
CENTER FOR HEALTH DEVELOPMENT

World Health Organization
Western Pacific Region

# HEALTH INDICATORS

# 2017

**Please send your comments regarding this publication to the address below.**

**Center for Health Development**

**Mailing address:** **S.Zorig street**
**Ulaanbaatar-210648**
**Fax:** **976-11-320633**
**Tel:** **70111485**
**E-mail:** **admin@hdc.gov.mn**
**www.hdc.gov.mn**

**Edited by:** D.Gantsetseg, Director, Center for Health Development
T.Sodgerel, Head of division of administration, finance and internal control
Kh.Gantsetseg, Head of division of health information

**Complied by:** S.Davaajargal Officer of division of health information
Kh.Narantuya Officer of division of health information
B.Boldbaatar Officer of division of health information
B.Norolkhoosuren Officer of division of health information
J.Erdene-Ochir Officer of division of health information
Kh.Delgermaa Officer of division of health information
B.Otgonchimeg Officer of division of health information
B.Dorjmyagmar Officer of division of development strategy and cooperation
B.Batdelger Officer of division of development strategy and cooperation
Sh.Enkhzaya Head of division of drug, medical equipment
D.Bayarkhuu Officer of division of human resource policy coordination

**Layout by:** D.Uranchimeg, Division of health information
D.Altantsetseg, Division of health information

**Design by:** Bit Press LLC

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# FOREWORD

The presented Health Indicators for 2017 is based on the official statistical data of the health sector, estimated and summarized by international methodology.

This annual report presents the main health indicators by levels of health care services and leading causes of population mortality and morbidity by region.

The report provides SDG's Health Indicators for 2017, which Mongolia has articulated its development vision in "Concepts of Mongolian Sustainable Development-2030", approved by the 19th Resolution of State Great Khural (Parliament) of Mongolia on 5 February 2016. The health indicators and relevant information have been prepared within four health objectives of SDG's and expressed by 115 tables, 99 figures and 50 geospatial imagery.

In addition, in the era of information age, users are eager to get more information within limited time, the Health Indicators of SDGs is also available for you as a form of thumbnail with figures, main data and statistics.

As of 2017, the life expectancy at birth has increased, reached to 69.89; maternal mortality has decreased by 22.1 per 100 000 live births and infant mortality rate has decreased by 6.0 per 1 000 live births from the 2008 figure, as reached at the lowest rate in recent years.

In Mongolia, the number of person per hospital bed was 130, the number of person per one physician was 293, and the duplicated number of hospital inpatient care 2 756 per 10 000 population, one person had 5.7 visits a year for receiving outpatient health care services. This shows that accessibility of health care services has been improving year by year.

We would like to express our appreciation to the WHO Representative's Office in Mongolia for providing financial support for publishing this report to all of you available in making evidence-based decisions by health policy developers and decision-makers at all levels of the health sector.

We look forward to cooperate with you if you send your valuable comments and suggestions on the monthly, quarterly, annual reports and health statistics, provided by the Center. And we strongly believe that this annual report can provide timely information for health policy and decision makers, and other users for making evidence-based decisions.

**GENERAL DIRECTOR**  **D.GANTSETSEG**

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## LIST OF ACRONYMS

| | |
|---|---|
| ADB | Asian Development Bank |
| AIDA | Acquired immunodeficiency syndrome |
| CDR | Crude death rate |
| C-section | Caesarian sections |
| DOTS | Directly observed treatment strategy |
| FHC | Family health centres |
| HIV | Human immunodeficiency virus |
| MDG | Millennium development goals |
| NCD | Non-communicable diseases |
| PHC | Public health centre |
| RDTC | Regional diagnostic and treatment centres |
| SHC | Soum health centres |
| SPS | Structure and Performance Standards |
| STI | Sexually transmitted diseases |
| TFR | Total fertility rate |
| VHC | Village health centres |
| WHO | World Health Organization |
| NCCD | National infectious Diseases Center |
| NCC | National Cancer Center |
| NCMCH | National Center for Mother and Child |
| GDP | Gross Domestic Product |
| SISS | Social Indicators Sample Survey |
| NRSO | National Registration and statistics Office |
| MEDS | Ministry of Education, Culture, Science and Sports |
| SSNCD | Steps Survey NCDs |

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# ABSTRACT

"Health Indicators 2017" is composed 15 chapters, 41 subgroups and health indicators were compared with the last 10 years. Population of Mongolia reached to 3 million 177.9 thousand by the end of 2017. Out of the total population, 67.6% live in cities and the remaining 32.4% reside in the rural areas.

In 2017, the average life expectancy at birth was 69.89 years, for females 75.44 years and for males 65.88 years..

In 2017, 73 884 mothers gave birth in the country, which compared to 2016, the number of births has decreased by 3 919 or 5.0%. In 2017, 74 328 live births were recorded, out of them, there were 1 717 twins and 36 triplets.

The crude death rate was 7.9 in 1990, whereas the rate was 5.1 in 2017, decreased by 2.8 points compared to 1990.

In Mongolia, the under-five mortality rate per 1000 live births was 87.5 in 1990, and the rate was 16.7 in 2017. The national infant mortality rate has decreased steadily for the last years. In 1990, 4 789 infant deaths were recorded and in 2017 the number of deaths decreased to 1 009. The maternal mortality rate was considerably high during the 1990's in Mongolia.

As a result of the implementation of two times strategies on reducing maternal mortality between 2001 and 2010, the rate has decreased significantly in 2001-2006. As of 2017, the maternal mortality rate per 100 000 live births was estimated at 26.9.

In 2017, a total of 4 005 health facilities were operating and delivering health service around the country, including 13 central and specialized hospitals, 5 RDTCs, 16 aimag general hospitals, 12 district general hospitals and public health centres (PHCs), 6 rural general hospitals, 39 inter-soum hospitals, 218 family health centres, 273 soum health centres, 240 private hospitals and 1226 private clinics.

In 2017, total of 50 519 healthcare employees were worked in the public and private organizations of the health sector and this number was increased by 4.8% compared to the previous year. Out of total health personnel, 92.8% employed by health sector and 7.2% represents health workers employed by other sectors.

The total number of health workers employed by health sector by level of care as follows: 22.3% of them working in primary health care, 18.0% in secondary health care, 16.1% in tertiary health care, 18.1% in private hospitals and clinics, and 25.5% in maternity hospitals and other health care organizations, respectively.

As of 2017, an average number of population per a physician was 293, it has decreased by 16 persons, and an average number of population per a nurse was 259, this number has decreased by 10 persons respectively, as compared to the previous year.

In 2017, there were 15 812 deaths registered in the nationwide, which reduced by 369 cases or 1.2%, compared to the last year. In terms of sex, 60.8% were males and 39.2% were females of all deaths. Out of all deaths, 4292 deaths or 27.1% were occurred in hospitals, and the proportion of deaths that occurred within 24 hours of admission was 22.5%.

In 2017, 44 300 cases of 28 types of communicable diseases were registered, which estimated at 144.9 per 10 000 population. Compared to the previous year, the number of cases decreased by 25 363 cases or 82.9 per 10 000 population.

The five leading causes of population morbidity from non-communicable diseases per 10 000 population as follows: diseases of respiratory system (1671.4), diseases of digestive system (1558.7), diseases of genitourinary system (952.4), diseases of circulatory system (1145.6), and injuries, poisoning and certain other consequences of external causes (511.2), respectively.

# CHAPTER 1.

# POPULATION OF MONGOLIA

# CHAPTER 1.

# POPULATION OF MONGOLIA

This section provides an overview of the demographics of the population of Mongolia. This includes indicators of vital statistics on the growth, age and sex distribution, births and deaths, and life expectancy of the population.

The main sources of population statistics are the Population and Housing Census conducted by the National Statistical Office in every 10 years, and annual vital and migration statistics of the population.

Population of Mongolia includes resident population in Mongolia and Mongolian citizens who reside abroad for 6 months and above.

A household is a group of people who live together in one residence, with a joint budget and who jointly provide their food and other basic needs. Household members are typically family members or relatives; however, a household can include members with no family relation. The urban population includes population reside in Ulaanbaatar city, province centers and towns.

The rural population includes population reside in soum centers and rural areas.

The sex ratio at birth refers to the number of boys born alive per 100 girls born alive.

The crude birth rate is the number of live births occurring among the population of a given geographical area in a given year, per 1 000 mid-year population of the given geographical area during the same year.

The age specific fertility rate is the number of live births to women in specific age group, divided by the total population of women in same age group and expressed as a promille.

The total fertility rate refers the average number of children that would be born to a woman over her lifetime.

The crude death rate is the number of deaths occurring among the population of a given geographical area during a given year, per 1 000 mid-year population of the given geographical area during the same year age and expressed as a promille.

## 1.1. POPULATION

By the end of 2017, the total population of Mongolia was 3 177.9 thousand, increased by 57.9 thousand or 1.9 percent compared to the previous year. Out of the total population, 67.6% live in cities and the remaining 32.4% reside in rural areas. 1 463.0 thousand people or 46.0 percent of the population resides in Ulaanbaatar. 49.2 percent of the resident population is male and 50.8 percent is female. The sex ratio – the number of males per 100 females - is 97. Population distribution by age group, 30.5 percent of the population is children under 15 years, and 65.7 percent of the population aged 15-64 years, and 3.9 percent of the population is over the age of 65, respectively. As of 2017, the total number of households was 885.6 thousand, and 66.0 percent of households in urban areas and 34.0 percent of households in rural areas. The average family size is 3.6 person. Out of the total households, 386.2 thousand live in Ulaanbaatar city; 174.5 thousand live in Khangai region, 152.1 thousand in Central region, 106.0 thousand in Western region, and 66.8 thousand live in Eastern region.

***Figure 1.1.1.*** *Urban and rural population by province, 2017*

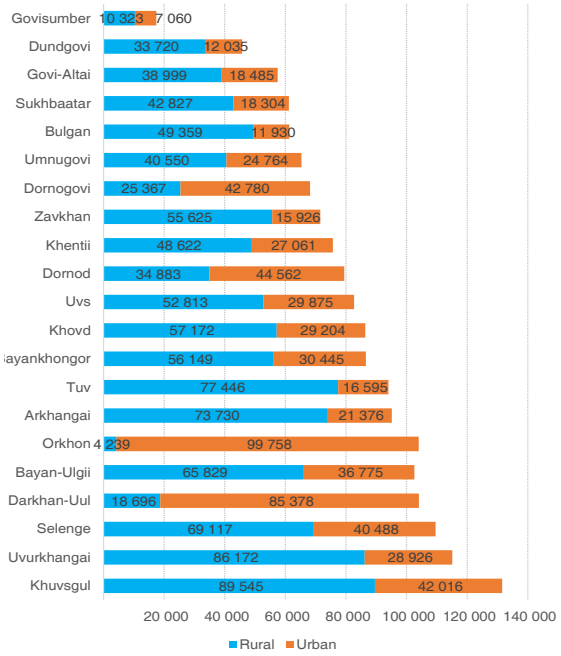
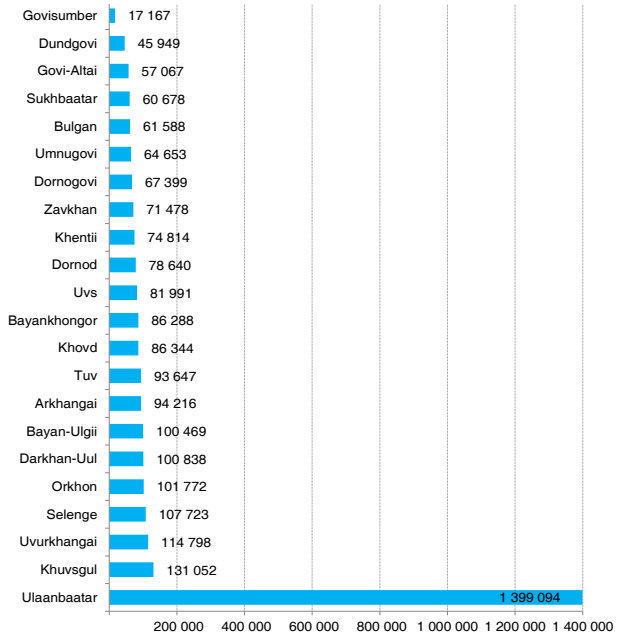



***Figure 1.1.2.*** *Average population by province, 2017*




In terms of population distribution, 67.2 percent of the total resident population in Mongolia or 2 103.2 thousands people reside in towns and villages. The urban population is highest (more than 50 percent of the total population reside in urban areas) in Orkhon, Darkhan- Uul, Govisumber and Dornogovi provinces.

***Figure 1.1.3.*** *Proportion of urban and rural population*

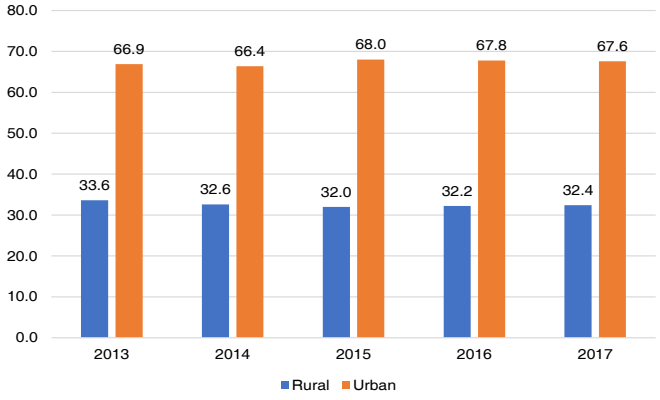
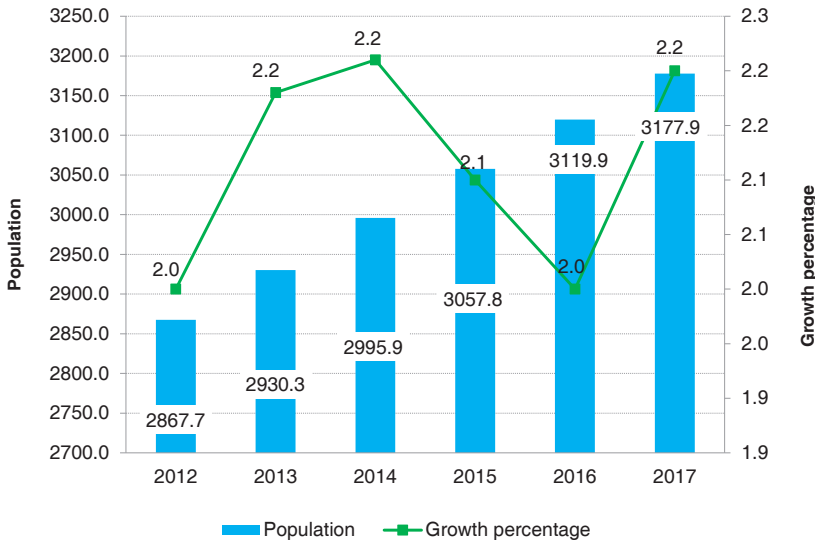


***Table 1.1.4.*** *Number and annual growth rate of population, 2012-2017*

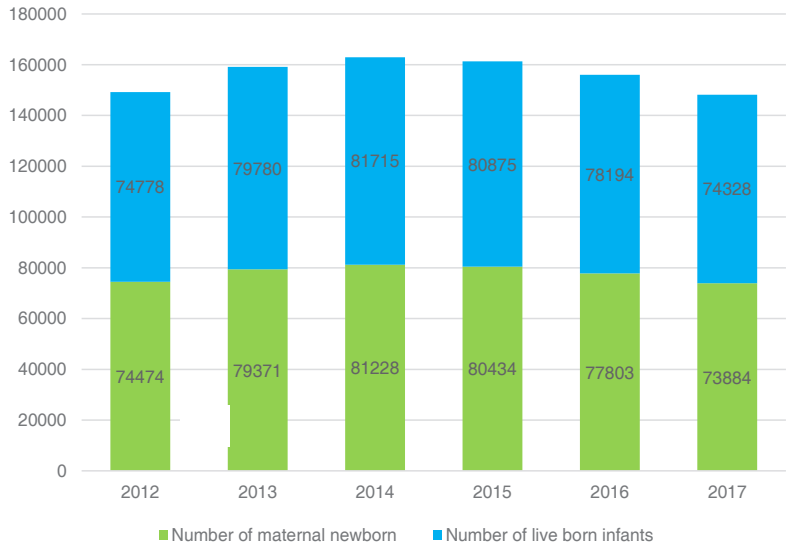



The population growth rate has increased for the last years. In 2011, the rate was 1.74 and it reached to 2.2 in 2017, which increased by 0.46 points.

