

Mizoram State

Overview	28
Aizawl District	30
Serchhip District	32
Lunglei District	33
Kolasib District	34
Champhai District	35
Mamit District	36
Saiha District	37

STATES IN THE NORTH-EAST AND EASTERN REGION

There were 23 districts in this region that had MAAR above 36.2/100,000.

MIZORAM STATE

Figure 5(A) gives the Map of India highlighting Mizoram State and Figure 5(B) gives the Map of Mizoram State highlighting the Districts where the MAAR was above 36.2 /100,000. These were: Aizawl, Serchhip, Lunglei, Kolasib, Champhai, Mamit and Saiha.

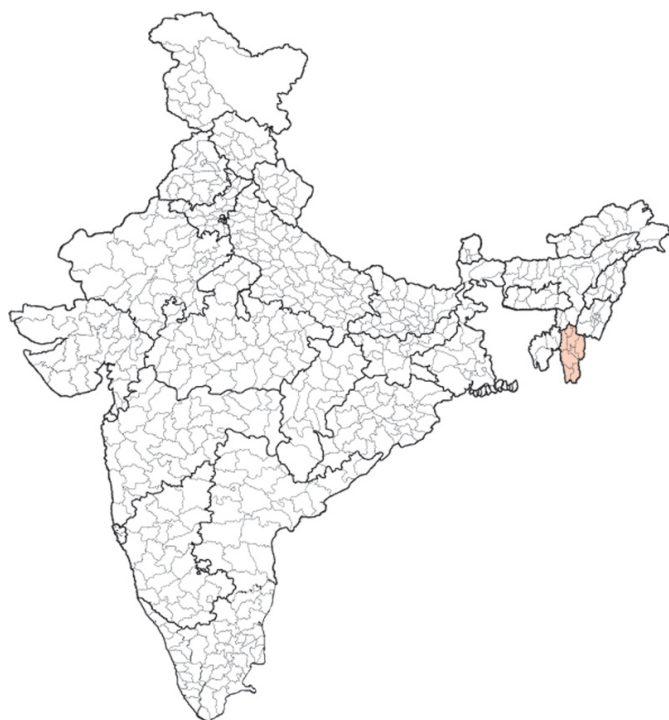


FIGURE 5(A): Map of India highlighting Mizoram State

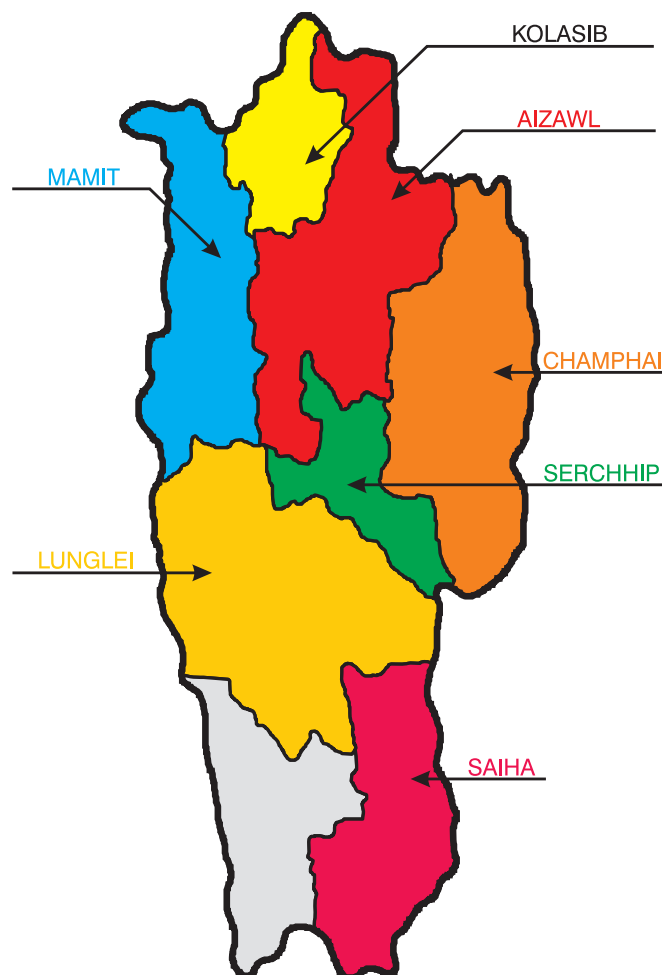


FIGURE 5(B): Map of Mizoram State highlighting the districts with MAAR above 36.2 per 100,000

