

# STATE IMPLEMENTING AGENCY OF HEALTH GOVERNMENT OF MONGOLIA



# HEALTH INDICATORS

Please send your comments regarding this publication to the address below. Implementing Agency of the Government of Mongolia-Department of Health

Mailing address: Enkhtaivan street 13B

Ulaanbaatar-210648

POB-187

Fax: 976-11-320633 Tel: 70111485

E-mail: admin@doh.gov.mn, web: www.doh.gov.mn

Edited by: SH. Enkhbat MD., Dsc (Med)

Compiled by: D.Nyamkhorol, MPH

D.Bayasgalan, MD,MS S.Ariuntuya, MPH T.Unurtsetseg

Translated by: L.Oyun MD., MPH., EdD

Layout by: D.Uranchimeg

S.Saintuya

# **Preface**

The Health Statistics and Information Division of the State Implementing Agency of Health has been producing the Health Indicators volumes since 1970. It uses official statistical data of the health sector to estimate annual health indicators based on international methodology and summarizes it in this volume.

The 2010 volume contains health indicators of Mongolian Millennium Development Goals, standard indicators of the health sector, as well as indicators on the main causes of population mortality and morbidity by region, urban and rural areas, gender, age groups and levels of health care services. It has a compilation of some economic indicators of the health sector and includes evaluation indicators of health programs that have been implemented at the national level. The volume has some comparison data with international and WHO regional countries on the health sector's human resources, the world population's mortality and morbidity, and its projection up to 2030. It has illustrated its data with 80 tables, 49 graphics and 43 geographical mappings.

The Ministry of Health announced the year of 2010 as the year of the Health Sector's comprehensive reformation. In this year, based on the Government Platform and Millennium Development Goals, within a comprehensive framework of the National Development Policy, the MOH took realistic actions to identify main areas of the health sector that needed development, to identify needs for amendments of the laws, to increase financial investment, to improve supply of human resources and to increase its skills.

In 2010 the maternal mortality rate reduced to 45.5 per 100 000 live births. It has been going down steadily since 2002 and it reached the lowest level in comparison with countries that held a low level. Infant mortality rate has also reduced to 19.4 per 1000 live births. These indicators demonstrate the possibility of sustainable reduction of maternal and child mortality and keeping it at a low level.

I believe this volume will provide necessary support in making evidence-based decisions by health policy developers and decision-makers at all levels of the health sector

DIRECTOR- GENERAL SH. ENKHBAT

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# List of acronyms

AR Arkhangai BO Bayan-Olgii BKH Bayankhongor

BU Bulgan GA Gobi-Altai GS Gobisumber DG Dornogobi DO Dornod DU Dundgobi ZA Zavkhan OR Orkhon UV Uvurkhangai UM Umnugobi SU Sukhbaatar SE Selenge TU Tuv UVS Uvs

KHU Khuvsgul
KHE Khentii
Aimag Aimag average
UB Ulaanbaatar

KHO

Country Country average

Khovd

NSO National Statistical Office

MDG Millennium Development Goals
STI Sexually transmitted infection
HIV Human Immunodeficiency Virus

AIDS Acquired Immunodeficiency Syndrome
DOTS Directly observed treatment short-course

NTBP National TB Sub-program

RH Reproductive health

IMCI Integrated Management of Childhood Illness

GDP Gross domestic product HIF Health Insurance Fund

SSIGO State Social Insurance General Office

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# **CHAPTER 1. POPULATION OF MONGOLIA**

# 1.1. Population of Mongolia

Administratively, Mongolia is divided into aimags and the capital city. Aimags are further divided into soums and soums into bags. The capital city is divided into districts and districts into khoroos. Presently, the country has 21 aimags, 329 soums, and 1568 bags. The capital city, Ulaanbaatar, has 9 districts and 132 khoroos.

By the end of 2010, the population of Mongolia reached 2 million 780.7 thousand: an increase of 45.0 thousand people or 1.6%, compared to 2009. Of the total population, 63.3% are living in cities and the remaining 36.7% reside in the rural areas. Around 1 million 151.4 thousand people live in Ulaanbaatar city, which is 41.4% of the total population.

48.6% of the total population is male and 51.4% is female. Around 27.3% of the population are under 15 years of age, 68.9% are between 15-64, 3.8% are 65 and over.

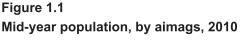
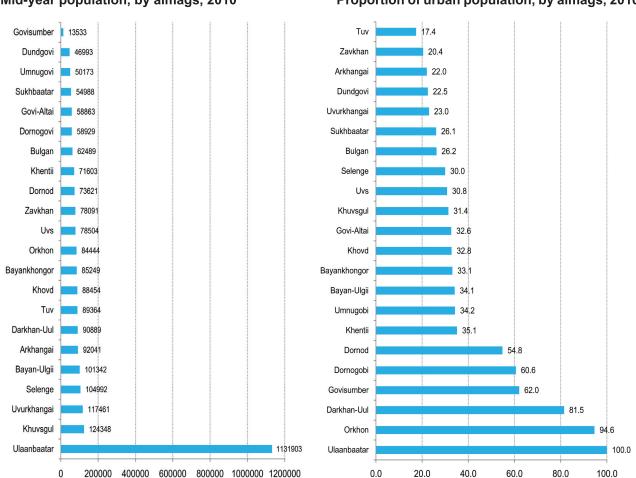


Figure 1.2

Proportion of urban population, by aimags, 2010



# 1.2 Average life expectancy

As per an average life expectancy, which serves as an indicator for human development, Mongolia belong to medium development country. In 2010, the average life expectancy of the population Mongolia was 68.05 years. Gender specifications of the average life expectancy were 72.26 years in females and 64.93 years in males. In other words, women experienced a greater life expectancy than males by 7.3 years.

### 1.3 Selected Demographic indicators

Since 1990, Mongolia has been undergoing a demographic transition defined by a sharp reduction in fertility and death rates, and an increase in aging. For instance, in 1990, the growth rate of the population was 2.7%, while in 2000, it was 1.4%. However, between 2007-2009, the growth population was 1.5-2.0%, which compared to the previous 3 years, increased by 0.3-0.8%. The birth rate per 1000 population was reduced by half from 35.3 in 1990 to 18.0 in 2003, reaching the lowest level and became stable in 2004-2006. It increased to 21.7 in 2007, 23.7 in 2008, and 25.30 in 2009, but decreased to 23.8 in 2010.

The total fertility rate (TFR), interpreted as the number of children a woman would have by the end of her childbearing years, was 4.3 in 1990. The total fertility rate (TFR) experienced a two-fold decline during the period of 2000-2003. However, in relevance to the increase in birth rate in 2007-2009, this indicator increased to 2.3 in 2007, 2.6 in 2008, and 2.7 in 2009, but decreased to 2.3 in 2010.

In 2010, there were 65889 live births. Of which, 1376 were twins /688 births/ and 21 were triplets /7 births/. Of all live births, 51.3% were boys and 48.7% were girls. In other words, for every 100 girls, there were 105 boys.

Table 1.1. The demographic indicators by selected years

Indicators	1990	2000	2005	2006	2007	2008	2009	2010
Total population (thousand)	2149.2	2407.5	2562.3	2594.8	2626.6	2683.5	2735.5	2780.7
Urban population	54.6	57.2	60.2	60.9	61.0	61.4	62.6	63.3
Rural population	45.4	42.8	39,8	39.1	39.8	38.6	37.4	36.7
Age group (percent)								
0-15	41.5	33.7	32.6	28.6	28.9	28.1	27.6	27.3
15-64	54.4	62.8	63.9	67.3	67.3	67.8	68.4	68.9
65 and over	4.1	3.5	3.5	4.1	4.1	4.1	4.0	3.8
Demographic rates								
CBR	35.3	21.5	17.8	18.4	21.7	23.7	25.3	23.8
CDR	7.9	5.9	6.1	6.1	6.2	5.7	5.7	6.3
Growth Rate	2.7	1.5	1.17	1.23	1.55	1.8	1.9	1.70
TFR	4.3	2.2	1.9	1.9	2.3	2.6	2.7	2.3

Looking at the long-term estimation of 2000-2025, which was based on the population census of 2000, the percentage of elders is estimated to grow by 16.2% or 20.1 thousand people in 2005, compared to 2000, and in 2010, is estimated to grow by 28.7% or 35.6 thousand people, compared to 2000.

In 2010, 36.7% of the total population lived in rural areas. In other words, 41.4% of the total population lived in Ulaanbaatar city, 21.9% lived in aimag centres and the remaining percentage lived in rural areas (soum centres/bags). Due to increased urbanization, rapid socio-economic development, and continued rural- to- urban migration since 1990, in 2000, 42.8% of the total population resided in the rural areas, which decreased to 36.7% in 2010.

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# CHAPTER 2. HEALTH GOALS OF THE MILLENIUM DEVELOPMENT

The 147 Heads of States representing 191 nations adopted the Millennium Development Goals (MDGs) at the United Nations Millennium Summit in September 2000 and agreed on global developmental priorities ranging from poverty reduction to sustainable development. These goals are based on the resolutions of UN Summits, and have grown into a measure of progress.

In 2008, Mongolia included verification of human rights and democratic governance development in the objectives of the Millennium Challenge Account. Thus, a total of 9 goals with 24 objectives were developed and approved by parliament and necessary programs, policies and measures were taken for implementation.

Within the framework of Mongolia's MDG, 3 goals (9-13 objectives) were developed that are related to health, such as: to reduce infant mortality rate, to improve maternal health, and to fight against HIV/AIDS, tuberculosis, and other diseases.

# Objective 9 Reduce the under-5 mortality rate by 4 times between 1990 and 2015

Table 2.1 Infant and Under-five Mortality Rates(per 1000 live births), selected years

Indicator	1990	2000	2004	2005	2006	2007	2008	2009	2010	2015
		h	nfant mor	tality rate	e /per 100	0 live birt	hs/			
Gender										
Male	-	-	25.9	22.8	22.1	19.2	22.4	22.6	21.3	
Female	-	-	19.6	18.6	17.3	16.4	16.6	17.6	17.3	
Residence										
Country average	63.4	31.2	22.8	20.8	19.8	17.8	19.6	20.2	19.4	22.0ª/15.0 <sup>b</sup>
UB city average	70.3	32.8	23.7	18.1	19.0	14.7	17.5	18.0	16.1	-
Aimag average	62.5	30.8	22.3	22.5	20.3	20.3	21.2	21.9	22.1	-
		Ur	nder 5 mo	rtality rat	e /per 10	000 live bi	rths/			
Gender										
Male	-	-	32.5	28.4	26.8	23.3	26.4	25.9	26.4	
Female	-	-	25.6	23.6	21.1	20.8	20.2	21.2	22.7	
Residence										
Country average	87.5	42.4	29.1	26.1	24.0	22.1	23.4	23.6	24.6	29.2ª/21.0b
UB city average	99.9	42.4	28.9	21.7	21.8	18.8	20.8	21.0	20.6	-
Aimag average	94.4	42.5	29.2	28.9	25.6	24.6	25.3	25.7	28.0	-

Source: a. Decree #15 of the State Ikh Khural, on approving Mongolia's MDG, 2005

b. Decree #13 of the State Ikh Khural, on approving Mongolia's MDG, 2008

The above statistics and data confirm the stable decrease in infant and under 5 mortality rates in Mongolia within the past 20 years. This reduction is the result of public health measures such as immunization programs, Integrated Child Disease Management, and the promotion of breastfeeding.

# Rate of goal implementation in 2015

In 1990, the under-5 mortality rate per 1000 live births was 88.8 and infant mortality rate was 64.4, while in 2006 this indicator reduced to 24.0 and 19.8 respectively, reaching its goal for 2015. Therefore, in 2008, a new goal of lowering the under-5 mortality rate per 1000 live births to 21.0 and infant mortality rate to 15.0, was promoted and the Government is working toward it.

In 1990, the infant mortality rate per 1000 live births was 64.4, in 2000 it dropped 2 times, between 2000 and 2010, it dropped 3.3 times, and by 2010, it has reached 19.4. The under-5 mortality rate per 1000 live births in 1990 was 88.8, in 2000 it dropped twice as much, between 2000 and 2010, it dropped 3.6 times and by 2010, it has reached 24.6.

As of 2010, the goals to be achieved in 2015 on the infant and under 5 mortality rates vary by aimags.

Table 2.2 Goals to be reached by 2015, by aimags, 2010

Implementetion level of objectives for 2015	Under 5 mortality rate, by aimags	Infant mortality rate , by aimags
Achieved	(4 aimag + 1 city)	(4 aimag)
(>15.0)a (>21.0)b	Govisumber, Darkhan-Uul, Orkhon, Selenge, Ulaanbaatar city	Govisumber, Darkhan-Uul, Orkhon, Selenge
Possible	(5 aimag)	(4 aimag + 1 city)
(15.0-20.9)a (21.0-25.9)b	Bulgan, Dornod, Sukhbaatar, Govi-Altai, Umnugovi	Ulaanbaatar city, Bulgan, Govi-Altai, Dornod, Khentii
Slow	(8 aimag)	(6 aimag)
(21.0-25.9)a (27.0-32.9)b	Arkhangai, Bayankhongor, Dornogovi, Dundgovi, Zavkhan, Tuv, Khovd, Khentii	Bayan-Ulgii, Dornogovi, Dundgovi, Umnugovi, Tuv, Sukhbaatar, Khovd
In possible	(4 aimag)	(6 aimag)
(26.0<)a (33.0<)b	Bayan-Ulgii, Uvurkhangai, Uvs, Khuvsgul	Arkhangai, Bayankhongor, Zavkhan, Uvurkhangai, Uvs, Khuvsgul

Comment:

a. Infant mortality rate

b. Under-5 mortality rate

Causes of infant mortality include pathology during the prenatal period, respiratory and digestive system illnesses, communicable diseases, birth defects, and death caused by accidents. In the past 10 years, the rate of mortality due to pathology during the prenatal period and birth defects has abruptly increased. For example, in 1998, birth defects took 2.0% of infant mortality and pathology during the prenatal period 25.0%, while in 2010, birth defects took up 12.0% and pathology during the prenatal period took up 51.1%.

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# **Objective 10**

# To provide all individuals with essential reproduction health services, and to lower the maternal mortality rate by 4 times between 1990 and 2015

Mongolia used to be among the countries with high maternal mortality rate, compared to other regional and developed countries, but starting from 2008, it was among the medium rate countries.

Table 2.3 Maternal mortality rate (per 100 000 live births), by selected years

Indicators	1990	2000	2003	2004	2005	2006	2007	2008	2009	2010	2015
Country average	199.0	158.5	109.5	98.6	93.0	69.7	89.6	49.0	81.4	45.5	50.0ª
UB city average	126	171.1	138.0	79.8	73.3	71.8	73.7	55.2	78.9	46.2	-
Aimag average	230	153.4	93.7	109.6	105.7	68.2	102.0	44.3	83.5	44.9	-

Source: a. Decree #13 of the State Ikh Khural, on approving Mongolia's MDG, 2008

From 2002-2006, UNFPA and the Mongolian Government successfully implemented the 2<sup>nd</sup> national reproductive health program, and within the outcome of the continued activities during 2007-2011, the maternal mortality rate decreased sustainably and stayed at low level.

In 2010, the maternal mortality rate decreased to 45.5 per 100 000 live births, which has decreased steadily since 2002 and compared to years with low rates, it has reached its lowest. Looking at this, there is a possibility to further decrease maternal mortality and to keep it low.

By looking at the maternal mortality rate of 2010 by aimags, Bayankhongor, Bulgan, Gobisumber, Darkhan-Uul, Dornogobi, Dornod, Dundgobi, Uvurkhangai, Sukhbaatar, Tuv, and Khentii, a total of 11 aimags, didn't have maternal mortality. But looking at it by region, the rate is still high in some aimags. Maternal mortality rate is 76.7-205.5 per 100 000 live births in Uvs, Khovd and Gobi-Altai aimags of the western regions, which is 1.5-4.5 times higher than the aimag average.

## Objective 11

# To limit and prevent the spread of HIV/AIDS by 2015

Compared to other countries, Mongolia is among 5 countries in East Asia and the Western Pacific Region to have a low spread rate of HIV/AIDS, with 1.0% prevalence rate of HIV/AIDS among the total population, but in the recent years, the number of registered HIV/AIDS cases has increased.

Table 2.4 HIV prevalence among pregnant women and youth between the ages 15-24, by percentage

Indicators		2000	2006	2007	2008	2009	2010	2015
HIV prevalence among pregnant women		-	0.004	0.001	0	<0.1	<0.1	<0.1
HIV prevalence youths between ages 15-24	-	-		0.0007	0.0005	<0.1	<0.1	<0.1

Source: a. Decree #13 of the State Ikh Khural, on approving Mongolia's MDG, 2008

Ever since the first registration of HIV/AIDS in 1992, there have been a total of 83 registrations by the end of 2010, of which 21 cases were registered in 2010. Of the 83 registered, 12 have passed away.

The average registration of HIV/AIDS during 1992-2004 was 1 case and 9-13 cases during 2005-2009, but in 2010, it has increased to 21 cases.

17 (81%) of people registered with HIV/AIDS in 2010 were male and 4 (19%) were female. All registered cases were transmitted by sexual intercourse. By looking at the age group, 38.1% or 3 cases were adolescents aged 15-24. 81% of registered cases were reported to be unmarried/singles.

8 (38.1%) HIV cases were detected and registered through active epidemiology, 7 (33.3%) cases through routine medical check-ups and 6 (28.6%) cases when the patients were admitted to hospital due to other diseases. 6 patients are involved in anti-retroviral treatment.

# Objective 12 Reduce the prevalence of tuberculosis by 2015

Although the diagnosis and treatment of tuberculosis has improved and the mortality rate is decreasing in Mongolia, incidence of TB is on the rise, making it difficult to achieve the objective.

Tuberculosis is largely attributed to a country's social, economy and the living standards. In Mongolia, the prevalence of Tuberculosis is affected by inflation, unemployment, poverty, and migration, resulting from the socio-economic changes that started since 1990. According to WHO's survey, Mongolia is ranking 3<sup>rd</sup> among 7 countries with high rate of tuberculosis within in the Western Pacific Region.

Table 2.5 Prevalence and death rate of Tuberculosis, (per 100 000 population), by selected years

Indicators	1990	2000	2005	2006	2007	2008	2009	2010	2015	
Incidence of tubercu	losis									
Country average	79	125	175	185	166	159	156	154	100.0ª	
UB city average	85	180	264	259	225	227	213	212	-	
Aimag average	63	99	123	132	123	115	113	115	-	
Death rate of tuberc	Death rate of tuberculosis									
Country average	4.8	3.2	4.0	2.9	2.5	2.707432	2.8	3.3	2.0ª	
UB city average	5.4	2.5	3.3	3.3	2.3	3.233707	2.7	4.4	-	
Aimag average	3.9	2.0	4.3	2.5	2.6	2.363299	2.9	2.5		
Proportion of TB cas	es detec	ted and	cured un	der DOTS						
Country average	-	100/80	100/79	100/82.1	100/83.8	100/85.0	100/84.2	100/84.5	100.0ª	
UB city average	-	100/84	100/74	100/78.4	100/80.6	100/83.2	100/80.2	100/81.7	-	
Aimag average	-	100/81	100/84	100/87.1	100/88.0	100/87.2	100/88.0	100/87.5	-	

Source: a. Decree #13 of the State Ikh Khural, on approving Mongolia's MDG, 2008

In 1990, the incidence rate of tuberculosis was 79 per 100 000 population, but in 2000, it had increased by 1.5 times, and 2-2.3 times during 2004-2006. However, starting from 2007, the incidences have decreased and in 2007, the rate was 166 per 100 000 population, 159 in 2008, 156 in 2009, and 154 in 2010.

The number of people dying due to tuberculosis is relatively decreasing. During 1992-1995, an average of 121 people died due to tuberculosis, 113 in 1996-1999, 75 in 2000-2003, and 80 cases in 2004-2009, but the cases have increased to 91 in 2010.

Of the 4,213 new cases of tuberculosis registered in 2010, 60.1% were pulmonary TB and 39.9% were non-pulmonary TB. 72.5% (1,837) of pulmonary TB were sputum positive TBs. 69.0% of total TB cases occurred in the 16-44 working age group. 52.0% were male and 48.0% were female.

In 2010, the verified diagnosis percentage was 74.8% and the recovery rate was 84.5%, which compared to the previous year, has increased.

Mongolia, as in many other countries, has used directly observed treatment short courses (DOTS) since 1990s which has impacted in reduction of and assisted in taking under control TB prevalence.

# **CHAPTER 3. MATERNAL AND CHILD HEALTH**

#### 3.1 Maternal health

The government determined the population development policy in the population policy documents and in the national development policy based on the MDG. By assisting mothers and children, newlyweds and new-borns, and by providing financial assistance once a year to mothers with many children, there has been a tendency for the population to grow in recent years. By implementing a reproductive health national program and reducing maternal mortality strategy, the quality and amount of surveillance of pregnant women has improved, decreasing maternal mortality.

The successful implementation of the 3<sup>rd</sup> reproductive health national program with UNFPA (2007-2011), Safe delivery project (2008-2009) with UNICEF and WHO, "Safe Pregnancy" and "Decreasing maternal mortality strategy 2005-2010" with WHO, and the Health Minister's decree 190 "On reducing maternal mortality" and decree 149 "On measures to reduce maternal mortality" have all played its role in reaching the objective to reduce maternal mortality.

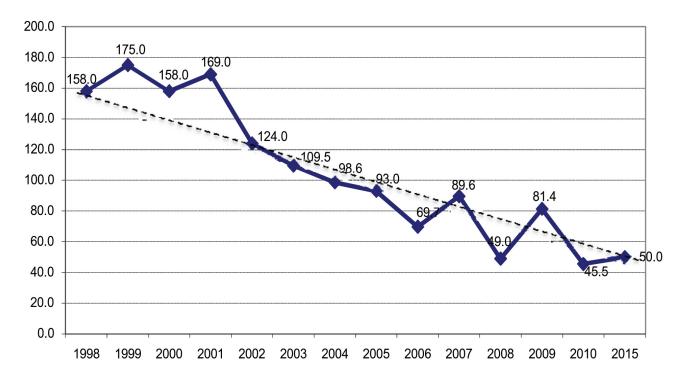


Figure 3.1 Maternal mortality rate per 100 000 live births (1998-2010)

#### In 2010

- The "Maternal and child health (2011-2015) strategy' is approved in order to improve maternal and child health, to achieve millennium development goals and to reduce maternal and child mortality. This strategy is developed under the "From Healthy mother a healthy child" slogan within the framework of the goal "to reduce maternal and child morbidity and mortality, to achieve MDGs four and five"
- Health Minister's decree 105 "On regulating abortions" of 2010 was passed

#### About maternal and child health in 2010

- "To improve reproductive health, and to strength maternal and infant health services to reach the MDG" in Ulaanbaatar city
- The conference on "Maternal and Infant Health" for widwifes of Western region took place in Khovd city of Khovd aimag
- Within the framework of rapid decision making process during disasters and accidents training on "provision of essential care and services on obstetrics at regular basis during emergency situations" was conducted for aimag and district consultant doctors in gynaecology and obstetricians

#### 3.1.1. Antenatal care

In the MDGs it is stated that antenatal care and services such as prenatal monitoring, predelivery room provision, percentage of hospital births, and active monitoring of postnatal care to reach certain levels by 2011. An evaluation of "Reduction of maternal mortality in 2005-2010 strategy" revealed that indicators on pregnancy, delivery and postnatal period's quality of services which include 'percentage of women who used antenatal care 6 or more times during their pregnancies', 'percentage of home visits of mother and child after delivery', and 'percentage of pregnant women who used iron supplements' did not meet expected levels. Pregnancy monitoring helps diagnose complications that can occur during pregnancy, birth and post birth and allows taking preventative measures when necessary. The issues related with early detection of pregnancy, prenatal care, identification of pregnant women with risk and complications, their transfer to the next level of health care, delivery of healthy women, antenatal care, infant care, family planning, regular operation of pre-delivery rooms for women are still considered as priority issues among the primary health care system in soums and family clinics. Clinic care and services during pregnancy and before birth are important in decreasing complications during pregnancy, birth, post birth period, and maternal and child illness and mortality.

Pregnant women who use antenatal care and who have regular health checkups contribute significantly to diagnose and treat associated illnesses, as well as decrease possible complications during pregnancy and birth.

Looking at the 2008 Reproductive health study by the National Statistic Committee and UNFPA, the average period at which prenatal care began in 1998 was 3.7 months, which became 3.3 months in 2003, and 2.9 months in 2008, which shows a positive outcome of mothers attending prenatal care at an early period. In 2010, 83.4% of all pregnant women received prenatal care during the first 3 months of pregnancy. 79.7% of women in the city and 86.4% of women in the rural areas were under prenatal care. 1.4% of women attended prenatal care after 7 months.

Providing pregnant women with access to antenatal care and regular health visits will help prevent and monitor possible complications relating to anemia, late pregnancy complications, kidney disease and other illnesses. According to decree number 197 of 2004, approved by the Minister of Health, on "Procedures and rules on testing pregnant women for HIV/AIDS", tests must be made under the consent of the pregnant woman.

Of all pregnant women receiving antenatal care, 93.0% have undergone general blood testing and, of these, 8.1% were anaemic. 88.2% of women were tested for syphilis, which, compared to the previous year, had decreased by 2.0 points. 2.2% of women tested positive for syphilis, which is higher than the national average by 3.2% in Dornogobi, 2.6% in Bayankhongor, 2.5% in Orkhon, and 2.9% in Ulaanbaatar. 61.8% of pregnant women had X-ray examinations and 53 cases of active tuberculosis were detected, of which 56.6% was from Ulaanbaatar city.

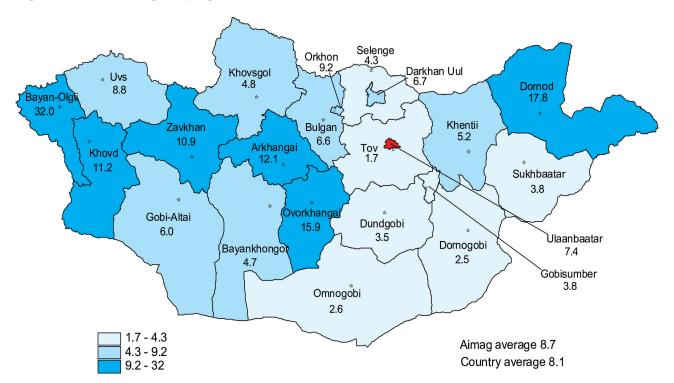


Figure 3.1.1 Percentage of pregnant women with anemia, 2010

Renovation of maternal rest rooms in the rural areas with high level of pregnancy and birth complications provided opportunities to give birth in settings close to proximity to clinics that can provide professional help and to give birth under professional care.

Improving the delivery room structure and the human resources as well as continuously providing necessary equipment and tools are significant in delivering standard care and help.

As of 2010, 342 maternal resting wards were operating throughout the country, of which 290 were in soum centers, 24 in village clinics, 21 in aimag centers, 3 in Ulaanbaatar city clinics and 4 in other places.

119 maternal resting wards are in designated buildings, 223 are in clinics, a total of 82'639 beds were used and the average period of stay at a maternal resting ward was 10.0 days. During this year, a total of 12 new rest places were built and 43 underwent construction and renovations. Of the total number of mothers required to rest in resting wards, 78.0% went to maternal resting wards.

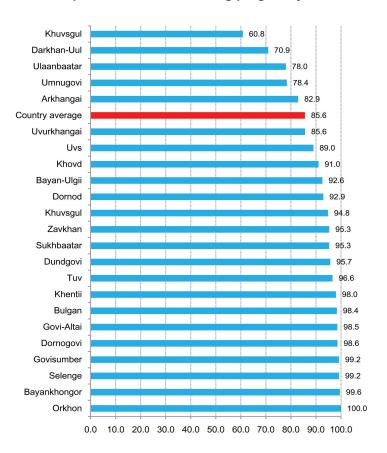
In 2010, 81.9% of all mothers went at least 6 times for check-ups during pregnancy.

According to the figures, the indicators of Arkhangai, Umnugobi, and Ulaanbaatar city are below the national level.

However, the percentage of women who didn't undergo prenatal care is 0.6%, which is higher than the previous year by 3 times.

7.9% or 196 mothers didn't undergo prenatal care in Bayan-Ulgii aimag, which is higher than the other aimags and the national level.

Figure 3.1.2 Percentage of women undergoing prenatal check-ups at least 6 times during pregnancy, 2010



# 3.1.2 Birth, delivery health care and services

It is most important to have pregnant women deliver at clinics, to provide clinics with well trained midwives and other staff and to have all pregnant women start prenatal care as early as possible. It is necessary for pregnant women giving birth their first time, twin births, mothers over 35 years of age, pregnant women undergoing prenatal care too late, mothers who had complications during previous births, mothers who had still births, and mothers with malnutrition and chronic diseases to deliver in fully equipped local hospitals. According to the reproductive health research in 2008, 40% of the total number of women come to aimag centers and Ulaanbaatar city to give birth; the western region demonstrates the lowest number of transfers of pregnant women from soum to aimag and from aimag to Ulaanbaatar. 99% of women that gave birth received professional medical help, and of these, 53 percent received obstetric help, which was higher in comparison to rural areas. In rural areas, 37 percent of pregnant women were assisted by a feldsher, this was 21 percent higher in comparison to the city.

In 2010, 65'660 mothers gave birth at a national level, which compared to 2009, the birth number has decreased by 2884 births or 4.2%. Birth numbers increased in Gobisumber and Selenge aimag, but decreased in the other aimags and Ulaanbaatar city. Birth rate per 1000 persons is 23.8, and this indicator is high in Gobisumber 28.0, Orkhon 27.2, Ulaanbaatar 26.0, Dornod 25.0, and Uvs 24.9.

Only regular births are delivered in soum centers, whereas in case of complications, they

are taken to aimag general holpitals to be under care of specialized doctors. However, the number of deliveries in aimag general hospitals is increasing and the capacity of the maternal resting wards is increasing excessively. 43.4% of total births were in Ulaanbaatar city, 41.8% were in aimags' and districts' general hospitals, 11.5% were in soum, intersoum and village hospitals, 2.7% in rural general hospitals, and 0.5% were delivered at home. 40.8% of total births were first time births, and 4.4% of all births were under doctors' supervision, 87.7% under obstetrician gynaecologists, and 7.5% were under mid-wife feldchers' care. 6.0% of births were under 20 years of age and 12.1% were over 35 years of age. The number of mothers delivering at home has increased and compared to the previous years, has increased by 0.1 points or by 55 births. Of a total of 323 home births, 145 births were delivered without the care of hospitals and this indicator has decreased by 2.1 points from the previous year and compared to the previous years, the number of deliveries without hospital care is decreasing.

Table 3.1.2 Number of births, by type of health facility, 2010

Aimag, city	Total number of births	At home	Number of births in aimag hospitals	Number of births in rural general hospitals	Number of births in soum and intersoum hospitals	Village hospitals	Number of births at bagh feldsher posts	State Research Center for Maternal and Child Health	Number of births in private hospitals
Arkhangai	1946	4	1165	0	776	0	1	0	0
Bayan-Olgii	2459	3	1736	0	720	0	0	0	0
Bayankhongor	1874	6	1521	0	340	7	0	0	0
Bulgan	975	3	641	0	331	0	0	0	0
Gobi-Altai	1303	4	1004	0	292	0	3	0	0
Gobisumber	379	2	376	0	1	0	0	0	0
Darkhan-Uul	2469	15	2367	0	87	0	0	0	0
Dornogobi	1288	6	1053	192	37	0	0	0	0
Dornod	1842	6	1695	0	141	0	0	0	0
Dundgobi	864	1	672	0	191	0	0	0	0
Zavkhan	1656	11	889	325	431	0	0	0	0
Orkhon	2294	13	2266	0	15	0	0	0	0
Uvurkhangai	2752	10	1637	278	772	0	9	0	46
Umnugobi	1167	4	942	0	221	0	0	0	0
Sukhbaatar	1149	2	1003	0	144	0	0	0	0
Selenge	1896	8	936	630	265	57	0	0	0
Tuv	922	0	548	0	374	0	0	0	0
Uvs	1953	33	1309	0	611	0	0	0	0
Khovd	2076	6	1452	243	375	0	0	0	0
Khuvsgul	2933	2	1799	0	1132	0	0	0	0
Khentii	1388	4	1023	130	221	1	9	0	0
Aimag average	35585	143	26034	1798	7477	65	22	0	46
Ulaanbaatar	30075	180	1408	0	9	0	0	28218	260
Country average	65660	323	27442	1798	7486	65	22	28218	306



Figure 3.1.2 Crude Birth rate per 1000 population, by aimag, 2010

# 3.1.3 Post-delivery health care services

One of the main issues of health care services is to improve post delivery care for mothers and infants, to monitor within 42 days of birth, and to give counselling to mothers on caring for their baby, breastfeeding and family planning.

According to the 2008 Reproductive Health research, the percentage of mothers receiving counsel within 42 days of birth has increased since the 2003. Within this research, counselling on breast feeding and infant care has increased by 2 points, counselling on family planning by 6 points and counselling on STI's increased by 11 points.

In the 2010 health statistic registration, 88.0% of mothers who were under prenatal care received maternal care within 42 days of birth, which has increased by 3.8 points, compared to the previous year. This indicator is significant in decreasing post delivery complications and maternal mortality.

According to the 2008 Reproductive Health Research, 46% of mothers who gave birth had some kind of associated diseases, which has increased by 13 points since 1998, and 0.4 points since 2003.

According to the 2010 health statistics, 24.6% of all mothers who gave birth had some kind of associated diseases during pregnancy. From which the three main causes are:

- Urogenital disease 35.9%
- Coronary disease 15.4%
- Digestive system disease 9.8%

Also, in 2010, a total of 48'422 cases of complications during pregnancy, birth and post-delivery per 1000 live births were registered. Of which:

- Pregnancy complications 32.5%
- Birth complications 41.5%
- Post-delivery complications 1.4%
- Diseases not related to pregnancy and birth 24.6%.

Since 2009, the average number of diseases of pregnant women and those who gave birth has increased, especially diseases not related to pregnancy and birth, which has increased by 7.8 points.

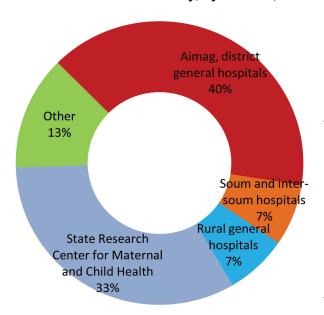
The increase in number of pregnant women with STI's, and the birth of children with inborn syphilis shows the necessity to increase the quality of pregnancy health care and services. Of pregnancy complications, 55.6% were epileptic, of birth complications, 28.5% were primary and secondary weaknesses in birth strength, and of post delivery complications, 58.5% were late bleeding.

# 3.2 Maternal mortality

The 5<sup>th</sup> objective of the Millennium Development Goals is to reduce maternal mortality by 75% between 1990 and 2015. 40-50 million pregnancies were registered along the western region countries of the Asia-Pacific, 30,500-50,000 maternal mortalities occurred during pregnancy, birth and post delivery, and 300,000 infant mortalities during the first day.

Today, the maternal mortality level in our country has reduced 4 times since 1990. Mongolia has moved from a high level country to a country with a monderate level of maternal mortality. In 2010, 30 cases of maternal mortality were registered and it was 45.5 per 100,000 births. This indicator is the lowest within the previous years. Since 2009, maternal mortality has decreased by 26 cases and in Bayankhongor, Bulgan, Gobisumber, Darkhan-Uul, Dornogobi, Dornod, Dundgobi, Uvurkhangai, Sukhbaatar, Tuv, and Khentii aimags, there was no registration of maternal mortalities.