## 1.2. SELECTED DEMOGRAPHIC INDICATORS

In Mongolia the fertility rate steadily decreased between 1990 and 2000, and then fluctuated during the past 15 years. During 2007-2009, the number of birth increased steadily as compared to the previous years. In 2014, 81.7 thousand children born, considered as the highest birth rate. This number decreased to 74.3 in 2017.

***Figure 1.2.1.*** *Woman who gave births and live births, 2012-2017*




Although there was a twofold reduction in the birth rate from 35.3 per 1000 population in 1990 to the minimum rate of 17.8 in 2005, it has been steadily increasing from 2006 and reached to 24.0 per 1000

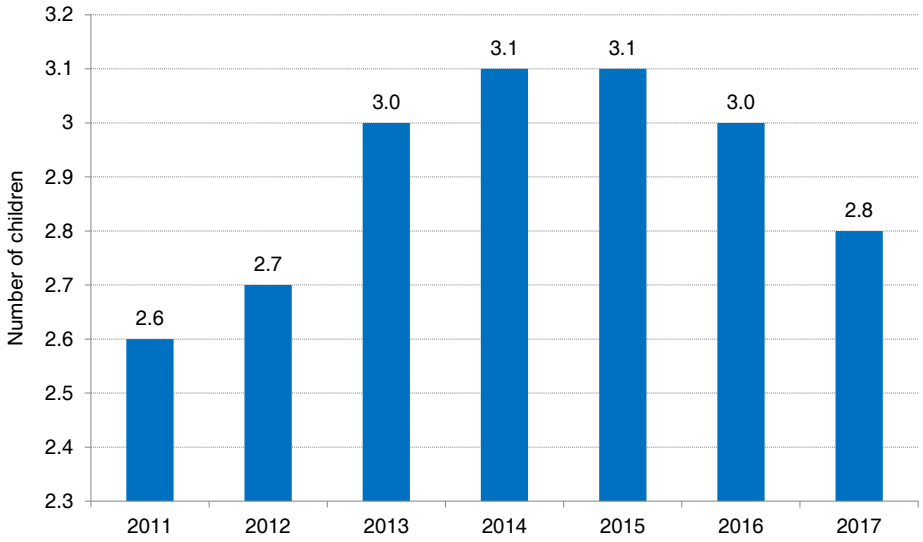
population in 2017. The birth rate in 2017 has decreased by 1.3 points as compared to the previous year. In 2017, there were 74.3 thousand babies born, which is a decrease in 5.0% from previous year. The sex ratio at birth is 105 boys per 100 girls.

***Table 1.2.1.*** *Demographic indicators by selected years*

| Indictors | 1990 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total population (thousand) | 2 149.2 | 2 683.5 | 2 735.5 | 2 780.7 | 2 811.6 | 2 867.7 | 2 930.3 | 2 995.9 | 3 057.7 | 3 119.9 | 3 177.9 |
| Urban population (%) | 54.6 | 61.4 | 62.6 | 63.3 | 67.1 | 67.2 | 68.1 | 66.4 | 68.0 | 68.9 | 67.6 |
| Rural population (%) | 45.4 | 38.6 | 37.4 | 36.7 | 32.9 | 32.8 | 31.9 | 33.6 | 32.0 | 31.1 | 32.4 |
| Age group (%) | | | | | | | | | | | |
| 0-15 | 41.5 | 28.1 | 27.6 | 27.3 | 27.2 | 27.6 | 27.4 | 28.0 | 29.6 | 30.0 | 30.5 |
| 15-64 | 54.4 | 67.8 | 68.4 | 68.8 | 68.8 | 68.4 | 68.8 | 68.0 | 66.6 | 66.2 | 65.7 |
| Over 65 | 4.1 | 4.1 | 4.0 | 3.9 | 4.0 | 4.0 | 3.8 | 4.0 | 3.8 | 3.8 | 3.9 |
| Demographic rates | | | | | | | | | | | |
| CBR | 35.3 | 23.7 | 25.3 | 23.8 | 25.3 | 26.3 | 27.5 | 27.6 | 26.7 | 25.3 | 24.0 |
| CDR | 7.9 | 5.7 | 5.7 | 6.3 | 6.2 | 5.9 | 5.6 | 5.6 | 5.4 | 5.2 | 5.1 |
| Growth rate | 2.7 | 1.8 | 1.9 | 1.7 | 1.9 | 2.0 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 |
| TFR | 4.3 | 2.6 | 2.8 | 2.4 | 2.6 | 2.7 | 3.0 | 3.1 | 3.1 | 3.0 | 2.8 |

The crude death rate was 7.9 in1990, it declined 5.1 in 2017, decreased by 2.8 compared to 1990.

***Figure 1.2.2.*** *Total fertility rate by selected years, 2012-2017*




The total fertility rate (TFR) was 4.3 in 1990, and it decreased to 2.75 in 1995, whereas the rate was 2.25 in 2000, which decreased 2 times as compared to the 1990 figure. In the field of demography, total fertility rate of minimum 2.1 is considered to ensure replacement level fertility or long-term “natural” replacement of the population. However, the total fertility rate was 1.99 in 2003, which lower than the replacement level fertility. And it declined further down to 1.95 in 2005 which was the lowest level in the history of Mongolia. As a result of pro-fertility policies taken by the government, TFR climbed up to 2.34-2.69 in 2007-2009. However, the rate has declined again reached to 2.39 in 2010. TFR in 2017 was 2.8, the rate has been increasing steadily since 2011.

## 1.3 AVERAGE LIFE EXPECTANCY

Globally, life expectancy has been improving at a rate of more than 3 years per decade since 1950, with the exception of the 1990's.

During the 1990's , progress on life expectancy stalled in Africa because of the rising HIV epidemic; and in Europe because of increased mortality in many ex-Soviet countries following the collapse of the Soviet Union. Life expectancy increase accelerated in most regions from 2000 onwards, and overall there was a global increase of 5.0 years in life expectancy between 2000 and 2015, with an even larger increase of 9.4 years observed in the WHO African Region.

The global average increase in life expectancy at birth since 2000 exceeds the overall average rate of life expectancy increase achieved by the best-performing countries over the past century.

In 2017 the life expectancy at birth reached to 69.89 years, increased by 0.32 points as compared to the previous year. And the life expectancy for women was 75.44 years and for men 65.88 years

On average, women live longer than men in every country of the world, and the difference is 4 years. For Mongolia, female life expectancy is higher than male by 9.56 years. From the estimates of global life expectancy by country for 2017: the country with the highest life expectancy is Monaco at 89.42, while the country with the lowest life expectancy is Chad at 50.2. Mongolia is ranked at 159$^{th}$.

***Table 1.3.1.*** *Population life expectancy, list of the first ten countries*

| № | Coutnry/ciry | Average life expectancy | Year |
|---|---|---|---|
| 1 | Monaco | 89.42 | 2017 |
| 2 | Japan | 85.26 | 2017 |
| 3 | Singapore | 85.21 | 2017 |
| 4 | Macau | 84.55 | 2017 |
| 5 | San Marino | 83.34 | 2017 |
| 6 | Andorra | 82.85 | 2017 |
| 7 | Jersi | 82.61 | 2017 |
| 8 | Hong Kong | 82.52 | 2017 |
| 9 | Australia | 82.31 | 2017 |
| 10 | Italy | 82.28 | 2017 |

http://www.infoplease.com/world/statistics/life-expectancy-country.html

In 2017, there was a difference among aimags and regions in average life expectancy.

The lowest life expectancy is in the khangai area of 70.14, the central region has the highest life expectancy in the population, which estimated at 71.8. Indicating by aimags: Khuvsgul /66.18/, Uvs /68.84/, Dornod /68.76/, Darkhan-Uul /68.67/, Govi-Altai /69.43/ and Bayankhongor /69.27/, and these aimags are below the national average life expectancy.

***Table 1.3.2.*** *Average life expectancy by regions and sex, 2017*

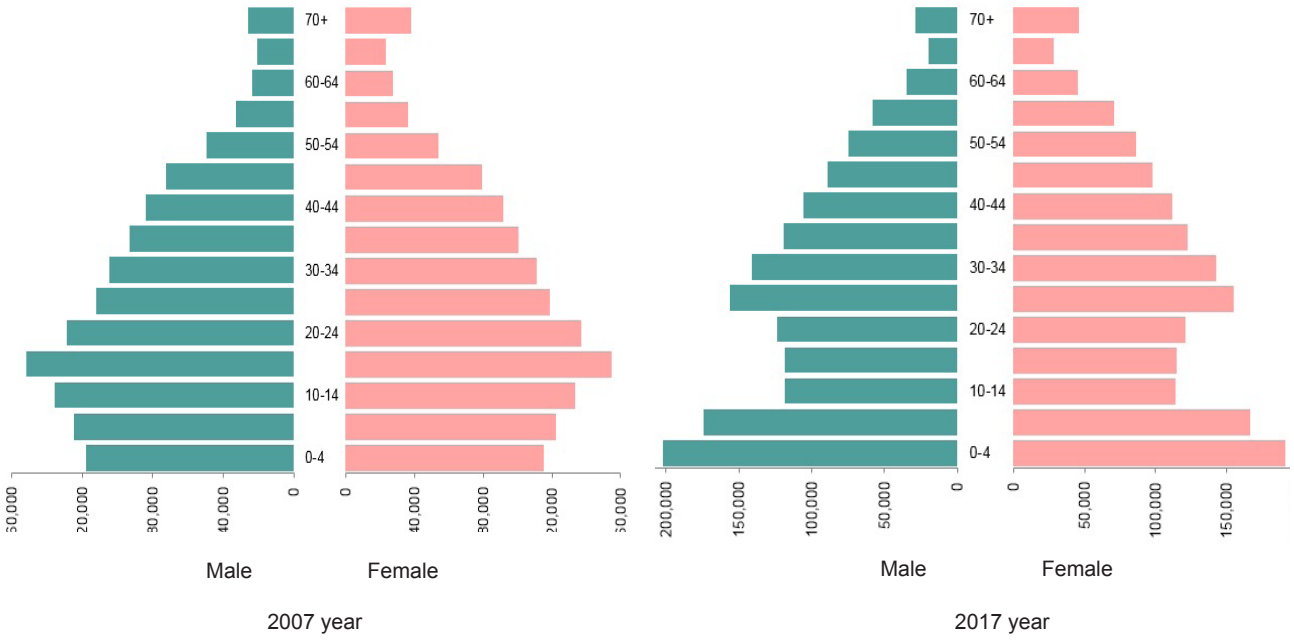
| Province/city | Total | Male | Female |
|---|---|---|---|
| **Total** | **69.89** | **65.88** | **75.44** |
| **Western region** | **70.82** | **67.09** | **74.14** |
| Bayan-Ulgii | 73.12 | 70.31 | 75.38 |
| Govi-Altai | 69.43 | 64.65 | 73.76 |
| Zavkhan | 70.11 | 67.6 | 72.84 |
| Uvs | 68.84 | 63.93 | 72.87 |
| Khovd | 72.63 | 68.94 | 75.85 |
| **Khangai region** | **70.14** | **67.34** | **74.24** |
| Arkhangai | 70.81 | 68.35 | 72.32 |
| Bayankhongor | 69.27 | 66.3 | 71.01 |
| Bulgan | 73.40 | 68.58 | 76.71 |
| Uvurkhangai | 71.33 | 70.34 | 81.81 |
| Khuvsgul | 69.85 | 67.31 | 72.65 |
| Orkhon | 66.18 | 63.15 | 70.96 |
| **Central region** | **71.80** | **68.44** | **76.48** |
| Govisumber | 73.01 | 72.01 | 75.53 |
| Darkhan-Uul | 68.67 | 64.37 | 74.35 |
| Dornogovi | 70.60 | 66.09 | 76.56 |
| Dundgovi | 73.58 | 70.61 | 78.13 |
| Umnugovi | 71.85 | 67.78 | 76.48 |
| Selenge | 72.08 | 67.81 | 78.33 |
| Tuv | 72.85 | 70.43 | 75.98 |
| **Eastern region** | **70.86** | **66.95** | **75.20** |
| Dornod | 68.76 | 64.85 | 73.08 |
| Sukhbaatar | 72.07 | 67.17 | 76.97 |
| Khentii | 71.75 | 68.83 | 75.54 |
| **Ulaanbaatar** | **71.51** | **66.71** | **74.9** |

Population age and sex composition is always affected by fertility, mortality and migration of the country. In other words, the decline in births, mortality rates and the increase in life expectancy of the population has resulted to decrease in the proportion of younger age population and increase in the proportion of older people.

There are 2 concepts used to asses age composition of population in the field of demographic study, If population percentage aged 0-14 is greater than 35 percent out of total population, it is considered that age composition is “young” and if the percentage is smaller than 25 percent, its age composition is “old”. The percentage of the 0-14 year-olds out of total population was 30.5, in our country.

