

6. HEALTH INFRASTRUCTURE

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6. Health Infrastructure

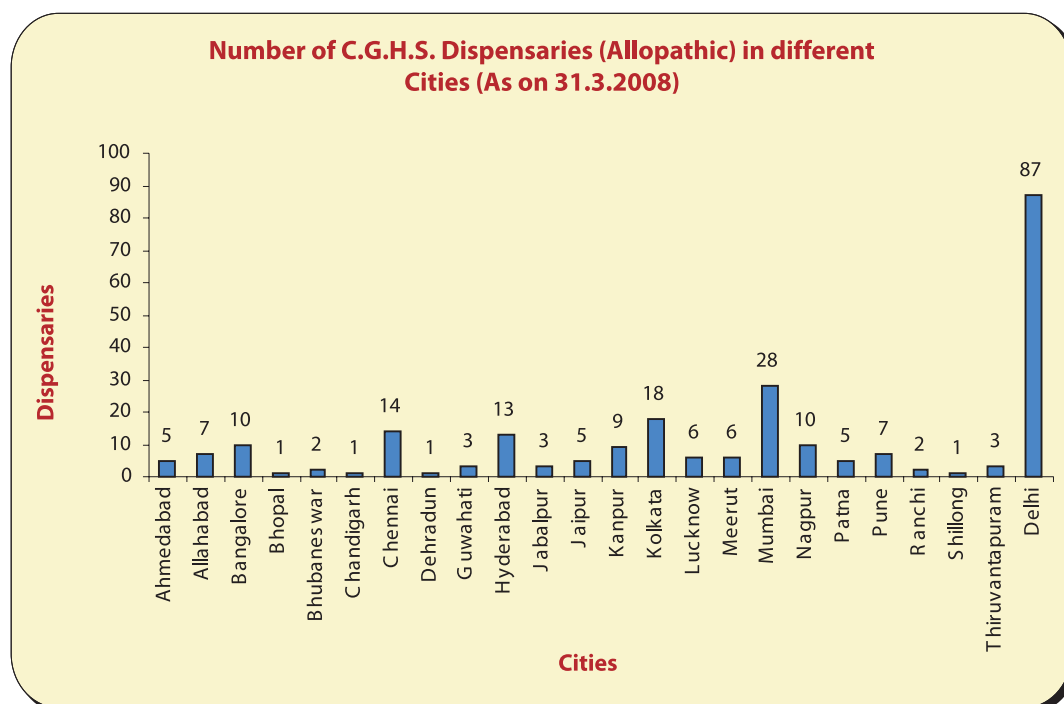
Health Infrastructure is an important indicator to understand the healthcare delivery provisions and mechanisms in a country. It also signifies the investments and priority accorded to creating the infrastructure in public and private sectors.

This section on Health Infrastructure indicators is subdivided into two categories viz. educational infrastructure and service infrastructure. **Educational infrastructure** provides details of medical colleges, students admitted to M.B.B.S. course, post graduate degree/diploma in medical and dental colleges, admissions to BDS & MDS courses, AYUSH institutes, nursing courses and para-medical courses. **Service infrastructure** in health include details of allopathic hospitals, hospital beds, Indian System of Medicine & Homeopathy hospitals, sub centers, PHC, CHC, blood banks, mental hospitals and cancer hospitals.

- ▶ Medical education infrastructures in the country have shown rapid growth during the last 18 years. The country has 289 medical colleges, 282 Colleges for BDS courses and 122 colleges conduct MDS courses with total admission of 32,815, 22,650 and 2,365 respectively during 2008-09.
- ▶ There are 1,620 Institution for General Nurse Midwives with admission capacity of 62647 and 523 colleges for Pharmacy (diploma) with an intake capacity of 31513 during 2007-08.
- ▶ There are 11,289 hospitals having 4,94,510 beds in the country 6,298 hospitals are in rural area with 1,42,396 beds and 2,774 hospital are in Urban area with 3,24,206 beds.
- ▶ Medical care facilities under AYUSH by management status i.e. dispensaries & hospitals are 22,566 & 3,367 respectively during 2008.
- ▶ There are 1,45,272 Sub Centers, 22,370 Primary Health Centers and 4,045 Community Health Centers in India as on March 2007 (Latest).
- ▶ India has 924 Government licensed Blood banks and 368 voluntary blood banks. Private hospitals has 718 blood banks and other private charitable centers are 520 in India during 2008.

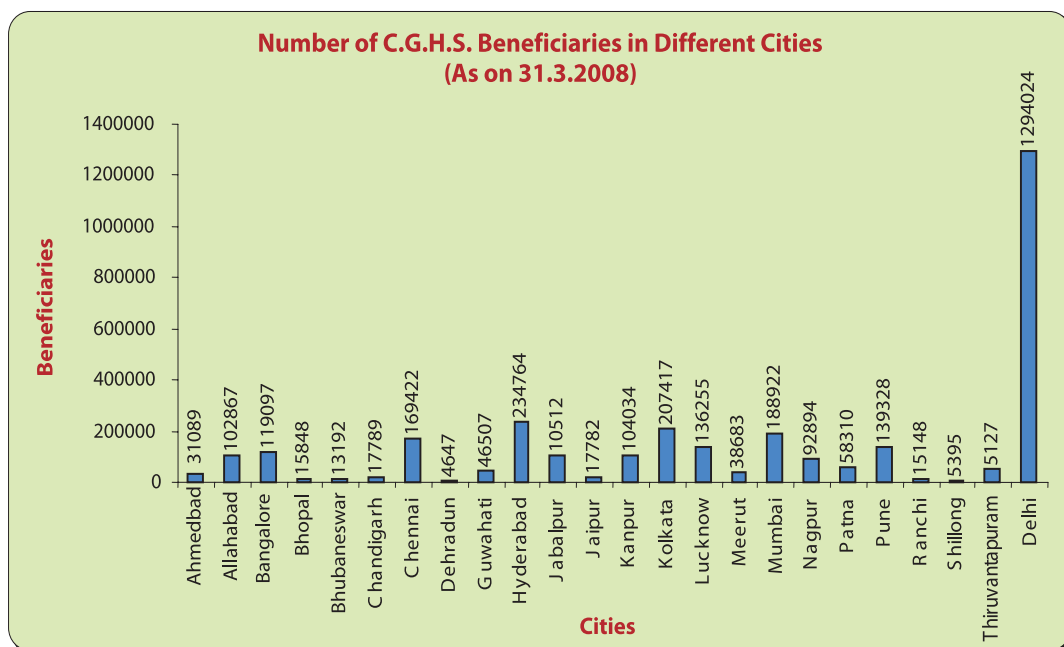
Source: Dental Council of India

- ▶ CGHS has health facilities in 24 cities having 247 Allopathy Dispensaries and Total 335 Dispensaries in the Country with 9.00 Lakhs registered cards/ families.



Source: Central Government Health Scheme, Dte. GHS, M/O. Health & F.W., Nirman Bhawan, New Delhi

- ▶ During 2007-08 the city wise no. of CGHS beneficiaries has been analysed and presented in the graph.