Many effective measures were taken to build up a supportive environment to reduce maternal mortality. It includes development and implementation of clinical guidelines to increase quality of services on reproductive health, early screening of high risk pregnant women by specialized doctors, increase knowledge and skills of bag, soum, family doctors, obstetricians and gynaecologists, and provision with essential drugs and medical equipments.



Picture 3.2 Maternal mortality, by location, 2010

13.3% of maternal mortality was from pregnancy complications, 20.0% was from birth complications, 10.0% was from post delivery complications and 56.6% was from diseases not related to pregnancy and birth. Compared to last year, birth complications and diseases not related to pregnancy and birth increased by 12.9 points and 12.0 points significantly. However, the decrease in maternal mortality due to pregnancy complications by 20.6 points is related to the increase in number of prenatal care and the improvement of health care. In order to improve the quality of prenatal care and the prevention of infant mortality "Surveillance guide of pregnant women" is being implemented at a national level.

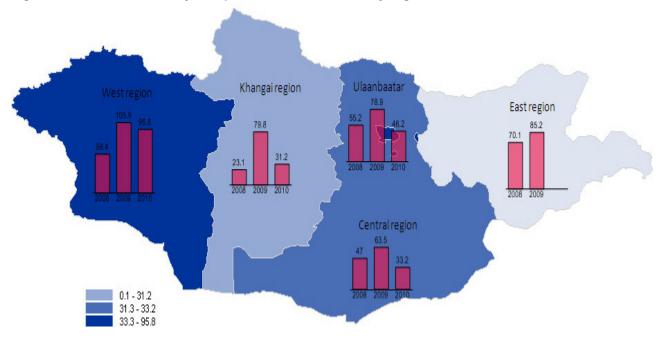


Figure 3.2 Maternal mortality rate per 100,000 live births, by region, 2008-2010

The rate of maternal mortality in the western region is higher than the other regions, according to the average indicators of the past 3 years. The relatively high level of maternal and infant mortality in such regions is related to the low development of structure, transportation, weather, economy, migration, and living standards, as well as the fact that 20% of the population resides in remote regions far from the aimag center.

# 3.3 Child health and breast feeding

The main indicators of maternal and infant health are continuously improving as a result of improving infant health care, implementing integrated child disease management, and promoting breastfeeding and immunization under the Child development and protection /2002-2010/ national program.

There were a total of 65,889 live births at the national level, which has decreased by 2,873 children or 4.2% since last year. 4.4% of the total live births weighed less than 2,500 grams. 1,376 of live births were twins and 21 were triplets. Still births is 7.3 per 1,000 births and of a total of 486 still births, 26.3% were within in the western region, which is higher than the other regions. 53.7% of the still births were boys and is high in most regions. The sex ratio at birth was 105.4. In 2010, the percentage of active surveillance in children-under-one was 99.6% and that for children-under-five was 93.0%.

The research shows that more than 4/5, 81%, children suckled within 1 hour of birth and 82% of children less than 6 months of age only breast fed. According to official statistics, the percentage of children that suckled within 1 hour of birth is 95.0%. This indicator is high in Darkhan-Uul, Dornod, Orkhon, Sukhbaatar, Khentii and Ulaanbaatar city.

Table 3.3 Data on new borns, by region, 2010

		Number	of newbor	ns	Of all newborns,			
Regions	Total	Male		Sex	percent with birthweight below 2500 g	percent of stillbirths		
Western region	9390	4723	4667	101.2	4.0	13.4		
Central region	9031	4640	4391	105.7	3.7	4.6		
Khangai and Gobi region	12802	6635	6167	107.6	4.1	7.8		
Eastern region	4393	2227	2166	102.8	3.9	6.6		
Aimag total/average	35616	18225	17391	104.8	3.9	8.4		
Ulaanbaatar	30273	15585	14688	106.1	4.7	6.1		
Country total/average	65889	33810	32079	105.4	4.4	7.3		

## 3.4 Infant and under five mortality

Within the Millennium Development Goal, the order number 19 of the Ulsiin Ikh Khural was approved in order to reduce infant mortality rate per 1,000 live births to 15.0 by 2010 and under five mortality rate to 21.0. With the support of the international organization World Vision, projects such as supplying children under five and breastfeeding mothers with vitamin A, iron supplement, and multi-nutrient food supplements are being implemented and increasing the number of involvement. The development of the national strategy for infant feeding (2008-2015) has started, coordinating with the international standard. Within the past 15 years, infant mortality rate has reached 35.3-19.4 per 1000 live births in our country and this decrease can be related to the health policy and programs.

Looking at decrease of infant mortality by 3.3 times between 1990-2008 it can observed that it is possible to reach the MDG by 2015. According to the 2008 research, infant and under five mortality rates differs by region. The research results show infant mortality rate is high among the western regions and low in southern regions. The percentage of newborn babies' mortality in total mortality was increased, although the total infant mortality was reduced. Infant mortality is mostly related to maternal health and birth complications.

1275 cases of infant deaths were registered at the national level in 2010, which is 19.4 per 1000 live births. Compared to the previous year, it has decreased by 111 cases or 8.0%, and has decreased by 0.8 mortalities per 1000 live births. 60.1% of infant mortality occurred during infancy. Infant mortality is 11.6 per 1000 live births.

However, there were 1,622 cases of under five deaths, which is at a level of 24.6 per 1000 live births. 54.6% of total deaths is male and 45.4% is female. Compared to last year, it has increased by 1 death per 1000 live births. The following aimags have a higher level than the aimag and national level by 5.6-18.6 mortalities per 1000 live births: Bayan-Ulgii, Uvs, Khuvsgul, Uvurkhangai, Zavkhan, Bayankhongor, Arkhangai and Tuv.

The leading three causes of deaths among children under 1 were diseases occurring during prenatal period - 51.1%, respiratory system diseases - 21.6%, and birth defects, abnormal development and chromosomal disorders - 12%. In infant deaths due to, respiratory system diseases increased by 2.4 points and birth defects by 0.8 points

Table 3.4 Causes of infant and under five deaths, by location, 2010

	Infa	nt	1-4 yea	r-olds
	Urban	Rural	Urban	Rural
Diseases of the respiratory system	14.2	26.1	16.2	27.5
Diseases of the digestive system	2.1	2.4	3.0	3.7
Certain conditions originating in the perinatal period	59.1	46.2	46.1	36.5
Congenital malformations, deformations and chromosomal abnormalities	14.9	10.2	13.3	9.3
Injury, poisoning and certain other consequences of external causes	4.5	8.4	12.2	14.1

1st leading cause
2nd leading cause
3rd leading cause

In the city and in rural areas, the leading cause of deaths among children under 1 and children under 5 were diseases occurring during prenatal period. Compared to the previous year, deaths caused by respiratory diseases have increased by 3.1 points among children under 1 and by 1.6 points among children under five.

Table 3.4.1 Diseases among children under 1 and children under 5, by location, 2010

	0-1 yea	r-olds	1-4 yea	r-olds
	Urban	Rural	Urban	Rural
Diseases of the respiratory system	19.1	44.0	18.1	43.2
Diseases of the digestive system	5.2	7.6	4.0	8.0
Certain conditions originating in the perinatal period	3.3	0.8	1.2	0.3
Injury, poisoning and certain other consequences of external causes	1.3	0.6	3.5	1.2
Certain infectious and parasitic diseases	0.8	0.4	2.2	1.8
Diseases of the skin and subcutaneous tissue	1.9	2.1	3.5	2.4
Diseases of the ear and mastoid process	0.5	2.5	0.2	0.9

1st leading cause
2nd leading cause
3rd leading cause

Respiratory system diseases are the leading diseases among children under 1 and children under 5 in the city and rural areas, and are increasing year by year. Since last year, respiratory system diseases increased by 8.0 points among children under 1, and by 19.5 points among children under 5. Especially, there were rise in common cold cases.

Table 3.4.2 The Five leading causes of morbidity among children and adolescents, by age group /per 10000 population/, 2010

	1-4 year-olds	5-9 year-olds	10-14 year-olds	15-19 year-olds
Diseases of the respiratory system	3827.3	1278.3	1009.7	691.5
Diseases of the digestive system	734.2	685.7	672.7	612.8
Certain infectious and parasitic diseases	351.1	239.6	139.5	151.1
Injury, poisoning and certain other consequences of external causes	389.0	282.2	337.3	424.4
Diseases of the genitourinary system	103.7	124.5	225.8	448.4
Diseases of the skin and subcutaneous tissue	444.4	283.1	320.7	384.5



Majority of diseases among adolescents is taken up by diseases of the respiratory, digestive and urogenital system. Year by year, injury, poisonings and others consequences external causes are increasing among adolescents, and has increased by 65.1 illnesses per 10000 children, among children between 15 and 19.

#### 3.5 Abortion

Abortion rate is one of the indicators that can show the knowledge, understanding, practice of family planning and whether there is increase of its usage as well as whether cares and services, policy, and programs are influencing the population in this field. The 2008 research showed the increase in births and women's interest in giving birth and the successful implementation of the government's social welfare policy programs on promoting births has decreased the abortion rate during the past years. However, one of the main issues reproductive health is facing is not only unstable decrease of abortion, but there is no factual data on the number of abortions.

In 2010, the Health Minister's decree 105 "On regulating abortions" was approved and indicated the implementation of abortion standard MNS 5488:2005. This action allowed the introduction of modern methods on comprehensive safe abortion services to be performed by obstetricians and gynecologists in clinics that have the right to perform abortions. Introduction of safe abortion standards contributed in reduction of abortion complications and cases of mortality due to abortion.

According to the health statistics of 2010, 12,492 cases of abortion were registered, with the ration of 189.6 per 1000 live births, and 14.8 abortions per 1000 women of reproductive age. Compared to the previous year, the number has increased by 110 cases, with the ration of 6.3 abortions per 1000 live births. Compared to last year, the increase in Darkhan-Uul, Orkhon and Ulaanbaatar city shows that access to abortion services is higher in settled areas. Also, the number of abortions at private clinics is higher than the previous years. Later pregnancy is at 3.5% and compared to last year, has decreased by 0.6 points. According to the age group, 6.0% of the total number of abortions is among women under 20 years of age, 72.8% were ages 20-34, and 21.2% were women over the age of 35. Compared to last year, abortion among women under 20 years of age decreased by 0.3 points.

16.5% of women who had abortions never gave birth, in other words, was first time abortion, and comparing this indicator to the previous, it has decreased 1.5-2 times.

According to location, 1.1% of abortions were done in soums and inter soum clinics, 32.1% in private clinics, 25.8% in district health centers, and 39.7% or the majority were in delivery wards and Maternal and Child Health Research Center.

# 3.6 Contraception

The population knowledge and usage of family planning is increasing year by year and the utilization of contraception is continuously increasing. According to the 2008 research, 78% of all women and 91% of women with families use some kind of contraception.

According to the health statistics indicators of 2010, modern contraception usage has reached 53.4%. 534.4 out of 1000 RH aged women use some kind of contraception. The most commonly used methods are IUD -28.1%, condoms -36.4%, and pills -24.8%. Compared to the previous year, contraception methods increased by 2.3 points.

# **CHAPTER 4. MEDICAL SERVICES**

The health care system in Mongolia is characterized by three levels of care and services and its prevailing principle is to deliver equitable, accessible and quality health care and services for every person.

- Primary care and services are mainly placed in family practice facilities in UB city, and in soum and inter-soum hospitals in aimags
- Secondary care and services take place in district general hospitals in UB city, and aimag general hospitals in aimags
- Tertiary care and services are placed in major hospitals and specialized professional centers in UB city.

As of 2010, 16 specialized hospitals, 4 regional diagnostic and treatment centres, 17 aimags general hospitals, 12 district general hospitals, 6 rural general hospitals, 37 inter-soum hospitals, 274 soum hospitals, 218 family group (FGP) practices and 166 private hospitals and 947 clinics have been delivering health care services to the Mongolian population.

Table 4.1 Health facilities by level of care

·	
Health care providers	Number
Primary level hospitals	546
Family hospitals	218
Soum hospitals	274/17
Intersoum hospitals	37
Secondary level hospitals	35
District hospitals	12
Rural general hospitals	6
Aimag general hospitals	17
Tertiary level hospitals	20
Regional Treatment and Diagnostic centers	4
Specialized Centers and Hospitals	16
Maternity hospitals	3
Other hospitals	55
Private hospitals	166
Private clinics	947
Hot spring	16
Drug supply companies	158
Drug manufactures	41
Drug stores	666
Other	47
Total	2700

#### 4.1 FGP services

Within the framework of the program "Health Sector Development -2", FGPs were established in stages in Ulaanbaatar city and aimag centres and by 2002, converted to a private clinic structure.

Health Indicators, 2010 25

As of 2010, there were 218 FGPs, of which 123 provided primary medical care and public health services to 151.4 thousand residents of Ulaanbaatar and 95 served 608.9 thousands residents of 21 aimag centers.

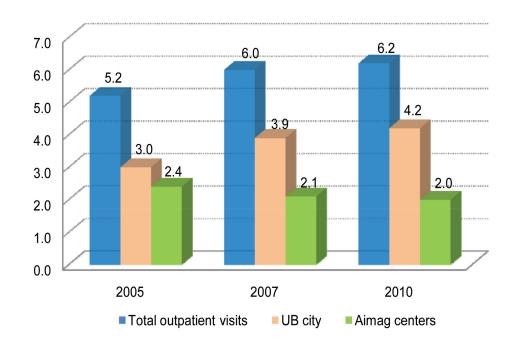
Table 4.1.1 Some indicators of health care and services in FGPs, 2010

Indicators	Family h	Total	
	UB city	Aimag centers	
Number of FGP	123	95	218
Number of physicians	521	295	816
Number of nurses	475	283	758
Number of outpatients	4180797	2064880	6245677
Percentage of preventive medical check-up	40.9	34	38.6
Number of visits person per year	3.6	3	3.4
Number of outpatient visits per physician	8024.6	6999.6	7654.0
Percentage of an early antenatal care coverage	79.7	84.2	83.4

In the 218 FGPs, there were a total of 2,265 health professionals working, of which 851 were physicians and 758 were nurses.

In 2010, an average of 6.2 million medical examinations were performed at the FGP level, one resident visited an average of 3.4 times a year for primary health and public health services. Out of all medical examinations performed in out-patient departments, the percentage of preventative medical examinations at a FGP level in Ulaanbaatar was 41% and in aimags was 34%.

Figure 4.1.1 Outpatient visits performed by the FGPs (million)



In 2005, 3.0 million medical examinations were done at FGP level in Ulaanbaatar city, whereas in 2007, it was 3.9 million, and reached to 4.2 million in 2010. The number of medical examinations performed by one family doctor in UB was 8,024.6, which is higher than one family doctor working at the aimag level by 1025. The increasing of capacity in FGPs at Ulaanbaatar level is mainly related to the increase in population, number of births, and migration from the rural areas to UB city in the past years.

# 4.2 Soum and inter-soum hospital services

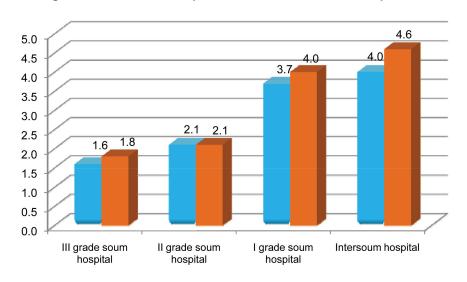
According to the structural and operational standards of soum hospitals approved in 2001, soum hospitals are divided into three categories depending on the size of their catchment population. The first category includes soum hospitals which deliver health care and services for 4,500 residents and have at least seven physicians. The second category includes those hospitals which cover between 3,001-4,500 people and have a minimum of three physicians. Finally, the third category includes soum hospitals which deliver health care and services to a population of up to 3,000 people with one physician.

Table 4.2.1 Average number of doctors per soum and inter-soum hospitals compared to the requirements of the Structure and Performance Standard, 2010

Grade	Number of hospital	Average number of doctors per hospital	Number of physiciains required by the standard	Hosptais that meet the requirement  Number Percentage			ailed to meet andard Percentage
I grade	28	4.0	7	3	10.7	25	89.3
II grade	68	2.1	3	25	36.8	43	63.2
III grade	178	1.8	1	178	100.0	0.0	0.0
Intersoum hospital	37	4.6	8	2	5.4	35	94.6

According to the table above, 10.7% of grade I hospitals, 36.8% of grade II hospitals, and 100.0% of grade III hospitals meet the requirements for standard number of doctors. In grade III hospitals, a standard of at least 1 doctor should be working and 62 hospitals (35%) out of 178 hospitals have 1 doctor, 100 hospitals (56%) have 2 doctors and 16 hospitals (9%) have 3 or more doctors.

Figure 4.2.1 Average number of doctors per soum and inter-soum hospitals, 2009-2010



Health Indicators, 2010 27

The standard number of doctors to be working at grade I soum hospitals is at least 7 doctors, but the average number is lower than the standard by 1.7 times and the average number of doctors is 4.0.

Out of the inter-soum hospitals, only 2 hospitals have the standard number of 8 doctors, while the other 35 hospitals are below the standard and have 4.6 doctors. In other words, 94.6% of all inter-soum hospitals are in shortage of doctors. This indicator shows the necessity of providing inter-soum hospitals with specialized doctors.

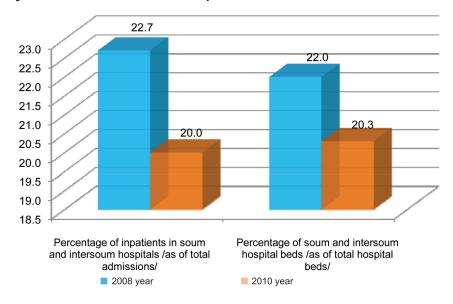
Table 4.2.2 Quality and accessibility indicators of health care and services in soum and inter-soum hospitals

	200	8 year		2010 year		
Indicators	Soum hospital	Intersoum hospital	Total	Soum hospital	Intersoum hospital	Total
Number of hospital beds	3324	655	3979	2988	642	3630
Number of physicians	523	132	655	564	168	732
Number of nurses	1448	233	1681	1349	251	1600
Average length of stay	7.7	7.6	7.65	7.8	7.4	7.6
Number of in-patients	123,019	22,514	145,533	112,692	23897	136,589
Number of out-patients	2480464	371,244	2851708	2102553	417,396	2519949
Percentage of preventive medical check-up	49.2	47.8	48.5	39.3	38.6	39.0
Percentage of en early antenatal care coverage	88.0	88.6	88.3	88.1	91.8	90.0
Maternal Mortality Ratio /per 100000 live births	69.3	0.0	34.7	17.2	60.7	39.0
Infant Mortality Rate /per 1000 live births	30.8	23.6	27.2	43.4	28.5	36.0

As of 2010, 20.4% of all hospital beds were accounted for soum and inter-soum hospitals and compared to 2008, it has decreased by 349 beds or 8.8%.

The number of in-patients of soum and intersoum hospitals was 136.6 thousand people. Comparing the number of in-patients of inter-soum hospitals to 2008, it has increased by 6% in 2010, but has decreased 8.4% in soum hospitals.

Figure 4.2.2 Capacity of soum and inter-soum hospitals



In 2008, percentage of prenatal care was 88.3% at soum and inter-soum hospital level, but in 2010, it has increased to 90.0%.

In 2010, 6.6% (2 cases) of the total number of maternal mortality occurred in soum and intersoum hospitals. In 2007, maternal mortality rate per 100,000 live births was 17.2 at soum hospital level, and 60.7 at inter-soum hospital level.

In 2008, infant mortality rate per 1000 live births was 30.8 at soum hospital level and 23.6 at inter-soum hospital level, while it increased to 43,4 and 28.5 respectively in 2010.

# 4.3 Secondary level medical service

As of 2010, there were a total of 4476 health personnel, including 894 physicians, 1,536 nurses and 2,105 mid-level health staff at 17 aimag health centres; and a total of 2,562 health personnel, including 699 physicians, 747 nurses and 984 mid-level health staff working at the 9 district health centres.

In 2001, the structure and activities of the aimag general hospital MNS 5095-2001 standard were approved. This standard is also followed by all district general hospitals.

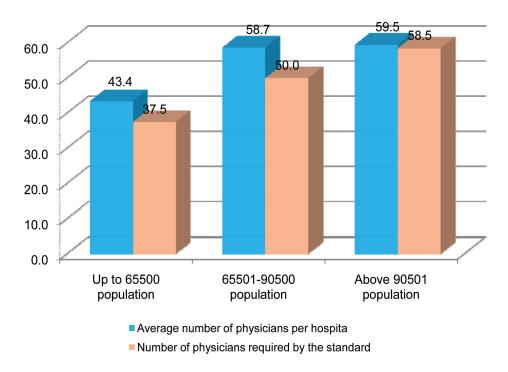
In this standard, the number of doctors is set according to local population levels. As of 2010, 23.5% of aimag health centres or 4 hospitals do not meet the standards.

Table 4.3.1. Average number of physicians per aimag hospital compared to the numbers required by the Structure and Performance Standard, 2010

Population	Average number of physicians per	Number of physiciains required by the	ns the requi			ls failed to e standard
	hospital	standard	Number	Percentage	Number	Percentage
Up to 65500	43.4	37.5	6	85.7	1	14.3
65501-90500	58.7	50	5	83.3	1	16.7
Above 90501	59.5	58.5	2	50	2	50.0
Average	-	-	13	76.5	4	23.5

The data in above table demonstrates that the number of physicians aimag general hospitals with population of 65500 and 65501 – 90500 is higher from minimum standard. The number of physicians in aimag general hospitals with population of 90501 meets with the minimum standard. This data may suggest that there is a need fo revision of minimum standard for physicians and health professionals in aimag general hospitals.

Picture 4.3.1 Average number of physicians per aimag general hospitals compared to the numbers required by the Structure and Performance Standard, 2010



Aimag general hospitals account for 18% of all hospital beds and compared to 2008, increased by 68 beds or 2.0% in 2010, a total of 3,189 beds.

District general hospitals account for 8% of all hospital beds, and although there was no policy to increase or decrease the number of beds in the past years, number of in-patients at district general hospitals level was 63.5 thousand in 2008 and was 74.7 thousand in 2010, increasing by 8.2 thousand people.

Pisture 4.3.2 Selected indicators for the secondary and tertiary level hospitals

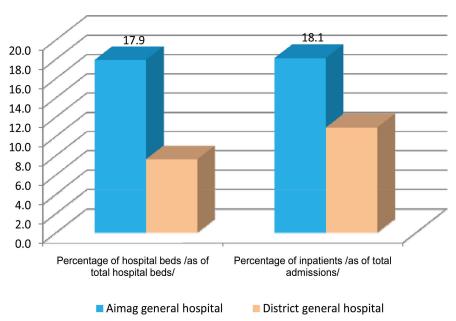


Table 4.3.2 Quality and accessibility indicators of health care and services in aimag and district general hospitals

	2008 year		2009 year		2010 year		Average for the	
	Aimag	District	Aimag	District	Aimag	District	last 3 years	
Indicators	general hospital	general hospital	general hospital	general hospital	general hospital	general hospital	Aimag general hospital	District general hospital
Number of hospital beds	3121	1353	3209	1353	3189	1353	3173	1353
Number of physicians	931	720	863	711	894	699	896	710
Number of nurses	1519	694	1545	727	1536	747	1533.3	722.7
Average length of stay	8.2	8.1	8.1	8	7.9	7.7	8.1	7.9
Number of in-patients	111,320	63,507	122,352	65,509	123,750	74,767	119,141	67,928
Hospital deaths within 24 hours	31.8	30.8	30.5	29.3	30.8	29.9	31	30
Number of out-patients	1721881	1887217	1535327	1860310	1516156	2017029	1079346	1301415
Percentage of preventive medical check-up	42.4	47.5	43.3	44.5	40.3	45.6	42	45.9
Maternal Mortality Ratio /per 100000 live births	37.9	-	75.9	-	50.5	-	54.8	-
Infant Mortality Rate /per 1000 live births	16.1	-	17.2	-	15.0	-	16.1	-

In 2008, the average length of stay in aimag general hospitals was 8.2 days and 8.1 days in district general hospitals, which decreased to 7.9 and 7.7 respectively in 2010.

During 2008-2010, the percentage of deaths occurring within 24 hours in aimag and district general hospitals was 30 %, which indicate nearly the same level.

In 2008, the number of outpatients at aimag general hospitals level was 1.7 million, which decreased to 1.5 million in 2010, and was 1.8 million at district general hospitals, which increased to 2.0 million in 2010. Percentage of preventative medical check-ups decreased at aimag and district general hospitals level and is at the average level of the past 3 years. During the past 3 years, the infant mortality rate steadily decreased at aimag general hospitals level and was at the average of 16.1 during the past 3 years.

In 2008, maternal mortality rate per 100,000 live births was at the lowest level of 37.8 at aimag general hospitals level; however, it increased to 75.9 in 2009. But in 2010, it reduced to 50.5 and remained at the same level as the last 3 years average.

In the last 3 years, the number of inpatients transferred from soum and inter-soum hospitals accounted for 31.0% of the total inpatients in aimag general hospitals, and became 32.3 in 2010, which increased by 2.8% compared to 2008.

# 4.4 Tertiary level medical services

As of 2010, aimag general hospitals of Orkhon, Dornod, Uvurkhangai and Khovd were functioning at national level under the status of Regional Diagnostic and Treatment Centres (RDTC).

As of 2010, a total of 1572 health personnel were working at RDTC, of which 319 were doctors, 560 were nurses and 757 were mid-level medical staff.

Table 4.4.1 Quality and accessibility indicators of medical care and services in RDTC, 2008-2010

Indicators	2008	Years 2009	2010	Average for the last 3 years
Number of hospital beds	1108	1117	1129	1118
Average length of stay	8.5	8.3	7.8	8.2
Percentage of death occurred within 24 hours	33.2	28.9	30.0	30.7
Number of in-patients	40941	41820	46249	43003
Number of out-patients	469581	447241	454569	457130
Maternal Mortality Ratio (per 100000 live births)	22.2	26.8	14.2	21.1
Infant Mortality Rate (per 1000 live births)	14.6	10.6	21.8	15.7
Number of in-patients referred from lower level of care	35.3	28.7	31.1	31.7

In 2008, 40.9 thousand in-patients were admitted to RDTC and which became 46.2 thousand in 2010, which increased by 5,308 people. On average, 12,000 patients were treated annually at each RDTC transferred from soum, inter-soum hospitals and regional aimags which account for 26.0% of the total in-patients.

Likewise, on average of 2,300 in-patients were treated annually in each aimag general hospital referred from a lower level of care, whereas on average, 3,200 in-patients, or about 900 more in-patients, were treated in the average RDTC.

The average length of stay at RDTC in 2008 was 8.5 days, which decreased to 7.8 in 2010. Moreover, the percentage of total deaths occurring in hospitals, within 24 hours of admission was 33.2 in 2008 and decreased to 30.0 in 2010.

Infant mortality rate per 1,000 live births has been at a relatively low point at the national level and it has reached 15.7 for the period of 2008-2010 in RDTCs. In 2010, there was 1 case of maternal mortality in the RDTC in Orkhon aimag.

Major hospitals and specialized centres in UB city deliver tertiary health care and services.

As of 2010, there were a total of 5,794 health personnel working in 16 tertiary level major hospitals and specialized centres, of which 1,207 were doctors, 1,866 were nurses and 2,270 were mid-level medical staff.

Tertiary level hospitals in UB city account for 22.4% of all hospital beds and 19.8% of inpatients.

The average length of stay in 2008 was 10.5 days which decreased to 10.0 days in 2010.

Furthermore, the percentage of total in-hospital deaths occurring in less than 24 hours after admission increased from 21.9% in 2008 to 23.5% in 2010. The average over the last three years is 21.7%.

Table 4.4.2 Quality and accessibility indicators of medical care and services in tertiary hospitals in UB city

Indicators		Years	Average for the last 3	
Indicators	2008	2009	2010	years
Number of hospital beds	3983	4005	3995	3994.3
Number of physicians	1232	1183	1207	1207.3
Number of nurses	1878	1875	1866	1873.0
Average length of stay	10.5	10.2	10	10.2
Percentage of death occurred within 24 hours	21.9	19.8	23.5	21.7
Number of in-patients	128873	131068	135248	131730
Number of out-patients	1116 979	1191 925	1187610	395870
Number of in-patients referred from lower level of care (from rural areas)	34498	30727	33622	32949

Within the last 3 years, there was an average of 131 thousand in-patients at major hospitals and specialized centres, of which 9.9-49.1% were transferred from the rural areas. Compared to 2008, the total number of in-patients increased by 5% in 2010, but transferred patients from the rural areas decreased by 2.5%.

Figure 4.4.1 Percentage of patients transferred from rural areas to tertiary level hospitals

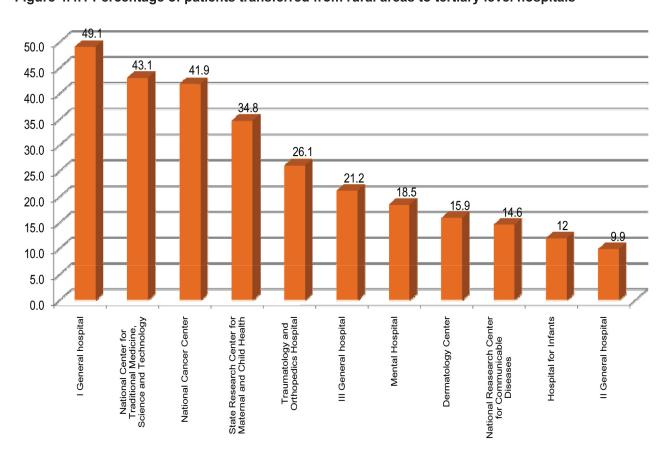


Table 4.4.3 Selected indicators for the major hospitals and specialized centres

Hospitals	Number of Outpatient visits	Number of Hospital admissions	Average length of Hospital stay	Hospital death within 24 hours
I General Hospital	202041	19786	8.6	26.7
II General Hospital	96979	7701	8.9	21.1
III General Hospital	132229	16235	8.8	16.7
State Research Center for Maternal and Child Health	134886	34441	6.5	-
National Cancer Center	72007	7165	9.6	5.6
National Research Center for Communicable Diseases	99730	10631	14.9	-
Traumatology and Orthopedics Hospital	89219	11847	13.5	28.4
Dermatology Center	78145	5587	10	-
Mental Hospital	48053	5845	28.2	9.1
Hospital for Infants	-	352	8.7	-
National Center for Traditional Medicine, Science and Technology	26879	3390	9.8	-

#### 4.5 Private clinic medical service

As of 2010, there were 947 private clinics and 166 hospitals and a total number of 4314 health personnel, of which 1549 are physicians and 1313 were mid-level medical staff, of which 1041 were nurses.

Table 4.5.1 Selected indicators for private clinics and holpitals

	2000	2005	2009	2010
Private hospitals	466	160	160	166
Private clinics	400	523	922	947
Number of hospital beds	964	1982	2422	2527
Percentage of hospital beds	5.4	10.8	13.6	14.2
Number of physicians	736	1145	1396	1549
Number of nurses	296	682	858	1007
Number of out-patients	-	1 016 705	1 304 897	1 036 934
Number of in-patients	23592	63 267	75 003	86 117
Average length of stay	11.3	9	8.1	7.9

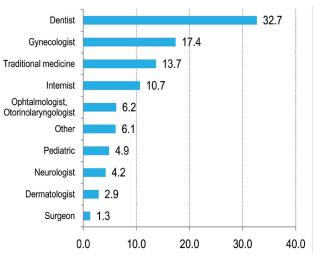
In 2005, the number of hospital beds in the private sector was 1,982, but increased to 2,527 in 2010, taking up 14.2% of all hospital beds. Starting from 2005, the establishment of new private sector clinics, especially with hospital beds, were limited, however some services offered by these private hospitals were services offered by state hospitals. Therefore, health policy focused on expanding activities of these hospitals and supporting the establishment of various services.

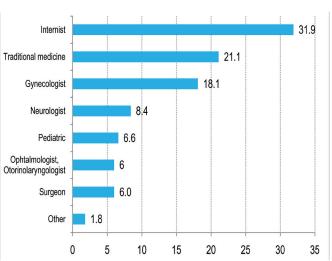
In 2010, the number of doctors and medical staff increased in private clinics and hospitals. In 2005, a total of 1016705 patients received outpatient services and there were 63267 inpatients at the private hospitals, but in 2010, the number increased to 1036934 and 86117 respectively.

As of 2010, 31.9% of private hospitals were in internal medicine, 21.1% in traditional medicine, 18.1% in obstetric, 8.4% in neurology and 6.6% in pediatrics.

Figure 4.5.1 Percentage of ptivate clinics by specialization, 2010

Figure 4.5.2 Percentage of private hospitals by specialzation, 2010





Looking at the private hospitals by bed capacity, 14.0% of hospitals have 5-8 beds, 36.4% have 10-12 beds, and 25.0% have 15 beds, and 75% of private hospitals have up to 15 beds.

Table 4.5.2 Bed capacity of private hospitals, 2010

Inidcators	Number	of hospital	Number of in-patients		
	Number	Percent	Number	Percent	
5-8 beds	23	14	7909	9.5	
10-12 beds	62	36.6	27324	32.9	
15 beds	41	25	19994	24.1	
20-25 beds	27	16.5	17440	21	
30 beds	7	4.3	3593	4.3	
40-50 beds	2	1.2	1620	1.9	
below 50 beds	4	2.4	5070	6.1	
Total	166	100	82950	100	

Health Indicators, 2010 35

# **CHAPTER 5. HUMAN RESOURCE IN THE HEALTH SECTOR**

The Health Minister's decree 443 "To develop the human resources in the health sector within 2010-2014" was approved and the implementation started in 2009. This policy is coordinating training of health sector's human resources, its post-graduate training, specialization and development structure with needs of the sector, and goals on improving medical professional ethics. For the first time this document introduced human resources planning till year 2020 and highlighted key policy issues.

As of 2010, there were 39,608 employees in the health sector's state and private organizations. It consisted of 616 managers, 7,497 doctors, 1,176 pharmacist, 9,197 nurses, 697 midwives, and 15,828 specialized health professionals. 82.3% of the total employees are females.

There were 27.18 physicians per 35.8 nurses/midwives per 10,000 population. The Physicians, nurses/midwives ratio at the national level was 1:1.3, and in Ulaanbaatar city 1:1.1, and at the aimag level 1:1.8. According to the WHO report of 2009, an average number of physicians per 10,000 population in the world was 13, 10 in lower middle income countries, 22 in upper middle income countries, and in our country this number is higher of an average in countries of the Western Pacific region.

Number of nurses/midwives in the health sector per 10,000 population is one of the key indicators to assess the health sector human resource supply. In the world this number in average is 28, 15 for lower income countries, 42 for upper income countries, and for Mongolia this indicator is 35.8.

Table 5.1 Some indicators on human resources in health sector, by countries, 2009

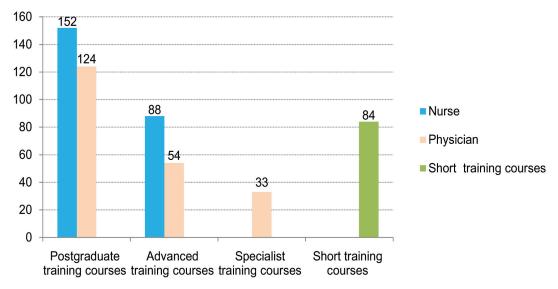
Member state	Physicians per 10 000 population	Nurses per 10 000 population (midwive)	Doctors nurses (midwive) ratio
WHO region			
African region	2	11	1:05
Region of the Americas	19	49	1:2.5
South-East Asia region	5	12	1:2.3
European region	32	79	1:2.4
Eastern Mediterranean region	10	15	1:1.4
Western Pacific region	14	20	1:1.4
Income group			
Low income	4	10	1:2.3
Lower middle income	10	15	1:1.4
Upper middle income	22	42	1:1.9
High income	27	86	1:3.1
Global	13	28	1:2.1

Source: World Health Statistics, 2009

In 2010, the number of physicians per 10,000 population at the aimag level was 18.0, which is higher than Ulaanbaatar by 2.2.