On the other side, if population percentage aged 65 and above in total is more than 10 percent, it can be said that the age composition is “old”. On the contrary, if the percentage is below 5 percent, age composition is considered “young”. The percentage of population aged 65 and above represents 3.9 percent in 2017 in the total population.

***Figure 1.3.1*** *Population pyramid, 2007 and 2017*




The figure 1.4.1 shows age structure diagram, which depicts age and sex distribution of the population in 2007 and 2017.

According to the population pyramid, the proportion of 15-19 year olds was high in 2007 and the proportion of 15-19 years olds was low in 2017, explained by a decline in the fertility rate between 2001 and 2005. However, since 2011 the fertility rate has been increasing gradually as indicated widening in the base of the pyramid.

# CHAPTER 2.

## INDICATORS FOR SUSTAINABLE DEVELOPMENT GOALS

# CHAPTER 2.

# INDICATORS FOR SUSTAINABLE DEVELOPMENT OBJECTIVES

The Sustainable Development Goals (SDGs) are set of development goals for the global development to be achieved for the next decade and a half as a continuation of Millennium Development Goals. The agenda for SDGs was approved by the United Nations General Assembly during its 70th High-Level Meeting in September 2015, consists of 17 goals and 169 targets to achieve by the year 2030.

Mongolia has articulated its development vision in “Concepts of Mongolian Sustainable Development-2030”, which was approved by the 19th Resolution of State Great Khural (Parliament) of Mongolia on 5 February 2016.

The long-term Concept of Sustainable Development of Mongolia to be implemented by three phases: 2016-2020, 2020-2025 and 2025-2030.

By 2030, Mongolia would achieve the following targets through implementation of the Sustainable Development Vision such as end poverty in all its forms, improve the living environment of the Mongolian people to lead a healthy and long life; increase life expectancy at birth to 78 years and be placed among first 70 countries on the ranking of countries by the human development index.

Out of 17 SDGs, goal 3 focused on health, aimed at ensuring healthy lives and promoting well-being for all at all ages.

## 17 SUSTAINABLE DEVELOPMENT GOALS

| | | |
|---|---|---|
| **SDG-1 (7, 11)** | **SDG-7 (5, 10)** | **SDG-13 (5, 8)** |
| No Poverty | Clean energy | Protect the planet |
| **SDG-2 (8, 12)** | **SDG-8 (12, 22)** | **SDG-14 (10, 20)** |
| No hunger | Good jobs and economic growth | Life below water |
| **SDG-3 (13, 26)** | **SDG-9 (8, 22)** | **SDG-15 (12, 24)** |
| Good health | Innovation and infrastructure | Life on land |
| **SDG-4 (10, 15)** | **SDG-10 (10, 17)** | **SDG-16 (12, 21)** |
| Quality education | Reduced inequalities | Peace and justice |
| **SDG-5 (9, 23)** | **SDG-11 (10, 20)** | **SDG-17 (19, 38)** |
| Gender equality | Sustainable cities and communities | Partnerships for the goals |
| **SDG-6 (8, 12)** | **SDG-12 (11, 21)** | ***Yellow:** social, **Blue:** economic, **Green: environmental**, **Purple:** institutional development* |
| Clean water and sanitation | Responsible consumption | |

***Objective 1.*** Create a national disease prevention system, increase access to diagnostic services and increase life expectancy of the population.

Actions towards achieving this objective include reforming the health insurance system; ensuring early diagnosis and urgent responses to preventable and predominant diseases; improving the capacity of investigation; strengthening early diagnostic system and reference laboratories; and increasing life expectancy of the population to 71 years by 2020, to 74 years by 2025 and to 78 years by 2030.

The life expectancy at birth in 2017 was 69.89, which increased by 0.32 points compared to the previous year. Overall, female life expectancy is 75.44 years and male life expectancy is 65.88 years. On average, women live longer than men in every country of the world, and the difference is 4 years.

For Mongolia, female life expectancy is higher than male by 9.56 years.

The life expectancy at birth is directly influenced by infant mortality rate. In 2016, the infant mortality rate was 16.8, which increased by 1.8 points as compared to 2015. This has influenced on declining average of life expectancy at birth.

However, the infant mortality rate decreased by 3.2 points in 2017 compared to the previous year, which have led to increases in life expectancy at birth.

***Objective 2.*** Reduce factors affecting preventable maternal and child mortality by improving the quality and accessibility of reproductive health care services, and decrease maternal and child mortality and malnutrition. Under this objective the following targets were set:

By 2020, reduce maternal mortality ratio to 25 per 100,000 live births, under-5-child mortality to 15 per 1,000 live births and infant mortality to 13 per 1,000 live births.

**By 2025,** reduce maternal mortality ratio to 20 per 100,000 live births, under-5-child mortality ratio to 12 per 1,000 live births and infant mortality ratio to 11 per 1,000 live births.

**By 2030,** reduce the factors of preventable maternal and child mortality, and reduce maternal mortality in 100,000 live births to 15, under-5-child mortality in 1,000 live births to 9 and infant mortality in 1,000 live births to 8.

***Table 2.1.*** *Maternal mortality rate (per 100 000 live births), by selected years*

| Indicator | 1990 | 2000 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| National average | 199.0 | 158.5 | 69.7 | 89.6 | 49.0 | 81.4 | 45.5 | 48.2 | 50.8 | 42.6 | 30.6 | 26.0 | 48.6 | 26.9 | 25.0[a] |
| Ulaanbaatar | 126.0 | 171.1 | 71.8 | 73.7 | 55.2 | 78.9 | 46.2 | 44.2 | 43.0 | 52.3 | 35.9 | 28.8 | 41.8 | 31.2 | - |
| Province average | 230.0 | 153.4 | 68.2 | 102.0 | 44.3 | 83.5 | 44.9 | 51.8 | 58.6 | 32.8 | 25.0 | 23.0 | 56.0 | 22.3 | - |

***Source:*** *a. Resolution No 19, State Great Khural, Mongolia "Approving Mongolia Sustainable Development Vision-2030", 2016*

The maternal mortality rate in the country has reduced almost 4.6 times since 1990 and Mongolia has become a country with moderate level of maternal mortality from the country with high maternal mortality.

For the last decade, the maternal mortality rate has decreased in Mongolia significantly from 49.0 in 2008 down to 26.0 per 100 000 live births in 2015, reached at the lowest rate. The maternal mortality rate per 100 000 live births was estimated at 26.9 in 2017, decreased by 21.7 compared to the previous year.

In 2017, 20 cases of maternal mortality were recorded and it was 26.9 per 100,000 live births. Since 2016, maternal mortality decreased by 18 cases (47.4%) which comes to 21.7 per 100,000 live births. No maternal deaths were recorded in Arkhangai, Bayankhongor, Bulgan, Govi-Altai, Govisumber, Darkhan-uul, Dornogovi, Dornod, Dundgovi, Orkhon, Uvurkhangai, Selenge, Tuv and Khuvsgul aimags. 90.0% of maternal deaths occurred in hospitals and 10.0% at home.

***Table 2.2.*** *Infant and under-five mortality (per 1 000 live births), by selected years*

| Indicator | 1990 | 2000 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Infant mortality /per 1 000 live births/ | | | | | | | | | | | | | |
| **Gender** | | | | | | | | | | | | | |
| Male | - | - | 22.4 | 22.6 | 21.3 | 17.5 | 17.1 | 16.0 | 17.2 | 17.4 | 18.6 | 14.8 | |
| Female | - | - | 16.6 | 17.6 | 17.3 | 15.1 | 13.4 | 13.1 | 13.3 | 13.0 | 14.9 | 12.2 | |
| **Location** | | | | | | | | | | | | | |
| **National average** | **63.4** | **31.23** | **19.6** | **20.2** | **19.4** | **16.3** | **15.3** | **14.6** | **15.3** | **15.3** | **16.8** | **13.6** | **13.0[a]** |
| Ulaanbaatar | 70.3 | 32.8 | 17.5 | 18.0 | 16.1 | 13.3 | 13.1 | 13.6 | 15.0 | 14.7 | 15.0 | 12.7 | - |
| **Province average** | **62.5** | **30.8** | **21.2** | **21.9** | **22.1** | **19.2** | **17.5** | **15.7** | **15.7** | **15.9** | 18.8 | 14.5 | - |
| Under-five mortality /per 1 000 live births/ | | | | | | | | | | | | | |
| **Gender** | | | | | | | | | | | | | |
| Male | - | - | 26.4 | 25.9 | 26.4 | 21.9 | 20.8 | 22.6 | 20.3 | 20.7 | 23.0 | 18.0 | |
| Female | - | - | 20.2 | 21.2 | 22.7 | 18.0 | 16.5 | 16.9 | 16.4 | 15.7 | 18.5 | 15.4 | |
| **Location** | | | | | | | | | | | | | |
| **National average** | **87.5** | **42.4** | **23.4** | **23.6** | **24.6** | **20** | **18.7** | **18.0** | **18.4** | **18.3** | **20.8** | **16.7** | **15.0[a]** |
| Ulaanbaatar | 99.9 | 42.4 | 20.8 | 21.0 | 20.6 | 16.2 | 16.0 | 16.3 | 17.8 | 17.3 | 18.2 | 15.4 | - |
| **Province average** | **94.4** | **42.5** | **25.3** | **25.7** | **28.0** | **23.5** | **21.3** | **19.7** | **19.0** | **19.2** | **23.7** | **18.1** | **-** |

***Source:*** *a. Resolution No 19, State Great Khural, Mongolia "Approving Mongolia Sustainable Development Vision-2030", 2016*

Infant and under-five mortality rates have decreased significantly since 1990, for the past 20 years. It can be seen that the under-five mortality rate per 1000 live births fell 5.2 times and the infant mortality rate per 1000 live births decreased 4.7 times in 2017 as compared to 1990.

The national infant mortality rate has steadily decreased for the last years and reached to its target of the Millennium Development Goals (MDGs). In 2013, the infant mortality rate was estimated at 14.6 per 1000 live births and the rate was 13.6 in 2017, which reached to the lowest level.

At the national level, 1009 infant deaths were recorded in 2017 and the mortality rate was 13.6 per 1000 live births. It has decreased by 3.2 compared to the previous year.

**Under-five child mortality rate**

It is declared that reduce under-five child mortality to 15.0 per 1,000 live births by 2020 in the "Concepts of Mongolian Sustainable Development-2030", which was approved by the 19th Resolution of State Great Khural (Parliament) of Mongolia on 5 February 2016.

As of 2017, the under-five child mortality rate was 16.7 per 1,000 live births, decreased by 6.7 deaths compared to 2008.

A total of 1244 deaths were registered among children aged under-five years in 2017, which decreased by 384 deaths or by 4.1 per 1,000 live births compared to the previous year.

86.4% of deaths of children under-five were due to illnesses and 13.6% were due to injuries. Out of all deaths, 72.6% and 27.4% have occurred in hospitals and outside hospital, respectively.

***Objective 3.*** Reduce the burden of common non-communicable diseases and reduce health risk factors and preventable deaths through an active and inclusive partnership of individuals, families, communities and organizations.

**By 2020,** reduce pernicious habits in the population, improve the living environment, strictly enforce standards for food products and decrease deaths per 10 000 populations caused by cardiovascular diseases and cancer respectively, to 17.4 and 10.5.

**By 2025,** improve the quality of and access to health care services and decrease deaths per 10,000 populations caused by cardiovascular diseases and cancer respectively, to 16 and 9.

**By 2030,** decrease deaths per 10 000 populations caused by cardiovascular diseases and cancer respectively, to 14 and 8.

Diseases of the cardiovascular system and cancer have been the leading causes of deaths for the population since 1995.

The leading causes of mortality in 2017 were diseases of the cardiovascular system -34.2% and cancer-25.5%. Deaths from these diseases combined accounted for 59.7% of all deaths.

Annually, an average of 5000-5500 people (one in third of all deaths) died from diseases of the cardiovascular system and over 4000 people (one in fourth all deaths) died from cancer.

It is declared that decrease deaths per 10,000 populations caused by cardiovascular diseases and cancer respectively, to 17.4 and 10.5 by 2020 in the "Concepts of Mongolian Sustainable Development-2030", which was approved by the 19th Resolution of State Great Khural (Parliament) of Mongolia on 5 February 2016.

The gender-specific mortality rates for cardiovascular diseases were 21.06 per 10,000 for males and 13.97 per 10,000 for females in 2017. The mortality rate caused by cardiovascular diseases was higher than the national average in Khangai, Western and Central regions, but the rate was lower in Eastern provinces.

In 2017, ischemic heart disease was 25.7, stroke was 19.2 and arterial hypertension was 1.3 per 10 000 population in males aged 45-64 years. Compared to the mortality rate of women of the same age group, ischemic heart disease is 5.7 times, stroke is 1.9 times and arterial hypertension is 1.8 times higher among men than in women.

The stroke was the leading cause of mortality among Mongolian men and the mortality rate was 6.08

per 10 000 population in 2017, which decreased by 0.4 promile compared to the previous year.

Until 2003, the mortality rates for ischemic heart disease and stroke were in close proximity but starting from 2012, an increased trend has been observed for the mortality rate for stroke.

***Table 2.3.*** *Mortality due to cardiovascular disease and cancer, per 10 000 population, 2007-2017*

| Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Diseases of the circulatory system*** | | | | | | | | | | | | |
| Total | 21.92 | 20.54 | 21.74 | 23.61 | 22.58 | 20.91 | 19.60 | 19.11 | 18.86 | 17.45 | 17.45 | 17.4[a] |
| Male | 25.21 | 22.02 | 24.19 | 27.33 | 26.65 | 25.02 | 22.70 | 22.10 | 21.66 | 20.54 | 21.06 | - |
| Female | 18.80 | 18.76 | 19.41 | 20.29 | 18.73 | 17.04 | 16.70 | 16.20 | 15.40 | 14.46 | 13.97 | - |
| ***Neoplasms*** | | | | | | | | | | | | |
| Total | 12.21 | 11.80 | 11.89 | 13.02 | 12.69 | 12.60 | 13.00 | 13.52 | 13.59 | 13.41 | 13.03 | 10.5[a] |
| Male | 13.25 | 13.45 | 13.95 | 15.11 | 15.85 | 14.74 | 14.9 | 15.5 | 14.81 | 15.07 | 15.06 | - |
| Female | 9.50 | 10.10 | 9.92 | 11.15 | 10.36 | 10.67 | 11.2 | 11.7 | 11.6 | 11.61 | 11.08 | - |

***Source:*** *a. Resolution No 19, State Great Khural, Mongolia*
"Approving Mongolia Sustainable Development Vision-2030", 2016

Since 1990, cancer has been the second leading cause of population mortality in Mongolia. In 2017, deaths caused by cancer accounted for 25.5% of all deaths, and the mortality rate for cancer was 15.06 per 10,000 in males and 11.08 per 10,000 in females.