Aizawl District

Stomach was the leading site of cancer followed by oesophagus in males. The two sites constituted one-third of all cancers in males. These two sites were followed by cancer of the lung and hypopharynx - two tobacco related cancers (TRC). Cancer of the stomach was also the third leading site of cancer in females only preceded by cancers of the cervix uteri and breast. Cancer of the stomach constituted 11% of all cancers in females. Cancer of the lung in females followed stomach as the leading site of cancer [Fig. 5.1(c)]. Civil Hospital Aizawl is the only cancer treatment facility in the region and accounted for 75-80% of all cancers. Some patients use the Dr B.B. Borooah Cancer Hospital at Guwahati and others the Tata Memorial Centre at Mumbai. [Table 5.1(b)]

Overall Aizawl district has had considerably higher incidence rates in both males and females than the age adjusted incidence rates (not minimum incidence rates) of the PBCRs anywhere in India. This is again reflected in the individual sites of cancer. Besides Aizawl males reported the highest incidence rates of cancer of the tongue and hypopharynx in the world.

Other Districts - Mizoram State

Males

As in Aizawl district, cancer of the stomach was the leading site of cancer among males in the other six districts (Serchhip, Lunglei, Kolasib, Champhai, Mamit and Saiha) where the MAAR for all sites of cancer exceeded 36.2/100,000. This site of cancer constituted 25-41% of all cancers in males in these districts. The TRCs, cancer of the nasopharynx (which is now categorised as a TRC) and non-Hodgkin's lymphoma were the other leading sites of cancer in males that were seen more or less uniformly across these six districts.

Females

Cancer of the stomach was an important leading site of cancer in these districts in women as well. In fact, it was the leading site of cancer among women in Serchhip and Lunglei. It was the second leading site in Kolasib, Champhai and Saiha. Cancer of the cervix was the leading site in Champhai and cancer of the breast in Mamit. In Kolasib, the order of the first four leading sites of cancer, was: lung, stomach, cervix and breast. Cancer of the nasopharynx was among the ten leading sites of cancer in all these districts except Saiha.

5.1. AIZAWL DISTRICT, Mizoram State

(Code 1503)

TABLE 5.1(a) : Profile of Aizawl District (2001 Census)

Area (in sq. kms.)	3,576.3
Decadal Growth Rate (1991-2001)	39.24%
Literacy Rate	
Males	97.20%
Females	96.06%
Sex Ratio (females per 1000 males)	954
Density (persons per sq. km)	95

Source: NCRP, Bangalore



FIGURE 5.1(a) : Map of India highlighting Mizoram State

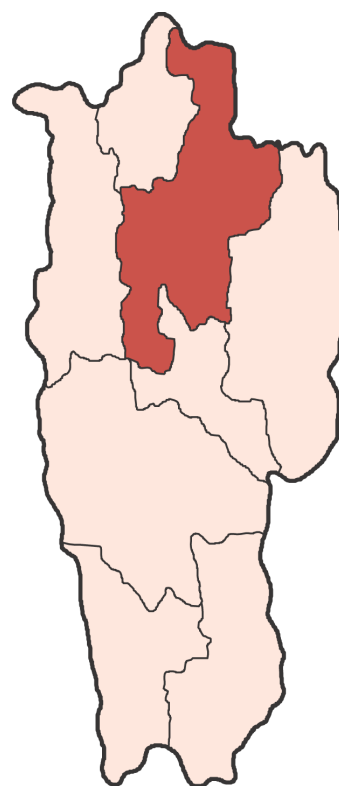


FIGURE 5.1(b) : Map of Mizoram State highlighting Aizawl District

TABLE 5.1(b) : Centrewise Distribution of Cancers

Number (#) and Relative Proportion (%)