In 2010, 534 medical professionals from countryside were enrolled in post graduate, specialised short term trainings funded by state budget. This enrolment was in line with an implementation of human resource policy to train countryside health professionals based on needs of health organizations.

Graphic 5.1 Number of doctors and clinics professionals who attended post graduate training in 2010, the training cost covered by the state



In 2010, there were 2500 graduates from 9 schools, which are specialized in preparing medical professionals in Mongolia.

Table 5.2 Planning of health professsionals until 2020, by selected professions

Years	Physi	cians	Nur	sing	Midwive		
rears	Needs	Enrollment	Needs	Enrollment	Needs	Enrollment	
2008	7336	805	8862	335	673	125	
2009	7358	465	9095	350	698	78	
2010	7461	467	9337	643	725	80	
2011	7551	469	9585	678	755	82	
2012	7631	471	9845	713	775	84	
2013	7767	473	10367	751	795	87	
2014	7988	476	10916	791	816	89	
2015	8024	478	11495	833	837	91	
2016	8061	480	12104	877	859	94	
2017	8098	482	12746	924	881	96	
2018	8136	484	13421	973	904	98	
2019	8173	487	14132	1024	927	-	
2020	8211	489	14881	1078	952	-	

Source:Policy document on developing health sector human resources in 2010-2014

This number demonstrates that it is sufficient to enrol around 500 students in general medicine, traditional medicine and in orthodontics. Yet, in 2010 the state and privates medical schools enrolled 723 students, which was higher by 223 more students than required.

### **CHAPTER 6. COMMUNICABLE DISEASES**

### 6.1 Total communicable diseases

In 2010, 41,373 cases of 27 different communicable diseases were registered, which compared to the previous year, increased by 2,514 cases or 5.0 diseases per 10,000 population. Compared to the previous year, the indicators show there has been an increase in diseases per 10,000 population in Arkhangai, Bayankhongor, Gobi-Altai, Gobisuber, Dornogobi, Dundgobi, Zavkhan, Tuv, Uvs, Khentii and Ulaanbaatar city.

In 2010, food poisoning, brucellosis, human pox, viral hepatitis, hand-foot-mouth disease, and syphilis increased by 1.5-8.5 cases per 10,000 population, compared to the previous year, which affected the increase in communicable diseases.

Acute infectious diseases registered in 2010, were higher than the national level of 151.2 per 10,000 population, in Bayankhongor, Gobi-Altai, Gobi-Sumber, Dornogobi, Dornod, Khuvsgul, Khentii and Ulaanbaatar city. 51.8% of the total number of diseases registered at national level was registered in Ulaanbaatar city.

34.6% of communicable diseases registered in 2010 at the national level were sexually transmitted infections, 22.0% were viral hepatitis, 10.2% were tuberculosis, 10.1% were intestinal infections, 10.7% were respiratory diseases, and 12.4% were other diseases.

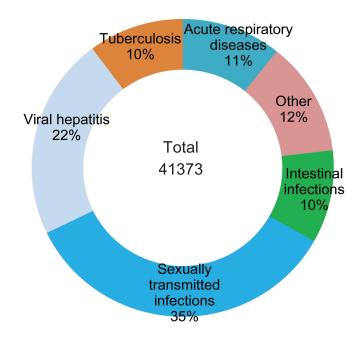


Figure 6.1 Total communicable diseases registered at national level

In 2010, there were 195 cases of death caused by acute infectious diseases, which compared to the previous year, had increased by 62 cases. Looking at the causes of death, 153 were tuberculosis, 24 were viral hepatitis, 6 were infant bacteriosis, 4 were meningococcal diseases, 2 were dysentery, 3 were inborn syphilis, and 1 case of typhoid fever, pox and food poisoning, respectively.

### 6.2 Intestinal infection

In 2010, 14,893 cases of 7 different intestinal infections (such as viral hepatitis A, dysentery, food poisoning, salmonellosis, typhoid fever, diarrhea, and hand-foot-mouth disease) were registered at the national level, taking up 36.0% of all communicable diseases. 6,617 cases (44.4%) of intestinal infections registered at the national level occurred in Ulaanbaatar city.

54.5% of intestinal infections were viral hepatitis A, 23.2% was dysentery, 17.4% was hand-foot-mouth disease, and 3.4% was food poisoning.

Table 6.2 Number of cases of intestinal infections, per 10 000 population

Cortain infactious and paracitie	2	009		2010	Increase /decrease	
Certain infectious and parasitic diseases /ICD-10	Absolut number	Per 10 000 population	Absolut number	Per 10 000 population	Per 10 000 population	
Typhoid and paratyphoid fevers	7	0.0	1	0.0	0.0	
Salmonella infections	122	0.5	146	0.5	0.0	
Shigellosis	3099	11.7	3451	12.6	0.9	
Other bacterial foodborne intoxications	123	0.5	510	1.9	1.4	
Diarrhoea infection	46	0.2	84	0.3	0.1	
Viral hepatitis A	5884	22.1	8116	29.7	7.6	
Hand, foot and mouth disease	262	1.0	2585	9.4	8.4	

Comparing cases of viral hepatitis A and hand-foot-mouth disease from 2009 to 2010, it has increased by 7.6-8.4 cases per 10,000 population.

### 6.2.1 Viral Hepatitis

A total of 9099 cases of viral hepatitis were registered at the national level, taking up 22.0% of all communicable diseases, and compared to the previous year, has increased by 2,234 cases. Of the total number of viral hepatitis, 89.2% was viral hepatitis A, 8.2% was viral hepatitis B, 1.5% was viral hepatitis C, and 1.1% was other viral hepatitis.

Table 6.2.1 Viral hepatitis per 10,000 population /by aimags higher than the national average, 2010

		2009	:	2010	Increase /decrease
Aimag	Absolut number	Per 10 000 population	Absolut number	Per 10 000 population	Per 10 000 population
Govi-Altai	127	20.9	656	110.5	89.6
Bayankhongor	94	11.1	834	97.7	86.6
Govi-Sumber	16	12.6	105	79.0	66.4
Khuvsgul	557	45.1	887	71.5	26.4
Khentii	211	29.4	393	55.0	25.6
Dornogobi	232	41.4	272	46.6	5.2
Dornod	227	30.9	288	39.1	8.2
Orkhon	344	42.5	314	37.8	-4.7
Bayan-Ulgii	408	40.0	357	35.1	-4.9
Darkhan-Uul	195	22.1	306	34.0	11.9
Country average	6865	25.8	9099	33.3	7.5

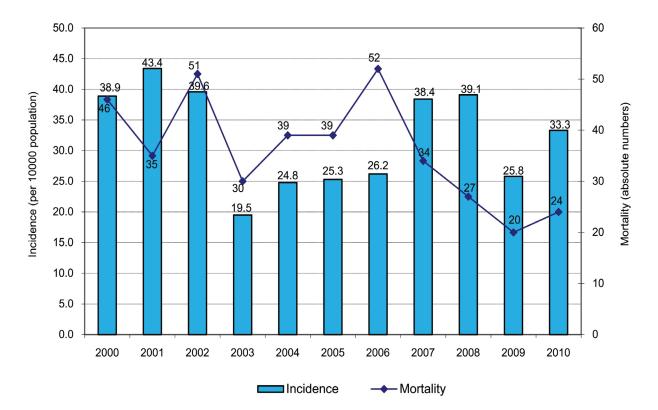


Figure 6.2.1 Viral hepatitis incidence and mortality trend, 2000-2010

### 6.3 Respiratory infections

6065 cases of respiratory infections were registered, taking up 14.7% of all communicable diseases.

Majority of the respiratory infections were tuberculosis (69.5%), varicella (20.9%), and mumps (8.6%). Compared to 2009, mumps decreased by 1,466 cases and varicella decreased by 386 cases. There was no registration of measles.

Table 6.3 Number of registered cases of respiratory infections, per 10'000 population

Certain infectious and		2009	2	010	Increase /decrease/	
parasitic diseases /ICD-10	Absolut number			Per 10 000 population	Per 10 000 population	
Tuberculosis	4218	15.9	4213	15.4	-0.5	
Scarlet fever	20	0.1	21	0.1	0.0	
Meningococcal infection	38	0.1	28	0.1	0.0	
Varicella	1654	6.2	1268	4.6	-1.6	
Measles	6	0.0	0	0.0	0.0	
Rubella	9	0.0	11	0.0	0.0	
Mumps	1990	7.5	524	1.9	-5.6	

### 6.3.1 Tuberculosis

The 4,213 new registered cases of tuberculosis take up 10.0% of all communicable diseases. 2303 cases occurred in Ulaanbaatar city, taking up 54.6% of all tuberculosis.

1837 new smear positive pulmonary tuberculosis were registered, increasing by 28 cases compared to the previous year.

60.1% of the new registered tuberculosis was pulmonary tuberculosis, 39.9% were extra pulmonary cases, and there were 438 cases of childhood tuberculosis, taking up 10.3% of registered new cases.

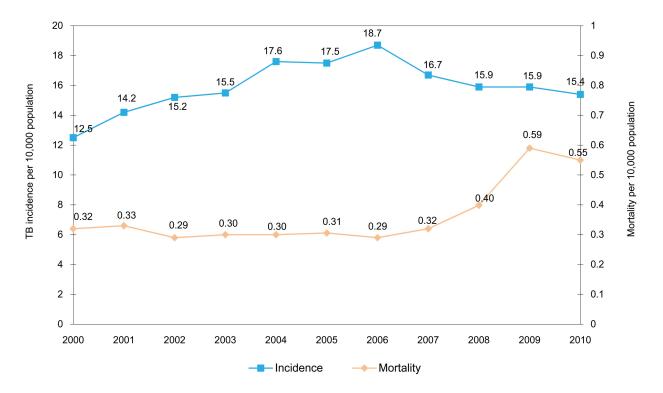
Table 6.3.1 Tuberculosis per 10'000 population /by aimags higher than national average, 2010/

	2009			2010	Increase /decrease/	
Aimag	Absolut number	Per 10 000 population	Absolut number	Per 10 000 population	Per 10 000 population	
Darkhan-Uul	264	29.9	241	26.8	-3.1	
Selenge	265	26.2	251	24.3	-1.9	
Khentii	117	16.3	176	24.6	8.3	
Sukhbaatar	87	15.1	97	17.7	2.6	
Dornod	176	23.9	155	21.1	-2.8	
Ulaanbaatar	2390	23.0	2353	21.2	-1.8	
Country average	4218	15.9	4213	15.4	-0.5	

Looking at the registered new cases by age group:

69% are 16-44 years old, with the working age group having the most cases. 52% were male and 48% female, the sex ratio being (m:f)=1.0:1.0. In 2010, the diagnosis rate was 74.8% and the cure rate was 84.5%, having increased by 0.7% and 0.3% respectively, compared to the previous year.

Figure 6.3.1 TB incidence and mortality trend, 2000-2010



### 6.4 Sexually transmitted infections

14,301 cases of STI's were registered, taking up 35.0% of communicable diseases, and compared to the previous year, has decreased by 16.0% or 2,728 cases. 32.4% of STI's were trichomoniasis, 40.1% were gonorrhoea, and 27.5% were syphilis.

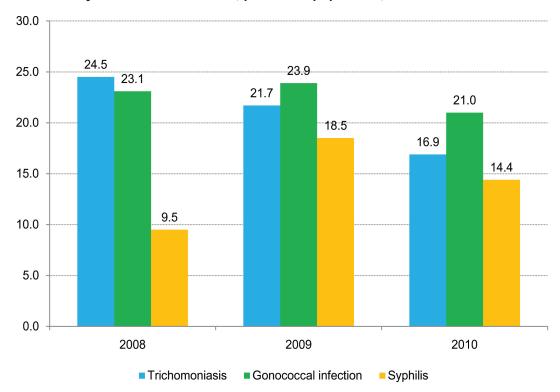
Table 6.4 Number of cases of STI's, per 10'000 population

Certain infectious and	:	2009		2010	Increase /decrease/
parasitic diseases / ICD-10	Absolut number	Per 10 000 population	Absolut number	Per 10 000 population	Per 10 000 population
Syphilis	4912	18.5	3937	14.4	-4.1
Gonococcal infection	6350	23.9	5741	21.0	-2.9
Trichomoniasis	5767	21.7	4623	16.9	-4.8

Syphilis per 10 000 population was higher than national and aimag level in Bayankhongor, Gobisumber, Dornogobi, Dornod, Khuvsgul aimags and Ulaanbaatar city, gonococcus is higher in Bayan-Ulgii, Bayankhongor, Gobi-Altai, Gobisumber, Dornogobi, Dornod, Khuvsgul aimags and Ulaanbaatar city, and trichomoniasis is higher in Bayankhongor, Bulgan, Dornogobi, Dornod, Dundgobi, Khuvsgul, Khentii aimags.

In 2010, 11 cases of inborn syphilis were registered, decreasing by 8 cases, compared to the previous year. Inborn syphilis occurred once in Dornod aimag, twice in both Uvurkhangai and Tuv aimag, and 6 cases occurred in Ulaanbaatar city. In 2010, of the 70538 examinations done on pregnant women, 1386 cases (2.2%) of syphilis, 593 cases (1.1%) of gonorrhoea, and 1474 cases (2.6%) of trichomoniasis was detected.

Figure 6.4 Sexually transmitted infections, per 10 000 population, 2008-2010



## **CHAPTER 7. NON-COMMUNICABLE DISEASES**

### 7.1 Main causes of population morbidity

Due to transitions in surveillance, changes have taken place with regard to population morbidity and mortality rates since 1990. Consequently, circulatory system diseases, now called "life style and behaviour dependent diseases", cancer, and injuries causing morbidity have become the leading causes of morbidity and mortality.

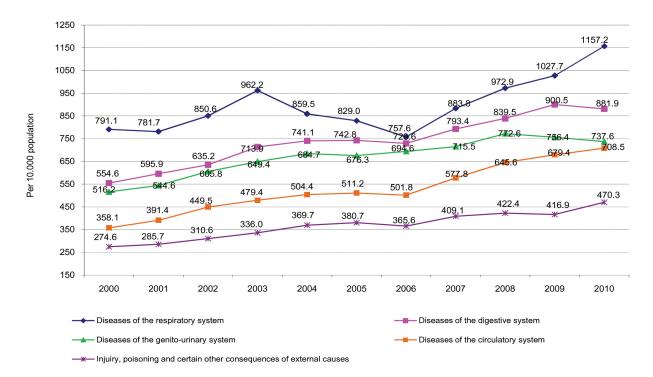


Figure 7.1. Five leading causes of morbidity, per 10 000 population /2000-2010/

As of 2010, respiratory diseases per 10,000 population was 1,157.21, digestive diseases was 881.89, urogenital diseases was 737.57, circulatory systems was 708.52, and injuries and poisoning was 470.32 per 10,000 population, which compared to 2009, digestive diseases and urogenital diseases have decreased. However, respiratory, circulatory diseases and injuries and poisoning did not decrease, but is continuously increasing. (Figure 7.1)

As of 2010, the 5 leading causes of population morbidity:

- Respiratory system diseases-1157.21 per 10,000 population
- Digestive system diseases -881.89 per 10,000 population
- Genitourinary system diseases -737.57 per 10,000 population
- Circulatory system diseases -708.52 per 10,000 population
- Injuries and poisoning -470.32 per 10,000 population

Looking at the 5 leading causes of morbidity of 2010 by location, in UB city, respiratory system diseases, digestive system diseases, injuries and poisoning are the 3 leading causes, and in the rural areas, respiratory, digestive system diseases and genitourinary system diseases are the 3 leading causes.

For instance, respiratory system diseases per 10 000 population is 956.81 in the city and 1296.69 in the rural areas, digestive system diseases is 851.03 in the city and 903.36 in the rural areas, genitourinary system diseases is 614.10 in the city and 823.50 in the rural areas, injuries and poisoning is 830.60 in the city and 219.57 in the rural areas, and the circulatory system diseases is 649.40 in the city and 749.66 in the rural areas.

Table 7.1.1 Five leading causes of morbidity, 2010

	All causes	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genitourinary system	Diseases of the circulatory system	Injury, poisoning and certain other consequences of external causes
Gender						
Male	4786.85	1121.04	739.25	355.99	552.70	617.64
Female	7171.28	1201.12	1024.08	1104.33	861.71	335.06
Group age						
Up to 20	4886.99	2167.60	763.95	229.25	45.19	367.89
20-44	5287.35	457.59	702.57	988.77	372.55	549.52
45-65	8830.89	701.20	1445.19	1159.21	2171.07	512.58
Above 65	13757.71	1229.09	1893.76	1215.24	5104.32	451.33
Residence						
Urban	6405.50	956.81	851.03	614.10	649.40	830.60
Rural	5695.66	1296.69	903.36	823.50	749.66	219.57
Region						
Western region	4847.06	1034.46	768.26	844.26	648.34	140.35
Khangai region	5828.76	1171.23	970.99	884.74	862.61	188.05
Central region	7133.47	1855.33	1062.98	925.89	906.84	349.25
Eastern region	5804.95	1429.39	1120.05	621.41	511.42	260.17
Total	5986.96	1157.21	881.89	737.57	708.52	470.32

When comparing the outpatient morbidity registration to male population, the female population is higher by 1.5 times. Looking at the causes of morbidity, men receive outpatient services for injuries, poisoning and other illnesses, which is higher than female by 1.8 times, but the other leading causes of morbidity is lower by 1.5-3 times.

The incidence rates of the 3 leading causes of morbidity by region were as follows: Western Region - diseases of the respiratory system (1,034.46), genitourinary system (844.26) and digestive system (768.26); Khangai-gobi Region - diseases of the genitourinary system (884.74), diseases of the respiratory system (1,171.23), and digestive system (970.99); Central and Eastern Regions respectively - diseases of the respiratory system (1,855.33 and 1,429.30), diseases of the digestive system (1,062.98 and 1,120.05) and diseases of the genitourinary system (925.89 and 621.41).

Compared to other regions, the incidence rates of diseases of the respiratory system were highest in the central and eastern regions, rates of diseases of the digestive system were highest in the central and eastern regions, rates of diseases of the genitourinary system were highest in the western, khangai-gobi and central regions, rates of diseases of the circulatory system were highest in the central and khangai-gobi regions, and rates of injuries and poisonings were highest in the central and eastern regions.

As of 2010, the following were the five leading causes of inpatient morbidity:

- Diseases of the respiratory system 403.13 per 10,000 population
- Diseases of the circulatory system 355.32 per 10,000 population
- Diseases of the digestive system 334.86 per 10,000 population
- Diseases of the genitourinary system 304.09 per 10,000 population
- Diseases of the nervous system 156.53 per 10,000 population

Table 7.1.2 Five leading causes of the Inpatient morbidity, 2010

	All causes	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genitourinary system	Diseases of the circulatory system	Diseases of the nervous system
Gender						
Male	1884.34	418.00	310.22	169.57	296.62	140.76
Female	3032.36	392.48	360.96	433.76	413.78	172.74
Group age						
Up to 20	1717.56	800.02	240.60	97.71	23.16	87.17
20-44	2261.58	115.78	261.71	367.65	156.55	143.38
45-65	3716.75	221.30	628.47	524.32	1073.25	300.69
Above 65	7173.02	574.66	933.96	733.17	2949.58	416.25
Residence						
Urban	2769.36	403.20	400.38	264.66	368.64	179.49
Rural	2251.41	403.09	289.26	331.53	346.05	140.55
Region						
Western region	2398.07	394.22	325.32	400.03	362.29	146.20
Khangai region	2166.38	351.33	281.13	321.47	373.94	123.12
Central region	2357.11	501.46	289.92	319.89	362.83	155.42
Eastern region	2277.67	416.33	307.16	271.21	268.71	149.69
Total	2463.96	403.13	334.86	304.09	355.32	156.53

Hospital admission rates were 1884.34 per 10 000 in males and 3032.36 per 10 000 in females and 1/3 of all inpatients were male.

Inpatient admission rate per 10 000 population was 1.5 times higher in males than females.

As of 2010, the 5 leading causes of hospitalization were as follows:

of hospitalized patients with diseases of the genitourinary system, 68.3% had nephritis; 44.8% of patients with diseases of the respiratory system suffered from pneumonia; 25.7% of those with diseases of the digestive system had liver problems; and 36.6% and 26.7% of patients with diseases of the circulatory system suffered from hypertension and ischemic heart diseases.

Nephritis accounted for 56.7% of diseases of the genitourinary system in 2000. This percentage increased to 65.4% in 2004 and in 2010, became 68.3%, in other words increased by 11.6%, compared to 2000.

Table 7.1.3 Inpatient Morbidity, by percentage, 2010

Diseases	Looding cours	Percent of total									
classification	Leading cause	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Diseases of the genitourinary system	Pyelonephritis (N10-N16)	55.76	59.03	63.14	65.41	69.06	69.7	67.8	69.1	66.6	68.3
Diseases of the respiratory system	Pneumonia (J12-J18)	42.69	41.01	42.67	43.24	39.83	38.6	40.5	41.9	38.8	44.8
Diseases of	Liver diseases (K70.K73.K74. K71-K73.K75-K77)	19.30	21.52	21.82	23.73	25.66	24.9	25.1	25.6	25.7	25.2
the digestive system	Appendicitis (K35-K38)	24.33	22.22	22.66	21.43	20.22	19.4	18.6	17.0	16.9	16.7
	Diseases of gallbladder (K80-K81)	14.50	14.92	16.45	15.84	15.57	15.3	13.97	13.7	14.2	13.8
Diseases of	Hypertensive diseases (I10.I11-I15)	34.66	34.44	32.64	32.3	31.30	32.6	32.1	33.2	34.4	36.6
the circulatory system	Ishemic heart diseases (I20.I23-I25)	20.29	20.91	23.46	25.73	26.28	26.3	29.3	30.1	29.5	26.6
Diseases of the nervous	Disorders of neural radices and plexuses (G50-59)	19.21	19.71	20.92	20.5	23.40	21.7	22.1	24.3	26.0	26.7
system	Epilepsy (G40-G41)	10.78	11.35	12.63	12.99	12.35	12.5	11.7	11.2	10.9	13.3

Pneumonia accounted for 46.7% of diseases of the respiratory system in 2000. This percentage went down to 43.2 in 2004 and 44.8% in 2010, a decrease of 2.0% compared to 2000.

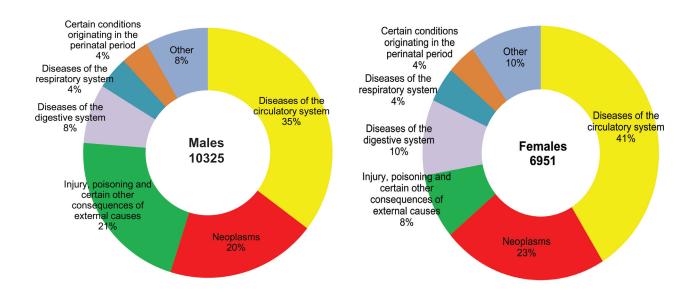
In 2000, liver problems and cholecystitis accounted for 18.9 and 14.6 percent of diseases of the digestive system, respectively. However, the percent of liver problems increased to 25.2% in 2010. Meanwhile, appendicitis accounted for 26.6 percent of diseases of the digestive system in 2000. This percentage decreased to 21.3 in 2004 and to 16.7% in 2010.

Ischemic heart diseases accounted for 19.2 percent of diseases of the circulatory system in 2000, 25.7 percent in 2004 and 26.6 percent in 2010, a 7.4 percent increase compared to 2000.

### **CHAPTER 8. POPULATION MORTALITY**

Diseases of the circulatory system, neoplasm's and injuries remain the 3 leading causes of population mortality since 1995 and the number of deaths due to these diseases has been increasing every year.

Figure 8.1 Leading causes of deaths, by sex, 2010



In 2010, disease of the circulatory system accounted for 37.7 percent, cancer accounted for 20.8% and illnesses and other causes accounted for 16.1% of the population mortality causes, and accounted for 75% of the total deaths.

On average, every year 6,000-6,500 persons or one third all deaths were due to diseases of the circulatory system, 3,500 persons or one in five deaths from cancer and 2,700 persons or one in six deaths were due to illnesses and other causes.

In 2010, the 5 leading causes of population morbidity are the following:

- Diseases of the circulatory system 23.61 per 10,000 population
- Neoplasms 13.02 per 10,000 population
- Illnesses and other causes 10.11 per 10,000 population
- Diseases of the digestive system 5.30 per 10,000 population
- Diseases of the respiratory system 2.72 per 10,000 population

The population mortality rate is 76.78 per 10,000 in males and 49.17 per 10,000 in females.

According to the estimations in 2008, the WHO announced that by 2030, ischemic heart disease, brain vascular disease (stroke), chronic obstructive pulmonary disease, respiratory infections and traffic injuries, will be the 5 leading causes of mortality in the world. (Table 8.3)

Table 8.1 Five leading causes of mortality, 2010

Indicators	Total death	Diseases of the circulatory system	Neoplasms	Injury, poisoning and certain other consequences of external causes	Diseases of the digestive system	Diseases of the respiratory system
Gender						
Male	77.38	27.33	15.11	16.59	5.94	3.28
Female	49.23	20.29	11.15	4.07	4.75	2.21
Age group						^
Up to 20	20.02	0.24	0.45	4.58	0.65	3.88
20-44	27.78	5.14	2.98	12.52	2.39	0.64
45-65	131.74	54.88	36.21	17.14	13.08	2.70
Above 65	589.62	329.84	154.26	9.60	51.97	15.05
Residence						^
Urban	66.14	21.75	14.14	13.56	5.80	2.24
Rural	46.12	24.90	12.24	7.70	4.96	3.04
Region						
Western region	57.05	25.04	10.86	5.62	3.74	3.97
Khangai region	63.41	28.05	13.70	8.14	3.93	2.71
Central region	57.51	22.19	11.70	8.14	5.72	2.16
Eastern region	61.13	18.67	12.39	10.39	9.05	2.94
Total	54.33	23.61	13.02	10.11	5.30	2.72

### 8.1 Mortality caused by cardiovascular diseases

Cardiovascular disease remains to be the leading cause of population mortality in Mongolia, as one in three people or approximately 6,000-6,500 people dies every year.

In 2010, cardiovascular mortality rates were 27.12 per 10,000 in males and 20.27 per 10'000 in females. The highest mortality rates were among people aged 65 years or older and there was a sharp increase among 45-65 year olds. (Table 8.1)

The cardiovascular mortality rate was highest in Khangai and western regions, and lowest in eastern aimags.

The main causes of mortality compared by gender and by age group are: Ischemic heart disease (31.71), stroke (32.43) and hypertension (3.68) per 10,000 in males aged 45-65. Ischemic heart disease is 3.8 times higher, hypertension is 1.7 times higher and stroke is 1.5 times higher in men when compared to women of the same age group. (Table 8.2)

Ischemic heart disease is the leading cause of mortality among Mongolian men and in 2010; it is at a level of 9.9 per 10,000 population. Until 2003, mortality rates of ischemic heart disease and stroke were in close proximity but starting from 2008, ischemic heart disease mortality rate seems to be getting higher.

In 2004, ischemic heart disease accounted for 12.2 percent of all deaths and was the leading cause of mortality in the world. The WHO predicts that by 2030, ischemic heart disease will account for 14.2 percent of all deaths and will remain the leading cause of mortality. (Table 8.3)

Table 8.2 Cause-specific cardiovascular disease mortality rate by age group /per 10 000 population/

	Diseases of the circulatory system	Cerebral infarction	Hypertensive diseases	Ishemic heart diseases
Total death	23.71	9.16	1.61	9.88
Up to 20	0.24	0.04	0.00	0.08
20-44	5.14	1.93	0.23	2.01
45-65	54.88	26.81	2.86	19.24
Above 65	329.84	106.99	27.33	153.15
Male	27.33	10.07	1.66	12.32
Up to 20	0.33	0.06	0.00	0.12
20-44	7.11	2.46	0.36	3.12
45-65	76.14	32.43	3.68	31.71
Above 65	375.24	122.40	28.00	181.65
Female	20.29	8.31	1.57	7.57
Up to 20	0.16	0.02	0.00	0.04
20-44	3.31	1.44	0.10	0.97
45-65	36.21	21.87	2.15	8.29
Above 65	296.24	95.59	26.83	132.05

### 8.2 Cancer mortality

Since 1990, cancer remains the second leading cause of population mortality in Mongolia. In 2010, cancer related mortality rates were 14.99 per 10,000 in males and 11.14 per 10,000 in females.

The leading causes of cancer in males in Mongolia are liver, stomach, lung, esophagus, and prostate. The leading cause of cancer in females is liver, cervical, uterine, stomach, esophagus and lung.

In 2010, 79.1% of the population diagnosed their cancer during the late stages (III and IV) of the disease, and 61.4% of cancer cases survived for less than a year after the diagnosis.

Figure 8.3 Leading causes of cancer mortality by survival years after the diagnosis, 2010

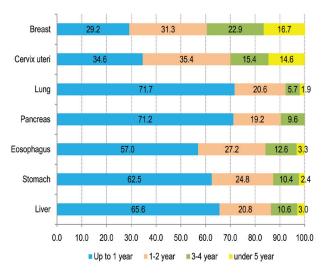
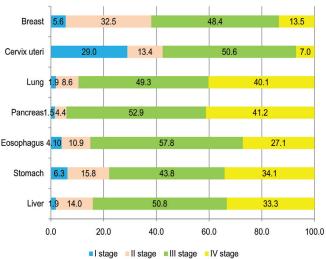


Figure 8.4 Leading causes of cancer morbidity by the stage diagnosis, 2010

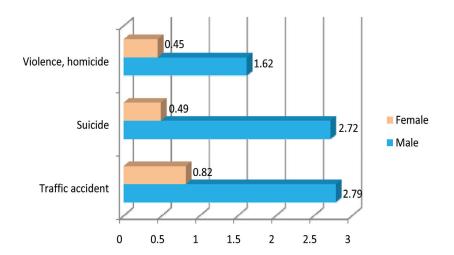


### 8.3 Mortality due to injuries and poisoning and certain other

Mortality due to injuries and poisoning has increased sharply within the last few years. It was ranked as the fifth leading cause of population mortality in 1990 and has been ranked third since 2000. Moreover, mortality rate due to injuries and poisoning was 6.0 in 1995, 7.6 in 2000 and 11.69 in 2007, increasing twice as much 2000. Although, the mortality rate due to injuries and poisoning decreased to 9.33 in 2008 and 8.71 in 2009 per 10000 population, reaching the lowest rate in the last 10 years, it increased to 10.11 in 2010.

The main cause of age specific mortality rates for males between 20-44 years of age were injuries and certain other consequences of external caused diseases. The mortality rate in this group was 12.52.

Figure 8.5 Injuiry, poisoning and certain other consequinces of externel causes, per 10.000 population, 2010



Deaths due to traffic accident were 17.6%, suicide was 15.6%, and homicide was 10.1% and 56.8% were mortalities caused by other accidents.

In comparison with women, per 10,000 persons, suicide rates are 5.5 times higher for men, violence and homicide rates are higher by 3.6 times, and traffic accident rates are higher by 3.4 times.

Table 8.3.1 Injuiry, poisoning and certain other consequinces of externel causes, and deaths trends

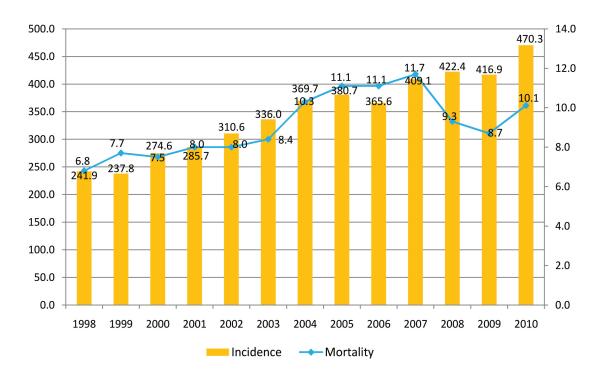


Table 8.2.1 The projection of mortality of world population, 2030

2004 Disease or injure	Deaths (%)	Rank
Isheamic heart diseases	12.2	1
Cerebrovascular diseases	9.7	2
Lower respirature infections	7	3
Chronic obstructive pulmonary diseases	5.1	4
Diarrhoeal diseases	3.6	5
HIV/AIDS	3.5	6
Tuberculosis	2.5	7
Trachea, bronchus, lung cancers	2.3	8
Road traffic accidents	2.2	9
Prenatality and low birth weight	2	10
Neonatal infections and other	1.9	11
Diabetes mellitus	1.9	12
Malaria	1.7	13
Hypertensive heart diseases	1.7	14
Birth asphydia and birth trauma	1.5	15
Self-inficted injures	1.4	16
Stomach cancer	1.4	17
Cirrhosis of the liver	1.3	18
Nephritic and nephross	1.3	19
Colon and rectum cancers	1.1	20
Violence	1	21
Breast cancer	0.9	22
Oesophagus cancer	0.9	23
	8.0	24

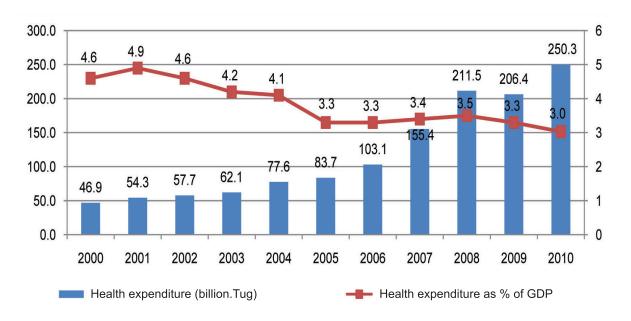
Rank	Deaths	2030
IXalik	(%)	Disease or injure
1	14.2	Isheamic heart diseases
2	12.1	Cerebrovascular diseases
3	8.6	Chronic obstructive pulmonary diseases
4	3.8	Lower respirature infections
5	3.6	Road traffic accidents
6	3.4	Trachea, bronchus, lung cancers
7	3.3	Diabetes mellitus
8	2.1	Hypertensive heart diseases
9	1.9	Stomach cancer
10	1.8	HIV/AIDS
11	1.6	Nephritic and nephross
12	1.5	Self-inficted injures
13	1.4	Liver cancer
14	1.4	Colon and rectum cancers
15	1.3	Oesophagus cancer
16	1.2	Violence
17	1.2	
18	1.2	Cirrhosis of the liver
19	1.1	Breast cancer
20	1	Tuberculosis
21	0.9	Neonatal infections and other
22	0.9	Prenatality and low birth weight
23	0.7	Birth asphydia and birth trauma
24	0.4	Malaria

# **CHAPTER 9. HEALTH FINANCING INDICATORS**

### 9.1. Financing of the health sector

The finance indicators of the health sector were calculated by implementation of the Minister for Health Package and Health Insurance Fund (HIF).

**Graphic 9.1.1. Health expenditure in GDP (percentage)** 



Source: Finance and Investment Division of MOH in 2010

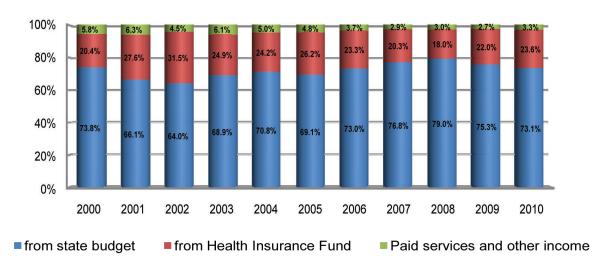
The Minister for Health Package budget was increased by 21.8% from the previous year's budget and increased by 21.2% in the budget performance. The health expenditure in GDP was reduced by 0.3%. Although there was an increase in health expenditure, its percentage of GDP was reduced.