Source: Central Government Health Scheme, Dte. GHS, M/O. Health & F.W., Nirman Bhawan, New Delhi

6.1 Education Infrastructure

6.1.1 Number of Medical Colleges & Students Admitted to the 1st Year M.B.B.S. in India 1991-92 to 2008-09

S. No.	Year	No. of Medical Colleges	Admission		
			Male	Female	Total
	1	2	3	4	5
1	1991-92	146	7468	4731	12199
2	1992-93	146	6927	4314	11241
3	1993-94 ¹	146	5989	3541	10400
4	1994-95	152	7685	4564	12249
5	1995-96	165	4416	2623	7039
6	1996-97	165	2212	1269	3568
7	1997-98 ²	165	2348	1274	3949
8	1998-99 ²	147	NR	NR	11733
9	1999-00 ³	147	NR	NR	10104
10	2000-01	189	NR	NR	18168
11	2004-05	229	NR	NR	24690
12	2005-06	242	NR	NR	26449
13	2006-07	262	14449	10609	28928
14	2007-08	266	18208	12082	30290
15	2008-09	289	18486	14329	32815

Notes:

1 Total may not tally with male and female column as some Medical Colleges have given the information for total only.

2 Data not received from 59 colleges in 1997-98 and 1998-1999

3 Data not received from 89 colleges in 1999- 2000

- The data for the years 2001-02, 2002-03 & 2003-04 not provided by the source agency.
- N.R: Not Received.

Source: Medical Council of India

6.1.2 Number of Dental Colleges & Admissions to BDS and MDS Courses in India 1994-95 to 2008-09

S. No.	Year	BDS		MDS	
		No. of Dental Colleges	No. of Admission	No. of Dental Colleges	No. of Admission
	1	2	3	5	6
1	1994-95	77	1987	32	225
2	1995-96	94	2562	32	263
3	1996-97	100	2859	35	301
4	1997-98	100	3301	37	427
5	1998-99	110	6100	41	729
6	1999-00	121	7100	44	801
7	2000-01	135	8340	49	859
8	2001-02	149	9550	52	922
9	2002-03	164	10970	56	992
10	2003-04	181	12960	58	1106
11	2004-05	185	13400	61	1173
12	2005-06	205	15440	67	1298
13	2006-07	238	18120	87	1764
14	2007-08	267*	20910*	104	2069
15	2008-09	282	22650	122	2365

Notes:

- BDS = Bachelor of Dental Surgery
- MDS = Master of Dental Surgery

* = Revised figures

Source : Dental Council of India

6.1.3 State/UT wise Number of Undergraduate Ayush Institutes & their Admission Capacity in India as on 1.4.2008*

S. No.	State/UT	Ayurveda		Unani		Siddha		Naturopathy		Homoeopathy		Total	
		No. of	Adm.	No. of	Adm.	No. of	Adm.	No. of	Adm.	No. of	Adm.	No. of	Adm.
		Colleges	Capacity	Colleges	Capacity	Colleges	Capacity	Colleges	Capacity	Colleges	Capacity	Colleges	Capacity
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Andhra Pradesh	5	200	2	125	—	—	1	30	5	230	13	585
2	Arunachal Pradesh	—	—	—	—	—	—	—	—	1	50	1	50
3	Assam	1	50	—	—	—	—	—	—	3	90	4	140
4	Bihar	11	330	4	180	—	—	—	—	15	880	30	1390
5	Chhattisgarh	3	170	1	40	—	—	1	40	3	200	8	450
6	Delhi	1	40	2	90	—	—	—	—	2	150	5	280
7	Goa	1	40	—	—	—	—	—	—	1	50	2	90
8	Gujarat	11	485	—	—	—	—	1	50	15	1585	27	2120
9	Haryana	6	310	—	—	—	—	—	—	1	50	7	360
10	Himachal Pradesh	1	50	—	—	—	—	—	—	1	100	2	150
11	Jammu & Kashmir	1	90	2	40	—	—	—	—	—	—	3	130
12	Jharkhand	1	40	—	—	—	—	—	—	2	100	3	140
13	Karnataka	53	2500	4	170	—	—	3	110	12	855	72	3635
14	Kerala	14	730	—	—	1	50	—	—	5	250	20	1030
15	Madhya Pradesh	16	725	4	180	—	—	—	—	19	1735	39	2640
16	Maharashtra	62	3305	5	270	—	—	—	—	47	3900	114	7475
17	Orissa	6	190	—	—	—	—	—	—	6	195	12	385
18	Punjab	12	590	—	—	—	—	—	—	4	410	16	1000
19	Rajasthan	6	300	2	90	—	—	—	—	7	535	15	925
20	Tamil Nadu	6	210	1	40	6	300	4	155	10	750	27	1455
21	Uttar Pradesh	15	650	11	505	—	—	—	—	8	400	34	1555
22	Uttarakhand	4	210	—	—	—	—	—	—	1	50	5	260
23	West Bengal	2	110	1	40	—	—	—	—	13	740	16	890
24	Chandigarh	1	50	—	—	—	—	—	—	1	80	2	130
TOTAL		239	11375	39	1770	7	350	10	385	182	13385	477	27265

* Provisional

- = NIL

Source: Central Council of Indian Medicine /Homeopathy/Deptt. of AYUSH

6.1.4 Number of Institutions and Admission Capacity/Number Admitted in Nursing/Para Medical Courses in India 2007-08

S.No.	Description of the courses	No. of Institutions	Admissions capacity / No. Admitted
1		2	3
1	General Nurse Midwives ¹	1620	62647
2	Aux. Nurse Midwives ¹	329	6502
3	Health Visitors & Health Supervisors ²	11	NA
4	Pharmacy (diploma) ³	523	31513
5	Dental Hygienist	17	65
6	Dental Mechanics Courses	18	50
7	B.Sc. (Med. Lab. Technicians)	3	56
8	Lab. Tech. /lab. Asstt.	97	2193
9	Sanitary/health/malaria inspectors	26	1695
10	Radiographers	33	410
11	X-ray technicians	41	426
12	Operational therapist Asstt.	6	59
13	Physiotherapist	8	174
14	Occupational therapist	4	75
15	Speech therapist	3	72
16	Orthopedist	4	24
17	Optician & refractionist	7	134
18	Health workers(male) under M.P.W	102	5334
19	Miscellaneous (incl. Ophth. Asstt.)	90	2668

Notes:

1. Reference period 31-3-2008
 2. Reference period 31-12-2000
 3. Reference period upto January -2008
- NA = Not Available

Source: Indian Nursing Council, Pharmacy Council of India.

6.2 Service Infrastructure

6.2.1 State/UT wise Number of Sub Centres, PHCs & CHCs Functioning in India as on March 2007 (Latest)

S.No.	States/UTs	Sub Centres	PHCs	CHCs
	1	2	3	4
	India	145272	22370	4045
1	Andhra Pradesh	12522	1570	167
2	Arunachal Pradesh	379	85	31
3	Assam	5109	610	100
4	Bihar	8909	1648	70
5	Chhattisgarh	4692	518	118
6	Goa	172	19	5
7	Gujarat	7274	1073	273
8	Haryana	2433	411	86
9	Himachal Pradesh	2071	443	71
10	Jammu & Kashmir	1888	374	80
11	Jharkhand	3958	330	194
12	Karnataka	8143	1679	254
13	Kerala	5094	909	107
14	Madhya Pradesh	8834	1149	270
15	Maharashtra	10453	1800	407
16	Manipur	420	72	16
17	Meghalaya	398	103	26
18	Mizoram	366	57	9
19	Nagaland	397	84	21
20	Orissa	5927	1279	231
21	Punjab	2858	484	126
22	Rajasthan	10612	1499	337
23	Sikkim	147	24	4
24	Tamil Nadu	8683	1181	236
25	Tripura	579	75	10
26	Uttarakhand	1765	232	49
27	Uttar Pradesh	20521	3660	386
28	West Bengal	10356	922	346
29	A& N Islands	108	20	4
30	Chandigarh	13	0	2
31	D & N Haveli	38	6	1
32	Daman & Diu	21	3	1
33	Delhi	41	8	0
34	Lakshadweep	14	4	3
35	Puducherry	77	39	4