Year	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Centre (with code in parentheses)						
Civil Hospital, Aizawl (130)	286	92.0	321	76.6	607	83.2
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	73	17.4	73	10.0
HBCR - Mumbai (1008)	21	6.8	25	6.0	46	6.3
All Other Centres	4	1.3	0	0.0	4	0.5
Total Cancers	311	100.0	419	100.0	730	100.0

Source: NCRP, Bangalore

TABLE 5.1(c) : Salient features of Cancer Incidence

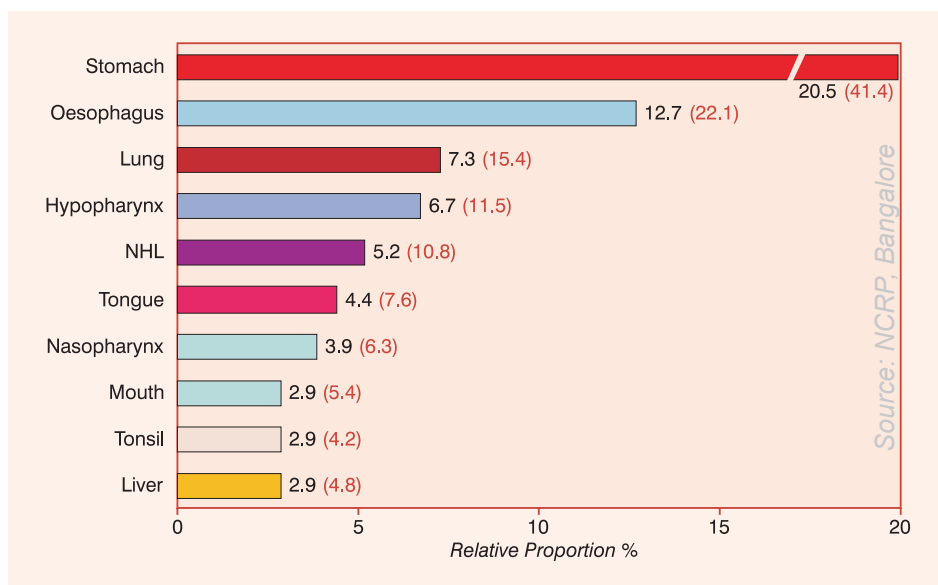
Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	1,71,572	1,63,764	1,76,635	1,68,901	3,48,207	3,32,665
Total Cancers (All sites)	164	147	222	197	386	344
Min. Crude IR	95.6	89.8	125.7	116.6	110.9	103.4
Min. Age Adjusted IR	159.4	148.4	217.9	209.2	189.1	179.3
Min. Truncated IR	289.2	290.6	390.9	406.6	340.9	349.6

Source: NCRP, Bangalore

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

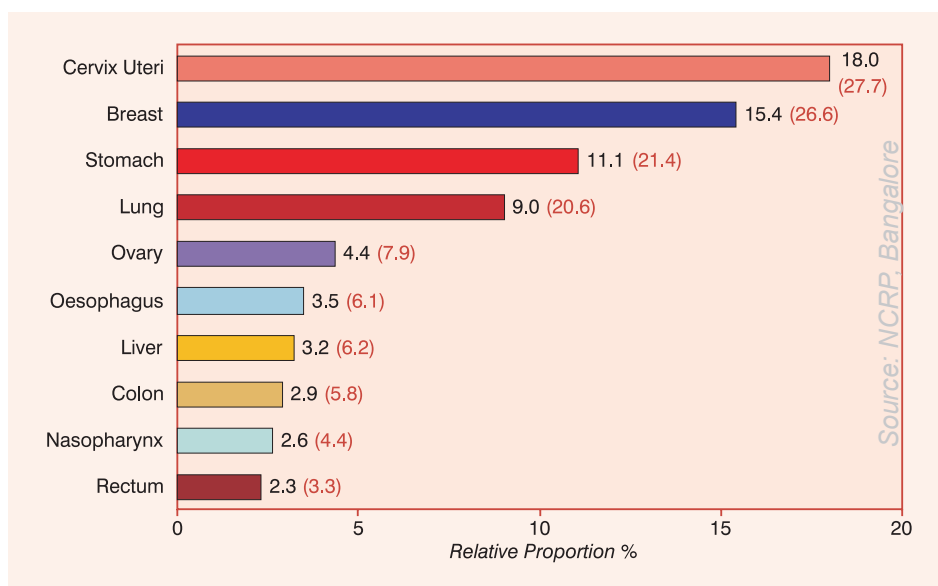
FIGURE 5.1(c) : Ten Leading Sites of Cancer (2001 - 2002)
 (Minimum Age Adjusted Incidence Rates given in parentheses)