When looking at the Minister for Health Package budget for 2010 by its expenditure items: 40.1% was spent on salary, 17.1% spent on drugs and food expenses that are directly related with main activities, 16.4% on investment, 7.8% on utilization or regular expenses, and 18.6% on other expenses.

The comparison of these expenditure items with the 2009 budget demonstrated increase of expenses on salary by 4.8%, increase of drugs and food expenses by 1.4%, investment expenses by 6.4%, utilization or regular expenses by 0.5%, and decrease in other expenses by 3.5%.

<sup>&</sup>lt;sup>1</sup> Calculated by Health Minister Package

**Graphics 9.1.2. Funding sources of health expenditure (by percentage)** 

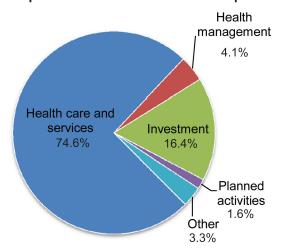


Source: Finance and Investment Division of MOH in 2010

Graphic 9.1.2 showed an increase of percentage of HIF's funding in total health financing by 1.6% but reduction of percentage of state funding by 2.2%. In cash value, in comparison with the previous year, the funding source of HIF increased by 31.9%, the state funding by 19.2%, and funding from paid services and other incomes by 45.6%. Although the cash value of all funding sources was increased depending on funding sources' growth speed, its percentage in total funding was either reduced or increased. In other words, state budget funding in cash values was lowest and reduced by 19.2%, while its percentage in total funding was reduced by 2.2%.

An increase of variety and types of services, and average net net cost of diagnosis that are covered by HIF led to the reduction of pressure on the HIF budget.

**Graphic 9.1.3. Structure of health expenditure** 



From the total expenditure on health 74.6% was used on health services and care, 16.4% on investment, 1.6% on planned activities, 4.1% on health management and the remaining 3.3% on sports and other expenses.

When looking at health care and services expenditure by levels: primary level health care services used 54.6 bln or 21.8% of the total health expenditure; secondary level health care services used 79.1 bln or 31.6% of the total health expenditure; specialized health care services used 52.9 bln or 21.2% of the total health expenditure. These expenses are fairly consistent with the 2009 expenses.

The investment expenses used 16.4% of total health expenditure. 59.1% of total investment expenses were used for moving and newly built constructions, 18.6% on repair, and 22.3% on renewal of vehicles, technical supplies and equipments (Table 9.1.1).

Source: Finance and Investment Division of MOH in 2008

Table 9.1.1. Investment in health sector

Investment	2005		:	2006		2007		2008		2009	2010
Investment	num	mln.tg	num	mln.tg	num	mln.tg	num	mln.tg	num	mln.tg	mln.tg
buildings for transfer	4	1,408.8	8	2,350.0	11	2,746.6	15	7 270 0	27	10 156 0	24,299.8
Newly built	7	390.0	7	560.0	29	3,856.9	38	7,378.8		12,156.9	24,299.0
Main renovation	32	1,088.1	35	750.0	97	1,756.5	80	4,593.2	73	5,434.9	7,631.0
Renovation of cars, technical equipments	-	545.6	-	2,800.0	-	2,486.1	-	3,786.7	-	2,999.6	9,181.9
Total investment		3,432.5		6,460.0		10,846.1		15,758.7		20,591.4	41,112.7

Source: Finance and Investment Division of MOH in 2010

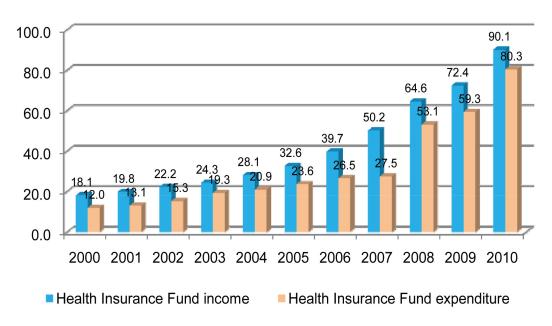
### 9.2. Health Insurance (HI)

Mongolia is facing its 17<sup>th</sup> year of introducing its social health insurance system. The Health Insurance Fund's revenue sources and expenditures are showed in this part.

### 9.3 Health insurance fund: Revenue and Expenditure

In 2010, the HIF had 2267.6 thousand insurers and 90.1 bln Tgs of income from fees. 2657.5 thousand insured people used health care services to the amount of 78.1 bln Tgs. 2.2 bln Tgs were spent on HIF activities and investment, and 0.02 bln Tgs on other expenses. In 2010 the HIF's income from fees increased by 24.4% and expenses by 35.4%.

Graphic 9.2.1. Revenue and expenditure of health insurance fund (billion TG)



Source: Department of Health Insurance inspection and financing, SSIGO 2010

The revenue of HIF consisted of 43.6% from individual insurance fees, 39.9% from private employers' paid fees, 12.1% from state paid insurance fees of citizens covered by state and 4.4% from interest rates of remaining amounts in banks, estimation of overdue fees, and other sources. These revenue sources are consistent with the previous year.

Besides that an increase of HIF revenue is related with an increase in numbers of employers and individuals, and with an increase in salary fund

Table 9.2.1 Income sources of Health Insurance Fund

	20	08	20	09	20	10
Income sources	Number of people (thousand Tg)	Total amount (Thousand Tg)	Number of people (thousand Tg)	Total amount (Thousand Tg)	Number of people (thousand Tg)	Total amount (Thousand Tg)
Health insurance fee paid by insuree	880.5	28484.3	887.9	31577.7	961.1	39310.4
Health insurance fee paid by employer	539.7	25980.6	546	28852.4	580.8	35965.7
health insurance fee paid by a government for citizens that its responsible for	1353.2	8094.3	1235	8094.3	1306.5	10906.1
Interest paid on fund's free money put in bank		1841		3569.6		3823.2
Overdue fee for health insurance payment		70.3		74.1		75
other income source		88.3		191.3		51.7
Total	2233.7	64558.8	2122.9	72359.4	2267.6	90131.9

Source: Department of health insurance monitoring and financing, SSIGO, 2010

In comparison with the previous year, in 2010 the expenditure of Health Insurance Fund increased by 21.0 bln Tg or by 35.4%. This increase is related with an increase of expenses on health insurance services and care in state and private clinics, and the inclusion of diagnosis, laboratory analysis, long term rehabilitation treatment as well as palliative treatment on the list of health care and services to be covered by health insurance.

As a result of the Minister for Health resolution N180 of 2010, starting from 2010, health insurance covers 115 diagnoses by groups, an 8.1% increase of average diagnosis net cost, an increase in the number of essential drugs at reduced cost from 107 to 365, and a 35.0% increase in the average cost of drugs. All these have impacted on the increase of the HIF expenditure.

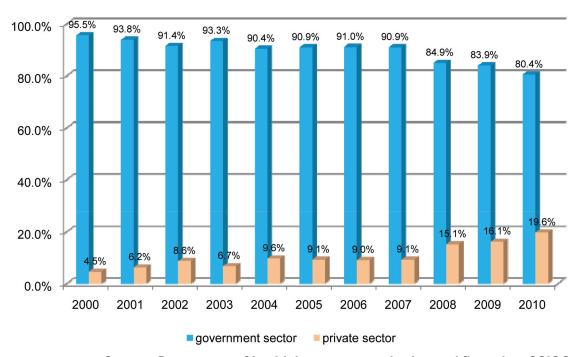
The health care services' expenditures are directly related to the number of people who received these services. For outpatient services and care, expenses for health care and services and the number of people who used these services have a reverse correlation. This reverse correlation may be attributed, on one hand, to an increase of base tariffs of health care and inpatient services of one insurer with group diagnosis at similar cost, and on the other hand, to larger percentage of high cost of outpatient health care services'.

Table 9.2.2. Health insurance fund's expenditure (by types of service and care)

	20	08	20	09	2010		
Health insurance fund's expenditure	Number of people (thousand	Total amount (Thousand	Number of people (thousand	Total amount (Thousand	Number of people (thousand	Total amount (Thousand	
	people)	Tg)	people)	Tg)	people)	Tg)	
Expenses on health care and services offered for health insured people	1617.9	50840.4	1736.6	56942.6	2656.6	78121.2	
Out-patients care and services	920.1	8605.5	853.7	6306.3	1259.3	11711.4	
In-patients care and services	356	39981	340.1	47500.5	333.9	55201	
daily treatment	4.6	178.8	3.7	145.6	17.2	1766.8	
Hot spa	31.2	1190.8	36.7	1507.6	42	2062.1	
Discounted medicines	306	884.3	502.4	1482.6	567.4	2045.4	
diagnosis/ analysis	0	0	0	0	417.8	3846.2	
traditional medicine	0	0	0	0	18.7	1467.6	
pallative care	0	0	0	0	0.3	20.7	
2. Activities expenses of Health insurance fund	0	2273	0	2352.7	0	2196.1	
3. other expenses	0	0	0	0	0.8	16.5	
total	1617.9	53113.4	1736.6	59295.3	2657.4	80333.7	

Source: Department of health insurance monitoring and financing, SSIGO, 2010

Graphic 9.2.2. Health insurance fund's expenditure, by property type (percentage)



Source: Department of health insurance monitoring and financing, SSIGO, 2010

When looking at the expenditure of the HIF by percentage of property type, the private sector's expenses are constantly growing. In 2009, 9,156.7 mln Tgs were spent on 634.3 thousand people, who received services from private clinics. In 2010, for 720.0 thousand people 15,320.3 mln Tgs was spent.

### **Attachment**

Table 1.Main indicators of Minister for Health's Package of Finance (mln. tg)

Indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Health expenditure in GDP (percentage)	4.6%	4.9%	4.6%	4.2%	4.1%	3.3%	3.3%	3.4%	3.5%	3.3%	3.0%
Total health expenses (mln. tg)	46,860.6	54,281.1	57,662.2	62,067.2	77,571.3	83,725.9	103,138.0	155,400.0	211,497.1	206,429.3	250,264.7
Health expenses per one person (tg)	19,602.8	22,137.5	23,449.5	24,929.6	30,799.4	32,862.0	40,029.1	43,092.0	79,529.7	76,183.0	90,732.5
Funding sources											
From state budget	34,578.9	35,891.1	36,892.8	42,786.3	54,908.7	57,825.1	75,284.6	118,900.0	167,680.3	154,356.2	183,939.8
From Health insurance Fund	9,553.3	14,970.3	18,173.0	15,474.6	18,798.2	21,897.4	23,999.7	31,400.0	38,212.4	45,086.7	59,457.4
Paid services and other income	2,728.4	3,419.7	2,596.4	3,806.3	3,864.4	4,003.4	3,853.7	4,500.0	6,178.5	5,630.0	8,199.1

Table 2. Some expenses of Minister's Package of Finance, by items (mln. tg)

Expenses items	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total health expenses (mln. tg)	46,860.6	54,281.1	57,662.2	62,067.2	77,571.3	83,725.9	103,138.0	155,400.0	211,497.1	206,429.3	250,264.7
From this: salary and bonuses	13,966.9	15,024.5	17,725.3	17,194.4	22,292.3	24,194.6	34,228.0	63,300.0	92,982.4	92,743.8	100,363.8
medicine	7,960.4	9,538.2	9,379.7	9,504.0	11,235.9	11,881.4	11,984.7	15,600.0	23,298.1	25,415.6	34,982.2
food	2,299.8	2,658.8	3,096.6	2,648.8	3,160.6	3,317.7	3,370.7	4,100.0	5,814.1	6,911.5	7,777.9
utility expenses /heating, water, electricity/	7,557.3	8,733.2	9,394.6	8,747.3	9,389.9	10,783.8	13,403.9	14,400.0	14,892.6	15,030.3	19,426.6
transportation expenses	1,836.0	1,956.6	1,972.6	1,959.7	2,534.3	3,265.8	3,612.8	4,700.0	6,251.6	4,631.0	5,625.3
budget expenses	1,399.5	1,162.9	1,929.6	3,168.2	3,576.1	3,432.5	6,460.0	10,846.1	15,758.7	20,591.4	41,112.8
other expenses	11,840.7	15,206.9	14,163.8	18,844.8	25,382.2	26,850.1	30,077.9	42,453.9	52,499.6	41,105.7	40,976.2

Table 3. Minister for Health's Package of Finance, by level (mln. tg)

Health expenses by level	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Specialized professional clinics, centers	10.920.0	12.519.1	13,402,4	13.835.7	16.739.3	17.926.9	21.684.0	32.000.0	44.893.9	44.701.2	52.964.8
		,		·	,	·					
Care and services at secondary level	13,498.0	16,890.8	18,045.4	20,755.4	25,525.1	27,111.5	33,286.4	50,700.0	66,142.3	65,386.2	79,143.2
care and services at primary level	8,222.2	9,774.2	12,198.8	13,198.4	16,599.7	18,732.3	23,412.8	34,700.0	50,670.9	48,677.7	54,575.6
other	14,220.4	15,097.0	14,015.6	14,277.7	18,707.2	19,955.2	24,754.8	2,700.0	49,790.1	47,664.3	63,581.1
Total	46,860.6	54,281.1	57,662.2	62,067.2	77,571.3	83,725.9	103,138.0	120,100.0	211,497.2	206,429.4	250,264.7

Table 4. Health insurance fund's income and expenses (mln. tg)

Health insurance fund's expenditure	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Health insurance fund income	18,111.2	19,802.6	22,188.3	24,312.5	28,124.6	32,574.2	39,660.0	50,263.7	64,558.8	72,359.4	90,131.9
health insurance fund expenditure	12,024.1	13,057.6	15,320.1	19,264.9	20,901.4	23,581.3	26,528.1	27,542.5	53,113.4	59,295.3	80,333.7
types of care and services											
out-patient care and services	191.7	416.0	607.4	1,097.5	1,115.2	1,766.4	3,339.9	2,154.5	8,605.5	6,306.3	11,711.4
in-patient care and services	11,352.7	12,010.7	13,997.6	15,227.5	16,792.6	18,794.0	20,528.5	22,893.4	39,981.0	47,500.5	55,201.0
family clinics				1,608.8	1,828.7	1,987.1	1,045.3				
cost of discounted medicine	250.6	378.7	424.5	381.8	526.9	571.1	564.5	564.4	884.3	1,482.6	2,045.4
sanatorium	229.1	252.2	290.6	342.8	389.1	462.7	558.5	573.0	1,190.8	1,507.6	2,062.1
day care									178.8	145.6	1,766.8
diagnosis											3,846.2
traditional medicine											1,467.6
pallative care											20.7
Health insurance fund's activities expenses	0.0	0.0	0.0	606.5	248.9	0.0	491.4	1,357.2	2,273.0	2,352.7	2,196.1
Other											16.5
by sector											
government sector	11,484.5	12,251.3	14,003.7	17,981.7	18,889.6	21,427.3	24,145.4	25,034.3	43,168.7	47,785.9	62,807.1
private sector	539.6	806.3	1,316.4	1,283.2	2,011.8	2,154.0	2,382.7	2,058.2	7,671.7	9,156.7	15,320.3
state average of insurance coverage	87.6%	81.2%	77.7%	83.0%	85.9%	76.5%	74.0%	78.3%	82.3%	77.6%	82.6%
Remaining amount from health insurance fund									11445.4	13064.1	9798.1

### **CHAPTER 10. NATIONAL HEALTH PROGRAM**

### NATIONAL REPRODUCTIVE HEALTH ORGRAM

Indicator	<b>Details</b>
Date and number of the Government Resolution which approved the programm	Resolution # 52 of 2007
Duration	2007-2011
Main objective	This programme's goal lies in reaching the Millennium Development Goals, and supporting sustainable population growth by the means of improving reproductive health, and providing health services based on reproductive rights and free choice, in an equitable, accessible, high quality and reliable manner

Nº	Indicators	2007	2008	2009	2010	Target for 2011
1	Maternal mortality ratio per 100.000 live births	89.6	49.0	81.4	45.5	65.0
2	Infant mortality per 1000 live births	17.8	19.6	20.2	19.4	18.0
3	Perinatal mortality per 1000 births	16.4	17.4	16.9	16.9	20.0
4	Early antenatal care (percent)	83.9	83.7	83.2	83.4	79.0
5	Proportion of pregnant women receiving antenatal check-ups at least six times during pregnancy	83.7	82.2	84.1	81.9	87.0
6	Modern contraceptive methods' usage rate	52.8	51.2	53.2	53.4	51.0
7	Percentage of elegible pregnant women who received the services of maternity waiting homes	84.1	62.5	71.0	78.0	65.0
8	Percentage of institutional deliveries	99.6	99.6	99.6	99.5	99.7
9	Abortion rate per 1000 live births	271.9	168.9	175.8	189.6	160.0
10	Percentage of women with anaemia detected during pregnancy	11.5	11.5	7.9	8.1	10.0
11	Percent of women receiving active check-up within 42 days after the delivery	77.3	78.2	84.2	88.0	80.0
12	Percentage of pregnant women tested for syphilis seropositivity	69.3	80.2	90.2	88.2	80.0
13	Adolescent fertility rate (among 15-19 years old women)	5.5	6.3	6.1	6.0	6.0
14	Percentage of pregnant women tested for HIV infection	64.2	82.9	64.5	90.8	80.0
15	Number of institutions that collaborate in reproductive health information and advocacy	6	9	9	10	50+

### NATIONAL COMMUNICABLE DISEASE CONTROL PROGRAM

Indicator	<b>Details</b>
Date and number of the Government Resolution which approved the programm	Resolution # 129 of 2002
Duration	2002-2010
Main objective	To reduce communicable disease morbidity and mortality through effective mobilization of social resources.

Nº	Indicators	2005	2006	2007	2008	2009	2010
1. I	mmunization coverage (percent)						
	BCG	98.0	98.2	98.6	98.5	98.8	98.5
	Hepatitis B	97.9	98.5	96.0	95.3	98.8	98.1
	DPT	98.8	99.0	94.8	96.0	97.4	98.0
	Measles	97.9	98.9	98.4	96.9	96.0	96.9
	Poliomyelitis	98.6	98.3	98.7	95.3	97.1	96.5
	ncidence of vaccine-preventable diseases per 10,0 pulation:	000					
	Generalized TB in 0-15 year-old children	0.1	0.1	0.1	0.1	0.1	0.1
	Hepatitis B	3.4	3.7	3.5	3.4	2.8	2.7
	Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0
	Pertussis	0.0	0.0	0.0	0.0	0.0	0.0
	Tetanus	0.0	0.0	0.0	0.0	0.0	0.0
	Measles	0.0	0.1	0.1	0.1	0.0	0.0
	Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0
3. L	aboratory confirmation of lung TB (percent)	69.8	76.8	76.2	76.7	74.1	74.8
4. (	Cure rate of new smear-positive cases	79.0	82.1	83.8	85.0	84.2	84.5
	ncidence of intestinal infections per 10000 pulation						
	Typhoid fever	0.1	0.0	0.0	0.0	0.0	0.0
	Dysentery	7.3	7.3	9.2	8.9	11.7	12.6
	Hepatitis B	21.1	21.7	34.2	35.0	22.1	29.7
	Salmonellosis	0.5	0.5	0.7	0.8	0.5	0.5
6. I	ncidence of brucellosis per 10,000 population	3.3	2.1	1.6	1.5	1.1	1.5
7.N	umber of cases of bubonic plague	0	1	3	1	1	2
8. I	ncidence of STIs per 10,000 population						
	Syphilis	9.5	11.7	12.7	18.7	18.5	14.4
	Gonorrhea	25.3	17.6	17.4	23.1	23.9	21.0
	Trichomoniasis	26.0	20.3	16.7	24.6	21.7	16.9
9. 1	Number of cases of congenital syphilis	36	51	7	17	19	11

### **NATIONAL INJURY PREVENTION PROGRAM**

Indicator	<b>Details</b>		
Date and number of the Government Resolution which approved the programm	Resolution # 279 of 2009		
Duration	The 1st Stage 2010-2012, the 2nd Stage 2010-2015		
Main objective	To reduce disability and mortality due to injuries		

Nº	Indicators	in 2008	in 2009	in 2010	in 2012
1	Death due to road traffic injuries /per 100 000 population/	18.7	15.8	17.8	16.5
2	Rate of child injury / per 10 000 population/	78.1	84.3	94.3	75.0
3	Burn /per 10 000 population /	22.7	23.5	26.9	21.5
4	Number of aimags with traumatology cabinet	14	16	16	20
5	Number of aimags, which do not have beds for trauma care and services	11	11	11	5
6	Number of aimags without traumatology doctors	5	4	3	2

# NON-COMMUNICABLE DISEASES PREVENTION AND CONTROL NATIONAL PROGRAM

Indicator	<b>Details</b>
Date and number of the Government Resolution which approved the programm	Resolution # 246 of 2005
Duration	The 1st Stage 2006-2009
Duration	The 2nd Stage 2010-2013
Main objective	Reduce deaths caused by major NCDs through improving control and surveillance of NCDs and their risk factors and through effective health promotion action

Nº	Indicators	base indi	cators in 200		in	Change as planned	
	maioutois	Reference value (2005)	Final 2006	111 2000	2010	2009	2013
	I. Primary	risk factors in	dicator				
1	Prevalence of tobacco smoking (by percentage)	25.9	26.6	27.6	-	23.4	20.4
2	Alcohol use percentage among population (in last month)	30.5	37.30%	38.60%	-	29	27
3	Salt intake (gram per day)	10.1	10.1	7.3	-	9.6	9.1
4	Fruits intake (days per week)	1.6	1.8	1.2	-	2	2.5
5	Prevalence of people who consume vegetables more than 2 units per day (by percentage)	44.4	44.4	29.7	-	49.4	55
6	Prevalence of people with active lifestyle on regular basis with 30 min as minimum (by percentage)	15.4	15.4	11.7	-	18.4	23.4
	II. Intermedia	te risk factors	indicator				
7	Prevalence of people with obesity (Body mass index BMI> 25 kg/m2	39.3	32.4	39.8	-	38.3	37.0
8	Blodd (arterial) pressure average a) systolic, b)	a/ 128.5	a/ 124.6	a/ 125.9	-	a/ 128.0	a/ 127.5
0	diastolic	б/ 79.4	б/ 76.9	б/ 78.9	-	б/ 78.9	б/ 78.4
9	Prevalence of peole with high cholestrol (>200 mg/dl or 5.2 mmol/l) (by percentage	12.4	23.9	41.7	-	12.2	11.7
10	Prevalence of people with high blood glucose (>5.6 - < 6.1 mmol/l)	10.2	10.3	9.4	-	10.0	9.8
	III. Rate of ea	arly detection	of cancer				
11	Prevalence of people with 5 year survival rate of the cervical cancer (by percentage)	-	-	36.4	36.4	34.0	35.0
Prevalence of people with 6 year survival rate of the breast cancer		-	-	37.8	31.5	30.0	31.0
	IV. Dea	nth rates of NC	Ds				
13	Death due to the cardial infarction (per 10 000)	-	-	8.7	9.8	3.5	3.0-3.4
14	Death due to the stroke (per 10 000)	-	-	8.1	9.2	15.1	12.5-14.0
15	Death due to the cancer (per 10 000)	-	-	11.9	13.0	11.8	11.5-11.7

### **ENVIRONMENTAL HEALTH NATIONAL PROGRAMME**

Indicator	<b>Details</b>
Date and number of the Government Resolution which approved the programm	Resolution # 245 of 2005
	2006-2015
Duration	The 1st Stage 2006-2010
	The 2nd Stage 2010-2015
Main objective	The aim of the Programme is to decrease the factors adversely affecting the environment and create safe conditions of healthy life and work for the population, by improving the inter-sectoral coordination and cooperation and by facilitation of activities regarding the improvement of environmental health

Nº	Indicators	2006	2007	2008	2009	2010	
ı	Water-born infectious diseases (per 10 000 pop)						
1	Typhoid and paratyphoid fevers	0.0%	0.0	0.0	0.0	0.0	
2	Other salmonella infections	0.5%	0.7	0.8	0.5	0.5	
3	Shigellosis	7.3	9.2	8.9	11.7	12.6	
4	Acute hepatitis A	21.7	34.2	35.0	22.1	29.7	
П	II Inflammatory diseases of the upper respiratory tract						
1	Acute laryngitis and tracheitis	33.3	40.6	51.3	49.7	56.7	
2	Asthma	14.5	15.8	19.2	20.1	19.8	

### **MENTAL HEALTH SECOND NATIONAL PROGRAM**

Indicators	Content
Government resolution number, date on approval of the program	Resolution # 303, 2009
	2010-2019
The program implementation period	First stage - 2010-2014
	Second stage -2015-2019
Main goal	To reduce prevalence of mental and behavioral disorderns through building a supportive environment to support mental health promotion, expansion of mental health services at primary level and community based health care

Nº	Indicators	in 2009	in 2010	in 2014				
To inc	To increase quality and access of mental health services and care							
1	Number of beds for mental disorders (per 10 000 population)	2.2	2.2	reduced by 10%				
2	Number of bed for mental disorders at aimag, district hospitals (per 10 000 population)	0.6	0.6	increased by 10%				
3	Number of family centers that operate in communities	12	12	14				
4	Number of mental health doctors at aimag, district level (per 10 000 population)	0.1	0.1	0.25				
5	Percentage of soums, family clinics' doctors who attended training on menal health care and services at primary level	25.0	32.0	60.0				
6	Percentage of mental health education in Medical science and nursing schools training curriculum	5.0	5.5	10.0				
7	Percentage of aimag, district, soum and family hospitals that are provided with medicines on mental health from the national list of essential drugs	86.0	41.0	95.0				

### **ORAL HEALTH PROGRAM**

Indicators	Content
Government resolution number, date on approval of the program	Resolution N 150, 2006
	2006-2015
The program implementation period	First stage 2006-2010
	Secondary stage 2011-2015
Main goal	To reduce prevalence of caries by improving monitoring and surveyllance of caries and its risk factors, by establishing health promotion environment to suppor healthy behavior, by increasing individials' monitoring on their oral health, and by improving quality and access of community-based oral health services and care

Nº		Indicators	in 2004	in 2010	in 2015		
	Prevalence of caries, its pace						
1		among 5-6 years old	80.1	79.0	78.0		
2	Prevalence of caries	among 12 years old	62.0	61.0	60.0		
3		in general population	71.6	71.0	70.0		
4		among 5-6 years old	4.6	4.5	4.3		
5	Pace of caries	among 12 years old	1.9	1.9	1.8		
6	in general population		3.1	3.0	2.8		
7	percentage of children in age groups 3 and 18 years old with complete set of teeth		67,5	70.0	72.5		

Source: Findings of a study conducted in 2004 by NMSU, Orthodontry school

### **NATIONAL IDD CONTROL PROGRAM**

Indicator	<b>Details</b>
Date and number of the Government Resolution which approved the programm	Resolution # 85 of 2007
Duration	2007-2010
Main objective	The Program aims at to decrease a spread of iodine deficiency up to level below 5%, increasing constant consumption of iodized salt up to level above 95% through raising up a size of domestically produced, high quality and safe iodized salt, supplied to the population, reducing IDD in livestock by increase of domestic production of nourishments.

	Criteria	Current level (2004, 2006)	Level to achieve (2010)	Source of data
1	Percentage of goiter spreads among children aged 7-11	13.80%	<5.0	Survey by public Health Institute and UNFPA
2	lodine content in urine of children aged 7-11, percentage to be below 100mkg/l	52.5	<50.0	Survey by public Health Institute and UNFPA
3	TSH in blood of infants, percentage to be above 5 IU	7.10%	<4.0	Survey by public Health Institute and UNFPA
4	Percentage of iodized salt consumption at household level	74.40%	95.0%	Survey by public Health Institute and UNFPA
5	Consumption of food with iodized salt	90	100	Report by Ministry of Food and Agriculture
6	Factories of iodized minerals and fodder/ nourishment	2.00%	3.0%	Report by Ministry of Food and Agriculture
7	Percentage of iodine deficiency among livestock	13.2	10.0	Surveys by University of Agriculture and

# CHAPTER 11. HEALTH PROFILE OF MONGOLIA FOR THE WESTERN PACIFIC REGION HEALTH DATABANK, 2010 Revision

	INDICATORS			DA	ГА			Year
Dem	ographics	To	tal	Ma	ale	Fer	male	
1	Area (1 000 km2)	156	7.00					2010
2	Estimated population ('000s)	278	0.75	135	1.70	142	9.05	2010
3	Annual population growth rate (%)	1.	70					2010
4	Percentage of population							
	- 0–4 years	10	.01	10	.43	9.	60	2010
	- 5–14 years	17	.26	17	.97	16	i.58	2010
	- 65 years and above	3.	94	3.	45	4.	41	2010
5	Urban population (%)	63	.31					2010
6	Crude birth rate (per 1000 population)	23	.80					2010
7	Crude death rate (per 1000 population)	6.	26					2010
8	Life expectancy (years)	68	.05	64	.93	72	26	2010
9	Total fertility rate (women aged 15–49 years)	2.	30			2.	30	2010
Soci	ioeconomic indicators							
10	Adult literacy rate (%)	97	.80	98	.00	97	7.50	2000
11	Per capita GDP at current market prices (US\$)	155	0.90					2009
12	Rate of growth of per capita GDP (%)	-1.2	29%					2009
13	Human development index	0.	74					2009
Com	nmunicable and noncommunicable diseases	Nur	nber of new ca	ases	Nu	mber of deatl	hs	
14	Selected communicable diseases	Total	Male	Female	Total	Male	Female	
	Hepatitis viral	9099	4925	4174	24	12	12	2010
	- Type A	8116	4391	3725	6	2	4	2010
	- Type B	747	418	329	17	9	8	2010
	- Туре C	140	57	83	1	1	0	2010
	- Type E							2010
	- Unspecified	96	59	37	0	0	0	2010
	Cholera							2010
	Dengue/DHF							2010
	Encephalitis	9	8	1	0	0	0	2010
	Gonorrhoea	5741	2769	2972	0	0	0	2010
	Leprosy							2010
	Malaria							2010
	Plague	2	2					2010
	Syphilis	3937	1148	2789	3	2	1	2010
	Typhoid fever	1	0	1	1	0	1	2010

	INDICATORS			DA	TA			Year
Dem	ographics	To	otal	М	ale	Fer	nale	
15	Acute respiratory infections	250609	120809	129800	463	267	196	2010
16	Diarrhoeal diseases	28442	14390	14052	55	22	33	2010
17	Tuberculosis							
	- All forms	4213	2243	1970	325	226	99	2010
	- New pulmonary tuberculosis (smear-positive)	1837	1018	819	246	174	72	2010
18	Cancers							
	All cancers (malignant neoplasms only)	4466	2274	2192	3264	1833	1431	2010
	- Breast	126	3	123	48	1	47	2010
	- Colon and rectum	125	65	60	70	35	35	2010
	- Cervix	358		358	130		130	2010
	- Oesophagus	339	158	181	302	164	138	2010
	- Leukaemia	24	9	15	25	9	16	2010
	- Lip, oral cavity and pharynx	83	56	27	49	33	16	2010
	- Liver	1722	974	748	1410	801	609	2010
	- Stomach	619	381	238	509	321	188	2010
	- Trachea, bronchus, and lung	387	319	68	327	254	73	2010
19	Circulatory							
	All circulatory system diseases	195428	73747	121681	6512	3647	2865	2010
	- Acute myocardial infarction	2102	1036	1066	998	710	288	2010
	- Cerebrovascular diseases	13555	5726	7829	2517	1344	1173	2010
	- Hypertension	82831	28270	54561	443	222	221	2010
	- Ischaemic heart disease	46731	20170	26561	1715	934	781	2010
	- Rheumatic fever and rheumatic heart diseases	24165	6878	17287	85	48	37	2010
20	Diabetes mellitus	8105	3810	4295	79	50	29	2010
21	Mental disorders	31118	15946	15172	19	13	6	2010
22	Injuries							
	All types	129726	82413	47313	2788	2213	575	2010
	- Homicide and violence				288	225	63	2010
	- Road traffic accidents				491	375	116	2010
	- Occupational injuries				39	35	4	2010
	- Suicide				459	384	75	2010
Lead	ding causes of mortality and morbidity	١	Number of case	es	Rate pe	r 100 000 pop	oulation	
23	Leading causes of morbidity (inpatient care)	Total	Male	Female	Total	Male	Female	
	Diseases of the respiratory system	319190	149582	169608	11572.11	11123.91	11998.47	2010
	Diseases of the digestive system	243248	98639	144609	8818.87	7335.45	10229.98	2010
	Diseases of the genitourinary system	203441	47500	155941	7375.68	3532.42	11031.64	2010
	Diseases of the circulatory system	195428	73747	121681	7085.17	5484.32	8608.00	2010
	Injuries, poisoning and other consequences of external causes	129726	82413	47313	4703.17	6128.78	3347.03	2010
	6. Diseases of the nervous system	90086	36604	53482	3266.03	2722.12	3783.44	2010
	7. Diseases of the skin and subcutaneous tissues	82415	36065	46350	2987.93	2682.03	3278.91	2010
	8. Diseases of the eye and adnexa	60218	23257	36961	2183.18	1729.55	2614.71	2010
	Infectious and parasitic diseases	46732	20773	25959	1694.25	1544.82	1836.40	2010
	<u> </u>							2010
	10. Mental and behavioural disorders	31118	15946	15172	1128.17	1185.85	1073.30	2

	INDICATORS			DAT	ГА			Year
		N	umber of deat	hs	Rate pe	r 100 000 poj	oulation	
24	Leading causes of mortality	Total	Male	Female	Total	Male	Female	
	1. Diseases of the circulatory system	6512	3647	2865	236.09	271.22	202.68	2010
	2. Tumours and neoplasms	3591	2016	1575	130.19	149.92	111.42	2010
(	Injuries, poisoning and other consequences of external causes	2788	2213	575	101.08	164.57	40.68	2010
	4. Diseases of the digestive system	1463	792	671	53.04	58.90	47.47	2010
	5. Diseases of the respiratory system	749	437	312	27.15	32.50	22.07	2010
	6. Certain conditions originating in the perinatal period	652	379	273	23.64	28.18	19.31	2010
	7. Diseases of the genitourinary system	285	161	124	10.33	11.97	8.77	2010
	8. Infectious and parasitic diseases	369	247	122	13.38	18.37	8.63	2010
	9. Diseases of the nervous system	318	182	136	11.53	13.53	9.62	2010
(	10. Congenital malformations, deformations and chromosomal abnormalities	215	103	112	7.79	7.66	7.92	2010
Mater	rnal, child and infant diseases	To	ıtal	Ma	ale	Fer	nale	
	Percentage of women in the reproductive age group using modern contraceptive methods	53	3.4			53	3.40	2010
26	Percentage of pregnant women with anaemia	8.	10			8.	.10	2010
27	Neonatal mortality rate (per 1000 live births)	9.	70	10	.83	8.	.51	2010
	Percentage of newborn infants weighing less than 2500 g at birth	95	.60	95	.95	95	i.30	2010
29	Immunization coverage for infants (%)							
	- BCG	98	3.5					2010
	- DTP3	96	6.1					2010
	- Hepatitis B III	96	3.1					2010
	- MCV2	94	1.9					2010
	- POL3	96	6.5					2010
	Maternal causes	١	lumber of case	es	Nu	mber of deat	hs	
		Total	Male	Female	Total	Male	Female	
30	- Abortion	12492		12492				2010
	- Eclampsia	8747		8747	2		2	2010
	- Haemorrhage	1670		1670	1		1	2010
	- Obstructed labour	6152		6152	1		1	2010
	- Sepsis	114		114	3		3	2010
31	Selected diseases under the WHO-EPI							
	- Diphtheria							2010
	- Hib meningitis	28	13	15	4	3	1	2010
	- Measles							2010
	- Mumps	524	273	251				2010
	- Neonatal tetanus							2010
	- Pertussis (whooping cough)							2010
	- Poliomyelitis							2010
	- i dilottiyelilis							
	- Rubella	11	5	6				2010