Source: Bulletin on Rural Health Statistics in India 2007. Infrastructure Division MOHFW/GOI

6.2.2 State/UT wise Number of Govt. Hospitals & Beds in Rural & Urban Areas (Including CHCs) In India (Provisional)

S. No.	State/UT/Division	Rural Hospitals		Urban Hospitals		Total Hospitals		Projected Population as on 1.3.2008 (In thousand)	Population Served Per Govt. Hospital	Population Served Per Govt. Hospital Bed	Reference Period
		No.	Beds	No.	Beds	No.	Beds				
	1	2	3	4	5	6	7	8	9	10	11
India		6298	142396	2774	324206	11289	494510		101403	2315	
1	Andhra Pradesh	167	6220	192	28113	359	34333	82375 (80712)	224825	2351	01.01.2007
2	Arunachal Pradesh	185	1356	15	862	200	2218	1198 (1184)	5920	533	01.01.2008
3	Assam	100	3000	NR	NR	100	3000	29435 (27878)	278780	9293	01.09.2004
4	Bihar	NR	NR	NR	NR	1717	22494	93633	54533	4163	01.09.2008
5	Chattisgarh	119	3270	99	6158	218	9428	23269 (22934)	105202	2433	01.01.2008
6	Goa	22	714	11	2127	33	2841	1596	48364	562	01.01.2009
7	Gujarat	284	11077	104	18791	388	29868	56626	145943	1896	01.01.2009
8	Haryana	57	1204	92	6515	149	7719	24171	162221	3131	01.01.2009
9	Himachal Pradesh	95	2646	54	5463	149	8109	6595	44262	813	01.01.2009
10	Jammu & Kashmir	61	1820	31	2125	92	3945	11257 (11099)	120641	2813	01.01.2008
11	Jharkhand	NR	NR	NR	NR	500	5414	30181 (29745)	59490	5494	01.01.2008
12	Karnataka	466	8010	426	41482	892	49492	57550	64518	1163	01.01.2009
13	Kerala	173	12450	77	15945	250	28395	33802 (33535)	134140	1217	01.01.2008
14	Madhya Pradesh	275	8179	102	11739	377	19918	68737 (67569)	179228	3392	01.01.2008
15	Maharashtra	365	10950	127	19356	492	30306	107972	219455	3563	01.01.2009
16	Manipur	24	669	4	1251	28	1920	2364 (2336)	83429	1067	01.01.2008
17	Meghalaya	26	780	8	1839	34	2619	2530 (2470)	72647	943	01.01.2007
18	Mizoram	10	320	10	904	20	1224	970 (958)	47900	783	01.01.2008
19	Nagaland	23	705	15	1145	38	1850	2171	57132	1174	01.01.2009
20	Orissa	1623	5882	84	8669	1707	14551	39655	23231	2725	01.01.2009
21	Punjab	72	2180	159	8440	231	10620	26722 (26391)	114247	2485	01.01.2008
22	Rajasthan	347	11850	128	20217	475	32067	64534 (63408)	133491	1977	01.01.2008
23	Sikkim	29	700	2	320	31	1020	591	1906	579	01.01.2009
24	Tamil Nadu	533	25078	48	22120	581	47198	66106 (65629)	112959	1391	01.01.2008
25	Tripura	16	500	15	1762	31	2262	3491 (3449)	111258	1525	01.01.2008
26	Uttar Pradesh	397	11910	528	20550	925	32460	190254 (183282)	198143	5646	01.01.2007
27	Uttarakhand	666	3746	29	4219	695	7965	9511	13685	1194	01.01.2009
28	West Bengal	99	5171	284	44510	383	49681	86995 (86125)	224869	1734	01.01.2008
29	A&N Island	26	595	1	450	27	1045	449	16630	430	01.01.2009
30	Chandigarh	1	50	5	2562	6	2612	1227 (1161)	193500	444	01.01.2008
31	D&N Haveli	1	30	1	231	2	261	299	149500	1146	01.01.2009
32	Daman & Diu	2	52	2	140	4	192	238 (182)	45500	948	01.01.2004
33	Delhi	21	972	109	22886	130	23858	16955	130423	711	01.01.2009
34	Lakshadweep	9	200	—	—	9	200	74 (73)	8111	365	01.01.2008
35	Puducherry	4	110	12	3315	16	3425	1204	75250	352	01.01.2009

Notes:

- Projected Population shown in the brackets relates to the reference period.
- Government hospitals includes central government, state government and local govt. Bodies
- Rural & Urban bifercation is not available in Bihar & Jharkhand .

Source: Directorate General of State Health Services

6.2.3 Medical Care Facilities under AYUSH by Management Status as on 1.4.2008(Provisional)

S. No.	Management	Ayurveda		Unani		Siddha		Yoga		Naturopathy		Homoeopathy		Amchi		Total	
		Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A. Under jurisdiction of States/Union Territories																	
1	State/Govt./UT Administration	2195	12863	230	965	270	478	4	27	12	15	90	4943	0	5	2801	19296
2	Local Bodies	14	880	0	43	0	0	0	1	0	8	0	758	0	0	14	1690
3	Others	168	606	24	0	4	0	8	40	158	209	140	118	2	125	504	1098
Total (A)		2377	14349	254	1008	274	478	12	68	170	232	230	5819	2	130	3319	22084
B. CGHS & Central Government organizations																	
4	C.G.H.S.	1	35		11		3		2				37			1	88
5	Railway ministry		39										129			0	168
6	Labour Ministry :		130				5						32			0	167
7	Ministry of col		16													0	16
8	Research Councils	23	2	12	6	2	2				5	4	23		1	41	39
9	National Institutes	3	1	1		1					1	1	2			6	4
TOTAL		27	223	13	17	3	10	0	2	0	6	5	223	0	1	48	482
All India (A+B)		2404	14572	267	1025	277	488	12	70	170	238	235	6042	2	131	3367	22566

Note :-

Provisional

Source: D/o. AYUSH, Ministry of Health & Family Welfare.

6.2.4 State/UT wise Number of Licensed Blood Banks in India as on 06/01/2009

S. No.	State/ UT	Government	Voluntary	Private Hospital	Private Charitable	Total
	1	2	3	4	5	6
	India	924	368	718	520	2530
1	Andhra Pradesh	71	56	89	55	271
2	Arunachal Pradesh	2	1	N.A.	N.A.	3
3	Assam	42	4	23	6	75
4	Bihar	44	7	13	22	86
5	Chattisgarh	18	3	6	13	40
6	Goa	5	N.A.	2	3	10
7	Gujarat	31	77	9	71	188
8	Haryana	17	8	19	12	56
9	Himachal Pradesh	21	1	N.A.	N.A.	22
10	Jammu & Kashmir	25	N.A.	1	N.A.	26
11	Jharkhand	12	N.A.	6	2	20
12	Karnataka	42	25	80	41	188
13	Kerala	37	5	102	10	154
14	Madhya Pradesh	48	22	26	32	128
15	Maharashtra	84	39	75	100	298
16	Manipur	3	N.A.	N.A.	N.A.	3
17	Meghalaya	6	N.A.	2	N.A.	8
18	Mizoram	4	N.A.	2	N.A.	6
19	Nagaland	4	N.A.	N.A.	N.A.	4
20	Orissa	6	52	15	2	75
21	Punjab	52	8	39	2	101
22	Rajasthan	50	6	15	7	78
23	Sikkim	3	N.A.	N.A.	N.A.	3
24	Tamilnadu	101	25	85	58	269
25	Tripura	3	N.A.	4	N.A.	7
26	Uttar Pradesh	73	13	49	53	188
27	Uttarakhand	17	4	5	1	27
28	West Bengal	70	6	17	22	115
29	Andaman & Nicobar	2	N.A.	N.A.	N.A.	2
30	Chandigarh	3	1	N.A.	N.A.	4
31	Dadra & Nagar Haveli	N.A.	1	N.A.	N.A.	1
32	Daman & Diu	1	N.A.	N.A.	N.A.	1
33	Delhi	22	4	25	7	58
34	Lakshadweep	N.A.	N.A.	N.A.	N.A.	0
35	Puducherry	5	N.A.	9	1	15