Males



Source: NCRP, Bangalore

Females



Source: NCRP, Bangalore

5.2. SERCHHIP DISTRICT, Mizoram State

(Code 1505)

TABLE 5.2(a) : Profile of Serchhip District (2001 Census)

Area (in sq. kms.)	Source: NCRP, Bangalore	1,421.6
Decadal Growth Rate (1991-2001)		18.45%
Literacy Rate		
Males		97.24%
Females		95.02%
Sex Ratio (females per 1000 males)		953
Density (persons per sq. km)		39

TABLE 5.2(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Civil Hospital, Aizawl (130)	40	100.0	42	87.5	82	93.2
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	6	12.5	6	6.8
Total Cancers	40	100.0	48	100.0	88	100.0

TABLE 5.2(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	28,260	26,949	28,884	27,582	57,144	54,531
Total Cancers (All sites)	23	17	24	24	47	41
Min. Crude IR	81.4	63.1	83.1	87.0	82.2	75.2
Min. Age Adjusted IR	155.1	113.4	153.9	155.5	154.5	134.7
Min. Truncated IR	285.3	243.6	217.6	261.5	251.1	252.6

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

5.3. LUNGLEI DISTRICT, Mizoram State

(Code 1506)

TABLE 5.3(a) : Profile of Lunglei District (2001 Census)

Area (in sq. kms.)	Source: NCRP, Bangalore	4,538.0
Decadal Growth Rate (1991-2001)		23.10%
Literacy Rate		
Males		87.36%
Females		80.74%
Sex Ratio (females per 1000 males)		922
Density (persons per sq. km)		30

TABLE 5.3(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Civil Hospital, Aizawl (130)	47	94.0	78	83.0	125	86.8
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	14	14.9	14	9.7
HBCR - Mumbai (1008)	3	6.0	2	2.1	5	3.5
Total Cancers	50	100.0	94	100.0	144	100.0

TABLE 5.3(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	71,168	65,566	72,459	66,828	1,43,627	1,32,394
Total Cancers (All sites)	29	21	52	42	81	63
Min. Crude IR	40.8	32.0	71.8	62.9	56.4	47.6
Min. Age Adjusted IR	66.3	52.3	126.4	107.8	96.6	80.3
Min. Truncated IR	125.1	138.7	240.6	155.1	183.3	147.0

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

5.4. KOLASIB DISTRICT, Mizoram State

(Code 1502)

TABLE 5.4(a) : Profile of Kolasib District (2001 Census)

Area (in sq. kms.)	1,382.5
Decadal Growth Rate (1991-2001)	36.01%
Literacy Rate	
Males	91.50%
Females	89.37%
Sex Ratio (females per 1000 males)	913
Density (persons per sq. km)	44

Source: NCRP, Bangalore

TABLE 5.4(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Civil Hospital, Aizawl (130)	41	100.0	42	97.7	83	98.8
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	1	2.3	1	1.2
Total Cancers	41	100.0	43	100.0	84	100.0

Source: NCRP, Bangalore

TABLE 5.4(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	31,666	28,948	32,358	29,616	64,024	58,564
Total Cancers (All sites)	22	19	23	20	45	39
Min. Crude IR	69.5	65.6	71.1	67.5	70.3	66.6
Min. Age Adjusted IR	125.5	116.8	123.7	115.4	124.6	116.1
Min. Truncated IR	178.9	262.7	291.1	192.0	235.6	227.0