The five leading causes of cancer by primary sites in males were liver, stomach, lung, bronchial tubes, esophagus and colon/rectum; whereas in females they were liver, stomach, cervix, esophagus, lung and bronchial tubes.

In 2017, 78.3% of the population diagnosed their cancer during the late stages (III and IV) of the disease, and 82.4% of cancer patients survived for less than a year after the diagnosis.

The percentage of cancer diagnosed during the late stages was at the same level and the percentage of cancer patients survived for less than a year after the diagnosis was increased by 15.3 percent compared to 2008.

***Objective 4.*** Decrease the spread of communicable diseases through prevention, early detection and preparedness to treat communicable diseases, by improving the rapid response capacity of health services, and by ensuring access to priority vaccines for everyone.

Under this objective the following targets were set:

**By 2020,** increase the rate of scheduled vaccination to 98.5 percent, and reduce the prevalence of hepatitis and tuberculosis in 10,000 populations respectively, to 3 and 14.4.

**By 2025,** increase the rate of scheduled vaccination to 99 percent, and reduce the prevalence of hepatitis and tuberculosis in 10,000 populations respectively, to 2.5 and 14.

**By 2030,** increase the rate of scheduled vaccination to 99.8 percent, and reduce the prevalence of hepatitis and tuberculosis in 10,000 populations respectively, to 2 and 13.

The incidence rate of tuberculosis (TB) in 1996 was 14.6 per 10 000 population, while in 2006 it reached

to 18.6, increased by 1.3 times. However, it has continuously decreased since 2007 reached to 16.8 per 10 000 population. The incidence of TB in 2011 was 14.3, in 2015 was 14.1 and in 2017 was 12.4 per 10 000 population, respectively,

Over 4000 new cases of TB were registered annually for the last five years. There was an increase of new cases of TB in every year between 2012 and 2015. However, the number of new cases of TB decreased by 266 cases in 2017 compared to the previous year.

***Table 2.4.*** *Tuberculosis, viral hepatitis incidence, per 10 000 population, by selected years*

| Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Tuberculosis*** | | | | | | | | | | | | |
| Total | 16.8 | 16.0 | 15.6 | 15.3 | 14.3 | 13.9 | 14.2 | 14.1 | 14.1 | 13.1 | 12.4 | 14.4[a] |
| Male | 18.2 | 17.4 | 16.4 | 16.7 | 16.5 | 15.9 | 16.2 | 16.1 | 15.7 | 14.2 | 13.7 | |
| Female | 15.4 | 14.6 | 14.8 | 13.9 | 12.2 | 12.0 | 12.3 | 12.1 | 12.5 | 12.0 | 10.8 | |
| ***Viral hepatitis*** | | | | | | | | | | | | |
| Total | 38.5 | 39.3 | 25.3 | 33.0 | 52.7 | 24.1 | 8.8 | 3.9 | 2.9 | 1.8 | 1.7 | 3.0[a] |
| Male | 41.7 | 42.6 | 28.3 | 36.4 | 59.1 | 27.1 | 10.4 | 4.7 | 3.3 | 2.0 | 2.0 | |
| Female | 35.5 | 36.2 | 22.5 | 29.7 | 46.5 | 21.4 | 7.2 | 3.1 | 2.6 | 1.7 | 1.5 | |

***Source:*** *a. Resolution No 19, State Great Khural, Mongolia "Approving Mongolia Sustainable Development Vision-2030", 2016*

A total of 534 new cases of viral hepatitis were registered in the nationwide in 2017, which accounted for 1.2% of all communicable diseases. The incidence decreased by 32 cases compared to the previous year. Out of all viral infections, 9.6% was viral hepatitis A, 56.9% was viral hepatitis B, and 17.0% was other viral hepatitis.

# CHAPTER 3.

# MATERNAL AND CHILD HEALTH

# CHAPTER 3.

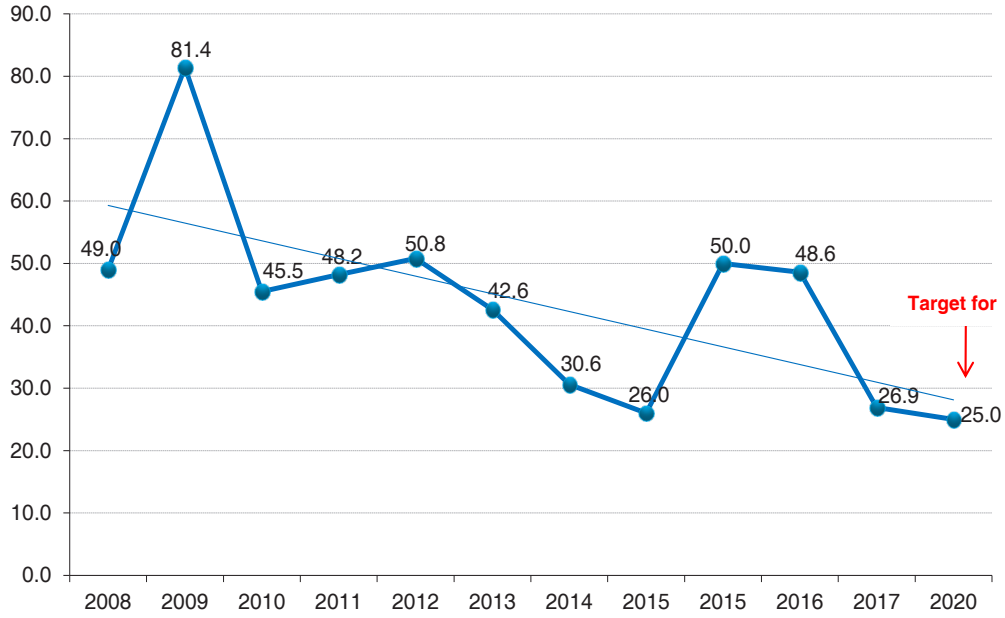
# MATERNAL AND CHILD HEALTH

## 3.1. MATERNAL HEALTH

The Government of Mongolia has approved a “National program on maternal, child and reproductive health” by the Government Resolution No.78, on March 07, 2017.

Implementation of the program during 2017-2021, to reduce maternal and child mortality by ensuring to create a favorable social and economic environment, strengthening financial stability of the program, and enhancing an active and inclusive partnership of citizens and civil society organizations for improving the quality and accessibility of healthcare services for all.

***Figure 3.1.1*** *Maternal mortality ratio per 100 000 live births (2008-2017)*




Maternal mortality ratio per 100 000 live births was estimated at 48.6 in 2016, which the ratio has reduced compared to the previous 10 years. However, there was an increase compared to the last year.

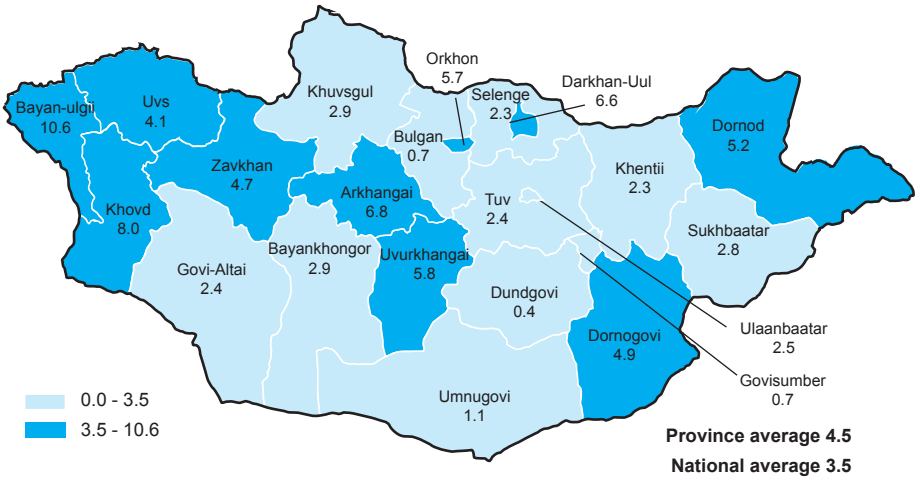
## 3.2. PREGNANCY CONTROL AND ANTENATAL CARE SERVICES

In 2017, a total of 77815 pregnant women were newly registered by antenatal care service and 86.8% of them at the first trimester or first 3 months, 12.0% at the 4-6 months, and 1.2% at the 7 months or late entry into antenatal care, respectively.

Early antenatal care services in terms of urban vs. rural areas showed that 87.0% were in urban areas, 86.5% were in rural areas, respectively. Both indicators have increased by 2.0% and 2.1%, respectively, when compared to the previous year.

Overall anemia prevalence among pregnant women who attended in the pregnancy control was 3.5%, and it was decreased by 0.2% compared to the previous year The percentage of pregnant women with anemia was 1.7-7.1 times higher than the national average in Arkangai, Bayan-Ulgii, Darkhan-Uul, Dornod, Orkhon, Uvurkhangai and Khovd aimags.

***Figure 3.2.1*** *Percentage of pregnant women with anemia by province, 2017*




Total participation rate was 97.4% who was provided a blood sample for antenatal syphilis test. Overall syphilis positivity was 2.4% of pregnant women and the following areas were 1.2-2.4 times higher than the country average: Govisumber /4.8/, Selenge /3.6/ and Khuvsgul /4.3/, respectively.

Gonorrhea screening covered 91.5% of pregnant women, which have increased by 0.2 percent from the previous year. Overall gonorrhea positivity was 0.4% of pregnant women and the following areas were 0.9-1.3 times higher than the country average: Dornod /1.7/, Sukhbaatar /1.5/ and Khuvsgul /1.3/, respectively.

Total participation rate for trichomoniasis testing was 92.1% and1.9% of pregnant women were a positive for this test. The following areas were 1.1-6.5 times higher than the country average: Bayankhongor /8.4/, Dornod /3.2/, Orkhon /3.8/, Sukhbaatar /4.7/, Selenge /3.5/ and Tuv /3.0/, respectively.

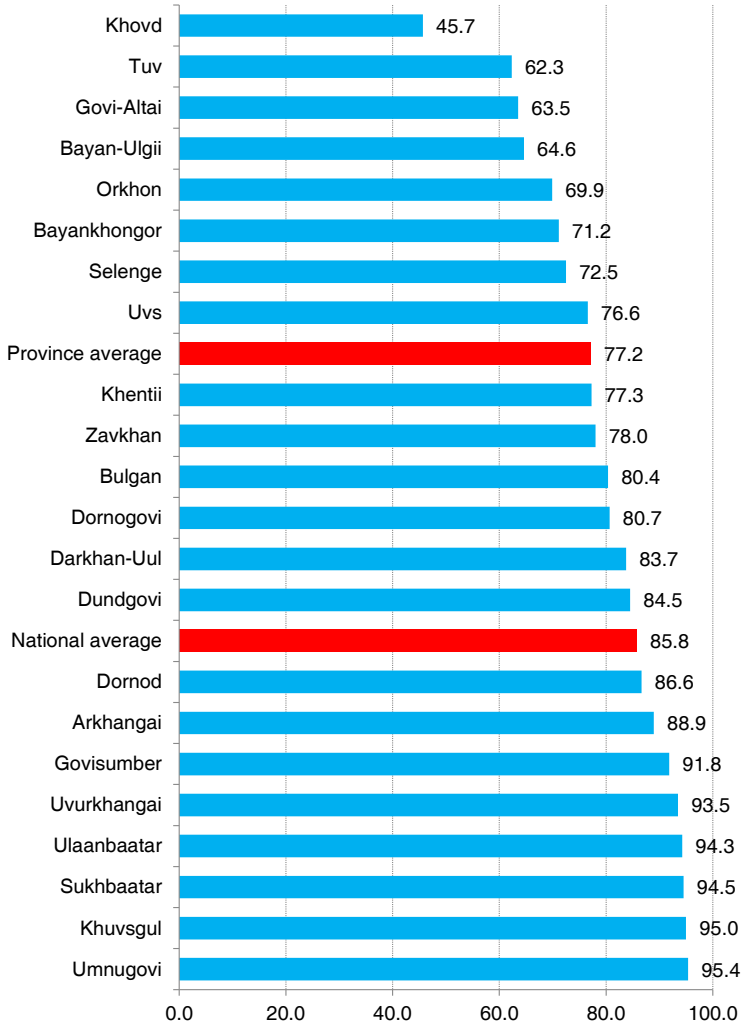
During the antenatal period, 49.3% of pregnant women have taken X-ray examinations and 189 cases (0.5%) of active tuberculosis were identified.

Total of 349 maternal resting wards were functioning throughout the country in 2017, of which 273 were in soum health centers, 38 in inter-soum hospitals, 17 in aimag's general hospitals, 10 in village health centers, 5 in rural general hospitals, 5 in Regional Diagnostic and Treatment Centers (RDTC) and 1 in hospital of Ulaanbaatar, respectively.

Out of all maternal resting wards, 111 or 33.8% located in designated buildings and 67.6% /236/ located in clinics and total of 66 989 bed days were used and average length of stay at a maternal resting ward was 6.5 days.

A total of 4 new maternal resting wards were built, in 33 places building maintenance or renovation and in 68 places comport improvement have been completed in 2017. Of mothers required for antenatal resting service, 71.6% went to resting wards.

***Figure 3.2.2*** *Percentage of women underwent antenatal check-ups more than 6 times during pregnancy, 2017*



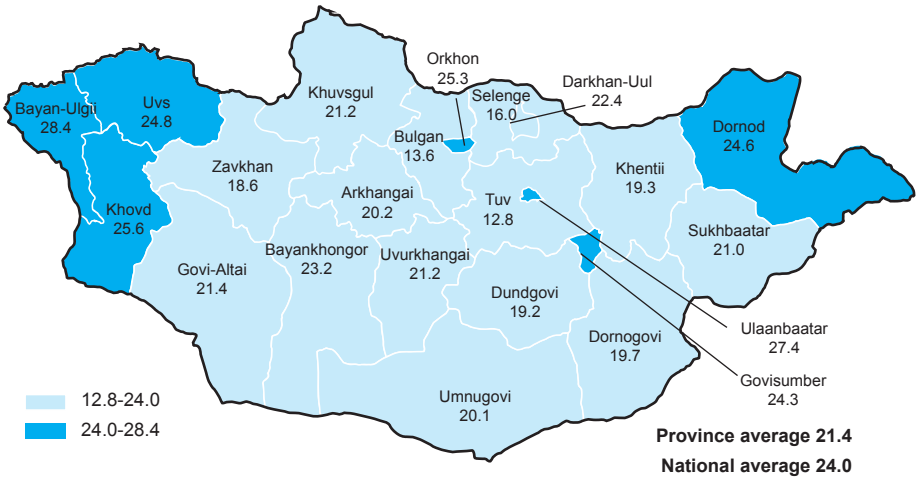

In 2017, 85.8% of all mothers had pregnancy control visit at least 6 times during their pregnancy and it is increased by 2.2% compared to the previous year.