		INDICATORS				DA	ГА			Year
		Health facilities			Number		Ni	umber of bed	s	
		- Specialized hospitals			16			6023		2010
	Public health	- General hospitals			35			3995		2010
	facilities	- District/first-level referral ho	spitals		328			3630		2010
		- Primary health care centres			218					2010
	Private health	- Hospitals			166			2527		2010
	facilities	- Outpatient clinics			947					2010
		Health care financing								
32	Total health exp	enditure								
	- amount (in m								150.50	2009
	·	ure on health as % of GDP							3.60	2009
	- per capita tot	al expenditure on health (in US	S\$)						55.54	2009
	Government exp	penditure on health	,							
	- amount (in mi								140.96	2009
	- general gover expenditure on h	nment expenditure on health a	s % of total						93.70	2009
	- general gover general governm	nment expenditure on health a ent expenditure	s % of total						8.70	2009
	External source	of government health expendi	ture							
	- external resou expenditure on h	rces for health as % of general ealth	l government							
	Private health e	xpenditure								
	- private expend health	diture on health as % of total e	xpenditure on						6.30	2009
	- out-of-pocket on health	expenditure on health as % of	total expenditure						5.90	2009
	Exchange rate i	n US\$ of local currency is: 1 U	JS\$ =						1440.76	2009
33	Health insuranc	e coverage as % of total popul	ation						77.6	2009
	IND	CATORS				DATA				Year
34	Human resource	es for health	Total	Male	Female	Urban	Rural	Public	Private	
	Physicians	- Number	7497	1578	5919	4565	2932	5948	1549	2010
	1 Hysicians	- Ratio per 1000 population	2.72	1.17	4.19	2.63	2.87	2.16	0.56	2010
	Dentists	- Number	533			387	146	183	350	2010
		- Ratio per 1000 population	0.19			0.22	0.14	0.07	0.13	2010
	Pharmacists	- Number	1176	80	1096	925	251	200	976	2010
		- Ratio per 1000 population	0.43	0.06	0.78	0.53	0.25	0.07	0.35	2010
	Nurses	- Number	9 179	206	8973	4396	4783	8172	1007	2010
		- Ratio per 1000 population	3.33	0.15	6.35	2.53	4.68	2.96	0.37	2010
	Midwives	- Number	697	11	686	139	558	672	25	2010
		- Ratio per 1000 population	0.25	0.01	0.49	0.08	0.55	0.24	0.01	2010
	Paramedical staff	- Number	1249	118	1131	622	627	978	271	2010
		- Ratio per 1000 population	0.45	0.09	0.80	0.36	0.61	0.35	0.10	2010
	Community health workers	- Number	437	72	365	209	228	427	10	2010
35	HOURT WORKERS	- Ratio per 1000 population	0.16	0.05	0.26	0.12	0.22	0.15	0.00	2010
55	Annual number	Physicians	735	186	549	619	116	504	231	2010
	of graduates	Dentists	144	28	116	144	0	108	36 152	2010
		Pharmacists	247	18	216			94	153	2010

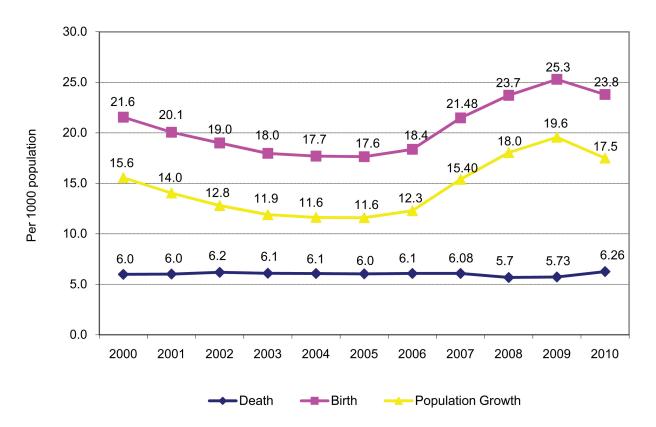
		INDICATORS				DA	ГА			Year
			Total	Male	Female	Urban	Rural	Public	Private	
36		Nurses	291	31	260			392	-101	2010
	Annual number	Midwives	140	2	138			102	38	2010
	of graduates	Paramedical staff	60	7	53			60		2010
		Community health workers	18	7	11			18		2010
37		Physicians	250							2010
		Dentists								
		Pharmacists	19							2010
	Workforce losses/ Attrition	Nurses	301							2010
		Midwives	22							2010
		Paramedical staff	50							2010
		Community health workers								
		INDICATORS				DA	ГА			Year
Heal	lth-related Millenn	ium Development Goals (MD0	Gs)	To	tal	M	ale	Fer	nale	
38	Prevalence of u	nderweight children under five	years of age	6.	30	5.	90	6.	60	2007
39	Infant mortality r	ate (per 1000 live births)		19	.40	2′	1.3	17	<b>'</b> .3	2010
40	Under-five morta	ality rate (per 1000 live births)		24	.60	26	3.4	22	2.7	2010
41	Proportion of 1 y	vear-old children immunised a	gainst measles	96	.90					2010
42	Maternal mortali	ty ratio (per 100 000 live birth:	s)	45	.50					2010
43	Proportion of bir	ths attended by skilled health	personnel	99	.80					2010
	- Percentage of (as % of total del	deliveries at home by skilled iveries)	health personnel	0.	20					2010
	- Percentage of deliveries)	deliveries in health facilities (a	as % of total	99	.51					2010
44	Contraceptive p	revalence rate		53	3.4					2010
45	Adolescent birth	rate		6	.0					2010
46	Antenatal care	- At least one visit		83	.40					2010
	coverage	- At least four visits		1	.4					2010
47	HIV prevalence	among population aged 15-24	years	<(	).1					2010
48	Estimated HIV p	revalence in adults		<0	.02					2010
49	Percentage of p	eople with advanced HIV infec	ction receiving	88	.24	85	.19	10	0.0	2010
50	Tuberculosis pre	evalence rate per 100 000 pop	ulation	65	.26	65	.26			2010
51	Tuberculosis de	ath rate per 100 000 populatio	n	3.	30	4.	91	1.	77	2010
52		perculosis cases detected und ent short-course (DOTS)	er directly	74	.80					2010
53	Proportion of tub treatment short-o	perculosis cases cured under course (DOTS)	directly observed	84	.50				••	2010
				To	tal	Url	oan	Ru	ıral	
54	Proportion of po source	pulation using an improved dr	inking water	76	.00			49	.00	2009
55		pulation using an improved sa	•	50	.00	6	i4	32	.00	2009
56	Proportion of po drugs on a susta	pulation with access to affordainable basis	able essential	80	.00					2009

# **CHAPTER 12. MAIN HEALTH INDICATORS FOR 2010**

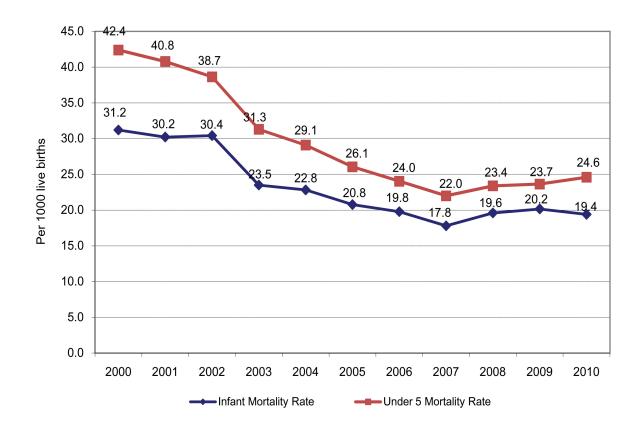
# Main Health Indicators, 2010

				Per 10.00	Per 10.000 population		9k	JE.	gu	stis	Per	Per 1000 population	ulation	er	Under 5 mortality rate	ortality rate
ol Z	Aimag and city	Population, 2010	sbed IstiqsoH	Phycisians	Midlevel medical personnels	Fill health workers	Mumber of persons p hospital bed	Number of persons p	Number of midlevel personnel per physici	Average outpatient vi per person per year	Crude birth rate	Orude death rate	Population growth rate	nfant mortality rate p 1000 live births	per 1000 under 5 children	per 1000 live births
	∢	-	2	က	4	2	9	7	œ	6	10	11	12	13	41	15
~	Arkhangai	91633	60.73	14.78	54.87	121.58	164.65	676.77	3.71	3.49	21.14	5.94	15.20	26.15	6.55	31.28
7	Bayan-Ulgii	100836	60.78	14.21	46.38	103.31	164.52	703.76	3.26	3.87	24.26	5.26	19.00	22.77	7.99	33.13
က	Bayankhongor	85133	58.53	13.02	57.01	120.47	170.84	768.01	4.38	3.62	21.98	6.31	15.67	26.54	7.27	32.91
4	Bulgan	62637	59.21	14.56	57.93	123.86	168.89	69.989	3.98	3.57	15.60	5.55	10.05	20.45	4.26	24.54
2	Gobi-Altai	58350	73.90	21.07	81.72	174.47	135.32	474.70	3.88	4.67	22.14	5.81	16.33	20.72	00'9	26.86
9	Gobi-Sumber	13772	78.33	28.82	76.11	167.01	127.67	346.99	2.64	6.84	28.01	4.73	23.28	2.65	1.24	5.31
7	Darkhan-Uul	91728	57.43	25.42	58.20	126.31	174.12	393.46	2.29	7.80	27.17	6.78	20.39	8.07	3.31	11.71
80	Dornogobi	59539	62.11	31.22	57.36	145.26	161.01	320.26	1.84	6.71	21.86	5.79	16.07	24.69	5.86	28.55
တ	Dornod	73617	65.20	18.20	54.33	128.77	153.38	549.41	2.99	4.09	25.02	68.9	18.13	20.03	5.65	23.82
10	Dundgobi	46314	63.41	18.73	62.78	140.24	157.69	534.01	3.35	3.98	18.39	6.21	12.17	21.91	5.64	29.99
1	Zavkhan	76861	68.89	15.37	63.90	138.94	145.15	620.75	4.16	4.96	21.21	6.16	15.05	26.65	7.09	32.71
12	Orkhon	85742	50.95	29.13	62.41	137.96	196.38	343.27	2.14	7.55	27.17	96.9	20.20	14.74	5.04	18.21
13	Uvurkhangai	117408	54.15	14.98	47.85	104.12	184.69	667.39	3.19	2.70	23.43	90.9	17.37	28.34	7.81	33.07
14	Umnugobi	51013	56.01	23.32	57.20	125.37	178.55	428.83	2.45	5.59	23.26	6.30	16.96	22.07	5.61	26.32
15	Sukhbaatar	55021	57.65	19.28	59.83	138.76	173.46	518.75	3.10	5.01	20.90	6.07	14.82	21.55	5.53	25.86
16	Selenge	106525	61.53	15.33	50.77	107.72	162.53	652.12	3.31	3.59	18.06	5.31	12.75	8.38	2.68	13.10
17	Tuv	90224	47.33	15.44	49.24	118.62	211.26	647.56	3.19	3.18	10.32	5.15	5.17	25.89	3.12	30.20
18	Uvs	78207	60.89	15.54	61.14	124.58	164.23	643.48	3.93	4.15	24.88	99.9	18.22	33.40	9.50	43.17
19	Khovd	88402	65.80	16.73	26.07	113.28	151.98	597.66	3.35	4.38	23.47	4.64	18.83	24.10	7.28	29.88
20	Khuvsgul	124587	49.70	14.07	55.81	111.94	201.21	710.56	3.97	4.93	23.59	7.21	16.37	29.67	9.08	37.86
21	Khentii	71748	60.61	19.69	56.98	134.91	164.98	507.82	2.89	4.42	19.38	5.38	14.01	19.48	5.38	28.14
22	Aimag average	1629297	59.24	18.03	56.72	124.36	168.82	554.70	3.15	4.55	21.88	6.02	15.86	22.12	6.15	27.99
23	Ulaanbaatar	1151460	72.33	40.33	58.34	171.24	138.26	247.95	1.45	7.62	26.57	6.61	19.96	16.09	5.54	20.65
24	Country average	2780757	64.61	27.18	57.38	143.60	154.78	367.92	2.11	5.81	23.80	6.26	17.54	19.35	2.90	24.62

### **Crude Birth and Death Rates and Population Growth (2000-2010)**



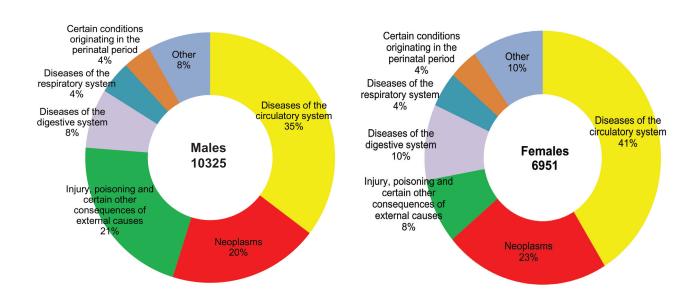
### Infant and Under 5 Mortality Rates (2000-2010)



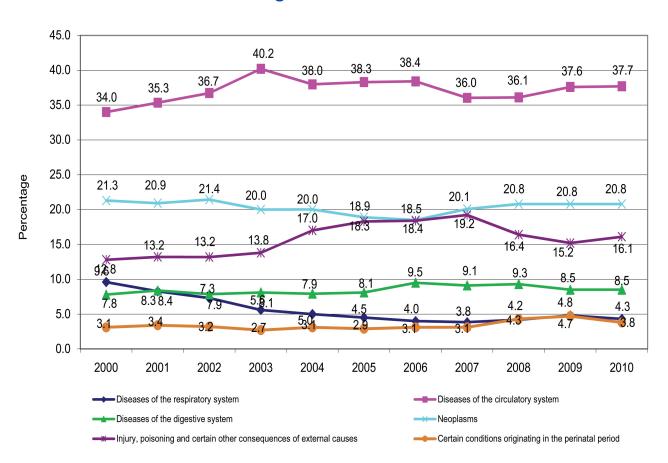
## Deaths by Causes and Sex, 2010

	To	otal	Ma	ales	Fer	males
Main Causes ICD-10	Abs. number	per 10000 pop	Abs. number	per 10000 pop	Abs. number	per 10000 pop
Diseases of the circulatory system	6512	23.61	3647	27.12	2865	20.27
Neoplasms	3591	13.02	2016	14.99	1575	11.14
Injuiry, poisoning and certain other consequences of external causes	2788	10.11	2213	16.46	575	4.07
Diseases of the digestive system	1463	5.30	792	5.89	671	4.75
Diseases of the respiratory system	749	2.72	437	3.25	312	2.21
Certain infectious and parasitic diseases	652	2.36	379	2.82	273	1.93
Certain conditions originating in the perinatal period	369	1.34	247	1.84	122	0.86
Diseases of the genito-urinary system	318	1.15	182	1.35	136	0.96
Diseases of the nervous system and sense organs	285	1.03	161	1.20	124	0.88
Congenital malformations, deformations and chromosomal abnormalities	215	0.78	103	0.77	112	0.79
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	120	0.44	62	0.46	58	0.41
Endocrine, nutritional and metabolic diseases	111	0.40	37	0.28	74	0.52
Mental and behavioural disorders	28	0.10	19	0.14	9	0.06
Pregnancy, childbirth and the puerperium	24	0.09	7	0.05	17	0.12
Diseases of blood and blood forming organs and certain disorders involving the immune mechanisms	19	0.07	13	0.10	6	0.04
Diseases of the musculoskeletal system and connective tissue	18	0.07	10	0.07	8	0.06
Diseases of the eye and adnexa	14	0.05	-	0.00	14	0.10
Diseases of the skin and subcutaneous tissue	0	0.00	0	0.00	0	0.00
Total	17276	62.63	10325	76.78	6951	49.17

## Main Causes of Death, by Sex, 2010



## Five Leading Causes of Death 2000-2010



## Five Leading Causes of Death (by aimag), 2010

				per 10000 population		
Nº	Aimag, city	Diseases of the circulatory system	Neoplasms	Injury,poisoning and certain other consequences of external causes	Diseases of the digestive system	Diseases of the respiratory system
1	Arkhangai	28.25	11.95	6.41	3.26	2.93
2	Bayan-Ulgii	25.56	3.45	2.96	6.41	7.89
3	Bayankhongor	26.63	13.37	8.21	4.69	3.28
4	Bulgan	25.60	15.36	5.92	2.56	1.60
5	Gobi-Altai	24.63	12.23	8.66	2.55	2.04
6	Gobi-Sumber	17.74	7.39	8.13	7.39	0.00
7	Darkhan-Uul	28.50	15.51	10.56	5.28	1.87
8	Dornogobi	18.50	11.20	10.01	7.13	3.22
9	Dornod	18.47	17.11	14.67	8.01	3.26
10	Dundgobi	22.77	12.56	8.94	2.98	3.83
11	Zavkhan	29.71	12.04	4.61	4.87	2.31
12	Orkhon	27.71	16.11	11.72	5.45	1.07
13	Uvurkhangai	26.65	9.02	7.58	4.17	3.58
14	Umnugobi	22.92	10.96	7.77	9.57	3.19
15	Sukhbaatar	18.55	17.28	7.27	6.00	2.91
16	Selenge	25.91	10.76	5.52	4.48	1.81
17	Tuv	19.02	13.54	6.04	3.25	1.23
18	Uvs	26.75	17.07	7.90	2.29	4.46
19	Khovd	18.54	9.50	3.96	2.60	3.17
20	Khuvsgul	33.45	16.41	9.01	3.46	3.78
21	Khentii	18.99	2.79	9.22	13.13	2.65
22	Aimag average	24.90	12.24	7.70	4.96	3.04
23	Ulaanbaatar	21.75	14.14	13.56	5.80	2.24
24	Country average	23.61	13.02	10.11	5.30	2.72

## Causes of Infant and Under 5 Deaths, 2010

Diseases group according to ICD-10		0-1 age	u	nder 5
Abs. number	Abs. number	%	Abs. number	%
Certain conditions originating in the perinatal period	652	51.1	652	40.2
Diseases of the respiratory system	275	21.6	375	23.1
Diseases of the digestive system	153	12.0	176	10.9
Congenital malformations, deformations and chromosomal abnormalities	88	6.9	217	13.4
Injuiry, poisoning and certain other consequences of external causes	29	2.3	56	3.5
Diseases of the nervous system and sense organs	43	3.4	73	4.5
Certain infectious and parasitic diseases	10	0.8	21	1.3
Other	25	2.0	52	3.2
Total	1275	100.0	1622	100.0

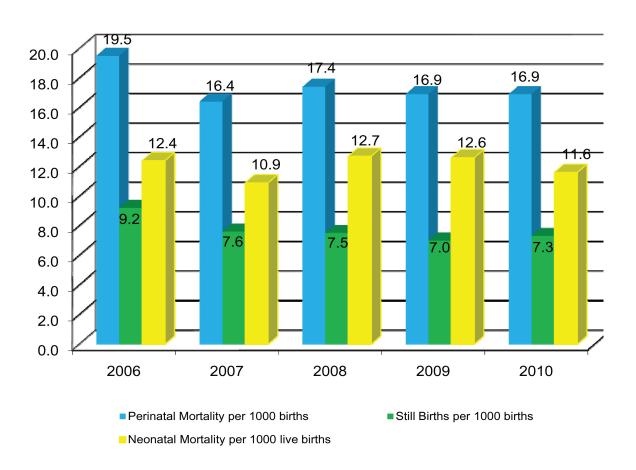
## Causes of Infant Mortality (2006-2010)

Causes	2006	2007	2008	2009	2010
Certain conditions originating in the perinatal period	51.0	49.7	51.9	52.5	51.1
Diseases of the respiratory system	17.2	19.1	17.3	19.2	21.6
Congenital malformations, deformations and chromosomal abnormalities	12.3	12.4	13.4	11.3	12.0
Injuiry, poisoning and certain other consequences of external causes	6.3	7.5	7.0	7.1	6.9
Diseases of the digestive system	4.6	4.4	4.4	4.4	2.3
Diseases of the nervous system and sense organs	5.5	4.2	2.7	3.3	3.4
Certain infectious and parasitic diseases	2.5	1.7	1.7	0.8	0.8

The Leading cause
The Second Leading cause
The Third Leading cause
The Fourth leading cause
The Fifth leading cause

Infant Mortality, 2010									
Causes	Rate								
Infant mortality rate per 1000 live births	19.4								
Early neonatal mortality rate per 1000 live births	9.7								
Post neonatal mortality rate per 1000 live births	1.9								
Neonatal mortality rate per 1000 live births	11.6								
Still births rate per 1000 births	7.3								
Perinatal mortality rate per 1000 births	16.9								

## **Infant Mortality 2006-2010**



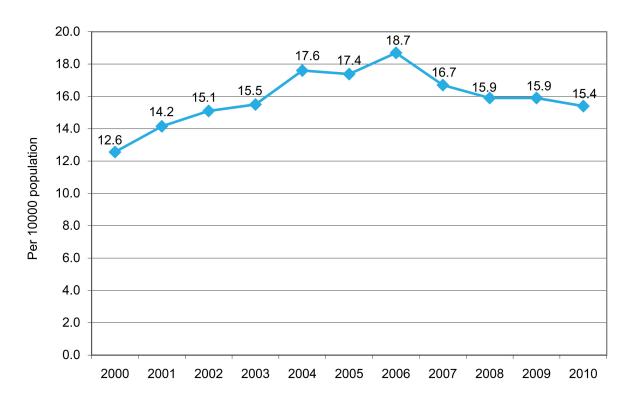
## **Infant Mortality, 2010**

Nº	Aimag and city	Perinatal mortality per 1000 births	Still births per 1000 births	Neonatal mortality per 1000 live births	Early neonatal mortality per 1000 live births	Post neonatal mortality per 1000 live births
	А	1	2	3	4	5
1	Arkhangai	20.4	6.1	14.9	14.4	0.5
2	Bayan-Ulgii	30.7	24.6	9.5	6.2	3.3
3	Bayankhongor	20.0	6.3	16.5	13.8	2.7
4	Bulgan	8.2	2.0	6.1	6.1	0.0
5	Gobi-Altai	18.3	6.9	13.0	11.5	1.5
6	Gobi-Sumber	7.9	5.3	2.7	2.7	0.0
7	Darkhan-Uul	8.4	4.0	4.8	4.4	0.4
8	Dornogobi	20.7	6.1	17.7	14.7	3.1
9	Dornod	15.6	8.6	10.3	7.0	3.2
10	Dundgobi	13.8	3.4	10.4	10.4	0.0
11	Zavkhan	22.2	9.0	16.4	13.3	3.0
12	Orkhon	16.4	6.9	10.8	9.5	1.3
13	Uvurkhangai	19.4	9.7	14.2	9.8	4.4
14	Umnugobi	19.4	4.2	18.7	15.3	3.4
15	Sukhbaatar	12.0	3.4	9.5	8.6	0.9
16	Selenge	9.4	4.7	5.8	4.7	1.0
17	Tuv	17.2	5.4	14.0	11.9	2.2
18	Uvs	25.9	13.2	17.5	12.8	4.6
19	Khovd	22.5	8.1	16.4	14.5	1.9
20	Khuvsgul	18.6	10.8	10.2	7.8	2.4
21	Khentii	17.2	6.5	12.3	10.8	1.4
22	Aimag average	18.2	8.4	12.2	10.0	2.2
23	Ulaanbaatar	15.4	6.1	11.0	9.3	1.7
24	Country average	16.9	7.3	11.6	9.7	1.9

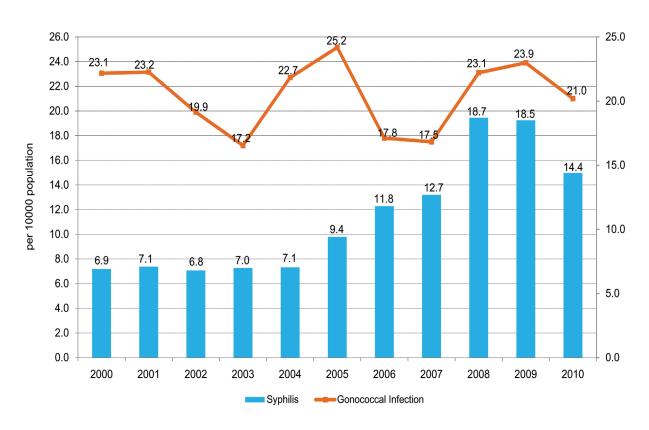
## Registered Reportable Infectious Diseases, per 10000 population (2005-2010)

Certain infectious and			Per 10000	) population		
parasitic diseases	2005	2006	2007	2008	2009	2010
Typhoid and paratypoid fevers	0.06	0.01	0.00	0.00	0.00	0.00
Salmonella infections	0.51	0.55	0.70	0.80	0.50	0.50
Shigellosis	7.24	7.32	9.20	8.90	11.70	12.60
Tuberculosis	17.38	18.69	16.70	15.90	15.90	15.40
Plague	0.00	0.00	0.00	0.00	0.00	0.00
Anthrax	0.09	0.07	0.10	0.10	0.00	0.20
Brucellosis	3.30	2.13	1.60	1.50	1.10	1.50
Scarlet fever	0.25	0.18	0.10	0.10	0.10	0.10
Meningococcal infection	0.32	0.25	0.60	0.30	0.10	0.10
Varicella	4.42	5.56	7.70	7.80	6.20	4.60
Measles	0.00	0.09	0.10	0.10	0.00	0.00
Rubella	0.02	4.81	24.40	0.60	0.00	0.00
Viral hepatitis	25.15	26.20	38.40	39.10	25.80	33.30
Viral hepatitis A	21.02	21.82	34.20	35.00	22.10	29.70
Viral hepatitis B	3.42	3.70	3.50	3.40	2.80	2.70
Viral hepatitis C	0.65	0.63	0.60	0.60	0.50	0.50
Mumps	6.65	19.86	3.70	2.10	7.50	1.90
Mycoses	-	4.24	4.44	4.90	10.20	16.20
Syphilis	9.42	11.81	12.77	18.70	18.50	14.40
Gonococcal infection	25.15	17.76	17.59	23.10	23.90	21.00
Trichomoniasis	25.88	20.48	16.86	24.00	21.70	16.90

## Incidence of Tuberculosis (2000-2010)



## Incidence of Syphilis and Gonococcal Infections (2000-2010)



## Prevalence, Incidence and Death Rates of Malignant Neoplasms, 2010

		Preva	lence			Inci	dence					D	eaths		
Malignant neonlocme		ber	dod	Ab	s.num	ber		er 100 pulati		Ab	s.num	ber		per 1000 opulatio	
Malignant neoplasms		Abs.number	per 10000	Total	Males	Femals	Total	Males	Femals	Total	Males	Femals	Total	Males	Femals
А	Б	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Lip, oral cavity and pharynx	1	291	1.06	83	56	27	0.30	0.42	0.19	49	33	16	0.18	0.25	0.11
Oesophagus	2	700	2.54	339	158	181	1.23	1.17	1.28	302	164	138	1.09	1.22	0.98
Stomach	3	1606	5.82	619	381	238	2.24	2.83	1.68	509	321	188	1.85	2.39	1.33
Colon	4	252	0.91	89	49	40	0.32	0.36	0.28	49	27	22	0.18	0.20	0.16
Rectus and anus	5	161	0.58	36	16	20	0.13	0.12	0.14	21	8	13	0.08	0.06	0.09
Liver	6	3563	12.92	1722	974	748	6.24	7.24	5.29	1410	801	609	5.11	5.96	4.31
Pancreas	7	144	0.52	68	36	32	0.25	0.27	0.23	52	31	21	0.19	0.23	0.15
Other in digestive organs	8	47	0.17	18	11	7	0.07	0.08	0.05	20	10	10	0.07	0.07	0.07
Larynx	9	114	0.41	26	20	6	0.09	0.15	0.04	23	20	3	0.08	0.15	0.02
Trachea	10	4	0.01	2	2	0	0.01	0.01	0.00	1	1	0	0.00	0.01	0.00
Lung	11	678	2.46	359	297	62	1.30	2.21	0.44	315	248	67	1.14	1.84	0.47
Other in the respiratory system	12	66	0.24	20	11	9	0.07	0.08	0.06	12	6	6	0.04	0.04	0.04
Bone and articular cartilage	13	227	0.82	64	37	27	0.23	0.28	0.19	38	27	11	0.14	0.20	0.08
Skin	14	166	0.60	36	11	25	0.13	0.08	0.18	9	3	6	0.03	0.02	0.04
Mesothelial and soft tissue	15	164	0.59	28	12	16	0.10	0.09	0.11	24	11	13	0.09	0.08	0.09
Breast	16	656	2.38	126	3	123	0.46	0.02	0.87	48	1	47	0.17	0.01	0.33
Cervix uteri	17	2127	7.71	358	0	358	1.30	0.00	2.53	130	0	130	0.47	0.00	0.92
Uterus	18	115	0.42	20	0	20	0.07	0.00	0.14	4	0	4	0.01	0.00	0.03
Ovary	19	313	1.13	62	0	62	0.22	0.00	0.44	28	0	28	0.10	0.00	0.20
Other female genital organs	20	109	0.40	21	0	21	0.08	0.00	0.15	15	0	15	0.05	0.00	0.11
Male genital organs	21	185	0.67	50	50	0	0.18	0.37	0.00	26	26	0	0.09	0.19	0.00
Cyst	22	85	0.31	20	17	3	0.07	0.13	0.02	14	11	3	0.05	0.08	0.02
Urology, nephrology	23	295	1.07	73	33	40	0.26	0.25	0.28	30	14	16	0.11	0.10	0.11
Other urinary organs	24	34	0.12	6	3	3	0.02	0.02	0.02	1	0	1	0.00	0.00	0.01
Ophtalmology	25	58	0.21	9	3	6	0.03	0.02	0.04	3	1	2	0.01	0.01	0.01
Brain	26	197	0.71	69	27	42	0.25	0.20	0.30	44	22	22	0.16	0.16	0.16
Luekaemia	27	111	0.40	24	9	15	0.09	0.07	0.11	25	9	16	0.09	0.07	0.11
Other	28	473	1.71	119	58	61	0.43	0.43	0.43	62	38	24	0.22	0.28	0.17
Total	29	12941	46.92	4466	2274	2192	16.19	16.91	15.51	3264	1833	1431	11.83	13.63	10.12

<sup>\*</sup> Source: National Center for Cancer, 2010 report.

## Prevalence, Incidence and Deaths of Malignant Neoplasms, 2010 (by aimag)

		Preval	ence			Inci	dence					De	aths		
Nº	Aimag and city	Abs. Iber	dod (	Ab	s.numl	oer		er 1000 opulatio		Ab	s.numb	er		er 1000 opulatio	
142	3	Abs	per 10000 pop	Total	Males	Femals	Total	Males	Femals	Total	Males	Femals	Total	Males	Femals
1	Arkhangai	307	33.4	159	86	73	17.27	18.92	15.67	113	68	45	12.28	14.96	9.66
2	Bayan-Ulgii	193	19.0	63	32	31	6.22	6.30	6.13	35	19	16	3.45	3.74	3.17
3	Bayankhongor	327	38.4	134	70	64	15.72	16.78	14.71	120	68	52	14.08	16.30	11.95
4	Bulgan	321	51.4	99	57	42	15.84	18.23	13.45	99	54	45	15.84	17.27	14.41
5	Gobi-Altai	307	52.2	119	49	70	20.22	16.94	23.38	70	41	29	11.89	14.18	9.69
6	Gobi-Sumber	57	42.1	34	13	21	25.12	19.36	30.81	13	8	5	9.61	11.91	7.34
7	Darkhan-Uul	557	61.3	212	113	99	23.33	25.69	21.11	149	86	63	16.39	19.55	13.43
8	Dornogobi	238	40.4	88	50	38	14.93	17.13	12.78	65	41	24	11.03	14.04	8.07
9	Dornod	440	59.8	142	64	78	19.29	17.59	20.95	141	76	65	19.15	20.88	17.46
10	Dundgobi	236	50.2	75	36	39	15.96	15.36	16.56	62	31	31	13.19	13.22	13.16
11	Zavkhan	342	43.8	123	75	48	15.75	19.44	12.15	92	56	36	11.78	14.52	9.11
12	Orkhon	412	48.8	101	54	47	11.96	13.20	10.80	114	65	49	13.50	15.89	11.26
13	Uvurkhangai	422	35.9	122	67	55	10.39	11.51	9.28	97	56	41	8.26	9.62	6.92
14	Umnugobi	295	58.8	64	27	37	12.76	10.89	14.58	58	32	26	11.56	12.91	10.24
15	Sukhbaatar	509	92.6	123	72	51	22.37	26.18	18.56	101	53	48	18.37	19.27	17.47
16	Selenge	293	27.9	198	99	99	18.86	18.95	18.77	135	82	53	12.86	15.70	10.05
17	Tuv	464	51.9	168	95	73	18.80	21.07	16.49	154	96	58	17.23	21.29	13.10
18	Uvs	397	50.6	177	103	74	22.55	26.20	18.88	135	76	59	17.20	19.33	15.05
19	Khovd	353	39.9	109	58	51	12.32	13.21	11.45	87	53	34	9.84	12.07	7.63
20	Khuvsgul	541	43.5	267	161	106	21.47	26.37	16.74	189	119	70	15.20	19.49	11.06
21	Khentii	291	40.6	67	37	30	9.36	10.47	8.27	42	27	15	5.87	7.64	4.14
22	Aimag average	7302	44.9	2644	1418	1226	16.26	17.62	14.92	2071	1207	864	12.73	15.00	10.52
23	Ulaanbaatar	5639	49.8	1822	856	966	16.10	15.86	16.32	1193	626	567	10.54	11.60	9.58
24	Country average	12941	46.9	4466	2274	2192	16.19	16.91	15.51	3264	1833	1431	11.83	13.63	10.12

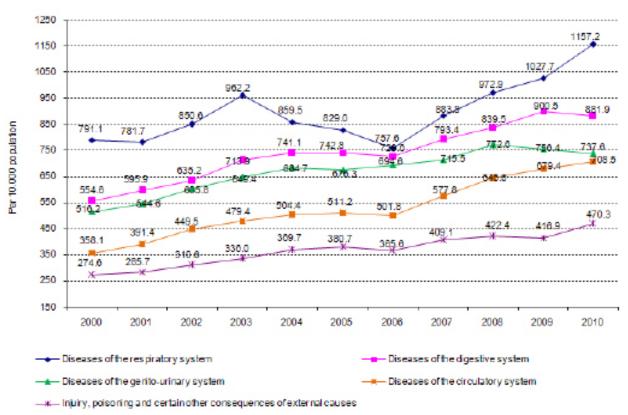
## Main 5 Causes of the Outpatient Morbidity, 2010

			per 10000 p	opulation	
Aimag and city	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genito- urinary system	Diseases of the circulatory system	Injuiry, poisoning and certain other consequences of external causes
Arkhangai	1295.94	1186.86	1099.40	1067.68	138.63
Bayan-Ulgii	755.96	431.31	715.79	530.48	53.28
Bayankhongor	1219.37	1730.93	1132.45	1112.97	206.57
Bulgan	950.89	553.06	742.22	737.74	130.90
Gobi-Altai	1231.33	1486.50	1094.41	865.91	258.74
Gobi-Sumber	3528.54	2239.79	1630.15	1667.10	588.95
Darkhan-Uul	1762.48	1167.14	838.50	982.85	423.70
Dornogobi	1420.20	815.90	877.33	725.79	358.91
Dornod	1661.48	1541.82	594.53	499.72	274.79
Dundgobi	859.07	622.44	715.01	568.60	113.64
Zavkhan	832.88	542.32	757.07	550.77	107.82
Orkhon	1170.37	713.61	564.76	528.16	272.49
Uvurkhangai	1329.04	979.05	898.60	904.64	221.78
Umnugobi	2531.84	1311.06	823.95	953.90	430.91
Sukhbaatar	1101.33	862.92	735.80	533.03	267.33
Selenge	1326.58	590.62	733.96	666.53	243.07
Tuv	1558.58	693.91	862.32	783.09	285.58
Uvs	1266.81	845.05	1027.72	690.28	177.57
Khovd	1085.32	536.10	626.32	604.27	104.35
Khuvsgul	1061.78	662.42	871.03	824.46	157.94
Khentii	1525.36	955.41	533.92	501.52	238.40
Aimag average	1296.69	903.36	823.50	749.66	219.57
Ulaanbaatar	956.81	851.03	614.10	649.40	830.60
Country average	1157.21	881.89	737.57	708.52	470.32