Note:

N.A.: Not Available

Source: Drug Controller General (I), DGHS, MOHFW (DRUG SECTION)

6.2.5 State/UT wise Number of Mental Hospitals and their Manpower Resources in India July 2002(Latest)

S. No.	State	Existing facilities Hospital beds		Manpower resources @														\$ Dist. Wise distribution of Psychiatric facilities	
				Psychiatrists			Clinical Psychologists			Physical Social workers			Psychiatric nurses						
		Govt. Sector	Pvt. Sector	Available	Ideal. Req	Deficit	Avail-able	Ideal. Req	Deficit	Avail-able	Ideal. Req	Deficit	Avail-able	Ideal. Req	Deficit	Avail-able	Not avail-able		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
1	A & N islands	10	-	1	4	3	-	6	6	-	8	8	-	3	3	1	1		
2	Andhra Pradesh	1020	210	180	757	577	8	865	857	3	1154	1151	Nil	123	123	NA	NA		
3	Arunachal Pradesh	10	-	1	10	9	-	15	15	-	20	20	-	1	1	1	12		
4	Assam	500	-	29	266	237	5	450	445	1	564	563	1	50	49	23	17		
5	Bihar	-	-	28	828	800	13	1214	1201	NA	1656	**	NA	**	**	NA	NA		
6	Chandigarh	57	-	31	9	+22	14	14	-	10	18	8	1	6	5	1	-		
7	Chhattisgarh	10	3	15	207	192	1	304	303	2	414	412	-	2	2	1	15		
8	Daman & Diu, D & N Haveli	10	-	1	4	3	-	6	6	1	8	7	4	1	3	1	3		
9	Delhi	329	113	155	137	+18	43	207	164	13	274	261	172**	32	+140	7	7		
10	Goa	210	-	26	14	+12	2	21	19	3	28	25	2	21	19	2	-		
11	Gujarat	853	326	97	505	408	12	753	741	12	1010	998	-	118	118	20	5		
12	Haryana	89	98	39	210	171	2	315	313	-	420	420	1	19	18	9	10		
13	Himachal Pradesh	14	3	8	61	53	2	90	88	-	122	122	-	6	6	3	9		
14	Jharkhand	1173	145	50	270	220	15	405	390	10	540	530	NA	135	**	3	15		
15	Jammu & Kashmir	120	-	4	100	96	1	150	149	1	200	199	-	12	12	2	12		
16	Karnataka	1341	1113	198	527	329	69	762	693	56	1052	996	175	245	70	18	9		
17	Kerala	1937	1539	238	318	80	42	477	435	40	636	596	14	348	334	13	-		
18	Lakshdweep	-	-	-	1	1	-	2	2	-	4	4	-	1	1	-	-		
19	Madhya Pradesh	592	NA	12	603	591	-	905	905	-	1206	1206	1	60	59	6	39		
20	Maharashtra	6073	652	486	967	481	33	484	451	44	1934	1890	117	672	555	17	18		
21	Manipur	10	-	6	24	18	1	36	35	2	48	46	-	1	1	2	6		
22	Meghalaya	70	-	5	23	18	-	35	35	-	46	46	2	7	5	1	6		
23	Mizoram	14	-	4	9	5	1	13	12	1	18	17	2	2	-	2	6		
24	Nagaland	25	-	5	20	15	-	30	30	-	40	40	1	3	2	3	5		
25	Orissa	118	-	19	367	348	5	550	545	1	734	733	-	11	11	4	26		
26	Puducherry	44	20	15	10	+5	1	5	14	13	20	7	20	7	-(+13)	4	-		
27	Punjab	580	267	89	242	153	18	363	345	21	484	463	10	85	75	11	6		
28	Rajasthan	627	110	75	565	490	12	798	786	4	1130	1126	-	74	74	16	16		
29	Sikkim	20	12	2	5	3	-	7	7	-	10	10	-	3	3	2	2		
30	Tamil Nadu	1800	NA	262	621	359	7	910	903	21	1242	1221	-	180	180	30	-		
31	Tripura	16	-	9	31	22	-	45	45	-	62	62	-	2	2	1	3		
32	Uttarakhand	-	-	6	84	78	-	126	126	-	168	168	-	-	-	1	12		
33	Uttar Pradesh	1750	275	115	1660	1545	20	2490	2470	35	3320	3285	-	202	202	10	60		
34	West Bengal	1471	210	83	802	719	28	1204	1176	-	1604	1604	4400*	1604	+4258	20	-		
Total		20893	5096	2219	9696	7477	343	13259	12926	290	19064	17118	**(6527)	4036	**	219	311		

Notes

* Figures unreliable: Nurses with some psychiatric training but without a Diploma in Psychiatric Nursing (DPN) appear to have been included.

** Figures unreliable

@ While the exact requirements of mental health personnel have not been definitively prescribed, the ideal required number of mental health professionals has been calculated as under:

Psychiatrists: 1.0 per 100,000 population psychiatric Clinical Psychologists: 1.5 per 100,000 Population Psychiatric Social Workers: 2.0 per 100,000 population Psychiatric Nurses: 1.0 per 10 psychiatric beds

\$ District-wise data in respect of psychiatric facilities are not available for the states of Andhra Pradesh (total districts-23) and Bihar (total districts-40).

Total number of psychiatrists trained in the country during 2000-2001

Qualification	Male	Female	Total
MD	36	9	45
DPM	15	6	21
Grand Total			66

Source: National Survey of Mental Health Resources carried out by the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, during May and July 2002. And published in Mental Health An Indian Perspective 1946-2003 Dte GHS/MOHFW/GOI

6.2.6 State/UT wise Number of Cancer Hospitals in India during 2004 (Provisional)

S. No.	State/UT	No. of Hospitals	Number of Hospitals Reported Information	Total Number of Beds reported	Reported Admission			Reported Discharged			Reported Deaths		
					Male	Female	Total	Male	Female	Total	Male	Female	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Andhra Pradesh	1	1	250	NR	NR	11204	NR	NR	11007	NR	NR	197
2	Assam	1	1	118	1072	583	1655	1001	563	1564	71	20	91
3	Bihar	1	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4	Gujarat	4	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
5	Himachal Pradesh	1	1	48	188	283	471	184	280	464	4	4	8
6	Karnataka	2	1	429	2130	3021	5151	1920	2878	4798	242	160	402
7	Kerala	1	1	1000	1211	1072	2283	1163	1041	2204	61	53	114
8	Madhya Pradesh	5	1	156	2870	2388	5258	2794	2336	5130	75	50	125
9	Maharashtra	2	1	24	350	476	826	336	456	792	15	19	34
10	Orissa	1	1	146	NR	NR	NR	NR	NR	NR	NR	NR	NR
11	Rajasthan	1	1	140	1524	1151	2675	1452	1095	2545	61	43	104
12	Tamil Nadu	4	1	423	3064	5523	8587	3003	5481	8484	53	46	99
13	Tripura	1	1	50	966	606	1572	915	583	1498	48	21	69
14	Uttar Pradesh	1	1	106	1068	1242	2310	1035	1224	2259	31	12	43
15	West Bengal	6	1	25	612	661	1273	536	575	1111	88	85	173
16	Delhi	3	2	262	6823	7939	14762	6617	7791	14408	201	144	345
	Total	35	15	3177	21878	24945	58027	20956	24303	56264	950	657	1804

Notes:

- NR = Information Not Received
- The sum of male and female may not tally with the total as some states have not reported gender wise information separately.