## 3.3. LABOR AND BIRTH MEDICAL CARE SERVICES

In 2017, 73 884 mothers gave birth in the country, which compared to 2016, the number of births has decreased by 3919 cases or 5.0%. Birth numbers increased in Bayan-Ulgii, Dornod and Uvs aimags, but decreased in other aimags and Ulaanbaatar city.

The crude birth rate per 1000 people is 24.0 in the country, and this indicator is higher than the national average in Bayan-Ulgii /28.4/, Orkhon /25.3/ and Khovd /25.6/ aimags.

***Figure 3.3.1*** *Crude birth rate per 1 000 population, by province, 2017*



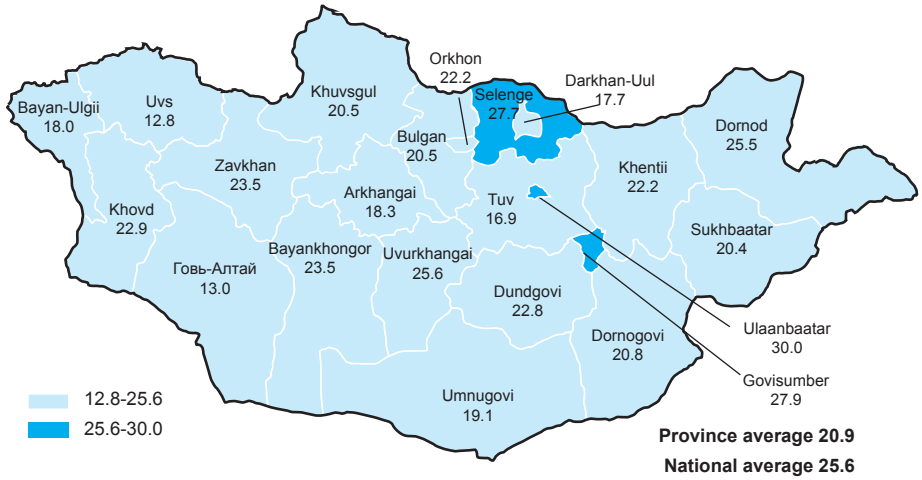

47.3% of total births were in Ulaanbaatar city, 29.5% were in aimag center general hospitals, 12.3% were in RDTCs, 5.7% were in soum, inter-soum and village hospitals, 2.4% were rural general hospital, 2.3% were in private clinics and in National Center for Infectious Diseases, and 0.4% were home births.

Of deliveries, 28.9% were first birth, 46.1% were 3 or more year's intervals birth, respectively.

99.8% of all births were attended by skilled health personnel. Percentage of mothers under 20 years old was 4.9% while of mothers aged over 35 years was 16.0%.

By estimating of the general fertility rate, 87 out of 1000 women of reproductive age gave birth in 2017.

***Figure 3.3.2*** *Percentage of caesarean section among deliveries, by province, 2017*




The World Health Organization (WHO) recommended level of caesarean sections (C-section) is 5-15% from all deliveries. In 2017, the percentage of births by C-section was estimated at 25.6% in Mongolia, which considered relatively high. The number of C-section has decreased by 4.3% (817 cases) when compared to the previous year. The C-section rate was lower than country average by 2.8 points in the Western region. In contrast, it was higher by 0.3-2.2 points in Khangai, Central and Eastern regions.

***Table 3.3.1*** *Percentage of births by caesarean section, by region, 2017*

| | Mothers gave births | Mothers underwent C-section (n) | |
|---|---|---|---|
| | | number | percent |
| Western region | 9606 | 1742 | 18.1 |
| Central region | 9062 | 1914 | 21.2 |
| Khangai region | 12462 | 2740 | 21.9 |
| Eastern region | 4639 | 1071 | 23.1 |
| **Province average** | **35769** | **7467** | **20.9** |
| Ulaanbaatar | 38115 | 11446 | 30 |
| **National average** | **73884** | **18913** | **25.6** |

Total of 295 home births have registered, which decreased by 1 case when compared to the previous year. Of those home births, 53.9% were occurred in Ulaanbaatar and this number has decreased by 2.1% from the previous year.

Total number of 125 birth cases were registered, which not attended by skilled health personnel and the number of cases decreased by 11.2% (14 cases) compared to the same period of the previous year. Furthermore, 15.6% (5965) of all mothers who gave birth in Ulaanbaatar hospitals came from countryside. This number has increased by 616 births from the previous year.

***Figure 3.3.3*** *Number of mothers from countryside who gave birth in Ulaanbaatar, 2017*

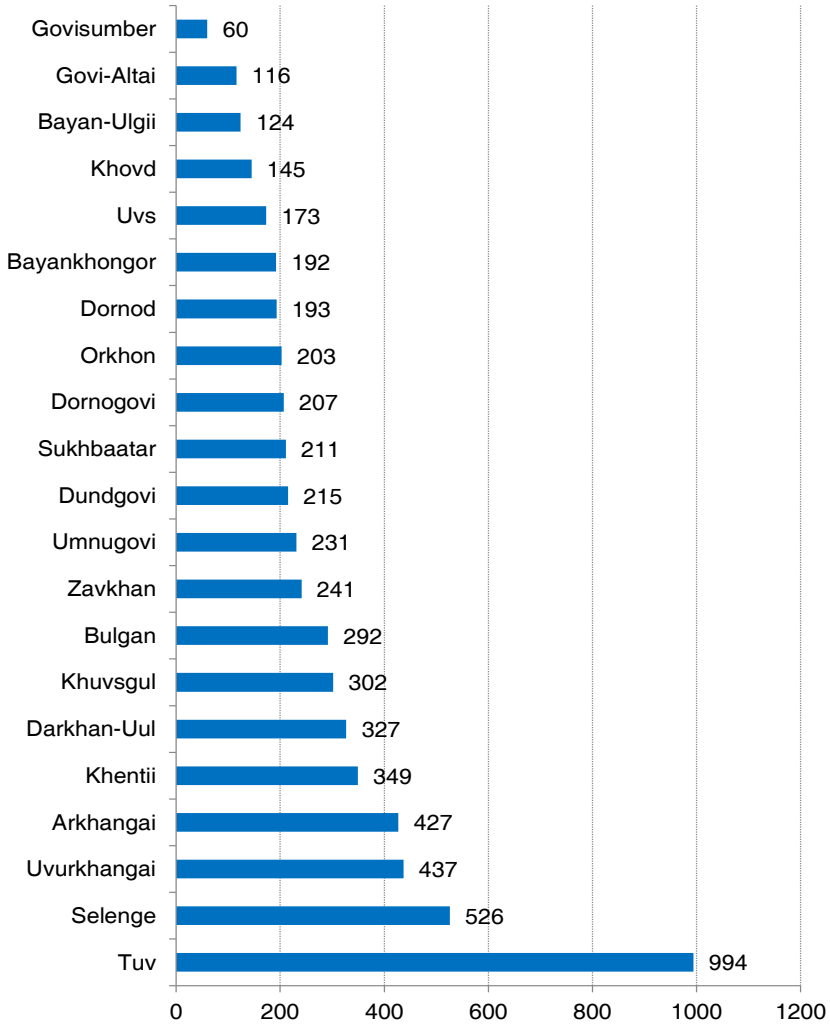


***Table 3.3.2*** *Number of births by type of health facility, 2017*

| Province, city | Total number of births | Home births | RDTC | Province district general hospitals | Rural general hospitals | SHC, inter-soum hospitals | VHC | Units with medical doctor | Maternity hospitals in UB NCMCH | Private clinics | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arkhangai | 1890 | 3 | 0 | 1454 | 0 | 433 | 0 | 0 | 0 | 0 | 0 |
| Bayan-Ulgii | 2844 | 10 | 0 | 2296 | 0 | 536 | 2 | 0 | 0 | 0 | 0 |
| Bayankhongor | 1997 | 9 | 0 | 1766 | 0 | 222 | 0 | 0 | 0 | 0 | 0 |
| Bulgan | 825 | 5 | 0 | 634 | 0 | 182 | 4 | 0 | 0 | 0 | 0 |
| Govi-Altai | 1216 | 2 | 0 | 1107 | 0 | 105 | 2 | 0 | 0 | 0 | 0 |
| Govisumber | 416 | 1 | 0 | 413 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Darkhan-Uul | 2249 | 14 | 0 | 2228 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| Dornogovi | 1318 | 3 | 0 | 1025 | 271 | 19 | 0 | 0 | 0 | 0 | 0 |
| Dornod | 1922 | 14 | 1851 | 0 | 0 | 57 | 0 | 0 | 0 | 0 | 0 |
| Dundgovi | 878 | 4 | 0 | 782 | 0 | 92 | 0 | 0 | 0 | 0 | 0 |
| Zavkhan | 1321 | 4 | 0 | 771 | 323 | 223 | 0 | 0 | 0 | 0 | 0 |
| Orkhon | 2566 | 6 | 2558 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Uvurkhangai | 2417 | 1 | 1765 | 0 | 279 | 367 | 0 | 1 | 0 | 5 | 0 |
| Umnugovi | 1297 | 6 | 1051 | 0 | 0 | 240 | 0 | 0 | 0 | 0 | 0 |
| Sukhbaatar | 1275 | 8 | 0 | 1211 | 0 | 56 | 0 | 0 | 0 | 0 | 0 |
| Selenge | 1712 | 3 | 0 | 909 | 612 | 147 | 41 | 0 | 0 | 0 | 0 |
| Tuv | 1192 | 5 | 0 | 893 | 0 | 294 | 0 | 0 | 0 | 0 | 0 |
| Uvs | 2029 | 10 | 0 | 1746 | 0 | 273 | 0 | 0 | 0 | 0 | 0 |
| Khovd | 2196 | 6 | 1835 | 0 | 166 | 189 | 0 | 0 | 0 | 0 | 0 |
| Khuvsgul | 2767 | 14 | 0 | 2145 | 0 | 608 | 0 | 0 | 0 | 0 | 0 |
| Khentii | 1442 | 4 | 0 | 1150 | 143 | 145 | 0 | 0 | 0 | 0 | 0 |
| **Province average** | **35769** | **132** | **9060** | **20530** | **1794** | **4199** | **49** | **0** | **0** | **5** | **0** |
| Ulaanbaatar | 38115 | 163 | 0 | 1266 | 0 | 0 | 2 | 0 | 34959 | 1719 | 6 |
| **National average** | **73884** | **295** | **9060** | **21796** | **1794** | **4199** | **51** | **0** | **34959** | **1724** | **6** |

***Table 3.3.3*** *Age specific fertility rate, 2017*

| Age group | Number of women of reproductive age | Number of live births given by women of reproductive age | Age specific rate |
|---|---|---|---|
| Under 20 years old | 156922 | 3624 | 23.1 |
| 20-24 | 120045 | 18035 | 150.2 |
| 25-29 | 151927 | 23505 | 154.7 |
| 30-34 | 140303 | 17159 | 122.3 |
| 35-39 | 120931 | 9599 | 79.4 |
| Over 40 yaers old | 207544 | 2406 | 11.6 |

Crude birth rate was 2.8 for the country. The highest age specific fertility rates (ASFR) were found among 20-24 years old with 150 per 1000 women and 25-29 years old with 154 per 1000 women.

## 3.4. POST-DELIVERY HEALTH CARE SERVICES

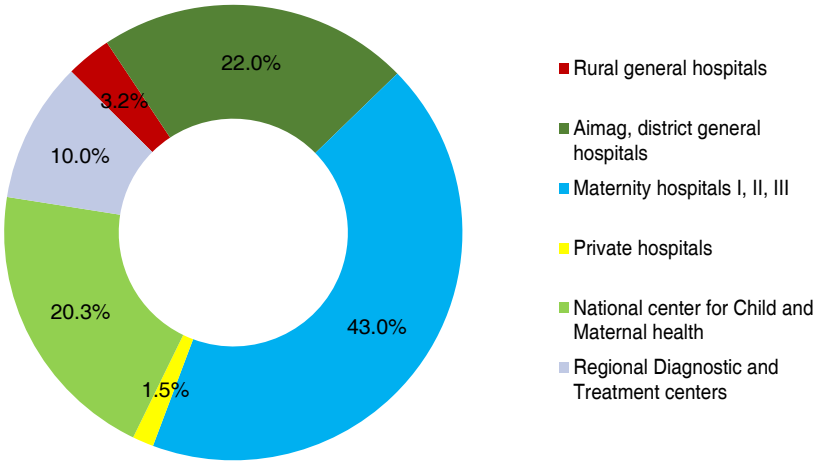
In 2017, 91.1% of mothers who were under prenatal care were received a postnatal care or post-delivery maternal care within 42 days of birth and this number has decreased by 1.0 point when compared to the previous year. This indicator is imperative in reducing a post-delivery complications and maternal mortality.

In connection with pregnancy, childbirth and post-delivery complications, total of 60 462 cases (813 per 1,000 live births) were recorded in 2017.

Among those cases the following complications occurred:

- Complications during pregnancy -37.5 %
- Delivery complications -52.4%
- Postpartum complications -2.4% and
- Other complications not associated with pregnancy and delivery-7.7%, respectively.

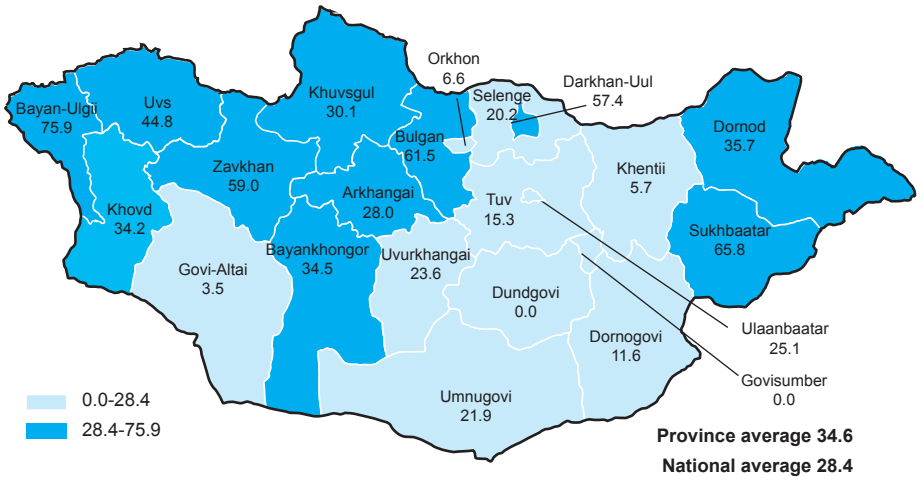
***Figure 3.4.1*** *Percentage of pregnancy, childbirth and post-delivery complications, by type of health facility, 2017*




In 2017, 59 cases of congenital syphilis have registered, which increased by 17 cases from the previous year. Those occurrences registered in the following areas: Ulaanbaatar-41, Arkhangai-3, Bulgan-1, Dornogovi-2, Dornod-1, Orkhon-1, Uvurkhangai-3, Umnugovi-1, Selenge-1, Khuvsgul-3 and Khentii aimags 2 cases, respectively.