## **Outpatient and Inpatient Morbidity, 2010**

		0	utpatient morb	idity		Inpatient morbio	lity
Nº	ICD-10	Incidence	Per 10000 population	Percentage	Incidence	Per 10000 population	Percentage
1	Diseases of the respiratory system	319190	1157.21	19.3	111195	403.13	16.4
2	Diseases of the digestive system	243248	881.89	14.7	92363	334.86	13.6
3	Diseases of the genito-urinary system	203441	737.57	12.3	83876	304.09	12.3
4	Diseases of the circulatory system	195428	708.52	11.8	98008	355.32	14.4
5	Injuiry, poisoning and certain other consequences of external causes	129726	470.32	7.9	27286	98.92	4.0
6	Certain infectious and parasitic diseases	46732	169.43	2.8	24061	87.23	3.5
7	Diseases of the nervous system and sense organs	90086	326.60	5.5	43174	156.53	6.4
8	Diseases of the musculoskeletal system and connective tissue	45801	166.05	2.8	24911	90.31	3.7
9	Pregnancy, childbirth and the puerperium	102904	373.07	6.2	99795	361.80	14.7
10	Other	274807	996.30	16.6	74957	271.75	11.0
11	Total	1651363	5986.95	100.0	679626	2463.96	100.0

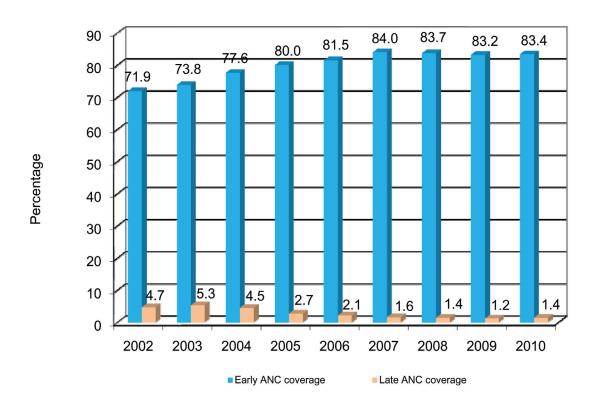
Main 5 Causes of Morbidity (per 10000 population), 2000-2010



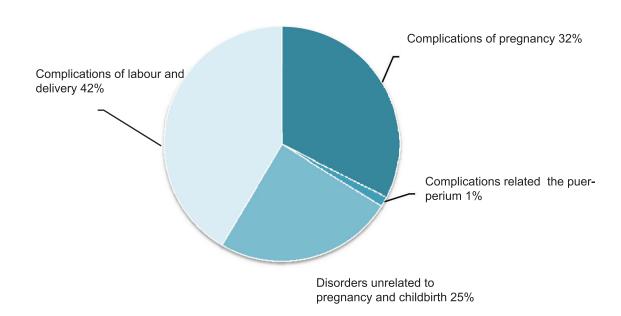
## **Antenatal Health Care Coverage, 2010**

		,	ANC covera	ge	t women 6 and	omen	υ	ies
Nº	Aimag and city	Total	Early ANC coverage	Late ANC coverage	Percentage of pregnant women who attented to ANC 6 and more times	Percentage of pregnant women with aneamia	Percentage of teenage pregnancy	Percentage of pregnancies above 35 age
	А	1	2	3	4	5	6	7
1	Arkhangai	100.0	95.6	0.3	82.9	12.1	5.2	8.9
2	Bayan-Ulgii	100.0	89.8	1.1	92.6	32.1	1.0	14.8
3	Bayankhongor	100.0	88.3	1.1	99.6	4.7	6.8	8.4
4	Bulgan	100.0	85.8	1.7	98.4	6.6	3.5	7.1
5	Gobi-Altai	100.0	83.1	0.5	98.5	6.0	4.0	11.5
6	Gobi-Sumber	100.0	81.1	1.7	99.2	3.8	7.6	15.5
7	Darkhan-Uul	100.0	85.5	1.3	70.9	6.7	5.8	14.1
8	Dornogobi	100.0	82.0	1.0	98.6	2.5	8.5	8.1
9	Dornod	100.0	81.1	1.6	92.9	17.8	5.2	10.7
10	Dundgobi	100.0	86.3	0.5	95.7	3.5	9.8	11.7
11	Zavkhan	100.0	89.7	0.4	95.3	10.9	3.1	11.6
12	Orkhon	100.0	89.6	0.8	100.0	9.2	6.8	14.0
13	Uvurkhangai	100.0	84.1	0.6	81.9	15.9	8.2	10.6
14	Umnugobi	100.0	86.0	0.7	78.2	2.6	8.3	7.1
15	Sukhbaatar	100.0	85.1	0.5	95.3	3.8	4.3	6.5
16	Selenge	100.0	83.2	0.6	99.2	4.3	5.2	8.9
17	Tuv	100.0	88.9	0.5	96.6	1.7	2.6	4.7
18	Uvs	100.0	85.5	0.8	89.0	8.8	2.4	14.2
19	Khovd	100.0	92.1	0.3	91.0	11.2	1.9	12.6
20	Khuvsgul	100.0	88.2	0.5	60.8	4.8	7.7	11.2
21	Khentii	100.0	76.6	1.5	98.0	5.2	7.3	7.5
22	Aimag average	100.0	86.4	0.8	88.8	8.7	5.3	10.4
23	Ulaanbaatar	100.0	79.7	2.1	73.6	7.4	5.8	12.1
24	Country average	100.0	83.4	1.4	81.9	8.1	5.5	11.2

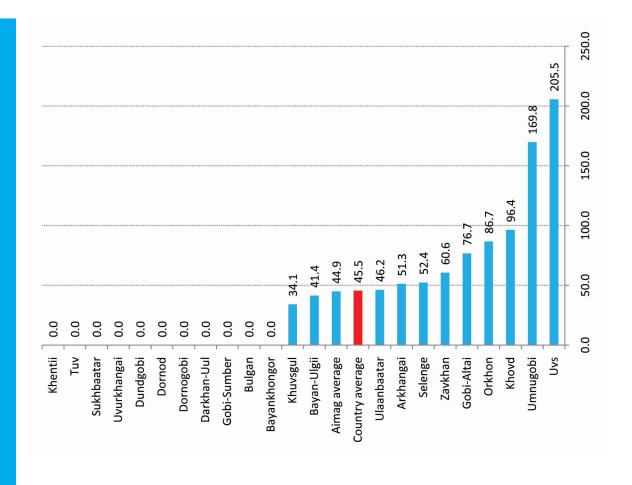
## Antenatal Care Coverage ,/2002-2010/



## **Complications of Pregnancy, Delivery and Puerperium, 2010**

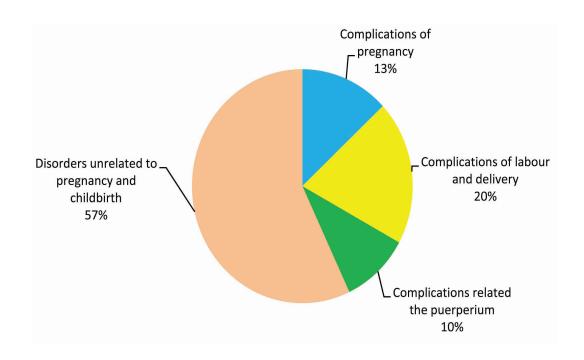


## Maternal Mortality Ratio /per 100000 Live Births/, 2010

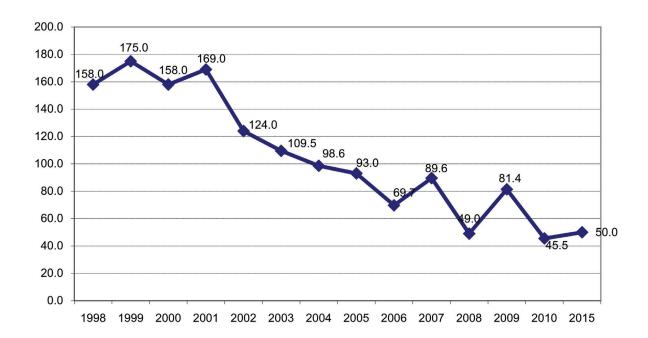


			per 100000 live births	
일	Aimag and city	Total	Aimag and city general hospital	Soum hospital
	A	7-	2	က
~	Arkhangai	51.3	85.8	0.0
7	Bayan-Ulgii	41.4	57.6	0.0
က	Bayankhongor	0.0	0.0	0.0
4	Bulgan	0.0	0.0	0.0
2	Gobi-Altai	7.97	9.66	0.0
9	Gobi-Sumber	0.0	0.0	0.0
7	Darkhan-Uul	0.0	0.0	0.0
∞	Dornogobi	0.0	0.0	0.0
6	Dornod	0.0	0.0	0.0
10	Dundgobi	0.0	0.0	0.0
11	Zavkhan	9.09	112.5	0.0
12	Orkhon	86.7	44.1	0.0
13	Uvurkhangai	0.0	0.0	0.0
14	Umnugobi	169.8	106.2	452.5
15	Sukhbaatar	0.0	0.0	0.0
16	Selenge	52.4	106.8	0.0
17	Tuv	0.0	0.0	0.0
18	Uvs	205.5	229.2	163.7
19	Khovd	96.4	0.0	323.6
20	Khuvsgul	34.1	55.6	0.0
21	Khentii	0.0	0.0	0.0
22	Aimag average	44.9	42.3	42.8
23	Ulaanbaatar	46.2	0.0	0.0
24	Country average	45.5	42.3	42.8

## **Maternal Mortality by Causes, 2010**



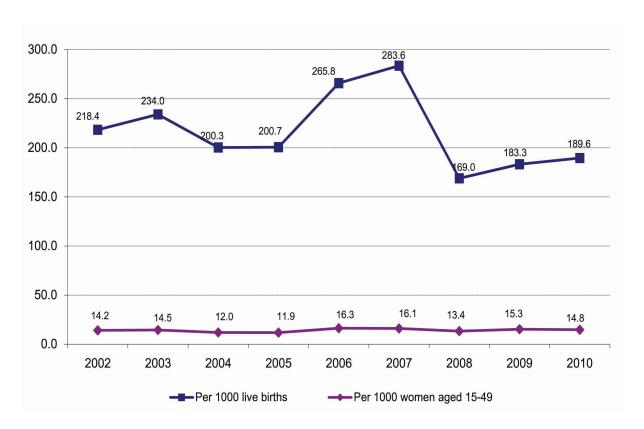
## Maternal Mortality Rate, per 100000 Live Births /2000-2010/



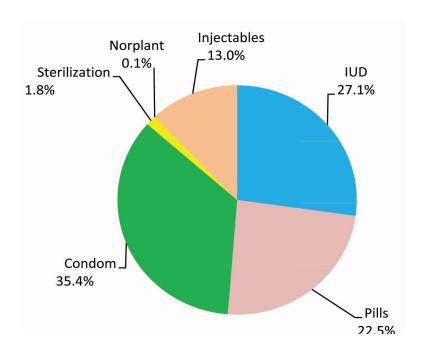
## Contraceptive Prevalence Rate /CPR/, 2010

					out o	f them		
Nº	Aimag, city	Percent of women in the RAG using contraceptives	Pills	Injectables	Norplant	Condom	anı	Sterilization
	А	1	2	3	4	5	6	7
1	Arkhangai	82.10	23.77	13.40	0.05	37.31	24.21	1.26
2	Bayan-Ulgii	50.19	18.41	23.98	0.00	17.07	40.41	0.14
3	Bayankhongor	59.20	14.95	10.55	0.16	9.72	60.13	4.49
4	Bulgan	42.50	25.59	13.07	0.06	24.62	36.01	0.65
5	Gobi-Altai	56.41	23.87	18.29	0.08	17.76	39.37	0.63
6	Gobi-Sumber	50.22	35.37	21.53	0.00	28.01	13.57	1.52
7	Darkhan-Uul	52.50	32.36	13.14	0.01	27.73	26.21	0.55
8	Dornogobi	65.24	26.78	13.70	0.28	39.79	18.58	0.87
9	Dornod	64.65	27.92	15.70	0.03	25.09	27.95	3.30
10	Dundgobi	59.96	41.43	12.03	0.04	22.41	23.43	0.67
11	Zavkhan	82.62	17.78	20.11	0.08	28.46	32.84	0.74
12	Orkhon	64.10	25.27	9.06	0.14	33.18	31.24	1.11
13	Uvurkhangai	60.86	23.66	23.75	0.08	17.96	31.74	2.81
14	Umnugobi	50.65	35.20	14.38	0.04	22.19	22.58	5.61
15	Sukhbaatar	54.87	15.81	11.38	0.05	6.02	59.08	7.66
16	Selenge	31.53	19.21	17.91	0.36	36.50	24.24	1.78
17	Tuv	46.48	26.15	18.76	0.04	21.69	33.28	0.08
18	Uvs	42.47	30.40	23.34	0.00	25.53	19.19	1.53
19	Khovd	49.59	13.37	11.67	0.02	51.86	21.16	1.92
20	Khuvsgul	58.35	17.49	21.15	0.02	15.72	43.44	2.19
21	Khentii	47.34	27.92	13.83	0.05	21.34	33.63	3.23
22	Aimag average	56.04	23.69	16.27	0.08	25.45	32.56	1.95
23	Ulaanbaatar	50.26	24.49	6.50	0.01	48.50	19.84	0.66
24	Country average	53.44	24.03	12.13	0.05	35.21	27.18	1.41

## **Abortion /2002-2010/**



## **Contraceptive Methods, 2010**



## Abortion, 2010

		Abor	tion		Abor	tion by a	ige		Late ab	ortion
Nº	Aimag, city	Per 1000 women	Per 1000		Under 2	0 age	avobe 3	5 age	Abs.	24
		aged 15-49	live births	Total	Abs. number	%	Abs. number	%	number	%
	А	1	2	3	4	5	6	7	8	9
1	Arkhangai	8.0	106.67	208	23	11.1	43	20.7	0	0.0
2	Bayan-Ulgii	4.3	43.48	105	1	1.0	46	43.8	0	0.0
3	Bayankhongor	6.4	81.21	153	16	10.5	44	28.8	2	1.3
4	Bulgan	1.8	31.70	31	0	0.0	11	35.5	0	0.0
5	Gobi-Altai	5.9	73.68	96	0	0.0	45	46.9	0	0.0
6	Gobi-Sumber	11.6	132.63	50	3	6.0	19	38.0	0	0.0
7	Darkhan-Uul	9.8	118.29	293	20	6.8	43	14.7	0	0.0
8	Dornogobi	25.1	342.59	444	45	10.1	69	15.5	0	0.0
9	Dornod	12.8	154.30	285	19	6.7	59	20.7	11	3.9
10	Dundgobi	3.0	44.98	39	6	15.4	10	25.6	0	0.0
11	Zavkhan	3.5	43.61	72	4	5.6	22	30.6	3	4.2
12	Orkhon	19.8	241.98	558	52	9.3	93	16.7	0	0.0
13	Uvurkhangai	11.5	136.99	377	13	3.4	101	26.8	35	9.3
14	Umnugobi	7.8	101.02	119	15	12.6	31	26.1	17	14.3
15	Sukhbaatar	3.5	48.28	56	5	8.9	13	23.2	0	0.0
16	Selenge	10.7	172.87	330	21	6.4	99	30.0	0	0.0
17	Tuv	3.4	90.61	84	5	6.0	23	27.4	0	0.0
18	Uvs	25.9	265.67	517	22	4.3	194	37.5	0	0.0
19	Khovd	7.5	84.82	176	3	1.7	56	31.8	2	1.1
20	Khuvsgul	0.2	2.73	8	5	62.5	1	12.5	4	50.0
21	Khentii	13.9	199.86	277	22	7.9	65	23.5	10	3.6
22	Aimag average	9.2	120.11	4278	300	7.0	1087	25.4	84	2.0
23	Ulaanbaatar	21.6	271.33	8214	446	5.4	1567	19.1	358	4.4
24	Country average	14.8	189.59	12492	746	6.0	2654	21.2	442	3.5

## Maternal Care During Delivery or Childbirth (by Aimag), 2010

			I	Delivery by	y percent			onnel	) age	5 age	eighing
Nº	Aimag and city	Aimag and city hospital	Private hospital	Rural general hospital	Soum hospital	Feldsher post	At home	Deliveries by nontrained personnel	Percent of deliveries under 20	Percent of deliveries avobe 35	Percent of newborn infants weighing at least 2500 g. at birth
	А	1	2	3	4	5	6	7	8	9	10
1	Arkhangai	59.9	0.0	0.0	39.9	0.1	0.2	0.0	5.0	8.7	1.5
2	Bayan-Ulgii	70.6	0.0	0.0	29.3	0.0	0.1	0.0	0.9	13.6	3.4
3	Bayankhongor	81.2	0.0	0.0	18.5	0.0	0.3	0.0	7.5	9.2	3.6
4	Bulgan	65.7	0.0	0.0	33.9	0.0	0.3	0.0	6.3	12.3	3.0
5	Gobi-Altai	77.1	0.0	0.0	22.4	0.2	0.3	0.2	4.0	11.4	4.1
6	Gobi-Sumber	99.2	0.0	0.0	0.3	0.0	0.5	0.0	7.1	14.5	1.3
7	Darkhan-Uul	95.9	0.0	0.0	3.5	0.0	0.6	0.2	5.7	13.7	2.9
8	Dornogobi	81.8	0.0	14.9	2.9	0.0	0.5	0.2	9.7	9.2	4.5
9	Dornod	92.0	0.0	0.0	7.7	0.0	0.3	0.0	5.6	11.5	4.5
10	Dundgobi	77.8	0.0	0.0	22.1	0.0	0.1	0.0	8.9	10.6	4.3
11	Zavkhan	53.7	0.0	19.6	26.0	0.0	0.7	0.1	3.0	11.0	2.8
12	Orkhon	98.8	0.0	0.0	0.7	0.0	0.6	0.5	5.8	12.0	4.9
13	Uvurkhangai	59.5	1.7	10.1	28.1	0.3	0.4	0.1	8.6	11.0	5.7
14	Umnugobi	80.7	0.0	0.0	18.9	0.0	0.3	0.0	9.8	8.4	5.0
15	Sukhbaatar	87.3	0.0	0.0	12.5	0.0	0.2	0.0	4.9	7.5	4.6
16	Selenge	49.4	0.0	33.2	17.0	0.0	0.4	0.1	6.9	11.8	3.7
17	Tuv	59.4	0.0	0.0	40.6	0.0	0.0	0.0	6.1	11.0	4.2
18	Uvs	67.0	0.0	0.0	31.3	0.0	1.7	0.5	2.7	15.3	6.6
19	Khovd	69.9	0.0	11.7	18.1	0.0	0.3	0.2	2.1	13.8	3.3
20	Khuvsgul	61.3	0.0	0.0	38.6	0.0	0.1	0.0	7.4	10.7	4.5
21	Khentii	73.7	0.0	9.4	16.0	0.6	0.3	0.1	9.3	9.6	2.6
22	Aimag average	73.2	0.1	5.1	21.2	0.1	0.4	0.1	5.8	11.4	4.0
23	Ulaanbaatar	98.5	0.9	0.0	0.0	0.0	0.6	0.3	6.2	12.8	5.0
24	Country average	84.8	0.5	2.7	11.5	0.0	0.5	0.2	6.0	12.1	4.4

## **Immunization Coverage for Infants, 2010**

				Covered percentag	ge	
	Aimag and city	BCG	Poliomyelitis	Diphteria/Tetanus/ Whooping cough	Hepatitis B	Penta vaccine
1	Arkhangai	98.7%	97.5%	96.2%	98.8%	97.3%
2	Bayan-Ulgii	99.5%	98.7%	98.4%	99.6%	98.7%
3	Bayankhongor	98.2%	99.2%	98.1%	99.3%	99.1%
4	Bulgan	99.9%	98.8%	99.3%	100.0%	98.6%
5	Gobi-Altai	99.1%	94.4%	95.1%	99.8%	93.7%
6	Gobi-Sumber	100.0%	96.1%	97.0%	100.0%	96.1%
7	Darkhan-Uul	99.5%	98.9%	99.0%	99.5%	99.0%
8	Dornogobi	99.2%	99.4%	99.5%	98.8%	99.4%
9	Dornod	98.2%	99.5%	99.7%	98.4%	100.0%
10	Dundgobi	99.7%	99.8%	100.0%	99.7%	99.8%
11	Zavkhan	98.9%	92.5%	91.8%	98.8%	92.2%
12	Orkhon	98.8%	99.0%	99.1%	100.0%	99.0%
13	Uvurkhangai	97.7%	99.5%	99.3%	97.7%	99.4%
14	Umnugobi	97.4%	97.2%	96.9%	98.3%	97.2%
15	Sukhbaatar	98.9%	94.7%	98.9%	96.6%	97.7%
16	Selenge	99.1%	98.0%	95.4%	99.0%	98.1%
17	Tuv	96.8%	99.1%	97.6%	96.8%	99.0%
18	Uvs	98.9%	99.0%	99.0%	99.4%	99.0%
19	Khovd	100.0%	97.9%	98.1%	100.0%	97.9%
20	Khuvsgul	99.3%	97.8%	97.4%	99.8%	98.3%
21	Khentii	98.3%	100.0%	99.6%	98.2%	100.0%
22	Aimag average	98.9%	98.1%	97.8%	99.0%	97.8%
23	Ulaanbaatar	99.0	94.2%	95.5%	97.0%	93.2%
24	Country average	98.5%	96.5%	96.9%	98.1%	96.1%

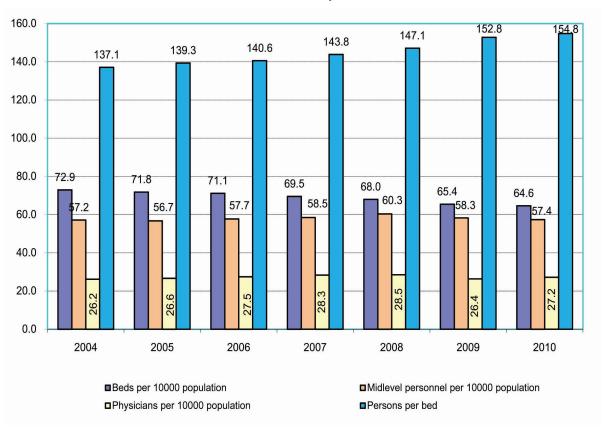
## Health Human Resource, 2010

	Female	22	8270	12	78	1953	227	5038	962	6561	2263	433	3865	6217	1374	4843	433	1317	1703	1871	137	112	550	227	50	134	299	370	929	289	2664	343	32591
	All workers	21	10614	26	106	2265	289	6642	1286	7576	2562	538	4476	7366	1572	5794	485	1531	2115	2199	178	138	723	379	55	285	912	515	902	356	2884	395	39608
	Other workers	20	3726	9	50	513	111	2565	481	2151	691	173	1287	2291	421	1870	188	474	640	353	40	25	169	146	10	137	120	290	265	141	759	31	11056
	Sther midlevel personnels	19	27	0	0	_	0	24	2	9	0	0	9	31	0	31	0	4	3	0	0	0	6	2	0	0	0	2	0	0	0	0	70
	elannosaed lavalbim antiO	18	217	0	2	0	5	178	32	64	19	9	39	54	12	42	3	21	80			2	3	0	0	2	9	0	223	84	1317	19	2020
	Midlevel pharmacist	17	2	0	0	0	0	2	3	89	24	2	39	62	17	45	0	12	12	8	0	0	0	0	0	0	0	2	0	0	0	0	007
	Х-гау technicion	16	187	0	0	0	10	143	34	267	82	12	173	226	64	162	7	32	43	21	0	7	4	24	9	0	7	~	0	7	0	က	0
From it:	Laboratory technician	15	က	0	0	0	~	~	7-	4	0	က	~	14	က	7	0	7-	9	151	0	0	0	0	0	0	~	0	0	0	0	0	100
Fro	Dental technician	14	581	0	2	75	19	411	71	321	92	36	193	129	64	92	13	78	35	49	3	2	82	28	_	2	7	36	0	0	က	151	4540
	Other feldshers	13	1055	9	က	14	10	874	144	13	0	13	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	4070
	Bags feldshers	12	367	0	9	က	1	289	28	163	20	25	118	82	37	48	25	<b>-</b>	13	12	0	0	က	0	0	0	0	0	0	0	0	<b>-</b>	000
	Midwife	7	36	0	0	4	0	26	9	135	92	4	22	69	19	20	2	21	14	3	0	0	က	0	0	~	ဝ	5	0	0	0	0	000
	From it; senior nurses	10	2472	10	59	758	75	1349	251	2426	747	143	1536	2426	260	1866	111	469	572	435	7-	2	41	9	19	50	4	80	7-	7	9	44	0470
sts	Total midlevel health specilis	6	4914	20	45	851	131	3271	296	3332	984	243	2105	3027	757	2270	186	621	692	713	4	13	142	92	26	27	57	121	224	93	1326	218	15000
	Other high level personnels	8	339	0	က	45	13	239	39	242	110	11	121	339	45	294	0	58	137	72	46	48	98	69	9	23	186	31	126	19	70	_	1010
	Pharmacists	7	4	0	0	0	_	က	0	41	15	3	23	92	13	63	4	14	16	4	3	5	4	0	0	2	43	_	165	62	729	က	4476
	From it females	9	1344	0	7	760	22	437	118	1370	627	74	699	1095	248	847	74	229	422	832	0	0	15	45	12	56	347	50	0	0	0	28	5010
	Physicians	5	1587	0	8	816	31	564	168	1693	669	100	894 (	1526	319	1207	94	312	569	980	0	0	16	55	. 12	92	465	61	0	0	0	35	7/07
	State inspector	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104	707
	Statisticians	က	0	0	0	0	0	0	0	21	10	~	10	27	2	22	2	8	3	0	0	~	19	2	0	0	0	~	0	0	0	0	70
	Public health specialists	7	4	0	0	40	7	0	7	16	14	0	2	9	7	4	0	7-	2	8	09	35	240	0	0	0	22	0	0	0	0	က	137
	Health managers	~	0	0	0	0	0	0	0	80	39	7	34	74	10	64	11	43	26	69	22	11	32	15	~	4	19	10	122	41	0	0	616
	ōN	Ф	~	7	က	4	2	9	7	8	6	10	1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	23
	Health care providers		Subtotal-1	Feldsher's posts with beds	Physician's post with beds	Family hospitals	Village hospitals	Soum hospitals	Intersoum hospitals	Subtotal-2	District hospitals	Rural general hospitals	Aimag general hospitals	Subtotal-3	Regional Treatment and Diagnostic centers	Specialized Centers and Hospitals	als		with beds	for outpatients	Ministry of health, government implementing agency	institutions	partments	Extremely contagious disease center		i.e.	Medical universities and colleges		panies	Sə.		suc	
		⋖				Primary level						level hospitals	`		Tertiary level		Maternity hospitals	Other hospitals	Private hospitals with beds	Private hospitals for outpatients	Ministry of health	Health research institutions	Aimag health departments	Extremely contag	Blood center	Emergency center	Medical universit	Hot spa	Drug supply companies	Drug manufactures	Drug stores	Other organizations	Total

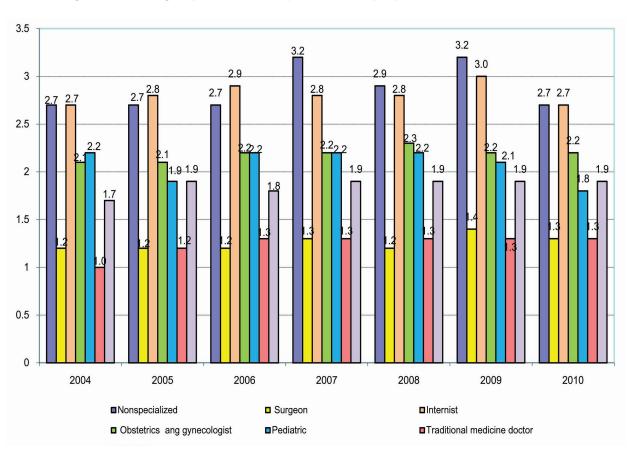
## Physicians, by Specialties, per 10000 population, 2010

Total		ω.	7	0	9.	<u>-</u> .	ω	4	7.	7.	7.	4	<u>.</u> .	0	က	<i>ي</i> .	ε.	4	2	۲.	<del>-</del> -	7.	0.	ω.	7
	35	0 14.	0 14.	0 13.	3 14.	0 21.1	7 28.	0 25.	0 31.	0 18.	0 18.	0 15.	0 29.	3 15.0	0 23.	19.	0 15.	2 15.	0 15.	0 16.	0 14.	0 19.7	18.0	7 40.	27
Other	34	0.0	0.0	0.0	0.3	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.1	0.7	0.3
Not specialized	33	3.8	1.6	3.5	8.1	5.4	3.0	2.4	9.2	2.0	1.5	4.6	3.1	1.7	9.2	3.5	2.8	8.0	2.4	2.4	3.1	2.4	3.1	2.0	2.7
Family doctor	32	0.7	2.0	3.2	2.4	1.4	8.9	5.0	3.9	3.7	2.2	3.2	5.0	1.4	2.0	1.8	1.4	4.8	4.3	2.8	2.2	4.2	3.0	4.7	3.7
Occupational therapist	31	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extremely contagious diseases	30	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.1	0.0	0.0	0.1	0.0	0.3	0.1	0.2	0.0	0.1	0.1	0.1
tsigoloimbiq∃	29	0.1	0.0	0.1	0.2	0.3	0.0	0.2	0.0	0.1	0.0	0.1	0.1	0.3	0.4	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.8	0.4
√enerologist	28	0.1	0.1	0.2	0.2	0.2	0.0	0.2	0.2	0.4	0.2	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.3
tsinəigyH	27	0.0	0.2	0.1	0.0	0.5	0.0	0.1	0.2	0.0	0.2	0.0	0.1	0.0	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1
Dietologist	26	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
teigolonU	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.1
Nephrologist	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.1
Pathogenist	23	0.1	0.1	0.1	0.0	0.3	0.0	0.1	0.2	0.3	0.2	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.5	0.3
Doctor laboratory	22	0.3	0.2	0.1	0.3	0.5	0.7	0.7	0.7 (	0.5	0.4 (	0.3	1.1	0.4	0.6	0.4 (	0.6	0.2	0.3	0.3	0.2	0.6	0.4	1.7 (	1.0
λ-ray diagnostic	21	0.3	0.2	0.2	0.3	0.5	0.7	0.4	0.8	0.8	9.0	0.4	1.1	0.2	0.4	0.5	0.2	0.1	0.3	0.8	0.2	0.3	0.4	1.8	1.0
Tuberculosis	20	0.2	0.2	0.1	0.3	0.2	0.7	8.0	0.3	0.4	0.2	0.1	0.2	0.2	0.4	0.5	0.4	0.4	0.3	0.2	0.2	9.4	0.3	0.5	0.4
Infectionist	19	0.2	0.2	0.1	2	2	0	ω	7	0.1	0.4	က	4	2	4	0.4	3	3	3	0.2	3	9	0.3	1.0	9.0
Dermatologist	18 1	0.0	0.1 0	0.0	0.0	0.2 0.	0.0	0.4 0.	0.0	0.0	0.0	0.1 0.	0.5 0.	0.1 0.	0.2 0.	0.4 0	0.0	0.1 0.	0.0	0.1	0.1	0.1 0.	0.1 0	0.4	0.2 0
Plactic surgeon	17 1	0.1	0.0	0.1	0.2	0.0	0.7	0.0	0.3	0.3	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.4	0.2
Physiotherapist	16	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.2	0.0	0.4	0.1	0.0	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.1	9.0	0.3
taiaintoiaiaidth q	15	0.1	0.1	0.1	0.0	0.2	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.2 (	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.2 (	0.2
Traditional medicine doctor	14	0.2	0.4	9.4	0.3	8.0	0.7	1.0	0.5	0.5	0.2	9.0	1.8	1.0	9.0	0.4	6.0	0.4	0.4	9.0	9.0	1.8	0.7	2.1	1.3
Stematologist	13	0.3	0.2	0.1	0.2	0.2	0.0	0.1	0.0	0.3	0.2	0.1	0.5	0.2	0.0	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.3	0.2
teitneQ	12	0.1	0.5	9.0	0.0	1.0	0.7	2.4	0.8	0.8	6.0	0.5	2.3	8.0	1.4	6.0	1.1	1.1	0.4	6.0	6.0	0.4	6.0	3.4	1.9
Psychiatrist and neurologist	11	0.1	0.2	0.2	0.3	0.2	0.0	9.0	0.3	0.4	0.2	0.1	0.5	0.2	0.2	0.4	0.1	0.1	0.3	0.2	0.2	0.1	0.2	0.8	0.5
Neurologist	10	0.4	0.4	0.2	0.5	0.7	0.7	0.7	1.4	0.7	0.4	8.0	0.7	0.4	9.0	6.0	0.4	9.0	0.3	0.5	0.3	9.0	0.5	1.4	6.0
taigolomlathqO	6	0.1	0.3	0.4	0.2	0.3	0.0	9.0	0.3	0.4	0.2	0.3	9.0	0.2	0.4	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.8	9.0
Otorinolaryngologist	8	0.1	0.2	0.1	0.2	0.2	0.0	9.0	0.5	0.4	0.2	0.1	9.0	0.3	0.2	0.4	0.5	0.2	0.1	0.1	0.2	0.3	0.3	0.8	9.0
taigoloonO	7	0.1	0.1	0.0	0.2	0.2	0.7	0.1	0.5	0.4	0.2	0.1	0.4	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.4	0.3
Traumatologist	9	0.1	0.2	0.1	0.0	0.2	0.0	0.4	0.5	0.3	0.2	0.1	0.5	0.1	0.0	0.4	0.1	0.2	0.1	0.1	0.1	0.3	0.2	0.8	0.4
Anaestesiologist	2	0.4	0.4	0.1	9.0	0.3	0.7	0.7	0.7	0.4	9.0	0.4	0.7	0.4	0.2	0.5	0.5	0.2	0.4	0.2	0.2	1.0	0.4	1.6	6.0
Surgeon	4	8.0	8.0	0.4	9.0	1.4	1.5	<del>7.</del>	1.2	8.0	9.0	9.0	1.1	1.0	8.0	0.5	8.0	0.4	8.0	1.0	0.7	1.3	9.0	2.1	1.3
Obstetrics and gynecologist	3	2.1	1.8	0.7	1.0	2.2	1.5	2.3	2.9	1.2	1.1	9.0	2.1	1.6	1.8	1.8	1.7	1.5	1.3	4.1	1.3	1.3	1.6	3.1	2.2
Pediatric	2	1.6	1.1	9.0	1.6	2.0	2.2	1.5	2.0	1.4	1.9	9.0	1.3	1.4	1.6	1.8	1.5	1.3	1.0	<u>7.</u>	4.1	2.1	1.4	2.3	1.8
taimətnl	_	1.7	2.5	1.1	2.9	1.0	1.5	2.1	2.5	1.4	1.5	0.8	4.0	1.8	1.0	2.0	1.3	1.1	1.4	2.4	1.0	1.1	1.7	4.1	2.7
Aimag and city	Б	Arkhangai	Bayan-Ulgii	Bayankhongor	Bulgan	Gobi-Altai	Gobi-Sumber	Darkhan-Uul	Dornogobi	Dornod	Dundgobi	Zavkhan	Orkhon	Uvurkhangai	Umnugobi	Sukhbaatar	Selenge	Tuv	Uvs	Khovd	Khuvsgul	Khentii	Aimag average	Ulaanbaatar	Country average
<u>e</u>	∢	1	2	ဗ	4	5	9	7	80	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