Source: Specialized Cancer Hospitals, 2005

6.2.7 Number of C.G.H.S. Dispensaries in Different Cities as on 31.3.2008

S. No.	Name of City	Type of Dispensaries		Poly Clinic	CGHs Lab	Dental Units
		Allopathy	Ayush			
1	2	3	4	5	6	7
1	Ahmedabad	5	2	0	1	1
2	Allahabad	7	2	1	1	0
3	Bangalore	10	4	1	4	1
4	Bhopal	1	2	0	0	0
5	Bhubaneswar	2	1	0	1	0
6	Chandigarh	1	0	0	0	0
7	Chennai	14	4	2	4	1
8	Dehradun	1	0	0	0	0
9	Guwahati	3	1	0	0	0
10	Hyderabad	13	6	2	1	0
11	Jabalpur	3	0	0	1	0
12	Jaipur	5	2	0	4	1
13	Kanpur	9	3	1	3	1
14	Kolkata	18	4	1	5	1
15	Lucknow	6	3	1	2	1
16	Meerut	6	2	0	2	1
17	Mumbai	28	5	2	4	3
18	Nagpur	10	3	1	1	1
19	Patna	5	2	1	1	1
20	Pune	7	3	1	2	1
21	Ranchi	2	0	0	1	0
22	Shillong	1	0	0	0	0
23	Thiruvantapuram	3	2	0	0	0
24	Delhi	87	37	4	34	5
Total		247	88	18	72	19

Note: This table shows only the number of dispensaries in different cities. For exact address of the dispensaries please contact the source agency

Source: Central Government Health Scheme, Dte. Ghs, M/O. Health & F.W., Nirman Bhawan, New Delhi

6.2.8 Number of Cards and Beneficiaries Availing C.G.H.S. Facilities in various Cities as on 31st March, 2008

S. No.	Name of City	Total No. of Cards	Total No. of Beneficiaries
1	2	3	4
1	Ahmedabad	8920	31089
2	Allahabad	21897	102867
3	Bangalore	39084	119097
4	Bhopal	3969	15848
5	Bhubaneswar	3171	13192
6	Chandigarh	5969	17789
7	Chennai	47580	169422
8	Dehradun	1817	4647
9	Guwahati	12239	46507
10	Hyderabad	62067	234764
11	Jabalpur	25410	105121
12	Jaipur	7188	17782
13	Kanpur	28005	104034
14	Kolkata	67466	207417
15	Lucknow	25178	136255
16	Meerut	10319	38683
17	Mumbai	51149	188922
18	Nagpur	25555	92894
19	Patna	13332	58310
20	Pune	40816	139326
21	Ranchi	3929	15148
22	Shillong	1595	5395
23	Thiruvantapuram	16873	51271
24	Delhi	334344	1294024
Total		857872	3209804

Source: Central Government Health Scheme, Dte. GHS, M/o. HEALTH & F.W., Nirman Bhawan, New Delhi

6.2.9 Statewise/ Systemwise Number of AYUSH Hospitals and Dispensaries in India as on 1.4.2008

S. No.	State/UT & Other	Ayurveda		Unani		Siddha		Yoga		Naturopathy		Homoeopathy		Amchi		Total	
		Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries	Hospitals	Dispensaries
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A. States/Union Territories																	
1	Andhra Pradesh	9	557	6	196					18	35	6	286			39	1074
2	Arunachal Pradesh	1	2					1	1			2	44	6	4	53	
3	Assam	1	380		1			1	25	3	2	3	75		8	483	
4	Bihar	11	311	4	144			1		2		11	179		29	634	
5	Chhattisgarh	8	634	1	6					2	5	3	52	1	14	698	
6	Delhi	10	148	2	25			2	4	4	10	2	98	4	20	289	
7	Goa	1	77							1	2	1	59		3	138	
8	Gujarat	47	1046						1	5	13	16	216	1	68	1277	
9	Haryana	8	472	1	19					7	2	1	20		17	513	
10	Himachal Pradesh	25	1109		3					3	1	1	14	2	12	31	1139
11	Jammu & Kashmir	2	273	2	235					1				82	5	590	
12	Jharkhand	1	122		30					1		2	54		4	206	
13	Karnataka	122	589	13	51	1		4		23	32	20	42	7	183	721	
14	Kerala	124	740		1	2	6			38	20	33	580		197	1347	
15	Madhya Pradesh	34	1427	2	50					6	9	22	146		64	1632	
16	Maharashtra	55	469	5	25			2		7	10	45		2	114	506	
17	Manipur									10	2	1	9		11	11	
18	Meghalaya	1	12									7	10	1	8	23	
19	Mizoram									1			1		1	1	
20	Nagaland		85									1	115		1	200	
21	Orissa	8	624		9			35	1	30	6	603		2	15	1303	
22	Punjab	15	507		35				1		5	5	107		20	655	
23	Rajasthan	100	3539	3	102			1		4	11	9	178		117	3830	
24	Sikkim	1	1										1	3	1	5	
25	Tamil Nadu	7	35	1	21	270	456		1	25	26	9	46		312	585	
26	Tripura	1	55									1	93		2	148	
27	Uttar Pradesh	1771	340	210	49					3	6	8	1482	1	1992	1878	
28	Uttarakhand	7	467	2	3					2	3	1	60	3	12	536	
29	West Bengal	4	295	1	3					3	5	12	1220	5	20	1528	
30	A&N Islands	1	5	1		1						1	15		4	20	
31	Chandigarh	1	6									1	5		2	11	
32	D&N Haveli		3										1			4	
33	Daman & Diu		1													1	
34	Lakshadweep		2										1			3	
35	Puducherry	1	16			16					3		7		1	42	
TOTAL (A)		2377	14349	254	1008	274	478	12	68	170	232	230	5819	2	130	3319	22084
B. CGHS & Central Government organization		27	223	13	17	3	10		2		6	5	223		1	48	482
TOTAL (A+B)		2404	14572	267	1025	277	488	12	70	170	238	235	6042	2	131	3367	22566

Note :-

Figures are Provisional

Source: D/o. AYUSH, Ministry of Health & Family Welfare.