The increase in number of pregnant women with sexually transmitted diseases (STIs) and birth of children with congenital syphilis suggests that there is need of early detection and treatment of infections in pregnant women and improving quality of antenatal care services.

***Figure 3.4.2*** *Percentage of eclampsia in pregnancy complications by province, 2017*

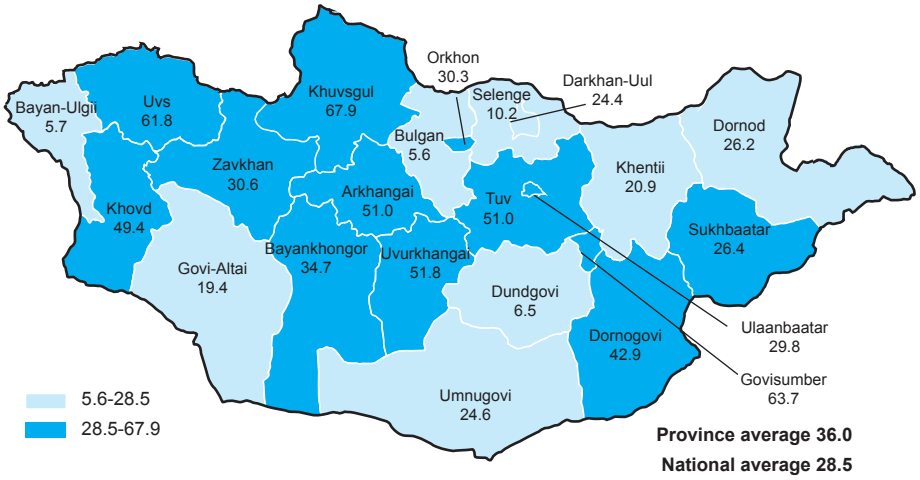



The percentage of eclampsia-pregnancy complications was 1.5-2.6 times higher than the country average in Bayan-Ulgii /75.9/, Zavkhan /59.0/, Sukhbaatar /65.8/, Uvs /44.8/, Darkhan-Uul /57.4 and Bulgan /61.5/, respectively. On the contrary, it was 2.4-8.1 times lower than the country average in

Dornogovi /11.6/, Govi-Altai /3.5/, Orkhon /6.6/ and Khentii /5.7/, respectively.

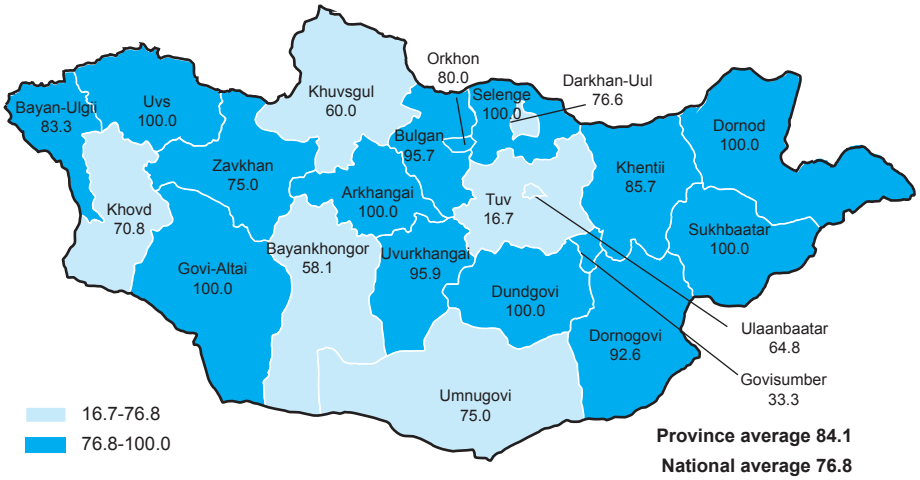
The percentage of pregnancy related complications such as pre-eclampsia and eclampsia was 28.2% and 0.2% respectively. First and secondary failure to progress in labor was in 28.8% which were the most common complications during birth. Postpartum hemorrhage accounted for 76.8% of all post-delivery complications.

***Figure 3.4.3*** *Percentage of failure to progress in labor by province, 2017*




The percentage of failure to progress in labor during the childbirth was 1.5-2.3 times higher than the country average for the following aimags; in Arkhangai /51.0/, Govisumber /63.7/, Dornogovi /42.9/, Uvurkhangai /51.8/, Tuv/51.0/, Uvs /61.8/, Khovd /49.4/ and Khuvsgul /67.9/, respectively.

***Figure 3.4.4*** *Percentage of postpartum hemorrhage, 2017*



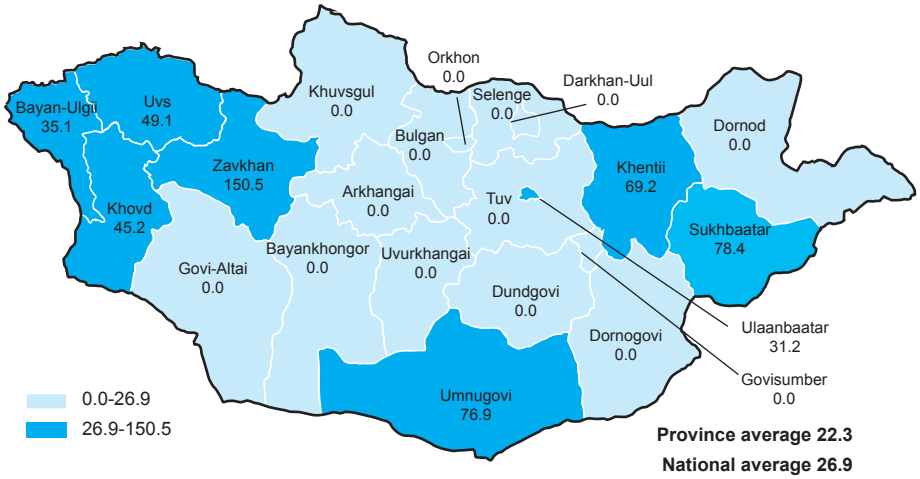

## 3.5 MATERNAL MORTALITY

The maternal mortality rate in the country has reduced 4.6 times since 1990 and Mongolia has become a country with moderate level of maternal mortality from the country with high maternal mortality.

In 2017, 20 cases of maternal mortality were recorded and it was 26.9 per 100,000 live births. Since 2016, maternal mortality has decreased by 18 cases or 21.7 per 100,000 live births. No maternal deaths were recorded in Arkhangai, Bayankhongor, Bulgan, Govi-Altai, Govisumber, Darkhan-Uul,

Dornogovi, Dornod, Dundgovi, Orkhon, Uvurkhangai, Selenge, Tuv and Khuvsgul aimags. 90.0% of maternal deaths occurred in hospitals and 10.0% at home.

***Figure 3.5.1*** *Maternal mortality per 100 000 live births by province, 2017*




Maternal deaths by mother's education are shown as follows: 35.0% higher, 65.0% secondary, respectively. Maternal deaths by mother's occupation are shown as follows: 40.0% employed, 20.0% herder and 35.0% unemployed, respectively.

By looking at the type of health facility where maternal deaths occurred, 5.0% of deaths were in district general hospitals, 15.0% in soum and rural hospitals, 15.0% in aimag general hospitals, 20.0% in city maternity hospitals, 10.0% in RDTC, 15.0% in First State Central hospital, Second and Third State Central hospital, 5.0% in NCMCH, and 10.0% in Centre of Forensic Medicine.

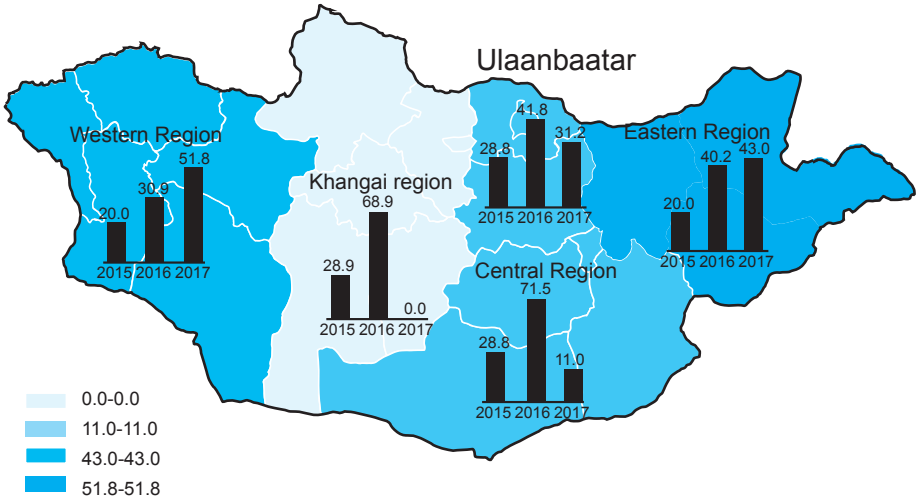
45.0 % of maternal mortality was from pregnancy related complications, 5.0% was from birth complications, 35.0% was from post-delivery complications and 15.0% was from diseases not related to pregnancy and birth. This data shows that birth complications and diseases not related to pregnancy and birth complications are decreased by 19.2%, whilst pregnancy related complications and post-delivery complications are increased by 13.4% and 3.4%, respectively, compared to the previous year.

***Table 3.5.1*** *Maternal mortality rate per 100 000 live births by age groups, 2017*

| Age group | Number of mother died | Percent | Number of children born by the same age group women | Maternal mortality rate per 100 000 live births of the same age group |
|---|---|---|---|---|
| Under 20 years old | 1 | 5 | 3624 | 27.6 |
| 20-24 | 3 | 15 | 18035 | 16.6 |
| 25-29 | 6 | 30 | 23505 | 25.5 |
| 30-34 | 4 | 20 | 17159 | 23.3 |
| 35-39 | 5 | 25 | 9599 | 52.1 |
| Over 40 years old | 1 | 5 | 2406 | 41.6 |

Maternal mortality rate per 100,000 live births was estimated at 52.1 among women aged 35-39 years, 41.6 among women aged 40 and above years, respectively, which was higher than the country average by 17.4-25.2 promile.

***Figure 3.5.2*** *Maternal mortality rate per 100 000 live births by region, 2015-2017*




Maternal mortality rate per 100,000 live births was lower than the country average in the Tuv region by 15.9 promile, but higher than the country average in Ulaanbaatar, Eastern and Western regions by 4.3-24.9 promile. In 2017, the maternal mortality rate in Eastern and Western region was 43.0-51.8 per 100,000 live births, increased by 2.8-20.9 promile when compared to the previous year.

## 3.6. CHILD HEALTH

When infant receive an appropriate healthcare and social service up to one month after birth, it gives increasing probabilities to survive and it can be essential base-line for further development and healthy growth. In 2017, 96.3% of newborns were breastfed within the first hour of life. This indicator was 1.6-6.2% lower than the country average in Arkhangai, Bulgan, Darkhan-Uul, Sukhbaatar and Selenge aimags.

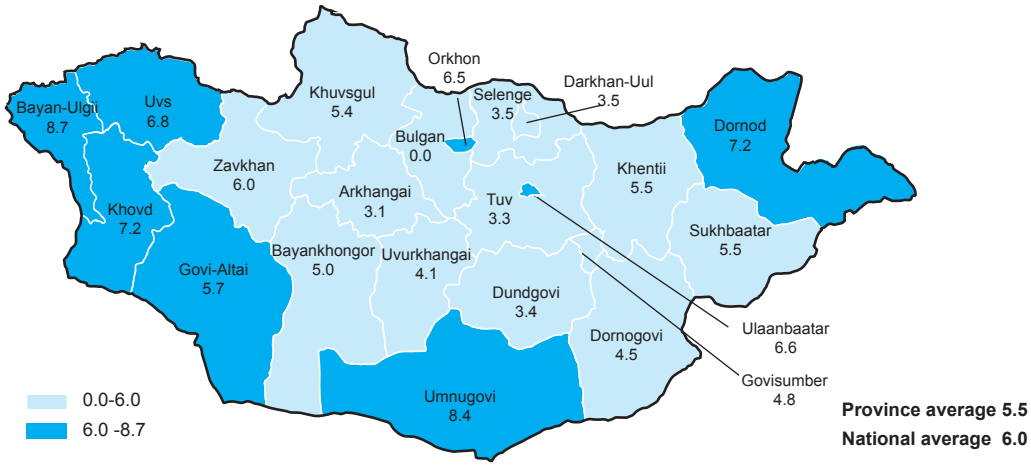
***Table 3.6.1*** *Data on newborns by region, 2017*

| Region | Number of newborns | | | Total births | | |
|---|---|---|---|---|---|---|
| | Total | Male | Female | Sex ratio | Percentage of low birth weight babies | Stillbirths /per 1 000 all births/ |
| Western region | 9 647 | 5 071 | 4 576 | 110.8 | 4.8 | 7.3 |
| Central region | 9 102 | 4 688 | 4 414 | 106.2 | 3.7 | 6.2 |
| Khangai region | 12 520 | 6 404 | 6 116 | 104.7 | 4.0 | 4.6 |
| Eastern region | 4 655 | 2 389 | 2 266 | 105.4 | 3.4 | 6.2 |
| **Province average** | **35 924** | **18 552** | **17 372** | **106.8** | **4.1** | **5.5** |
| Ulaanbaatar | 38 404 | 19 986 | 18 418 | 108.5 | 5.1 | 6.6 |
| **National average** | **74 328** | **38 538** | **35 790** | **107.7** | **4.6** | **6.0** |

In 2017, 74 328 live births were recorded at the national level, which decreased by 3 866 newborns or 5.2% compared to the same period of the previous year. 4.6% of total newborns had birth weight lower than 2500 grams. Out of all live births, there were 1717 twins and 36 triplets.

Stillbirths were 6.0 per 1000 births and of total 451 stillbirths were recorded, which decreased by 0.2% (36 cases) compared to the previous year.

