61,840	1,52,895
Total Cancers (All sites)	62	40
Min. Crude IR	38.3	26.2
Min. Age Adjusted IR	78.4	48.6
Min. Truncated IR	143.4	119.5

Min. = Minimum IR = Incidence Rate / 100,000