## Health Facilities, 2004-2010



## Physicians, by Specialities, per 10000 population /2004-2010/



## Average Length of Stay in Hospital, by bed Specialities -Total, 2010

ı	Total	24	7.7	9.	7.8	8.4	7.5	8.0	8.1	7.5	8.4	8.1	8.4	8.4	7.9	7.0	9.8	7.9	8.1	7.0	7.9	7.0	7.8	6.7	.5	8.2
				0 8				8				8	8								7 0.			5 7	.0	
	Other	23	0.0	0.0	0.0	0.0	0.0	Ö	0.0	9.2	0.0	Ö	Ö	0.0	0.0	7.4	0.0	0.0	0 6.2	0.0	O.	0.0	0.0	9	ω΄	7.4
	Dazilized	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	7.2
	Venerology	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Traditional medicine	20	9.0	0.0	8.9	8.5	9.1	0.0	9.0	8.9	9.6	8.1	7.8	9.6	7.2	0.0	0.0	0.0	9.6	10.4	8.1	7.8	0.0	8.3	9.3	8.8
	Oncology	19	7.5	7.9	7.7	0.0	7.2	0.0	8.1	0.0	0.0	8.3	11.1	0.0	7.7	0.0	0.0	8.6	0.0	6.8	0.0	0.0	9.4	8.2	8.9	8.7
Ì	Stomatolgy	18	0.0	7.9	9.3	0.0	0.0	0.0	9.7	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	7.6	6.8	7.0
	Dental	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	0.0	14.2
	Otolaryngology	16	8.7	9.1	5.8	8.3	6.3	0.0	8.7	0.0	8.3	9.3	3.9	6.8	8.1	0.0	5.9	8.0	7.3	4.9	7.0	0.0	8.8	7.9	5.9	6.5
	ygolomlæihqO	15	8.3	8.7	8.8	7.7	6.1	0.0	6.1	0.0	10.2	12.5	7.8	0.0	7.9	0.0	0.0	8.7	9.0	8.0	7.8	0.0	8.2	8.4	6.3	6.9
	Reanimation	14	0.0	3.9	0.0	11.2	17.7	0.0	6.7	0.0	32.7	8.1	0.0	16.6	18.3	4.0	0.0	0.0	13.6	7.0	15.7	0.0	0.0	9.6	16.3	14.2
	Urology,	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	8.3
	Иерћгоюду	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	10.6
	Traumatology	11	0.0	9.8	9.8	0.0	8.2	0.0	10.9	0.0	0.0	7.6	9.0	8.9	9.8	0.0	8.7	0.0	8.7	0.0	0.0	0.0	0.0	9.4	12.5	11.8
	Psychiatry and narcology	10	12.7	20.6	7.9	9.6	10.6	0.0	12.4	9.8	11.5	9.6	9.7	11.6	11.2	8.9	11.4	9.8	0.0	11.7	13.5	10.0	0.0	11.5	28.1	20.8
	Neurology	6	9.1	9.7	9.8	9.7	7.9	8.9	9.4	9.1	10.5	8.7	9.7	10.0	10.3	9.1	6.6	9.1	10.4	9.8	9.4	8.9	9.1	9.4	8.9	9.1
	Tuberculosis	∞	20.5	37.9	47.5	24.4	41.6	0.0	32.6	31.5	46.6	47.0	32.4	19.4	38.0	18.9	42.4	35.7	28.5	16.5	22.4	29.6	26.7	30.2	36.9	33.4
	Dermatology	7	0.0	8.3	8.5	6.6	6.6	0.0	8.7	0.0	10.2	9.8	9.0	0.0	9.2	10.9	9.0	8.0	8.8	11.4	10.3	8.4	9.7	9.3	9.8	9.6
	Infectious diseases	9	10.9	14.0	12.3	11.4	10.3	11.4	9.8	12.5	11.9	8.7	9.6	12.9	13.0	8.8	11.0	12.2	13.2	9.7	8.4	6.6	11.9	11.2	11.2	11.2
	Pea diatrics	2	7.2	7.7	7.2	7.3	7.7	9.9	9.9	6.5	9.9	7.5	9.7	6.9	8.9	6.1	8.2	7.1	6.5	7.2	6.9	9.9	7.0	7.0	6.7	6.9
	Gyneacology	4	9.0	9.1	6.8	8.4	6.3	7.3	7.1	2.6	6.1	6.4	9.8	7.0	11.8	5.1	5.9	7.2	5.8	5.2	8.9	6.1	9.2	7.1	7.5	7.2
	epirtetelO	8	4.6	4.7	5.0	4.3	3.5	3.9	4.2	4.6	4.2	2.0	6.3	0.9	4.0	3.8	4.4	4.4	4.5	4.2	4.1	2.5	4.8	4.4	4.0	4.2
	Surgery	2	7.1	8.0	5.4	7.0	3.6	9.4	5.6	5.5	8.2	6.1	8.4	5.1	7.1	6.7	9.9	6.7	8.9	6.3	8.9	5.4	5.9	6.4	7.5	6.9
	əniəibəm laməfnl	_	8.2	9.0	8.3	9.2	9.8	9.3	8.8	9.0	8.2	9.0	8.8	9.1	8.4	8.2	9.3	8.7	8.5	8.2	8.7	7.8	8.2	9.8	8.7	9.6
	Aimag and city	Б	Arkhangai	Bayan-Ulgii	Bayankhongor	Bulgan	Gobi-Altai	Gobi-Sumber	Darkhan-Uul	Dornogobi	Dornod	Dundgobi	Zavkhan	Orkhon	Uvurkhangai	Umnugobi	Sukhbaatar	Selenge	Tuv	Uvs	Khovd	Khuvsgul	Khentii	Aimag average	Ulaanbaatar	Country average
		⋖	-	2	Э	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

## **Utilization of Hospital Beds, 2010**

			Tota	al		Aima	g, city gei	neral ho	spitals		Soum h	ospitals	
Nº	Aimag and city	Utilization of bed fund	Percentage of bed fund	Average length of stay	Number of patients per bed per year	Utilization of bed fund	Percentage of bed fund	Average length of stay	Number of patients per bed per year	Utilization of bed fund	Percentage of bed fund	Average length of stay	Number of patients per bed per year
Α	Б	1	2	3	4	5	6	7	8	9	10	11	12
1	Arkhangai	323.68	88.68	7.74	41.81	333.48	91.36	8.27	40.34	317.20	86.90	7.07	44.85
2	Bayan-Ulgii	327.71	89.78	8.56	38.29	317.87	87.09	8.85	35.91	328.44	89.98	7.98	41.18
3	Bayankhongor	307.75	84.32	7.84	39.27	308.66	84.56	7.84	39.37	304.09	83.31	7.71	39.44
4	Bulgan	289.38	79.28	8.35	34.65	275.15	75.38	8.50	32.38	284.91	78.06	8.24	34.57
5	Gobi-Altai	239.50	65.62	7.50	31.92	220.66	60.46	7.94	27.80	261.39	71.61	7.63	34.26
6	Gobi-Sumber	355.08	97.28	8.04	44.15	340.34	93.24	7.92	42.99	451.15	123.60	8.71	51.77
7	Darkhan-Uul	357.60	97.97	8.11	44.07	346.30	94.88	7.97	43.46	363.55	99.60	7.79	46.69
8	Dornogobi	285.86	78.32	7.55	37.89	318.69	87.31	6.90	46.19	279.61	76.61	7.72	36.23
9	Dornod	288.65	79.08	8.41	34.33	270.71	74.17	8.31	32.56	318.46	87.25	8.57	37.17
10	Dundgobi	290.11	79.48	8.07	35.96	293.71	80.47	8.18	35.89	282.48	77.39	7.94	35.57
11	Zavkhan	286.70	78.55	8.41	34.10	266.47	73.00	8.77	30.37	275.02	75.35	8.24	33.37
12	Orkhon	335.15	91.82	8.39	39.96	330.78	90.62	8.35	39.61	307.80	84.33	7.53	40.90
13	Uvurkhangai	289.17	79.22	7.94	36.43	290.63	79.62	8.17	35.56	280.57	76.87	7.70	36.45
14	Umnugobi	246.35	67.49	7.04	34.97	288.24	78.97	7.13	40.44	257.12	70.44	6.86	37.46
15	Sukhbaatar	347.18	95.12	8.63	40.22	374.79	102.68	8.40	44.61	317.43	86.97	8.73	36.36
16	Selenge	287.68	78.82	7.93	36.27	325.75	89.25	8.52	38.22	277.57	76.05	7.44	37.30
17	Tuv	302.27	82.81	8.09	37.39	321.69	88.13	8.46	38.02	316.57	86.73	7.64	41.46
18	Uvs	286.64	78.53	7.04	40.69	271.21	74.30	6.78	39.99	330.27	90.48	7.18	45.98
19	Khovd	302.65	82.92	7.89	38.35	391.10	107.15	6.73	58.15	207.40	56.82	9.39	22.09
20	Khuvsgul	306.92	84.09	6.98	43.97	334.72	91.70	6.75	49.58	292.61	80.17	6.87	42.57
21	Khentii	298.14	81.68	7.81	38.17	293.66	80.45	8.50	34.56	309.42	84.77	7.36	42.02
22	Aimag average	301.95	82.73	7.90	38.20	311.00	85.21	7.90	39.37	291.87	79.97	7.70	37.93
23	Ulaanbaatar	325.85	89.27	8.48	38.44	0.00	0.00	0.00	0.00	319.00	87.40	7.53	42.39
24	Country average	312.93	85.73	8.17	38.31	311.00	85.21	7.90	39.37	292.36	80.10	7.69	38.01

## Number of Hospital Beds, by Specialities, per 10000 population, 2010

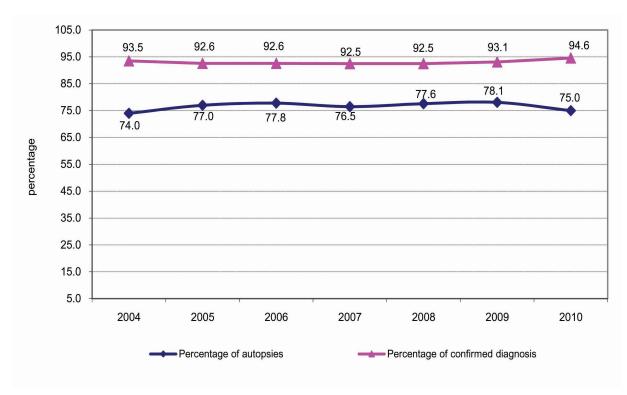
lstoT	24	60.73	60.78	58.53	59.21	73.90	78.33	57.43	62.11	65.20	63.41	68.89	50.92	54.15	56.01	57.65	61.53	47.33	60.89	65.80	49.70	60.61	59.24	72.33	64.61
Оіћег	23	0.22	2.96	1.76	00.00	0.00	0.00	0.00	3.22	0.00	0.00	00.00	4.62	0.17	3.79	0.00	0.00	1.12	2.55	2.15	0.80	0.00	1.14	0.74	0.98
Unspecialized	22	0.00	00:00	0.00	00:00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.17	0.40	0.00	0.00	0.00	0.00	0.23	0.16	0.00	0.07	0.10	0.08
Venerology	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Traditional medicine	20	1.41	0.00	0.70	2.56	0.34	0.00	4.95	5.09	2.04	2.13	2.56	1.42	1.96	0.20	1.45	0.76	3.92	1.02	2.26	1.77	5.73	2.06	3.75	2.76
Oncology	19	0.22	0.39	0.23	00.00	0.34	00.0	0.22	00.00	0.68	0.43	0.38	0.00	0.26	00.00	0.18	0.10	0.22	0.13	00.0	0.00	0.56	0.21	1.07	0.56
Stamatology	18	0.22	1.18	0.23	00.00	0.34	0.00	0.22	00.00	0.00	0.21	00.00	0.00	0.34	0.00	0.18	0.19	0.11	0.13	0.23	0.00	0.00	0.20	0.34	0.26
Dental	17	0.00	00.00	0.00	0.16	0.00	0.00	0.00	00.00	0.00	0.00	0.26	0.00	00.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00	0.02	00.00	0.01
Otolaryngology	16	0.22	1.18	0.23	0.32	0.34	0.00	1.54	00.00	0.68	0.64	0.13	1.18	0.94	00.00	0.18	1.90	0.11	0.25	06.0	00.00	1.40	0.65	1.28	0.91
Орһғаітоюду	15	0.22	0.69	1.41	0.32	0.17	0.00	0.44	00.00	1.77	0.43	0.26	0.00	0.17	0.00	0.18	0.19	0.00	1.78	0.23	0.00	0.56	0.44	1.34	0.81
Resnimation	14	0.00	0.79	0.59	0.32	0.51	1.48	0.88	0.00	0.68	1.06	0.38	0.95	0.34	09.0	0.00	0.00	0.45	0.51	0.45	0.00	0.28	0.43	1.28	0.78
Лгоюду	13	0.00	00:00	0.00	00.00	0.00	0.00	0.00	00.00	0.00	0.00	00.0	0.00	00.0	00.00	00.00	00.00	0.00	0.00	00.0	0.00	0.00	0.00	0.62	0.25
Иерћгојоду	12	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58	0.65
Traumatology	11	0.00	1.09	1.29	0.00	1.36	0.00	3.19	0.00	0.00	1.06	1.02	2.96	1.19	0.00	1.82	0.00	0.56	0.00	0.00	0.00	0.00	0.77	4.36	2.24
Psychiatry and narcology	10	0.65	0.99	1.17	0.64	0.34	0.00	2.20	0.85	2.72	0.21	0.38	2.96	0.77	0.40	1.82	0.95	0.00	0.64	1.13	0.64	0.00	0.98	3.98	2.21
Иеигоюду	6	3.26	1.38	2.93	2.88	3.91	3.69	4.29	4.75	3.80	1.70	4.61	2.37	1.02	4.38	4.18	2.19	4.25	1.53	3.17	1.53	2.09	2.87	4.90	3.70
sisoluoreis	8	1.09	0.69	0.59	1.12	1.36	0.00	3.30	1.70	4.75	0.64	0.38	2.37	1.28	0.40	1.64	2.86	1.12	1.27	1.13	0.72	3.21	1.57	2.45	1.93
Dermatology	7	00.00	1.18	1.17	1.60	1.36	1.48	1.98	00.00	1.36	0.64	06.0	0.00	09.0	09.0	1.82	0.38	0.67	1.27	1.70	0.64	0.56	06.0	1.91	1.32
Infectious	9	3.80	1.48	4.11	5.60	7.81	10.35	3.08	5.43	4.07	5.32	4.23	4.74	5.45	3.99	4.36	4.57	4.48	3.18	3.73	3.78	5.73	4.37	3.34	3.94
Peadiatrics	5	10.43	10.06	9.50	11.52	13.42	16.26	8.03	10.18	11.27	13.19	13.06	3.43	8.77	11.76	9.27	12.48	8.84	11.21	11.76	10.13	13.69	10.45	5.43	8.39
- Супеасоюду	4	2.50	1.68	4.11	3.04	3.74	8.87	3.41	1.87	1.77	1.49	2.18	1.18	2.89	3.59	2.36	6.57	1.45	3.69	2.60	2.09	2.65	2.83	3.25	3.01
Obstetrics	3	6.84	6.81	7.04	6.24	7.64	4.43	4.07	6.28	5.43	8.30	8.07	4.50	5.96	5.38	5.64	5.05	5.15	6.62	7.24	5.63	5.87	6.09	4.53	5.45
Surgery	2	4.35	3.75	3.64	4.64	6.46	9.61	3.19	6.62	5.57	3.19	6.27	3.55	3.92	5.78	2.55	3.81	1.12	4.46	3.73	4.02	4.47	4.19	6.57	5.17
Internal medicine	_	25.31	24.47	17.83	18.24	24.46	22.17	11.99	16.12	18.61	22.77	23.82	14.68	17.96	14.75	20.00	19.53	13.65	20.64	23.18	17.77	13.83	18.99	19.50	19.20
Aimag and city	Р	Arkhangai	Bayan-Ulgii	Bayankhongor	Bulgan	Gobi-Altai	Gobi-Sumber	Darkhan-Uul	Dornogobi	Dornod	Dundgobi	Zavkhan	Orkhon	Uvurkhangai	. Umnugobi	Sukhbaatar	Selenge	. Tuv	Uvs	Khovd	Khuvsgul	Khentii	Aimag average	Ulaanbaatar	Country average
	⋖	~	7	က	4	2	9	7	∞	6	10	7	12	13	4	15	16	17	18	19	20	21	22	23	24

## Post Operational Complications and Deaths, 2010 Pathologic Anatomy Difference in Diagnosis, 2010

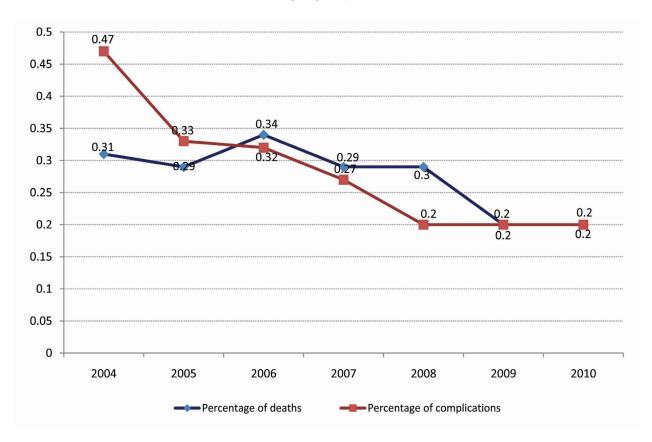
sqteep	5	0.00	0.00	0.12	0.00	0.00	69.0	0.04	0.07	0.61	0.00	0.00	0.07	0.17	0.54	0.00	0.00	0.52	0.00	0.00	0.19	0.20	0.12	0.31	0.24
Percentage of	4,	0.0	0.0	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	0.	0.0	0.0	0.	0	0.	0.	0.
Percentage of complications	4	0.31	1.13	0.12	0.81	0.00	0.00	0.29	0.07	0.36	0.84	0.47	0.41	0.17	0.67	0.00	0.00	0.00	0.00	0.00	0.31	0.40	0.28	0.18	0.21
Number of operations	-	964	1149	1612	615	1597	289	2403	1504	1645	477	1071	2931	2387	746	665	1205	572	1586	1599	1610	1007	27634	52080	79714
Aimag and city	Р	Arkhangai	Bayan-Ulgii	Bayankhongor	Bulgan	Gobi-Altai	Gobi-Sumber	Darkhan-Uul	Dornogobi	Dornod	Dundgobi	Zavkhan	Orkhon	Uvurkhangai	Umnugobi	Sukhbaatar	Selenge	Tuv	Uvs	Khovd	Khuvsgul	Khentii	Aimag average	Ulaanbaatar	Country average
윋	∢	_	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

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## Percentage of Confirmed Diagnosis with Pathologic Anatomy, 2004-2010



## **Indicators of Surgery Operations, /2004-2010/**



## Inpatient Morbidity per 10000 population, 2010

	Diseases of the ear and mastoid process	22	22.38	10.36	10.91	12.00	14.95	12.56	20.02	7.13	8.96	5.32	98.6	13.86	11.41	5.78	12.73	30.95	8.62	15.16	22.84	9.33	25.28	14.42	19.98	16.70
	Diseases of the eye and adnexa	21	3.80	21.41	52.79	6.40	8.66	2.96	13.20	9.33	39.39	7.24	7.56	2.72	10.90	9.57	7.82	7.33	2.69	52.99	11.08	4.10	14.38	14.55 1		27.86 1
ngue	Diseases of the nervous system and sense or	20	152.00	108.94	142.41	133.62	136.42	144.10	153.81	196.51	106.36	142.36	193.75	69.40	83.52	147.89	185.31	148.39	154.87	154.77	137.13	157.78	157.40	140.5		156.5
			19.88 15	25.75 108	38.59 142	22.24 133	24.29 136	13.30 14	99.57 153	19.18 196	91.28 106	14.90 142	13.45 193	61.93 69	16.09 83	35.48 147	33.83 18	31.24 148	29	25.60 15	30.07 13	16.81 15	10.33 15	31.56 14	71.00 179	
	Mental and behavioural disorders	19																	4							5 47.7
out of them	lnsulin-dependent diabetes mellitus	18	4.02	2.37	1.99	8.32	7.14	12.56	13.64	6.28	4.48	6.17	99.9	12.20	2.47	6.38	3.46	5.43	2.57	5.86	3.28	2.49	4.05	5.30	16.13	9.75
	Endocrine, nutritional and metabolic diseases	17	25.53	22.00	33.90	19.36	19.88	22.17	23.33	13.92	16.03	20.64	19.08	22.86	23.75	19.33	12.37	12.95	10.07	16.30	15.26	21.07	14.25	19.45	31.29	24.31
	Diseases of blood and blood forming organs and certain disorders involving the immune mechanisms	16	8.80	37.30	9.27	5.44	9.00	10.35	09.9	5.09	8.69	8.30	14.60	6.39	7.58	9.17	19.46	5.62	4.14	10.06	13.34	17.77	9.22	11.20	14.37	12.50
	Malignant neoplasm of breast	15	0.11	1.28	0.47	00.00	0.68	00'0	0.55	0.17	1.09	1.06	0.00	00.00	0.77	1.79	0.91	0.29	00.00	0.51	1.58	08.0	0.42	09'0	6.76	3.13
	Malignant neoplasm of cervix uteri	14	0.43	0:30	0.59	1.12	1.19	0.74	1.54	1.02	4.21	0.43	1.02	1.42	1.62	1.00	0.73	1.05	0.56	1.91	1.81	1.69	1.96	1.29	5.65	3.08
them	Malignant neoplasm of lung	13	0.43	00.00	0.35	1.44	0.85	00.00	99.0	0.51	1.63	0.64	2.18	0.59	1.11	1.40	1.64	1.14	1.45	0.89	2.60	0.80	1.40	1.05	2.73	1.74
out of them	Malignant neoplasm of stomach	12	1.20	3.75	1.88	4.16	2.72	0.00	2.31	1.70	3.67	0.21	2.43	1.42	1.28	2.39	1.82	2.38	2.01	5.99	5.99	2.90	1.68	2.61	11.19	6.13
	Malignant neoplasm of oesophagus	7	92.0	4.05	0.35	0.64	2.21	00.00	0.99	00.00	0.95	0.21	2.56	0.71	1.62	0.80	2.55	0.48	0.45	4.08	2.26	1.13	0.56	1.40	2.31	1.77
	Malignant neoplasm of liver	10	10.76	3.16	9.97	17.12	13.76	3.69	5.39	2.72	10.87	2.77	9.73	5.21	7.83	5.18	7.46	4.10	4.70	7.77	5.88	6.59	9.78	7.35	11.65	9.12
	Neoplasms	တ	18.36	25.75	20.88	28.65	42.13	11.82	24.21	13.75	43.33	12.13	29.71	21.91	32.10	19.73	24.91	17.14	16.67	31.59	40.25	24.05	24.72	25.62	93.61	53.52
	Trichomoniasis	œ	0.00	00.0	0.00	0.00	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
	Gonococcal infection	7	0.00	00.00	0.00	0.48	0.00	1.48	0.11	0.17	0.00	0.00	0.51	0.12	0.43	0.00	00.0	0.48	0.22	0.00	0.00	0.00	0.00	0.15	0.04	0.11
me	Congenital syphilis	9	00.00	0.00	0.00	00.00	00.0	0.00	0.00	00.00	00.00	00.00	0.13	0.71	0.26	0.00	00.0	0.19	0.11	00.00	0.11	00.00	00.00	0.09		0.07
out of them	Brucellosis	5	24.12	3.75	6.22	20.00	22.09	30.30	22.67	33.09	44.01	7.02	12.04	19.30	12.51	3.99	47.83	3.43	12.09	15.92	8.03	17.93	49.86	18.29	8.86	14.42
	Viral hepatitis	4	33.14	37.40	88.56	21.12	91.91	57.64	57.21	48.19	37.08	16.39	31.12	45.24	33.80	12.36	36.19	23.24	23.61	29.30	12.21	58.79	57.12	40.34	24.33	33.77
	zisoluɔıəduT	က	12.06	5.62	5.16	15.68	5.44	20.69	38.18	12.90	27.03	4.89	4.99	22.62	6.98	6.58	18.37	20.86	16.67	21.27	9.50	9.97	40.92	15.35	21.17	17.74
	Certain infectious and parasitic diseases	2	77.14	49.44	104.63	66.25	127.92	141.88	137.09	110.47	125.92	31.28	69.02	105.51	64.02	37.67	111.30	58.29	63.11	77.70	51.78	93.45	165.50	86.12		87.23
	Total	-	2,525.29	2,327.56	2,272.75 1	2,048.06	2,334.40	3,434.69 1	2,525.06	2,345.55	2,214.04	2,269.51	2,337.42	2,030.47	1,961.85	1,941.68	2,314.87	2,222.84	1,760.45	2,467.39	2,523.59	2,159.83	2,304.09	2,251.41	(0	2,463.96
	Aimag and city	∢	Arkhangai	Bayan-Ulgii	Bayankhongor	Bulgan	Gobi-Altai	Gobi-Sumber	Darkhan-Uul	Dornogobi	Dornod	Dundgobi	Zavkhan	Orkhon	Uvurkhangai	Umnugobi	Sukhbaatar	Selenge	Tuv	Uvs	Khovd	Khuvsgul	Khentii	Aimag average	Ulaanbaatar	Country average
	2		_	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

## Inpatient Morbidity per 10000 population, 2010 /continue/

səoue	Injuiry, poisoning and certain other conseque of external causes	47	77.03	35.82	75.54	59.05	71.35	109.37	116.41	109.12	96.30	60.44	55.58	125.65	66.24	77.13	84.93	71.34	28.65	66.11	71.00	46.08	93.99	73.00	136.18	98.92
	Symptoms, signs and abnormal clinical and laboratory findins, not elsewhere classified	46	0.00	0.00	0.12	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.01	3.25	1.34
ţ	Conginatal malformations, deformations and chromosomal abnormalities	45	3.26	10.85	2.58	2.72	6.29	1.48	3.74	3.39	4.48	11.07	2.43	6.16	6.30	3.39	4.18	0.95	3.69	2.93	11.53	2.17	4.47	4.73	23.31	12.36
ין	Certain conditions originating in the perinata	44	92.0	00.00	2.23	4.16	11.38	00.00	3.30	14.59	4.48	0.21	10.50	9.71	5.87	3.99	4.36	0.57	2.46	1.27	1.81	0.56	00.00	3.73	21.48	11.01
	Pregnancy, childbirth and the puerperium	43	343.65	319.91	350.03	235.40	344.19	411.60	368.03	362.98	337.68	283.02	293.25	376.11	296.27	364.94	294.25	261.92	166.51	394.25	358.49	315.57	282.11	317.19	425.91	361.80
out of them	Acute and chronic pyelonephritis	42	357.34	267.31	207.63	236.36	232.74	339.92	174.83	194.81	191.39	284.09	401.84	154.42	180.91	124.77	256.78	202.59	202.54	379.60	201.57	276.64	149.02	235.91	153.94	202.27
out of	Acute and chronic renal failure	41	0.54	1.87	3.28	1.60	0.00	2.96	99.0	0.85	1.49	1.28	1.15	0.12	2.47	1.00	0.73	2.57	06.0	1.53	0.23	0.88	0.14	1.25	5.22	2.88
	Diseases of the genito-urinary system	40	461.42	420.75	289.04	342.30	324.14	459.63	311.26	253.87	260.25	369.85	482.39	217.66	282.22	193.53	326.43	394.03	257.04	467.75	305.13	336.15	226.92	331.53	264.66	304.09
	Diseases of the musculoskeletal system and connective tissue	39	56.06	112.00	75.31	57.45	33.30	89.88	61.94	163.42	85.85	97.04	99.76	96.28	51.25	50.03	92.93	74.29	86.61	50.57	137.25	46.40	135.19	81.46	103.04	90.31
ə	Diseases of the skin and subcutaneous tissu	38	34.66	51.11	89.15	54.25	74.24	86.46	71.30	27.36	68.32	47.03	65.18	30.43	43.50	62.98	115.12	33.81	40.06	59.36	82.19	49.46	92.39	57.89		64.41
	Alcoholic liver disease	37	92.0	0.20	0.12	0.32	0.17	0.00	2.75	0.00	0.81	0.00	0.38	0.71	60.0	1.20	0.73	0.00	0.78	0.25	0.23	0.64	0.42	0.53	1.39	0.88
nem	Cirrhosia of liver	36	35.53	8.78	16.31	20.48	18.86	38.43	37.41	22.91	23.63	15.11	17.54	29.49	14.39	14.75	23.64	18.10	20.25	19.62	11.98	16.73	12.99	20.03	45.88	30.64
out of them	Chronic hepatitis, elsewhere classified	35	0.00	9.77	15.48	19.52	4.93	0.00	0.00	40.73	29.88	9:36	5.63	31.50	17.03	16.74	40.55	0.00	24.17	26.50	2.94	28.79	18.43	16.25	52.96	31.32
	Gaetric ulcer	34	11.73	12.04	13.26	6.40	11.55	11.82	12.87	6.62	8.15	09:9	21.39	12.55	9.88	4.98	2.73	12.29	6.83	3.95	11.53	14.07	6.14	10.36	13.54	11.67
	Diseases of the digestive system	33	348.87	295.14	299.36	219.08	434.91	430.08	301.47	315.98	294.07	316.22	288.90	280.66	260.26	246.95	313.89	230.78	188.00	310.43	297.22	278.57	313.53	289.26	400.38	334.86
	Chronic obstructive pulmonary disease	32	8.80	35.52	8.21	14.88	12.57	32.51	10.23	38.18	27.98	17.66	12.55	24.28	10.47	21.33	8.55	14.10	27.19	12.99	18.77	4.74	25.28	17.27	41.34	27.14
hem	Acute upper respiratory infections	31	14.45	11.25	18.42	27.53	41.45	42.12	49.73	22.57	6.79	1.49	15.49	4.14	18.81	14.55	43.83	84.01	33.46	5.99	28.49	11.82	8.52	23.97	47.35	33.56
out of them	Pneumonia	30	204.80	176.63	166.69	202.12	110.09	481.80	274.62	219.42	155.53	233.44	127.54	63.36	171.55	149.88	204.04	225.16	227.16	218.97	359.62	256.70	246.36	205.12	144.91	180.41
	ezuənjjul	59	61.17	36.02	18.30	17.28	00.00	181.05	9.79	19.18	21.05	95.12	1.54	6.63	34.22	44.45	26.73	54.39	26.52	23.31	6.44	14.23	43.85	28.41	7.97	20.02
	Diseases of the respiratory system	28	379.94	444.53	322.23	392.55	300.36	907.45	455.94	379.10	366.20	489.23	322.19	287.17	354.16	342.02	353.35	501.85	434.63	341.00	563.01	371.94	529.45	403.09	403.20	403.13
	Cerebrovascular diseases	27	17.93	11.35	13.02	17.92	11.21	6.65	21.78	7.47	7.47	8.94		12.79	15.07	7.97	4.18	14.76	13.54	11.08	18.99	9.49	20.81	13.26	18.49	15.41
hem	Ізсһаетіс һеаң dіseases	56	131.90	35.33	60.41	120.18	96.16	187.70	105.07	118.28	77.02	100.87		122.33	_	72.55	99.99	85.82	70.61	98.72	119.84	153.04	58.94	97.02	102.29	99.18
out of them	Hypertensive diseases	22	185.90	202.09	139.00	121.78	144.06	211.34	86.81	63.13	69.82	102.57	118.45	88.88	152.99	95.07	100.57	127.34	100.15	92.99	112.94	127.79	89.94	121.14	143.04	130.13
	Acute theumatic fever and chronic theumatic heart diseases	24	73.99	21.31	42.11	42.57	47.06	104.19	55.89	45.82	30.15	62.35	34.45	16.82	_	72.55	53.28	52.58	32.56	124.83	46.47	_	22.07	48.03	ш	39.47
	Diseases of the circulatory system	23	491.74	336.48	353.79	387.11	350.98	580.82	353.84	310.38	256.45	353.25	360.22	296.06	346.41	312.12	317.71	341.36	288.04	389.53	374.21	368.56	231.97	346.05	368.64	355.32

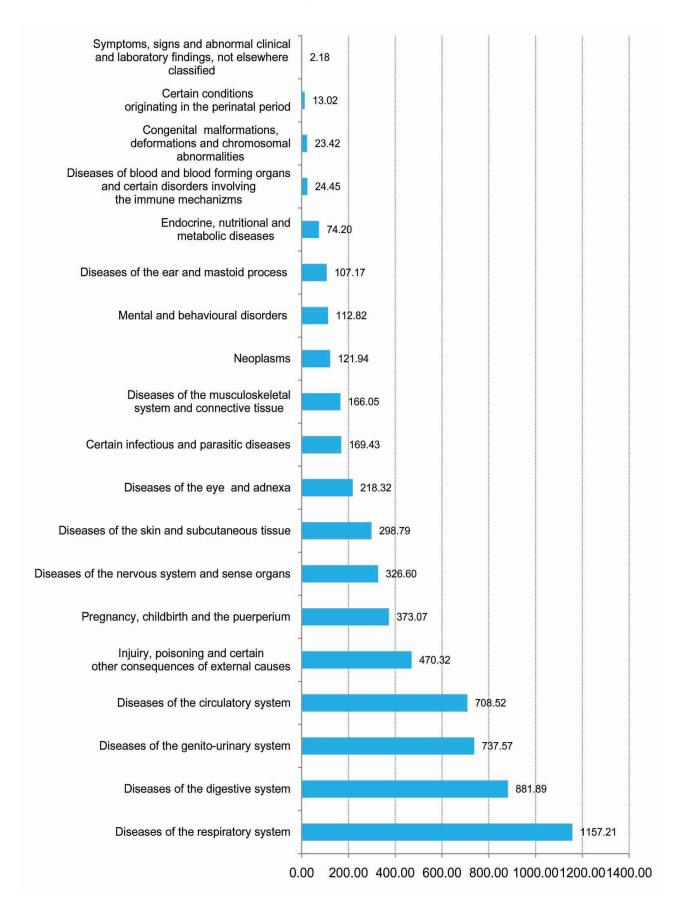
## Outpatient Morbidity (per 10000 population), 2010