***Figure 3.6.1*** *Stillbirth rate per 1 000 births, by province, 2017*




Stillbirth rate in the Eastern and Stillbirth rate in Bayan-Ulgii, Dornod, Umnugovi and Khovd aimags was 7.2-8.7 per 1000 births, which is higher than the country average by 1.1-2.7 promile. For the Central region, stillbirth rate was estimated at 8.3 per 1000 births in Umnugovi aimag, which was higher than the regional average by 2.2 promile. Stillbirth rate in Khangai and Central regions was lower than the country as well as aimags average. Of stillbirths, 52.5% were boys. The sex ratio at birth was 107.7. A total of 0.6% live births were recorded with congenital abnormalities. The incidence of congenital abnormalities was estimated at 5.8 per 1 000 total births. In 2017, active monitoring rates of infants and children under-five years were 99.7% and 74.8% respectively. Total of 20 663 neonatal morbidity cases were registered in 2017, which is accounted for 27.8% of all live births.

***Figure 3.6.2*** *Percentage of neonatal morbidity rate in live births, by province, 2017*

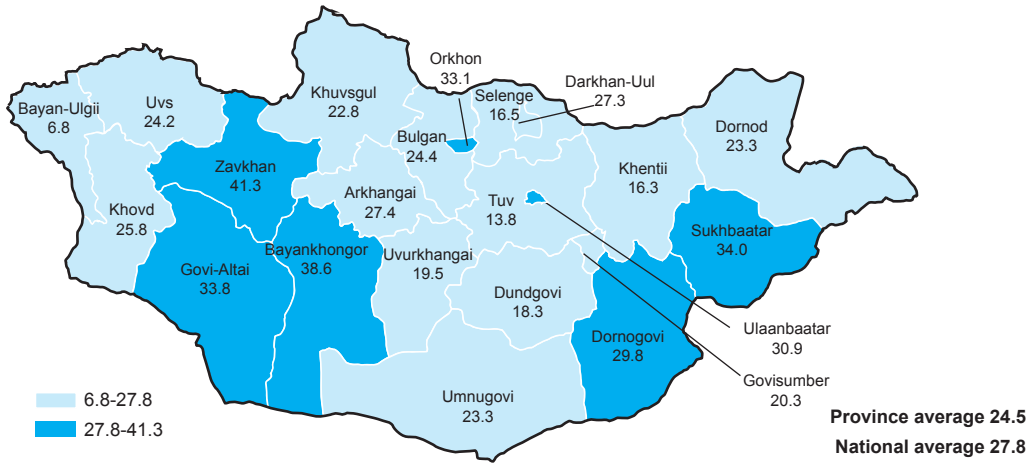



***Table 3.6.2*** *Neonatal morbidity rate, 2017*

| | Total neonatal morbidity | Perinatal pathology | Infectious and parasitic | | Diseases of respiratory system | | Diseases of digestive system | | Congenital abnormalities | Injuries, poisoning, certain other consequences of external causes | Other diseases |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | Congenital syphilis | Total | Pneumonia | Total | Non-infectious diarrhea | | | |
| Province average | 8704 | 6317 | 14 | 12 | 1099 | 334 | 137 | 98 | 207 | 4 | 1013 |
| Ulaanbaatar | 8465 | 10065 | 19 | 19 | 428 | 150 | 100 | 9 | 462 | 11 | 728 |
| National average | 20663 | 16382 | 33 | 31 | 1527 | 484 | 237 | 107 | 669 | 15 | 1741 |

Fetal asphyxia and neonatal jaundice were the disorders in the perinatal period, which occurred 6.8% and 46.4% of neonates respectively.

Total of 2 674 congenital abnormalities were registered among infants and the most common types of congenital anomalies were congenital heart defects /35.7%/, cleft lip and cleft palate /10.6%/, anomalies of digestive system /6.2%/ and deformities of hip /8.8%/.

***Table 3.6.3*** *Causes of infant and under-five morbidity by percentage (urban and rural), 2017*

| | 0-1 years old | | under-5 years old | |
|---|---|---|---|---|
| | Urban | Rural | Urban | Rural |
| Diseases of respiratory system | 37.3 | 66.7 | 42.8 | 66.6 |
| Diseases of digestive system | 10.3 | 10.1 | 12.0 | 13.7 |
| Conditions originating in the perinatal period | 12.5 | 4.1 | 6.9 | 2.2 |
| Injuries, poisoning, certain other consequences of external causes | 2.0 | 0.7 | 8.3 | 1.8 |
| Infectious and parasitic diseases | 3.8 | 0.9 | 8.3 | 2.9 |
| Diseases of skin and subcutaneous tissue | 8.2 | 4.3 | 10.5 | 5.3 |

1st leading cause
2st leading cause
3st leading cause

Diseases of the respiratory system were the leading disorders among infants and children under-five year old in both urban and rural areas. Frequently occurring respiratory diseases were pneumonia-25.4%, acute bronchitis-21.0% and influenza, influenza-like illnesses-10.9%, respectively. Non-infectious diarrheal disease was accounted for 48.5% among diseases of the digestive system.

***Table 3.6.4*** *The leading causes of morbidity among children and adolescents, by age group per 10 000 population, 2017*

| | 1-4 years old | 5-9 years old | 10-14 years old | 15-19 years old |
|---|---|---|---|---|
| Diseases of respiratory system | 5624.4 | 1721.4 | 1214.4 | 760.5 |
| Diseases of digestive system | 1307.1 | 1549.5 | 1099.3 | 1063.9 |
| Infectious and parasitic diseases | 545.5 | 187.0 | 100.3 | 186.3 |
| Injuries, poisoning, certain other consequences of external causes | 489.0 | 357.2 | 466.0 | 495.7 |
| Diseases of urogenital system | 196.7 | 213.6 | 255.6 | 510.0 |
| Diseases of skin and subcutaneous tissue | 781.9 | 528.4 | 537.4 | 582.6 |

1st leading cause
2st leading cause
3st leading cause

The majority of diseases among adolescents are diseases of respiratory and digestive system, injury, poisoning and certain consequences of external causes, skin and subcutaneous tissue diseases, infections of the genitourinary system and some infectious and parasitic diseases.

As of 2017, there was a tendency to increase of morbidity of children and adolescents from the previous years. For instance, the incidence of the digestive system increased by 173.3-491.5 cases, for each age groups 1-4, 5-9, 10-14, 15-19, respectively.

The leading causes of morbidity among children of 1-4 years of age were non-infectious diarrhea 494.7, tooth decay 326.7 and other dental diseases 217.3, respectively per 10,000 children with matching age group. Furthermore, the leading causes of morbidity in children aged 5-9 years were tooth decay and other dental diseases that occurred at 545.8 and 636.2 per 10,000 children with matching age group.

## 3.7 INFANT AND UNDER-FIVE MORTALITY RATE

At the national level, 1 009 infant deaths were recorded in 2017, which are 13.6 per 1000 live births. It has decreased by 3.2 per 1000 live births compared to 2016. More than half, 64.1% of deaths in

infant mortality were occurred at the neonatal period and the neonatal mortality rate was 8.7 per 1000 live births.

Total of 647 cases, 475 cases (73.4 %) of neonatal deaths were occurred in the early neonatal period /first 0-6 days of life/, whereas 172 cases (26.6%) of neonatal deaths were occurred in the late neonatal period /first 7-28 days of life/. Sex ratio for infant mortality was 56.7% male and 43.3% female, respectively.

In 2017, 1 244 children aged under-five died and this is 16.7 per 1000 live births. Irrespective of the actual number of 384 deaths for children aged under-five were increased in comparison to 2016, it was increased by 4.1 promile per 1000 live births. Of total deaths, 18.0 were boys and 15.4 were girls per 1000 live births.

The following aimags including Arkhangai /20.5/, Uvurkhangai /20.2/, Umnugovi /20.0/, Sukhbaatar /20.4/, Uvs /22.1/, Khovd /22.2/, Khuvsgul /26.3/ and Khentii /24.9/ have higher children aged under-five mortality rate by 3.3-9.6 promile compared to the country and aimag average.

***Table 3.7.1.*** *Infant and under-five mortality rate by age and sex, 2017*

| | Male | Female | Total |
|---|---|---|---|
| Early neonatal mortality rate | 282 | 193 | 475 |
| Late neonatal mortality rate | 94 | 78 | 172 |
| Neonatal mortality | 376 | 271 | 647 |
| Under-five mortality rate | 693 | 551 | 1 244 |
| Number of live births | 38 538 | 35 790 | 74 328 |

The leading causes of infant mortality were perinatal disorders.

***Table 3.7.2*** *Causes of infant and under-five mortality by percentage (urban and rural), 2017*

| | Infant | | Under-five | |
|---|---|---|---|---|
| | Urban | Rural | Urban | Rural |
| Diseases of respiratory system | 9.2 | 12.1 | 1.4 | 0.6 |
| Diseases of nervous system | 11.6 | 20.6 | 3.6 | 3.8 |
| Conditions originating in the perinatal period | 49.1 | 40.2 | 40.0 | 31.9 |
| Congenital abnormalities and chromosomal disorders | 17.5 | 8.2 | 1.4 | 1.5 |
| Injuries, poisoning, certain other consequences of external causes | 4.3 | 7.1 | 6.6 | 9.6 |

1st leading cause
2st leading cause
3st leading cause

87.0% of deaths of children under-five were due to illnesses and 13.0% were due to accidents and injuries. Of all deaths, 73.2%, 21.9% and 4.9% have occurred in hospitals, at home and other places respectively. This shows that it is need to focus on improving active supervision and monitoring of childcare, and health education for children under-five years old.

## 3.8 ABORTION

In 2017, 17 530 cases of abortion were recorded with ratio of 235.8 per 1000 live births and 20.5 abortions per 1000 women of reproductive age. The abortion rate has increased by 786 cases or 4.3% compared to the previous year which corresponds to 9.6 per 1000 live births.

The abortion rate was higher by 63.8-233.8 promile compared to the country average in some areas namely, Umnugovi /469.6/, Dornogovi /304.9/, Uvs /299.6/ and Ulaanbaatar /329.7/.

Abortions performed in private hospitals have increased by 839 cases or 25.6 percent compared to the last year. Late abortion rate per 1000 live births was 10.5.

The abortion rates by age group were as follows: women aged under 20 years – 5.3%, 20- 34 years olds – 70.0% and over 35 years olds – 24.7%. Compared to the previous year, abortion rate among women aged under 20 years was increased 0.3 percent.

Percentage of women underwent abortion first time has increased by 4.4% (60 cases) compared to last year and 9.0% of women who had abortions never gave birth.

Total of 23 cases with abortion complications were recorded. These complications of the abortion were: bleeding due to weakening of uterine contractility 39.1%, an inflammation of the uterine appendages 39.1% and uterus punctured problem 17.4%, respectively

***Table 3.8.1*** *Abortion by location, 2017*

| № | Type of the health facility | Number of recorded abortions | Percentage from total number of abortions |
|---|---|---|---|
| 1 | NCMCH | 2 027 | 11.6 |
| 2 | Maternity hospitals | 8 340 | 47.6 |
| 3 | District public health centres | 91 | 0.5 |
| 4 | Private clinics | 3 273 | 18.7 |
| 5 | RDTCs | 1 156 | 6.6 |
| 6 | Province general hospitals | 2 571 | 14.7 |
| 7 | Rural general hospitals | 29 | 0.2 |
| 8 | Inter-soum hospitals | 13 | 0.1 |
| 9 | Village health centre | 0 | 0.0 |
| 10 | Soum health centre | 30 | 0.2 |
| 11 | Other | 0 | 0.0 |
| | **Total** | **17 530** | **100.0** |

## 3.9 USE OF MODERN METHODS OF CONTRACEPTION

531 women out of 1000 reproductive age and 53.2% of women aged 15-49 years have used any contraceptive method.

Statistics on use of contraceptive methods were as follows: condoms – 27.5%, intrauterine devices – 27.3%, pills – 20.2%, injectable contraceptives -11.6%, Norplant – 2.4 %, sterilize -1.8 % and others -9.2%, respectively.

The study on use of contraception “Child development 2010”, which surveyed married and living with partners women aged 15-49 years, showed that regardless of their perception about contraceptive methods, just over half (55%) of women used the modern methods of contraception. 16.2% of women who have been using contraceptive methods stopped using them and 1.1% of them got pregnant.

***Table 3.9.1*** *Use of contraceptive methods by location, 2017*

| № | Location | Number of women using contraception | Percent |
|---|---|---|---|
| 1 | Ulaanbaatar city | 219 781 | 48.3 |
| 2 | Province centre | 97 572 | 21.4 |
| 3 | Soum centre | 85 001 | 18.7 |
| 4 | Bag | 52 692 | 11.6 |
| | **Total** | **455 046** | **100.0** |

# CHAPTER 4.

## MEDICAL CARE SERVICE

# CHAPTER 4.

# MEDICAL CARE SERVICE

The health facilities system of Mongolia consists of state-owned, private and mixed-owned health facilities that are in charge of public health, medical care service, pharmaceuticals supply, health education, research and training.

Medical care service is controlled by the integrated regulations of the state and is dedicated to be mutually beneficial with state, citizens and legal entities fair respectful for clients, equitable and accessible.

This chapter describes the comparison between the official statistical information of medical care service and the structural and operational standard of health care facilities. The Mongolian health system has three levels of service delivery and medical care service policy is dedicated to be equitable, accessible and qualified to everyone

Family health centers, soum and village health centres, inter-soum hospitals, clinics, maternity hospitals, public health centres, general hospitals, sanatoriums, ambulances service centres, regional diagnostic and treatment centres (RDTCs), central hospitals and specialized medical centres are currently serving a medical care services.

In 2017, a total of 4 005 health facilities were operating and delivering health care services around the country, including 13 central and specialized hospitals, 5 RDTCs, 16 aimag general hospitals, 12 district general hospitals and public health centres (PHCs), 6 rural general hospitals, 39 inter-soum hospitals, 218 family health centres, 273 soum health centres, 240 private hospitals and 1 226 private clinics.

***Table 4.1*** *Number of health organization, 2017*

| Health care providers | 2000 | 2005 | 2010 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| **I. State Property Health Organization** | | | | | | |
| Central and specialised hospitals | 19 | 17 | 16 | 13 | 13 | 13 |
| Regional diagnostic and treatment centres | - | 3 | 4 | 5 | 5 | 5 |
| Aimag, district general hospitals | 30 | 30 | 35 | 34 | 34 | 28 |
| Inter-soum hospitals | 13 | 31 | 37 | 39 | 39 | 39 |
| Soum health centres | 334 | 287 | 274 | 272 | 273 | 273 |
| Village health centres | - | - | 17 | 19 | 19 | 19 |
| **II. Private health organization** | | | | | | |
| Private hospitals | 466 | 683 | 1113 | 1230 | 1310 | 1466 |
| Family health centres | 99 | 228 | 218 | 218 | 220 | 218 |
| Private pharmacies | 321 | 514 | 666 | 967 | 1041 | 1277 |

## 4.1. FAMILY HEALTH CENTERS HEALTH CARE SERVICES

Family health centres (FHCs) are private organizations providing health services to urban and settled population by contract with the Government. Within the framework of the Second Health Sector Development Project funded by the Asian Development Bank (ADB), family practices were established according to planned phases in both Ulaanbaatar city and aimag centres. The family medicine system has been functioning since 2002 throughout the country.