Source: NCRP, Bangalore

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

5.5. CHAMPHAI DISTRICT, Mizoram State

(Code 1504)

TABLE 5.5(a) : Profile of Champhai District (2001 Census)

Area (in sq. kms.)	Source: NCRP, Bangalore	3,185.8
Decadal Growth Rate (1991-2001)		29.77%
Literacy Rate		
Males		94.00%
Females		89.64%
Sex Ratio (females per 1000 males)		955
Density (persons per sq. km)		32

TABLE 5.5(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Civil Hospital, Aizawl (130)	46	100.0	56	90.3	102	94.4
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	5	8.1	5	4.6
HBCR - Mumbai (1008)	0	0.0	1	1.6	1	0.9
Total Cancers	46	100.0	62	100.0	108	100.0

TABLE 5.5(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	51,531	49,266	52,657	50,432	1,04,188	99,698
Total Cancers (All sites)	29	17	35	27	64	44
Min. Crude IR	56.3	34.5	66.5	53.5	61.4	44.1
Min. Age Adjusted IR	108.7	61.4	114.2	92.7	111.5	77.2
Min. Truncated IR	162.4	120.5	278.4	203.2	221.0	162.3

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

5.6. MAMIT DISTRICT, Mizoram State

(Code 1501)

TABLE 5.6(a) : Profile of Mamit District (2001 Census)

Area (in sq. kms.)	Source: NCRP, Bangalore	3,025.8
Decadal Growth Rate (1991-2001)		20.07%
Literacy Rate		
Males		84.04%
Females		75.66%
Sex Ratio (females per 1000 males)		902
Density (persons per sq. km)		21

TABLE 5.6(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Civil Hospital, Aizawl (130)	32	100.0	25	75.8	57	87.7
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	8	24.2	8	12.3
Total Cancers	32	100.0	33	100.0	65	100.0

TABLE 5.6(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	32,549	29,389	33,256	30,082	65,805	59,471
Total Cancers (All sites)	21	11	18	15	39	26
Min. Crude IR	64.5	37.4	54.1	49.9	59.3	43.7
Min. Age Adjusted IR	107.6	66.2	100.5	78.8	104.0	72.6
Min. Truncated IR	186.2	129.2	146.1	218.1	165.9	174.2

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

5.7. SAIHA DISTRICT, Mizoram State

(Code 1508)

TABLE 5.7(a) : Profile of Saiha District (2001 Census)

Area (in sq. kms.)	Source: NCRP, Bangalore	1,399.9
Decadal Growth Rate (1991-2001)		33.16%
Literacy Rate		
Males		86.28%
Females		78.39%
Sex Ratio (females per 1000 males)		954
Density (persons per sq. km)		43

TABLE 5.7(b) : Centrewise Distribution of Cancers
Number (#) and Relative Proportion (%)

Year Centre (with code in parentheses)	2001		2002		2001 - 2002	
	#	%	#	%	#	%
Civil Hospital, Aizawl (130)	14	93.3	15	93.8	29	93.5
Dr. BB Cancer Institute, Guwahati (49)	0	0.0	1	6.3	1	3.2
HBCR - Mumbai (1008)	1	6.7	0	0.0	1	3.2
Total Cancers	15	100.0	16	100.0	31	100.0

TABLE 5.7(c) : Salient features of Cancer Incidence

Year	2001		2002		2001 - 2002	
	Males	Females	Males	Females	Males	Females
Estimated Population	31,114	29,711	31,880	30,478	62,994	60,189
Total Cancers (All sites)	11	4	9	7	20	11
Min. Crude IR	35.4	13.5	28.2	23.0	31.7	18.3
Min. Age Adjusted IR	64.9	17.0	62.9	40.7	63.9	29.0
Min. Truncated IR	162.0	11.5	94.4	89.8	127.8	51.1

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