																										_
	Cerebrovascular diseases	27	31.1	13.4	16.2	22.7	17.7	17.7	23.0	9.3	8.8	12.1	15.5	13.0	21.9	13.6	4.5	16.4	19.2	12.9	22.2	12.4	24.7	17.0	20.0	18.2
	lschaemic heart diseases	26	233.3	46.8	167.2	211.1	212.7	429.3	222.6	218.2	115.5	167.7	216.5	182.3	138.9	202.3	99.7	125.0	146.8	152.1	182.9	342.3	102.0	178.3	175.3	177.0
шe	eassesib əvisnəhəqyH	25	482.6	356.2	503.2	315.1	441.7	740.4	461.0	283.9	193.6	189.8	206.3	227.1	449.4	358.2	218.2	344.5	404.8	251.1	212.3	324.2	264.4	337.6	246.7	300.3
out of them	Acute theumatic fever and chronic rheumatic heart diseases	24	176.6	31.5	159.8	73.6	92.1	252.7	150.2	100.6	2.99	102.4	51.5	33.6	203.1	221.0	77.3	91.7	107.8	194.3	79.1	8.77	42.6	108.3	67.9	9.78
0	Diseases of the circulatory system	23	1067.7	530.5	1113.0	737.7	865.9	1667.1	982.8	725.8	499.7	. 9.895	550.8	528.2	904.6	953.9	533.0	666.5	783.1	690.3	604.3	824.5	501.5	_	649.4	708.5
	Diseases of the ear and mastoid process	22	148.5 10	16.8	164.6 11	91.1	4	402.0 16	145.3 8	85.0 7	2	47.7	30.2	28.4 5	118.7 §		61.3 5	2	က	141.5	56.2	74.1 8	52.4 5	4		107.2 7
			115.4 14	26.2	482.2 16	110.7	5.6 128.	ω	3	79.2	3.5 214.	က	61.1	112.0 2	313.3 11	304.7 319.	217.7 6	225.7 161.	5.2 189.	204.3 14	9	2	9	208.0 118.	_	218.3 10
	Diseases of the eye and adnexa	21	ဗ				.5 285.	.6 450.	.5 407.	8	.5 293.	.5 71.	2						.1 265.		.6 47.	.5 244.	.0 154.	ш	.9 233.	
sue	Diseases of the nervous system and sense org	20	405.	164.9	425.1	211.6	502.	547.6	245.	362.	261.5	211.5	240.	156.6	374.2	470.6	351.2	247.7	291.1	223.6	235.6	382.5	310.0	302.7	360.9	326.6
	Mental and behavioural disorders	19	144.8	44.7	149.1	27.5	127.8	46.6	241.4	41.9	198.6	42.8	34.8	131.1	54.1	72.7	9.92	139.2	163.6	69.4	31.4	27.6	39.1	94.2	139.6	112.8
out of them	nsulin-dependent diabetes mellitus	18	15.1	2.6	3.3	12.6	10.4	26.6	30.0	20.4	13.6	9.8	9.3	35.6	5.4	14.2	10.4	24.7	29.0	12.1	4.3	6.1	4.7	13.7	51.9	29.4
	Endocrine, nutritional and metabolic diseases	17	99.2	26.5	77.2	35.0	31.3	55.4	49.8	39.0	56.5	33.6	29.3	74.8	69.8	58.2	36.0	42.9	50.4	67.6	36.6	48.5	19.1	50.7	108.0	74.2
	Diseases of blood and blood formingorgans and Certain	16	35.3	61.2	22.2	8.3	43.3	16.3	14.3	12.4	39.5	12.1	31.0	9.5	39.0	25.3	25.8	10.7	12.5	43.7	22.8	33.9	13.8	26.8	21.1	24.5
	seard fo maslqoan tnangilaM	15	0.1	0.3	0.0	0.0	0.7	0.0	3.6	1.0	0.0	0.2	0.1	0.1	0.3	0.4	0.2	0.2	9.0	0.1	0.2	0.0	0.0	4.0	19.5	8.2
	Malignant neoplasm of cervix uteri	14	1.0	0.7	0.1	9.0	1.0	0.7	9.8	0.3	0.4	0.2	9.0	0.0	1.9	1.8	0.2	0.3	1.3	1.0	0.5	0.1	0.4	1.2	34.0	14.6
	Malignant neoplasm of lung	13	0.8	0.1	0.4	1.6	1.2	1.5	3.6	1.5	0.8	1.3	2.4	9.0	1.3	0.8	1.6	0.8	4.6	1.1	0.3	1.2	0.0	1.3	9.5	4.7
	Malignant neoplasm of stomach	12	1.4	0.9	0.4	2.6	2.4	0.7	7.7	1.2	1.2	0.9	2.3	9.0	0.9	1.2	2.0	1.3	4.3	4.1	2.3	1.7	0.3	2.0	33.1	14.8
of them	eugsang of oesophagus	1	0.3	1.8	0.8	1.4	2.0	0.0	3.5	0.7	0.8	1.1	1.3	9.0	0.9	1.0	0.7	1.0	9.0	5.2	9.0	1.3	0.1	1.3	10.6	5.1
ont o	Malignant neoplasm of liver	10	4.8	1.1	9.9	6.4	12.1	3.7	14.1	4.6	5.2	6.0	6.9	3.4	7.0	4.6	11.6	4.6	15.9	9.7	3.3	7.3	4.1	6.9	23.5	13.7
	уеорlаsms	တ	11.6	9.9	18.1	15.8	36.0	12.6	72.5	14.3	32.2	11.3	16.8	15.5	45.7	25.1	27.1	9.1	54.9	26.2	11.1	14.2	7.3	23.9	262.9	121.9
	zizsinomodɔinT	∞	7.4	6.9	62.5	26.7	3.2	5.2	5.9	19.0	21.9	21.5	16.1	8.2	10.0	6.4	10.4	12.7	7.0	7.4	9.9	26.6	25.8	16.7	16.9	16.8
	noitɔətni lsɔɔoɔonoƏ	7	2.9	23.4	44.5	14.4	31.1	37.7	16.3	50.7	49.3	5.5	9.1	7.1	11.4	5.6	18.4	20.7	6.3	15.7	5.1	41.8	13.0	20.0	22.0	20.8
	Congenital syphilis	9	5.6	1.0	22.8	5.6	6.1	17.0	14.2	30.5	19.4	2.6	5.9	14.0	10.5	11.0	7.6	11.4	7.7	3.8	6.4	15.4	5.3	10.5	19.7	14.3
	Brucellosis	2	0.0	0.2	0.0	1.1	0.0	0.0	3.7	2.4	3.0	0.0	1.0	0.0	0.2	0.0	12.2	0.0	1.3	1.5	0.0	0.0	9.4	1.5	1.5	1.5
em	Viral hepatitis	4	32.9	35.2	87.8	20.3	111.4	9.77	33.7	46.2	39.1	20.2	31.0	37.2	31.7	8.2	29.1	19.7	21.9	27.0	11.5	71.3	54.9	39.8	23.2	33.0
out of them	Tuberculosis	က	2.8	3.7	5.3	8.8	4.4	14.8	26.5	14.9	21.1	6.2	4.4	12.4	7.5	9.9	17.6	23.9	12.0	8.5	5.5	8.4	24.6	11.4	20.8	15.3
	Certain infectious and parasitic diseases	2	68.1	72.1	339.6	135.2	161.4	206.2	144.8	238.6	257.9	75.8	6.96	132.4	103.0	9.09	145.1	2.66	7.07	108.8	72.4	192.1	169.5	136.9	216.1	169.4
	Total	_	6460.4	3493.6	8010.9	4282.2	6967.4	13085.5	7337.7	6078.2	6753.0	3991.7	3877.4	4773.7	6242.5	8427.2	5286.4	5065.1	5948.7	5661.0	4235.9	5202.8	5375.5		6405.5	5987.0
	2		9	က	∞	4	9	13	7	9	9	က	3	4	9	∞	2	2	2	2	4	2	2	Н	9	ш
	Aimag and city	∢	Arkhangai	Bayan-Ulgii	Bayankhongor	Bulgan	Gobi-Altai	Gobi-Sumber	Darkhan-Uul	Dornogobi	Dornod	Dundgobi	Zavkhan	Orkhon	Uvurkhangai	Umnugobi	Sukhbaatar	Selenge	Tuv	Uvs	Khovd	Khuvsgul	Khentii	Aimag average	Ulaanbaatar	Country average
	일		_	2	က	4	2	9	7	8	6	10	7	12	13	14	15	16	17	18	19	20	21	22	23	24

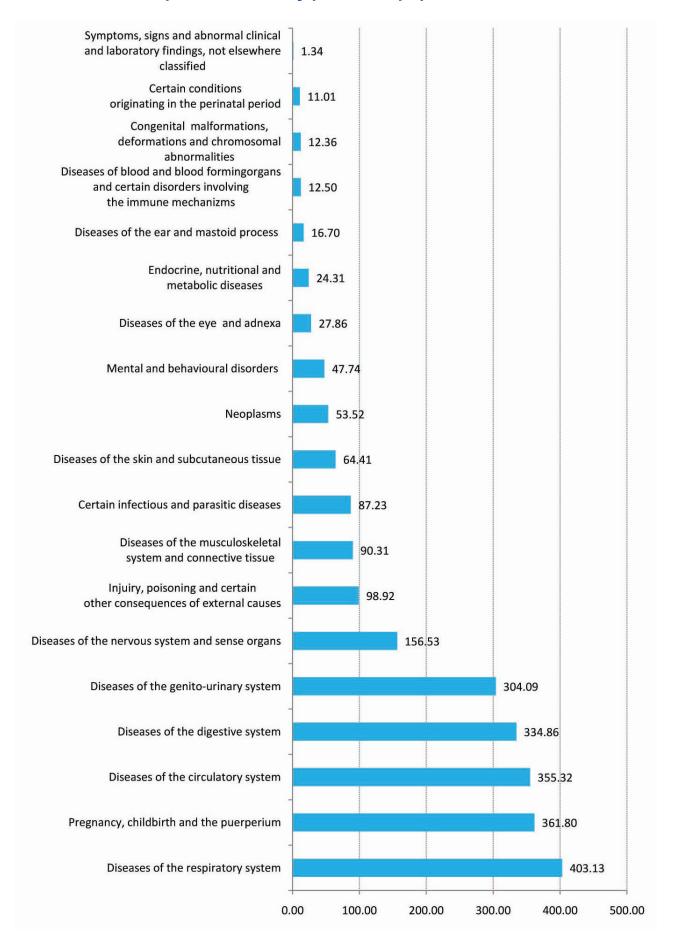
## Outpatient Morbidity (per 10000 population), 2010 /continue/

səs	Injuiry, poisoning and certain other consequenc of external causes	47	138.6	53.3	206.6	130.9	258.7	589.0	423.7	358.9	274.8	113.6	107.8	272.5	221.8	430.9	267.3	243.1	285.6	177.6	104.3	157.9	238.4	219.6	830.6
	Symptoms, again and elsewhere classified	46	0.0	0.0	0.1	4.6	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	1.0	c
	chromosomal abnormalities Symptoms, signs and abnormal clinical and	45	16.4	14.0	28.7	8.8	11.6	11.1	6.2	10.9	7.7	14.0	3.3	10.1	27.3	8.0	17.3	1.8	2.1	6.4	17.5	7.9	5.6	11.5	901
	period  Conginatal malformations, deformations and		7.9	0.0	2.6	4.2	12.4	0.0	3.3	15.6	5.0	0.2	10.9	10.1	6.9	9.9	6.7	9.0	0.7	1.3	1.8	9.0	0.0	4.4	0 10
	Pregnancy, childbirth and the puerperium  Certain conditions originating in the perinatal	43 44	357.4	321.9	368.2	254.4	388.9	419.7	368.5	368.2	342.6	284.1	296.3	380.6		376.3	295.2	265.9	312.4	406.7	370.5	329.7	291.3	334.4	4001
			882.4 3	466.0 3;	713.2 30	487.1 2	558.2	993.9	484.5	461.4 30	368.6	510.3	640.8 29	416.8 3	522.3	528.8 3	519.9	453.3	532.5	787.0 40	ω	ඉ	332.8	540.0	0000
out of them	Acute and chronic pyelonephritis	42		2 46															L		2 331.	0 627.			L
ont	Acute and chronic renal failure	41	0.3	<del>-</del>	1.6	9.0	0.0	3.0	0.3	0.8	1.2	1.1	1.7	0.5	5.9	2.8	6.0	1.7	2.0	1.4	0.2	1.0	0.1	1.4	50
	Diseases of the genito-urinary system	40	1099.4	715.8	1132.4	742.2	1094.4	1630.1	838.5	877.3	594.5	715.0	757.1	564.8	898.6	823.9	735.8	734.0	862.3	1027.7	626.3	871.0	533.9	823.5	617.1
	Diseases of the musculoskeletal system and	39	145.2	179.9	175.5	112.0	71.0	378.3	117.0	291.0	192.7	163.6	127.4	180.0	159.5	267.1	197.5	145.5	171.0	118.0	196.6	106.0	236.7	164.8	167.0
	Diseases of the skin and subcutaneous tissue	38	116.7	71.9	355.4	148.0	230.4	884.5	347.2	321.1	272.6	144.9	108.2	283.5	289.9	380.7	328.6	154.3	181.3	227.6	179.4	163.6	221.1	225.3	707
	Alcoholic liver disease	37	1.3	0.3	8.0	9.0	0.3	1.5	3.7	1.2	1.4	0.4	9.0	2.7	9.0	3.0	1.3	0.2	0.2	0.5	0.3	8.0	1.0	1.0	1 7
hem	Cirrhosis of liver	36	73.9	11.4	33.4	30.9	32.4	77.6	52.9	31.2	31.9	23.2	21.3	44.6	30.8	30.5	32.2	24.7	29.0	27.3	15.8	30.8	19.7	32.0	67.4
out of them	Chronic hepatitis, elsewhere classified	35	1.6	10.9	29.8	40.5	4.9	0.0	0.1	57.2	45.1	17.2	7.2	40.7	75.9	50.8	73.5	0.0	0.0	31.5	4.9	61.7	25.4	28.3	61.0
	Gastric ulcer	34	27.9	16.3	28.9	12.8	93.9	79.8	21.0	10.7	13.6	10.6	32.5	22.1	24.9	17.7	5.1	21.5	25.3	9.2	16.2	42.5	11.6	24.2	9 88
	Diseases of the digestive system	33	1186.9	431.3	1730.9	553.1	1486.5	2239.8	1167.1	815.9	1541.8	622.4	542.3	713.6	979.1	1311.1	862.9	590.6	693.9	845.1	536.1	662.4	955.4	903.4	8510
	Chronic obstructive pulmonary disease	32	13.6	47.7	12.8	43.7	33.6	106.4	59.9	80.8	63.8	32.8	16.3	89.5	58.2	68.4	17.1	21.0	24.6	23.9	31.8	14.0	47.3	39.4	131 B
em	Acute upper respiratory infections	31	30.1	14.4	59.9	51.4	85.1	58.4	82.8	43.3	23.5	4.3	28.0	20.8	44.3	41.9	219.5	109.2	128.4	38.2	74.8	31.9	14.7	56.3	57.5
out of them	Pneumonia	30	316.4	240.6	262.6	288.7	176.2	787.0	360.2	344.0	245.4	299.6	203.2	120.0	258.5	307.1	321.3	315.8	371.1	356.3	493.3	409.8	399.6	311.8	176.4
	ezuənyuı	29	427.4	180.5	96.4	78.6	0.0	1983.4	756.4	477.5	416.3	169.0	2.6	446.6	327.7	1261.8	178.8	364.5	428.3	100.1	54.2	173.0	324.6	317.6	50.1
	Diseases of the respiratory system	28	1295.9	756.0	1219.4	950.9	1231.3	3528.5	1762.5	1420.2	1661.5	859.1	832.9	1170.4	1329.0	2531.8	1101.3	1326.6	1558.6	1266.8	1085.3	1061.8	1525.4	1296.7	056 B
	Aimag and city	∢	Arkhangai	Bayan-Ulgii	Bayankhongor	Bulgan	tai	Gobi-Sumber	Darkhan-Uul	Dornogobi	Dornod	Dundgobi	Zavkhan	Orkhon	Uvurkhangai	Umnugobi	Sukhbaatar	Selenge		Uvs	Khovd	Khuvsgul	Khentii	Aimag average	Haanbaatar
	<u>o</u> Z		-	2	က	4	2	9	7	æ	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23

## Outpatient Morbidity per 10000 population, 2010



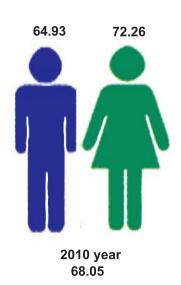
## Inpatient Morbidity per 10000 population, 2010



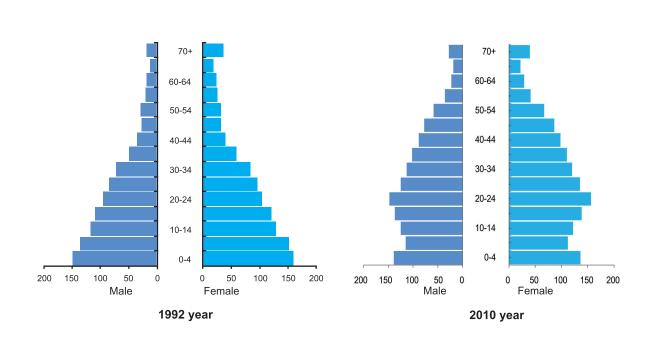
## **SELECTED DEMOGRAPHIC INDICATORS**

## **Average life expectancy**

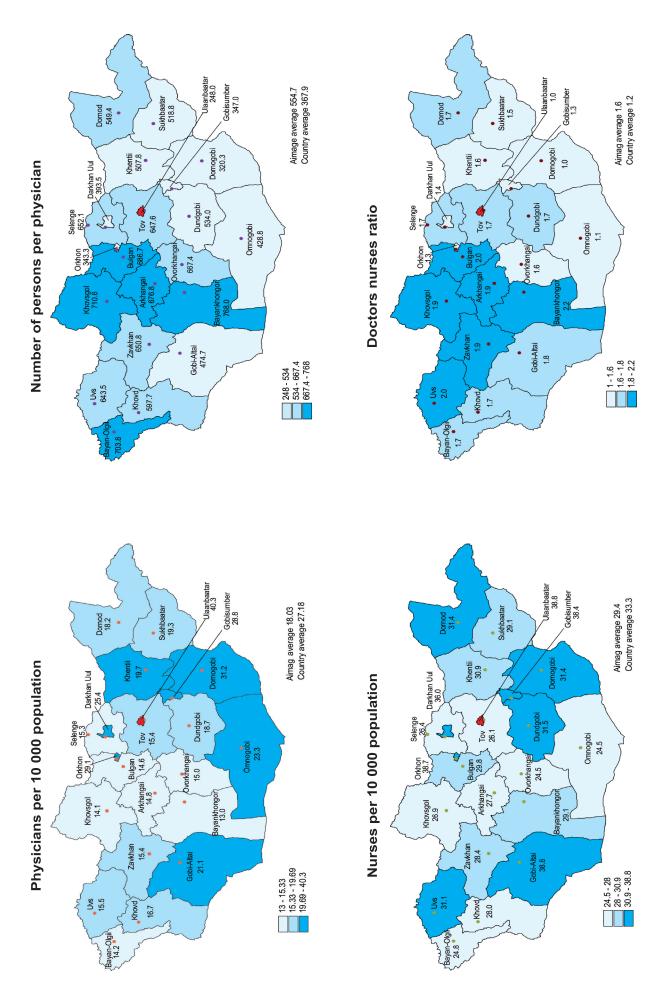




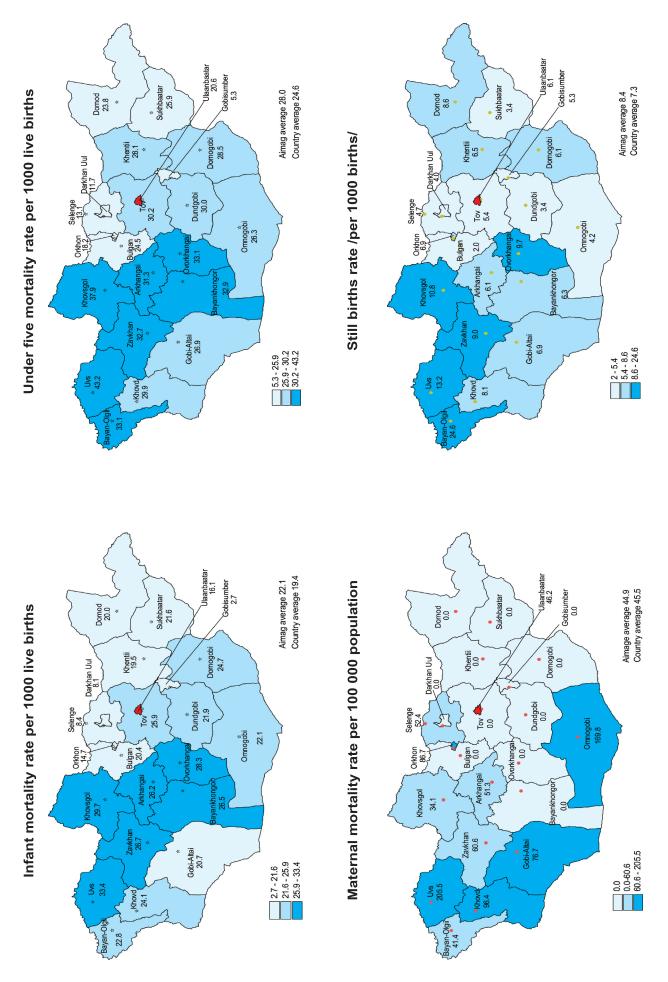
## **Population Pyramid**



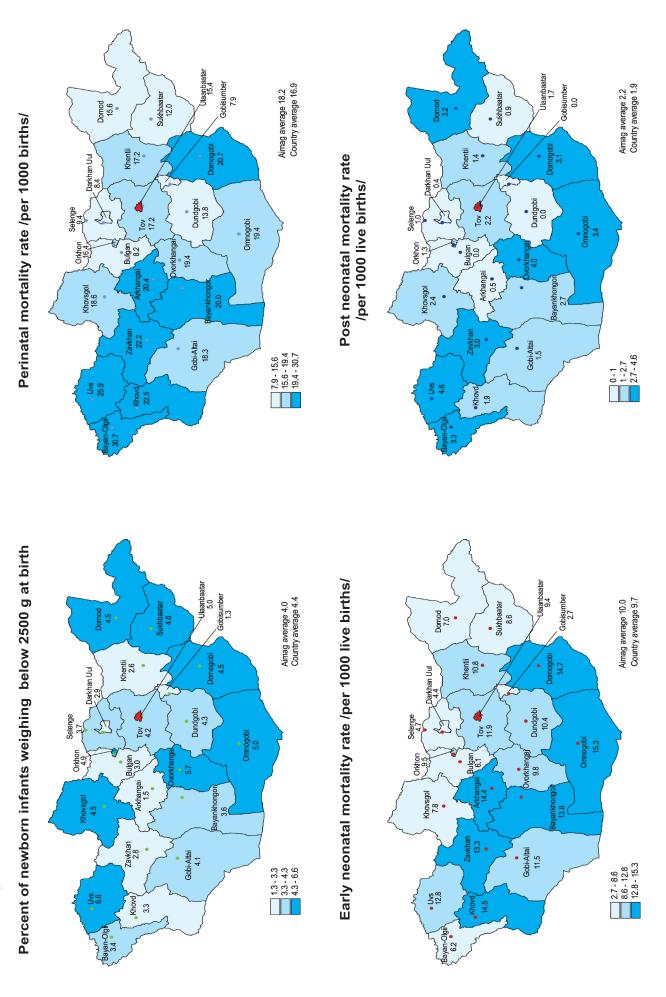
## **HUMAN RESOURCES INDICATORS**



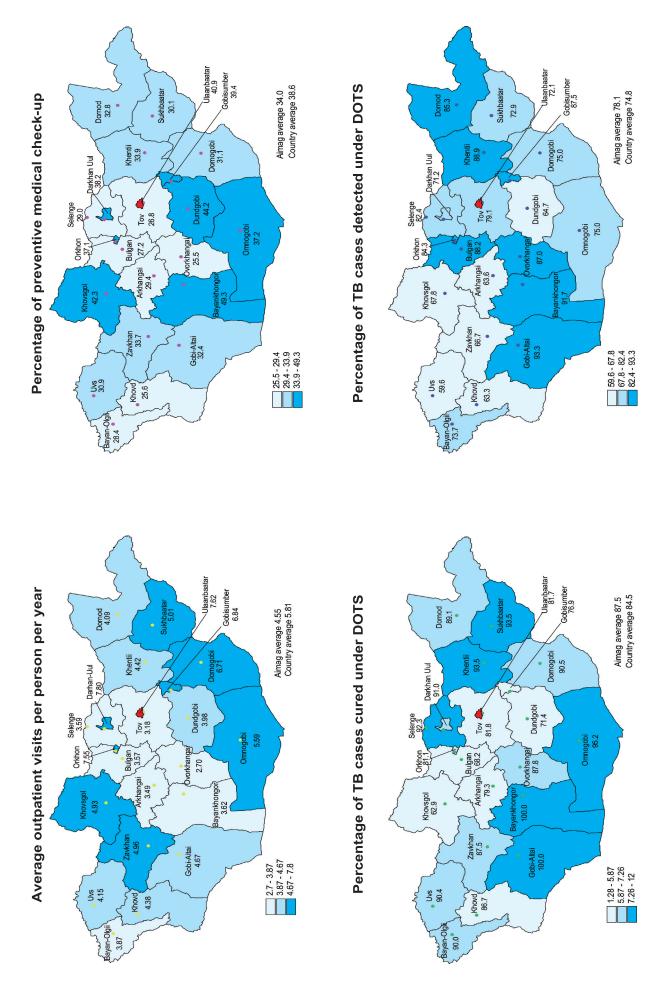
# QUALITY AND ACCESSIBILTY INDICATORS OF MEDICAL CARE AND SERVICES



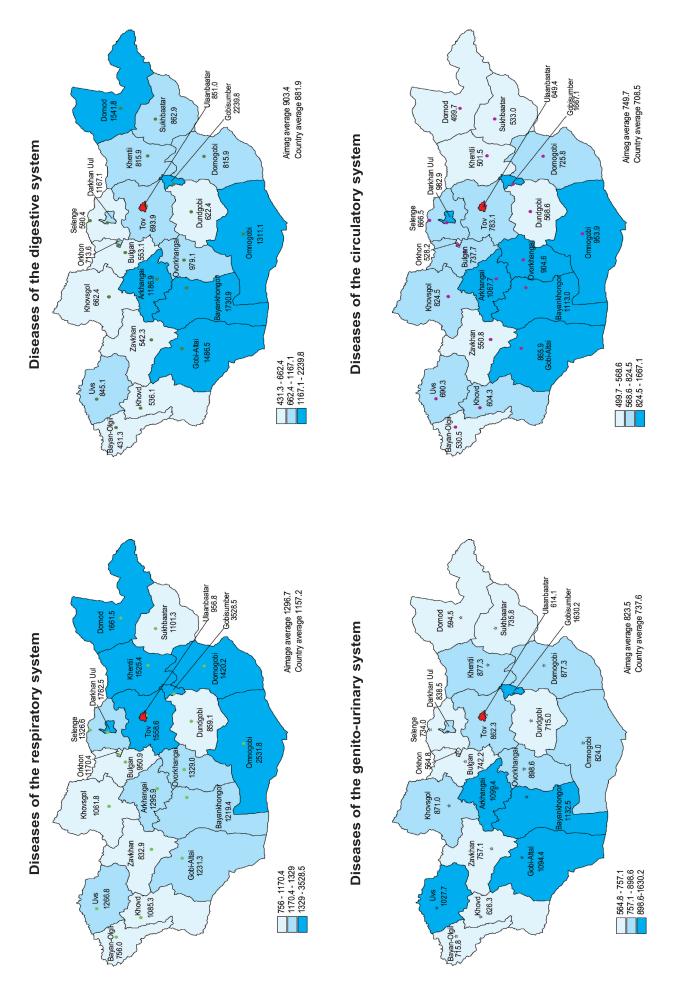
# QUALITY AND ACCESSIBILTY INDICATORS OF MEDICAL CARE AND SERVICES



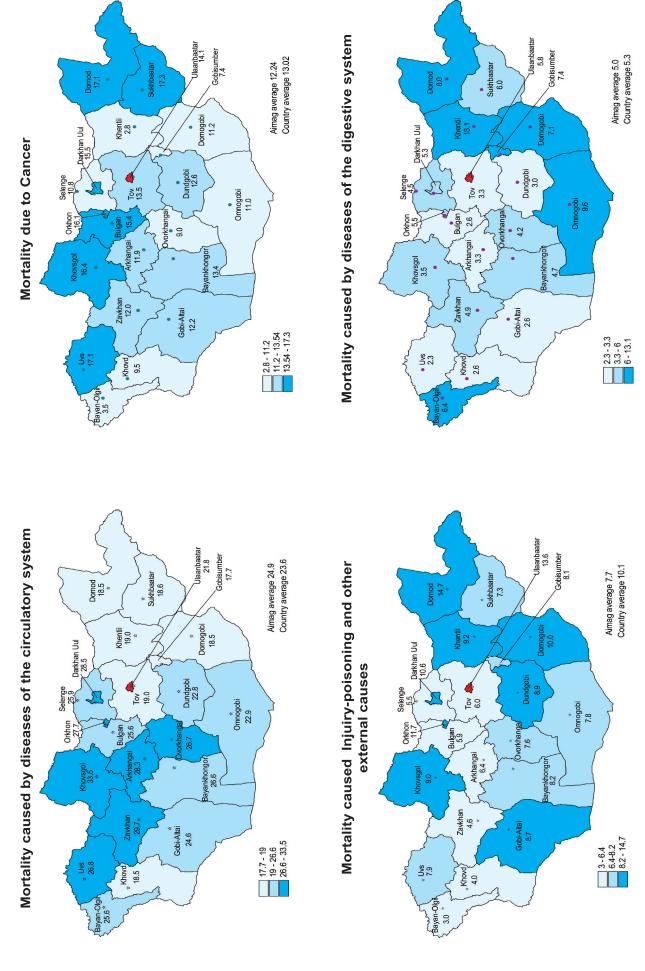
# QUALITY AND ACCESSIBILTY INDICATORS OF MEDICAL CARE AND SERVICES



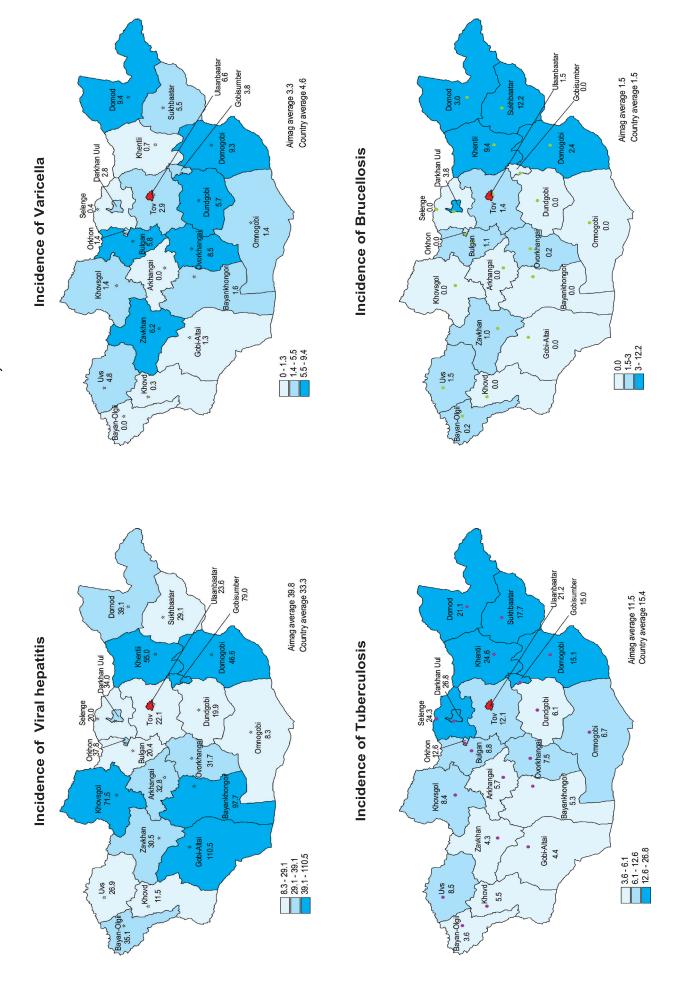
## LEADING CAUSES OF THE MORBIDITY, PER 10 000 POPULATION



## LEADING CAUSES OF THE MORTALITY, PER 10 000 POPULATION



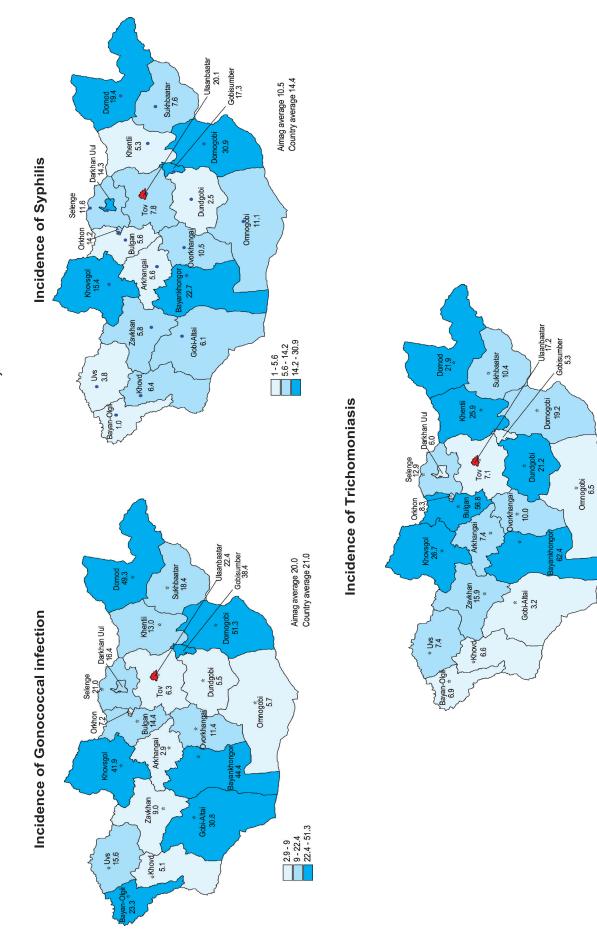
# SELECTED REGISTERED INFECTIOUS DISEASES, PER 10 000 POPULATION



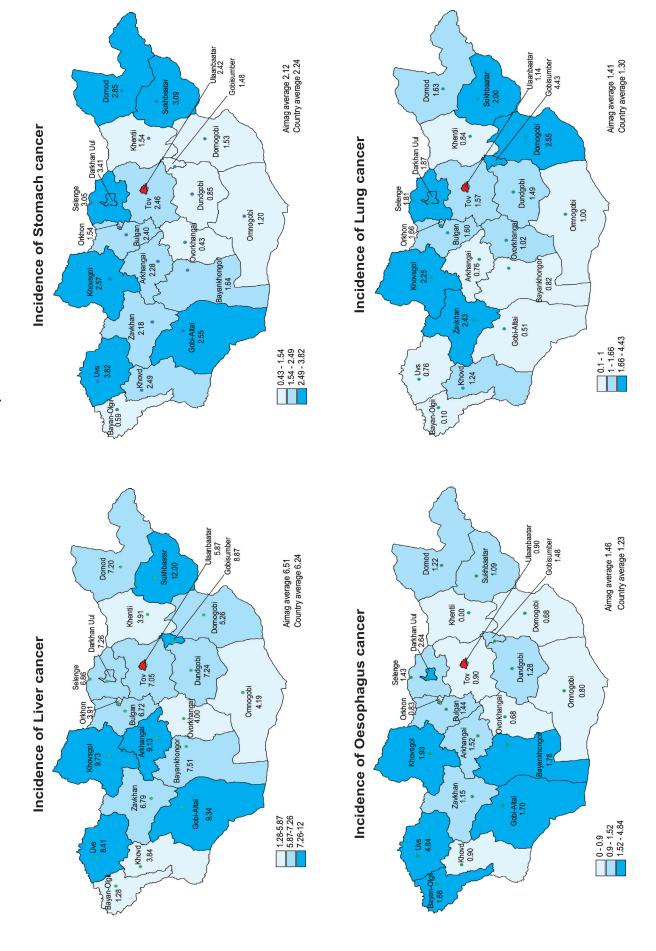
Aimag average 16.7 Country average 16.9

3.2 - 7.1 7.1 - 19.2 19.2 - 62.7

# SEXUAL TRANSMITTED INFECTIOUS DISEASES, PER 10 000 POPULATION



## INCIDENCE OF MALIGNANT NEOPLASMS, PER 10 000 POPULATION



# MORTALITY DUE TO MALIGNANT NEOPLASMS, PER 10 000 POPULATION