6.3 Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

1. BCG - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	BCG VL Chennai	800	831.47	894.94	758.66	599.01	800.00	489.50	61.19	Mar-08
2	SII Pune	1200	895.00	NA	NA	NA	NA	NA	NA	Mar-08
Total		2000	1726.47	894.94	758.66	599.01	800.00	489.50	61.19	

2. DPT - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production.	Demand	Supply	% Achieved	
1	PII Coonoor	705	409.82	660.00	380.52	660.00	660.00	288.02	42.73	Mar-08
2	CRI Kasauli	255	284.64	275.00	275.00		260.00	168.40	64.77	Mar-08
3	HBPCL Mumbai	488	79.33	80.00	79.40	0.00	0.00	0.00		Mar-08
4	SII Pune	3000	871.96	871.96	871.96	871.96	NA	NA	NA	Mar-08
5	HBI Udhagamandla hyd*	650				46.00	65.04	65.04	100.00	Mar-08
6	SBL Hydrabad	3000	94	30.00	30.00	6.72	5.00	5.00	100.00	Mar-08
7	Biological E Ltd. Hyd'bad	800				23.31	35.20	35.02	99.49	Mar-08
Total		8898	1739.75	1916.96	1636.88	1607.99	1025.24	561.48	54.76	

3. DT - Installed Capacity, Production Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	PII Coonoor	705	178.53	170	170	178.53	170.00	170.00	100.00	Mar-08
2	CRI Kasauli	200	136.9	139.15	139.15	136.90	139.15	139.15	100.00	Mar-08
3	HBPCL Mumbai	100	36.24	41.21	33.49	36.24	41.21	33.49	81.26	Mar-08
4	SII Pune	300	27.65	27.65	27.65	27.65	27.65	27.65	100.00	Mar-08
5	HBI Udhagamandla hyd*	100								
6	Biological E Ltd. Hyd'bad	300	NA	NA	NA	NA	NA	NA	NA	Mar-08
Total		1705	379.32	378.01	370.29	379.32	378.01	370.29	97.96	

* Note : New Institution/Vaccine

6.3 (Contd.) Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

4. TT - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	PII Coonoor	1800	597.70	961.75	471.34	1000.00	1000.00	179.31	17.93	Mar-08
2	CRI Kasauli	300	197.92	190.86	190.83	808.00	235.00	171.00	72.77	Mar-08
3	HBPCL Mumbai	712	274.42	184.79	205.72	92.63	0.00	0.00	0.00	Mar-08
4	SII Pune	7000	1276.95	1276.96	1276.96	1276.95	NA	NA	NA	Mar-08
5	KIPM Chennai	30	2.73	1.77	1.77	0.00	0.03	0.03	100.00	Mar-08
6	PI Shillong	50	0.76	0.22	0.22	0.00	0.02	0.02	100.00	Mar-08
7	Bio Vaccine Hyd'bad	300	652.00	1000.00	706.00	NA	NA	NA	NA	Mar-08
8	Dano Vaccine H'bad	1600	37.90	35.10	35.10	927.30	1000.00	926.99	92.70	Mar-08
9	HBI Udhagamandla hyd*	800				130.00	33.14	33.14	100.00	Mar-08
10	Shanta Biotech Ltd. Hyd'bad*	3000				5619.50	227.19	227.19	100.00	Mar-08
11	Biological E Ltd. Hyd'bad*	4000				60.08	83.71	83.71	100.00	Mar-08
Total			19592	3040.38	3651.45	2887.94	9914.46	2579.08	1621.38	62.87

5. OPV - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Prodtn.	Demand	Supply	Prodtn.	Demand	Supply	% Achieved	
1	HBPCL Mumbai	6000	1155.87	1174.10	1283.63	2027.07	1490.00	1379.50	92.58	Mar-08
2	BIBCOL Bulandshahar	6000	0.00	126.00	0.00	NA	NA	NA	NA	Mar-08
3	Panacea Bio-tech Ltd. Delhi	16000	3167.14	3513.56	3513.56	2285.04	2962.77	2962.77	100.00	Mar-08
4	Bio-Med (P) Ltd. Ghaziabad	80	10.00	10.00	10.00	16.00	12.00	12.00	100.00	Mar-08
5	BBL. Hy,bad	10000	6.80	NA	5.29	475.00	450.00	450.00	100.00	Mar-08
6	sanofi pasteur Delhi*						2.58	2.58	100.00	Mar-08
7	HBI Udhagamandla hyd*	200				30.00	61.96	61.96	100.00	Mar-08
Total		38280	4339.81	4823.66	4812.48	4833.11	4979.31	4868.81	97.78	

6. Measles - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	SII Pune	3000	2107.74	2688.10	2688.10	NA	NA	NA	NA	Mar-08
2	HBI Udhagamandla hyd*	300				30.00	30.00	61.96	206.53	Mar-08
Total			3300	2107.74	2688.10	2688.10	30.00	30.00	61.96	206.53

* Note: New Institution / Vaccine

6.3 (Contd.) Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

7. JEV - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	11.1	2.31	0.63	0.63	2.31	0.63	0.63	100.00	Mar-08
2	Shanta Biotechnics Pvt. Ltd Hy'bad*	2000								Mar-08
Total		2011.1	2.31	0.63	0.63	2.31	0.63	0.63	100.00	

8. YFV - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	0.55	0.738	0.986	0.888	1.19	1.06	0.824	77.74	Mar-08
2	sanofi pasteur Delhi*						0.03	0.03	100.00	Mar-08
Total		0.55	0.738	0.986	0.888	1.19	1.09	0.854	78.35	Mar-08

9. TCARV - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	PII Coonoor	5	2.08	2.50	2	3.00	1.46	1.46	100.00	Mar-08
2	SII Pune	20	8.16	8.68	8.68	8.17	NA	NA	NA	Mar-08
3	Zydus Cadilla Ahmedabad	24	14.11	11.50	6.8	18.00	18.00	14.98	83.22	Mar-08
4	HBI Udhagamand Gujrat	60	37.00	37.00	37	50.00	43.80	43.80	100.00	Mar-08
5	Chirion Behring Vaccine Lab. Ankleshwar Guj	75	62.51	42.39	42.89	60.41	45.53	44.96	98.75	Mar-08
6	Sanofi (Aventis) Pasteur, New Delhi	20	22.00	22.00	22	NA	NA	NA	NA	Mar-08
7	Bharat Bio tech Hy,bad	80	2.00	2.00	2	12.00	11.77	11.70	99.41	Mar-08
Total		284	147.86	126.07	121.37	151.58	120.56	116.90	96.96	

10. Typhoid (Vi-Poly) - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	Bio-Med (P) Ltd Ghaziabad	40	6.00	6.00	6.00	7.10	4.70	4.70	100.00	Mar-08
2	Zydus Aventis Ahmedabad	30	1.60	1.60	1.60	2.00	0.70	0.70	100.00	Mar-08
3	BBL Hy'bad	300	0.74	3.49	3.50	17.50	14.17	14.17	100.00	Mar-08
4	Sanofi (Aventis) Pasteur, New Delhi*					NA	0.56	0.56	100.00	Mar-08
5	CRI Kasauli	30	NA	NA	NA	7.88	15.90	10.49	65.97	Mar-08
Total		400	8.34	11.09	11.10	34.48	36.03	30.62	84.98	

* Note: New Institution / Vaccine

6.3 (Contd.) Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

11. Hepatitis-B - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	SII Pune	1000	NA	NA	NA	360.35	NA	NA	NA	Mar-08
2	Panacea Bio-tech Ltd. New Delhi-multidose presentation	540	15.01	0.00	0.00	8.88	17.04	17.04	100.00	Mar-08
3	Panacea Bio-tech Ltd. New Delhi-single dose presentation	120	0.00	0.38	0.38	0.00	0.08	0.08	100.00	Mar-08
4	Bharat Biotech, Hy'bad,	1000	13.34	36.91	36.91	100.00	3.80	3.80	100.00	Mar-08
5	HBI Udhagamand Gujrat*	200				40.00	25.41	25.41	100.00	Mar-08
6	Shanta bio technic Pvt. Ltd. Hy,bad	2000	799.50	799.50	799.50	793.64	576.70	576.70	100.00	Mar-08
7	Biological E. Ltd. Azamabad, hyderabad	500	7.04	7.04	7.04	0.00	0.70	0.70	100.00	Mar-08
Total		5360	834.89	843.83	843.83	1302.87	623.73	623.73	100.00	

12. Quaderivalent Meningococcal Meningitis Vaccine (MMV) - Installed Capacity, Production, Demand and Supply

S. No	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	Bio-Med Private Limited Ghaziabad	15	0.22	0.22	0.22	0.45	0.20	0.20	100.00	Mar-08
2	NICD Delhi-Import	2.08	1.57	1.57	1.57	2.095	1.711	1.807	105.61	Mar-08
Total		17.08	1.79	1.79	1.79	2.545	1.911	2.007	105.02	

13. Newer Vaccines By Panacea - Installed Capacity, Production, Demand and Supply

14. Haemophilis Influenzae vaccine

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	Bio-Med Private Limited Ghaziabad	40	6.00	6.00	6.00	3.00	1.50	1.50	100.00	Mar-08
2	SII Pune*									
3	Sanofi (Aventis) Pasteur, New Delhi*						2.49	2.49	100.00	Mar-08
4	Shanta bio technic Pvt. Ltd. Hy,bad*	1000				1.18	0.30	0.30	100.00	Mar-08
5	Panacea Bio-tech Ltd. New Delhi- multidose presentation*									
Total		1040	6.00	6.00	6.00	4.18	4.29	4.29	100.00	

* Note: New Institution / Vaccine

6.3 (Contd.) Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

15 Quadruple Vaccine (DT wp -HepB)

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
(i)	Panacea Bio-tech Ltd. New Delhi- single dose presentation	250	0	0	0	0.00	0.44	0.44	100.00	Mar-08
(ii)	Shanta bio technic Pvt. Ltd. Hy,bad*	2000				658.49	124.35	124.35	100.00	Mar-08
Total		2250	0	0	0	658.49	124.79	124.79	100.00	

16 Newer Vaccines from panacea Biotec Limited

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
(i)	Tetavalent Vaccine (DTwP - Hib)	4500	8.29	5.56	5.56	1.04	0.00	0.00	0.00	Mar-08
(ii)	Pentavalent vaccine (DTwp-HepB-Hib)	250	13.86	8.92	8.92	3.41	2.16	2.16	100.00	Mar-08
Total		4750	22.15	14.48	14.48	4.45	2.16	2.16	100.00	

17. Newer Vaccine from Shanta BioLtd.

- (I) Tetra*
- (ii) Pentavale*

18 MMR - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses						Status as on
			2006-07			2007-08			
			Production	Demand	Supply	Production	Demand	Supply	
(i)	HBI Udhagamandla hyd*				7.00	0.00	0.00	0.00	Mar-08
(ii)	SII Pune*				238.37	0.00	0.00	0.00	Mar-08
Total					245.37	0.00	0.00	0.00	

19 PCV 7- Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
(i)	Sanofi (Aventis) Pasteur, New Delhi*					0.30	0.30	100.00	Mar-08	

20 SIV - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
(i)	Sanofi (Aventis) Pasteur, New Delhi*					1.38	1.38	100.00	Mar-08	

*Note: New Institution / Vaccine

6.3 (Contd.) Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

21. ATS - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity (L.V.)	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	0.90	NA	NA	NA	0.00	0.00	0.00	0.00	Mar-08
2	HBPCL Mumbai	0.90	0.00	0.00	0.00	0.12	0.00	0.00	0.00	Mar-08
3	SII Pune*	0.40								Mar-08
4	Biological E Ltd. Hyd"bad*	0.50				0.14	0.21	0.22	104.76	Mar-08
5	B.S.& V Ltd. Thane*	1.00								Mar-08
Total		3.70	0.00	0.00	0.00	0.26	0.21	0.22	104.76	

22. ADS - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity (L.V.)	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	0.80	0.07	0.08	0.06	0.099	0.0071	0.00455	64.08	Mar-08
2	HBPCL Mumbai	0.90	0.005	0.01	0.0080	0.0034	0.00563	0.00318	56.48	Mar-08
3	B.S.& V Ltd.Thane*	0.50								Mar-08
Total		2.20	0.075	0.09	0.068	0.1024	0.01273	0.00773	60.72	

23. ASVS (Snake) - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity (L.V.)	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	3.00	1.98	2.11	2.11	0.25	0.05	0.04	80.00	Mar-08
2	HBPCL Mumbai	39.30	1.43	1.55	1.37	1.13	1.32	NA	NA	Mar-08
3	SII Pune	4.00	0.26	0.20	0.20	NA	NA	0.00	NA	Mar-08
4	Biological E Ltd. Hyd'bad	10.00	NA	NA	NA	0.38	0.14	0.14	100.00	Mar-08
5	KIPM Chennai	7.50	0.03	0.03	0.03	0.00	0.00	0.001	100.00	Mar-08
6	Bengal Chemical & Pharmaceutical Kolkota	0.60	0.33	0.60	0.42	0.04	0.05	0.03	60.00	Mar-08
7	Vins Bio-Products Ltd. Hy'bad*	0.40								Mar-08
8	Bharat Serum & Vaccine Ltd. Thane	8.40	7.26	6.50	6.50	NA	NA	NA	NA	Mar-08
Total		73.20	11.29	10.99	10.63	1.80	1.56	0.21	13.58	

* Note: New Incitation / Vaccine

6.3 (Contd.) Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

24. ASVS (Scorpion) - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity (L.V.)	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	HBPCL Mumbai	0.90	0.00	0.11	0.11	0.01	0.03856	0.03538	91.75	Mar-08
2	Bharat serum & Vaccines Thane	0.05	0.00	0.00	0.00	NA	NA	NA	NA	Mar-08
3	Total	0.95	0.00	0.11	0.11	0.01	0.03856	0.03538	91.75	

25. ARS - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity (L.V.)	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	2.50	0.35	0.32	0.32	0.382	1.36	1.22	89.71	Mar-08
2	Bharat Serum & Vaccine Ltd. Thane	3.00	2.30	2.00	2.00	NA	NA	NA	NA	Mar-08
3	Cadilla Pharmaceutical Ltd. Ahmedabad	1.00	0.50	NA	NA	309.00	720.00	544.00	75.56	Mar-08
4	Haffkine BPCL Mumbai	0.90	0.15	0.60	0.15	112.00	0.60	0.16	26.87	Mar-08
5	HBI udhamangla*					0.15	0.10	0.10	100.00	Mar-08
6	HBI udhamangla *					0.015	0.01	0.01	100.00	Mar-08
Total		7.40	3.30	2.92	2.47	421.547	722.07	545.49	75.55	

26. AGGS - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity (L.V.)	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	Bharat Serum & Vaccine Ltd. Thane	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Mar-08
	Total	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Mar-08

27. NHS - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	0	0.04	0.05	0.05	0.0636	0.033	0.033	100.00	Mar-08
	Total	0	0.04	0.05	0.05	0.0636	0.033	0.033	100.00	

* Note: New Institution / Vaccine

6.3 (Contd.) Vaccinewise and Institution-wise Status of Production, Demand and Supply 2007-08

28. Diagnostic Antigen (ML) - Installed Capacity, Production, Demand and Supply

S. No.	Institution	Installed Capacity	Quantity in Lakh of Doses							Status as on
			2006-07			2007-08				
			Production	Demand	Supply	Production	Demand	Supply	% Achieved	
1	CRI Kasauli	2.75	1.04	1.47	1.47	1.78	1.045	1.043	99.81	Mar-08
	Total	2.75	1.04	1.47	1.47	1.78	1.045	1.043	99.81	

*Note: New Institution/ Vaccine

Installed Capacity, Production and Supply of Quantity of different Vaccines Statement and Sera During 2007-08

S. No.	Institution	Installed Capacity	2007-08		
			Prodt.	Demand	supply
UIP - VACCINES					
1	BCG	2000	599.01	800	489.5
2	DPT	8778	1607.99	1025.24	561.48
3	DT	1645	827.275	428.06	221.119
4	TT	18272	9914.46	2579.083	1621.383
5	OPV	38080	4803.11	4979.31	4868.81
6	Measles	3200	30	30	61.96
NON-UIP VACCINES					
7	JEV	2011.1	0.76	3.5	3.5
8	TCARV	284	151.58	120.56	116.97
9	Typhoid	400	34.48	36.03	30.62
10	Typhoid	NA	NA	NA	NA
11	Heptaitis	8700	1302.87	623.73	623.73
IHR - VACCINES					
12	YFV	0.55	1.19	1.09	0.854
13	MMV	15	0.45	0.2	0.2
NEWER VACCINES					
14	Hib vaccine	40	3	1.5	1.5
15	DTwp-Hep	250	0	0.44	0.44
16	DTwp-Hib	150	1.04	0	0
17	DTwp-Hep	250	3.41	2.16	2.16
ANTI-SERA					
18	ATS	2.8	120.14	0.21	0.22
19	ADS	1.3	0.1024	0.01273	0.00773
20	ASVS (Sn	56.8	1.81	1.56	1.14
21	ASVS(SCO	0.95	0	0.03856	0.03538
22	ARS	7.4	421.382	721.96	545.3812
23	AGGS	4	0	0	0
24	Dignostic	2.75	1.78	1.045	1.043

6.4 The Directory Of Health Research Institutions In India – 2007

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In collaboration with WHO (India)

The Background

Over the years, the health sector has seen the emergence of several stakeholders, resources mechanisms and commitments towards meeting various health and development needs. Increasing emphasis is also being laid on developing evidence based health policies. Today, there is a greater recognition for the role that health research can and must play in achieving various health and related goals.

A health research system functions as the “brain” of a health system, to enable it to respond effectively to the health challenges. The key objective of a health research system is to coordinate health research through appropriate architecture and mechanisms. There is an array of specific objectives of a health research system, which include, inter alia, setting health research priorities, generating knowledge, building capacity, developing standard procedures and mechanisms to ensure ethics, quality, accountability and transparency, mobilizing resources and conducting advocacy for better partnership. A prime objective is immediate response and being alert to the continuing needs and challenges of health development (Strategies for Health Research Systems in South East Asia Region, WHO 2001).

In India, various organizations are engaged in health research – research institutes, medical colleges, non governmental organizations as well as government institutions. However, there is presently no comprehensive database available on health research institutions in the country and their areas of expertise. With a view to fill this lacunae, the Indian Council of Medical Research (ICMR) in collaboration with the WHO Country Office for India undertook an exercise on mapping Health Research Institutions to develop a database of health research institutions in the country. It is envisaged that such a directory of health research institutions would be useful in outlining ongoing research priorities as well as developing partnerships in health research.

The Process

Given the vast scope of health research, one of the foremost tasks was to develop an operational definition for health research and to set the scope of the study. An expert group meeting was held to define Health Research, Health Research Institutions, classification of Research, and the areas of research and who to access for information.

The definition and class of research as agreed upon is as follows:

- ▶ **Health Research:** Systematic generation of knowledge that can be used to promote, restore, maintain and/or protect health of the individuals and populations.
- ▶ **Health Research Institutions:** Groups of/and professionals, dedicated to health research as a legal entity or a unit of a larger legal entity.

Health Research Classification: This included:

- ▶ Basic Research – Studies detailing structure and function including immunity and pathogenesis, usually laboratory based.
- ▶ Clinical Research – Research conducted with human subjects in a medical setting, designed to obtain better information on the natural history, response to interventions/prophylaxis or pathogenesis of a condition that may lead to improved strategies for diagnosis, treatment or prevention of ill health.
- ▶ Epidemiological Research – The study of distribution and determinants of health related conditions in human populations and the use of this knowledge to improve their health status.
- ▶ Health Systems Research – Research that examines the provisions, resource generation (human and infrastructure), financing, governance and the utilization of health care services.

contd...

- ▶ **Social, Economic and Behavioral Research** Research that focuses on social, cultural, economic and behavioural factors that may modify the risk and outcome of disease in individuals and populations.
- ▶ **Operational Research** Combination of research techniques looking at problems in a system so as to provide better solution to managers in control of operations.
- ▶ **Bio-Ethics Research** Research on moral, ethical, legal and social issues pertaining to health.
- ▶ **Health Information Research and Bio-informatics** Research in the field of health information science.
- ▶ **Bioengineering and Diagnostics** Research to develop innovative biologics, materials, processes, implements, devices and informatics for the prevention, diagnosis treatment and rehabilitation.
- ▶ **Biotechnology and Pharmaceutical Research** Research related to discovery and development of new chemicals entities and biological products for health care.
- ▶ **Traditional and Complementary Medical Research** Application of all the above research systems on the rich heritage of India and other traditional systems which can be incorporated in the following health care system.

Based on the deliberations at the meeting, a questionnaire was prepared and pre-tested. Simultaneously, a database of approximately 2000 health institutions in the country was created. Health Institutions, medical colleges and universities in the country were identified from:

- (i) Published papers in Indian medical journals and articles by Indians in foreign medical journals for 2004-2005.
- (ii) Databases obtained from donor agencies like World Bank.
- (iii) Websites of Ministry of Health, Defence, Petro-chemicals, Department of Education, DBT, DST, CDRI, CSIR, CII, OPPI, FICCI, Department of Indian System of medicine, Association of Indian Industries, MCI, NGOs, donor agencies, UN organizations, Association of Universities and health institutions.
- (iv) Annual reports from 2003-2004 Ministry of health & family welfare, Directory of Recognized In-House R&D Units, Directory of Public Funded Research Institutions and others registered with DSIR, Directory of Recognized Scientific and Industrial Research Organisations by Department of Scientific and Industrial Research Ministry of Science & Technology.

The questionnaire was mailed to these institutions. The questionnaire aimed to identify the type and area of research undertaken by the institution. The contact details and brief description about the institution was also sought..

The response to the questionnaire was low less than 300 (299) institutions responded. In view of this, to fill in the information gap, internet searches were also conducted. Information obtained from the survey as well as internet searches and other sources has been compiled in this directory. Such information is therefore restricted to those institutions that have a website and have listed research as one of its activities or have indicated participating in development projects related to health.

As part of the compilation of the directory, the team faced various challenges such as incomplete information, information provided by individuals departments of medical colleges, the absence of websites for many institutions, time consuming effort required to get web addresses etc. While the information provided in the directory is not complete, and several institutions engaged in health research may be outside its ambit, this is a first step towards compiling in a single place, information about institutions that indicate that they are carrying out health research in India. As more information becomes available this may be updated. Notwithstanding these limitations, it is hoped that this directory would be useful not only to research institutions/researchers but also for government departments, donor agencies and private institutions interested in health research.