As of 2017, 218 FHCs were operating in the country, out of them 133 FHCs providing health care services for 1 418.4 thousand people in Ulaanbaatar city and 85 FHCs providing health care services in 21 aimags for 703.8 thousand people.

***Table 4.1.1*** *Some indicators of FHCs health care services, 2015-2017*

| Үзүүлэлт | 2015 | | | 2016 | | | 2017 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ub city | Province | Total | Ub city | Province | Total | Ub city | Province | Total |
| Number of FHCs | 129 | 89 | 218 | 133 | 87 | 220 | 133 | 85 | 218 |
| Number of family doctors | 622 | 329 | 951 | 633 | 335 | 968 | 647 | 338 | 985 |
| Number of nurses | 577 | 320 | 897 | 586 | 306 | 892 | 612 | 297 | 909 |
| Number of outpatients | 4 033 462 | 1 799 545 | 5 833 007 | 4 188 116 | 1 909 237 | 6 097 353 | 4 050 059 | 1 857 754 | 5 907 813 |
| Percentage of preventive medical check-ups | 43.0 | 37.1 | 41.2 | 43.7 | 37.4 | 41.7 | 42.7 | 38.8 | 41.5 |
| Number of visits per person per year | 2.9 | 2.6 | 2.8 | 3.0 | 2.7 | 2.9 | 2.9 | 2.7 | 2.8 |
| Number of outpatient visits per physician | 6484.7 | 5469.7 | 6133.6 | 6616.3 | 5699.2 | 6298.9 | 6259.8 | 5496.3 | 5997.8 |
| Percentage of early antenatal care | 84.0 | 82.3 | 83.6 | 84.9 | 81.3 | 83.1 | 87.0 | 83.9 | 85.5 |

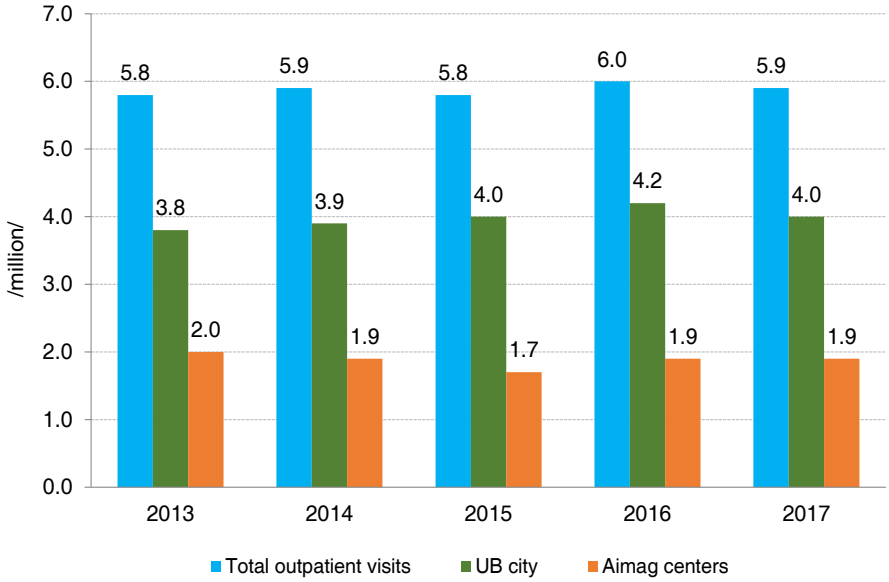
Total of 2 738 health professionals were working in 218 FHCs, including 985 physicians and 909 nurses. However, the Structural and Performance Standards of FHCs are specified that one family doctor per 1800-2000 population. In fact, country average one family doctor served for 2 154 population in 2017. The number of people per one physician was met the standards in Bayankhongor, Govi-Altai, Zavkhan, Uvurkhangai, Umnugovi, Tuv, Khovd and Khentii aimags, but for other aimags the ratio was higher than the given standard.

In 2017, an average of 5.9 million medical examinations was done at the FHCs and in average one person had 2.8 visits to FHC a year for receiving health care services.

Out of total outpatient visits, 41.5% were preventive medical check-ups, reaching 42.7% in Ulaanbaatar

city and 38.8% in aimag FHCs, respectively. A number of preventive medical check-ups were decreased by 0.2% compared to the previous year. The Structural and Performance Standards for FHCs is specified that active visits to households should not be lower than 30%, but it stayed 28.1%, it was increased by 0.7% compared to 2017.

***Figure 4.1.1*** *Number of outpatient visits performed by the FHCs /by million/*




As review, the following number of medical examinations was done at the family health centers of Ulaanbaatar; 3.0 million in 2005, 3.9 million in 2007 and 4.0 million in 2017, respectively. An average number of visits performed by one family doctor per year were 6 259 in Ulaanbaatar city and 5 496 in provincial level centres.

## 4.2 SOUM HEALTH CENTERS AND INTER-SOUM HOSPITALS MEDICAL CARE SERVICES

Soum health centres (SHC) and village health centres (VHC) provide health care services by modern and traditional medicine to their catchment population, and depending on the number of residents and geographical location of a soum bag medical units could operate. Inter-soum hospitals provide health care services to the population of their own soum and neighbouring soums depending on the population size and density.

Structural and Performance Standards (SPS) for Soum and Village health centres were approved in 2013. In this SPS soum or village health centres were classified into three categories according to their population size of catchment and remote status. The first category of SHCs deliver health care services up to 3 000 residents which service area is limited up to 50 km from province center.

The second category of SHCs deliver health care services up to 3 000 residents which service area is limited to 50-99 km from province center or accessible to province center up to 1-2 hours. The third category of SHCs or inter-soum hospitals deliver health care services up to 8 000 residents which service area is more than 100 km from province center.

However, SHC is located less than the 50 km from province center, is considered as second category

when providing a service more than 3 000 of the population or more than 70% of catchment population live far from soum center. When SHC is located less than the 100 km from province center, but providing a service more than 8 000 of the population, it is considered as third category. According to this standard, SHC's category is classified in the following table.

***Table 4.2.1*** *Comparing characteristics between provision of physicians per SHC, inter-soum hospital and minimal level of standard, 2017*

| Grade | Number of hospitals | Average number of physicians per hospital | Hospitals that meet the requirement | | Hospitals failed to meet the requirement | |
|---|---|---|---|---|---|---|
| | | | Number | Percentage | Number | Percentage |
| I grade | 19 | 1.9 | 15 | 78.9 | 4 | 21.1 |
| II grade | 78 | 3.0 | 63 | 80.8 | 15 | 19.2 |
| III grade | 176 | 2.7 | 141 | 80.1 | 35 | 19.9 |
| Inter-soum hospitals | 39 | 6.0 | 7 | 17.9 | 32 | 82.1 |

***Figure 4.2.1*** *Average number of doctors per SHC and inter-soum hospital, 2017*

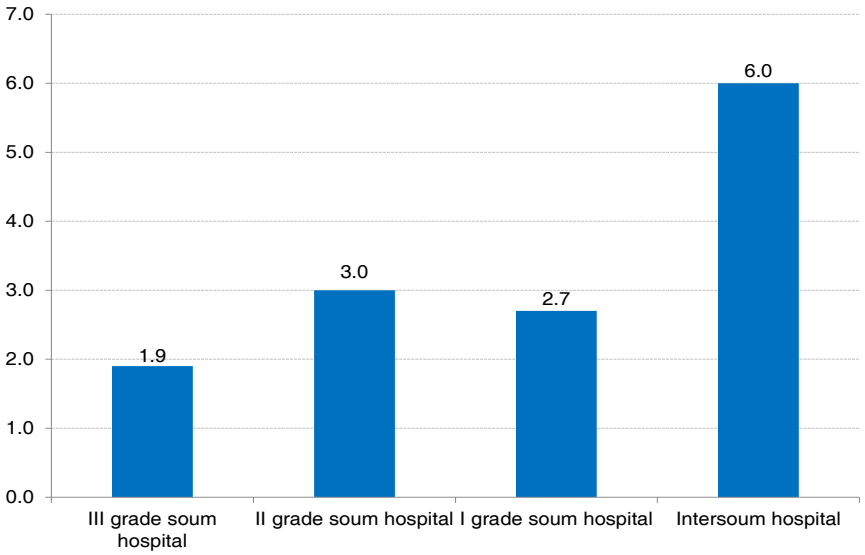


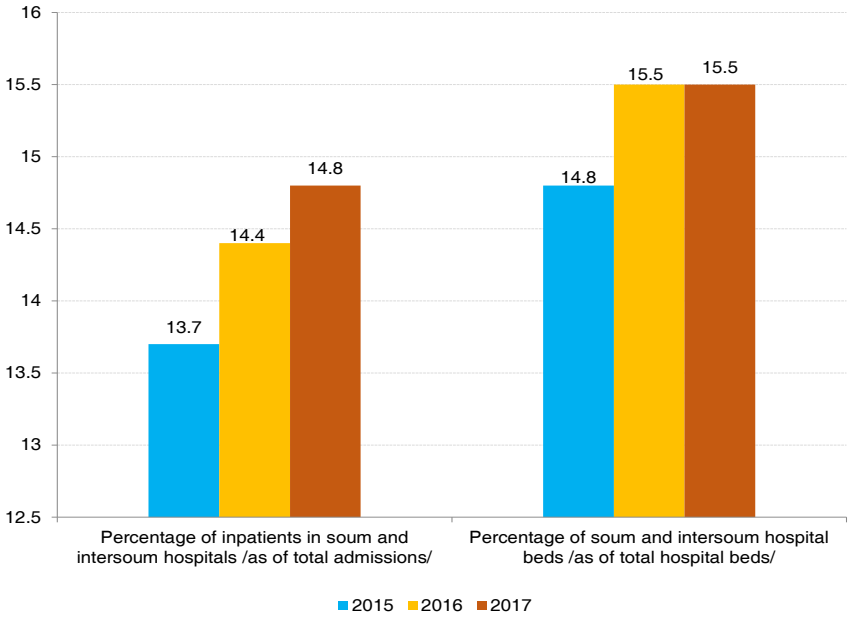

***Table 4.2.2*** *Some indicators for quality and accessibility of health care services in SHCs and inter-soum hospitals , 2014 and 2016*

| Indicator | 2015 | | Total | 2017 | | Total |
|---|---|---|---|---|---|---|
| | Soum hospital | Inter-soum hospital | | Soum hospital | Inter-soum hospital | |
| Number of hospital beds | 2546 | 667 | 3213 | 3081 | 722 | 3803 |
| Numbe of doctors | 661 | 224 | 885 | 755 | 235 | 990 |
| Number of nurses | 1446 | 276 | 1722 | 1438 | 278 | 1716 |
| Average length of stay | 6.9 | 6.7 | 6.9 | 6.9 | 6.6 | 6.8 |
| Number of inpatients | 88386 | 19327 | 107713 | 93948 | 20211 | 114159 |
| Number of outpatients | 1,554,484 | 428,561 | 1,983,045 | 1,731,055 | 370,403 | 2,101,458 |
| Number of check-ups | 38.1 | 36.6 | 37.8 | 38.9 | 37.7 | 38.7 |
| Number of early antenatal coverage | 86.8 | 87.9 | 86.9 | 89.0 | 88.8 | 88.9 |
| Maternal mortality rate /per 1 000 live births/ | 26.2 | 0.0 | 18.6 | 66.8 | 0.0 | 47.2 |
| Infant mortality rate /per 1 000 live births/ | 41.1 | 23.0 | 35.9 | 50.9 | 29.7 | 44.8 |

15.9% of all hospital beds were accounted for SHC and inter-soum hospitals in 2017, and it has increased by 590 beds or 18.4% compared to 2015.

Total number of inpatients in SHC and inter-soum hospitals was 114.2 thousand people in 2017. The number of inpatients in SHC and in inter-soum hospitals has respectively increased by 4.6% and 6.3% compared to 2015.

***Figure 4.2.2*** *Number of patients and average length of stay of SHC and inter-soum hospitals, 2015-2017*




The average length of stay was 6.9 days in 2015, but it has decreased to 6.8 days in 2017. An average number of visits per capita at the SHC and inter-soum hospitals were decreased to 2.1 in 2017 compared to 2.3 days in 2013.

In 2017, percentage of prenatal care was 88.9% at SHC and inter-soum hospitals, an increase by 2.0% compared to 2015. In 2017, there were 2 maternal deaths registered in SHCs and inter-soum hospitals, and the mortality rate was 47.2 deaths per 100,000 live births. As of 2017, infant mortality rate was 50.9 and 29.7 per 1000 live births in SHC and inter-soum hospitals respectively. And the infant mortality rate has increased by 8.9 compared to 2015.

## 4.3. GENERAL HOSPITALS AND PUBLIC HEALTH CENTERS MEDICAL CARE SERVICES

The Law on Health of Mongolia has described that General hospitals which set up as a minimum 7 departments including internal medicine, pediatrics, obstetrics and gynecology, general surgery, dentistry, neurology and infectious diseases, with the goal of providing the medical services in terms of inpatient and outpatient level. Based on location and needs of a population general hospitals could have additional outpatient unit. Public health centers provide public health services in accordance with Government policy and laws, with the goal of supporting health promoting environment at aimag and district level.

In 2017, a total of 5 063 medical professionals including 1 113 doctors, 1 755 nurses and 659 other medical professionals and technical education staffs, were working in 16 aimag general hospitals.

In total, 3 151 medical professionals including 840 doctors, 943 nurses and 323 other medical

professionals and technical education workers were working in district general hospitals and public health centers of the capital city Ulaanbaatar.

In 2017, there were 3 588 beds in aimag general hospitals which accounted for 15.1% of all hospitals beds and number of beds has increased by 210 compared to 2015.

The number of hospital beds in district general hospital and public health centers accounted for 10.0% of all hospital beds. And the number of inpatients at district general hospitals level was 93.4 thousand people in 2015, increasing this number by 18.9 thousand people making it 112.3 thousand in 2017.

***Figure 4.3.1*** *Number of patients and percentage of bed capacity of secondary and tertiary level hospitals, 2017*

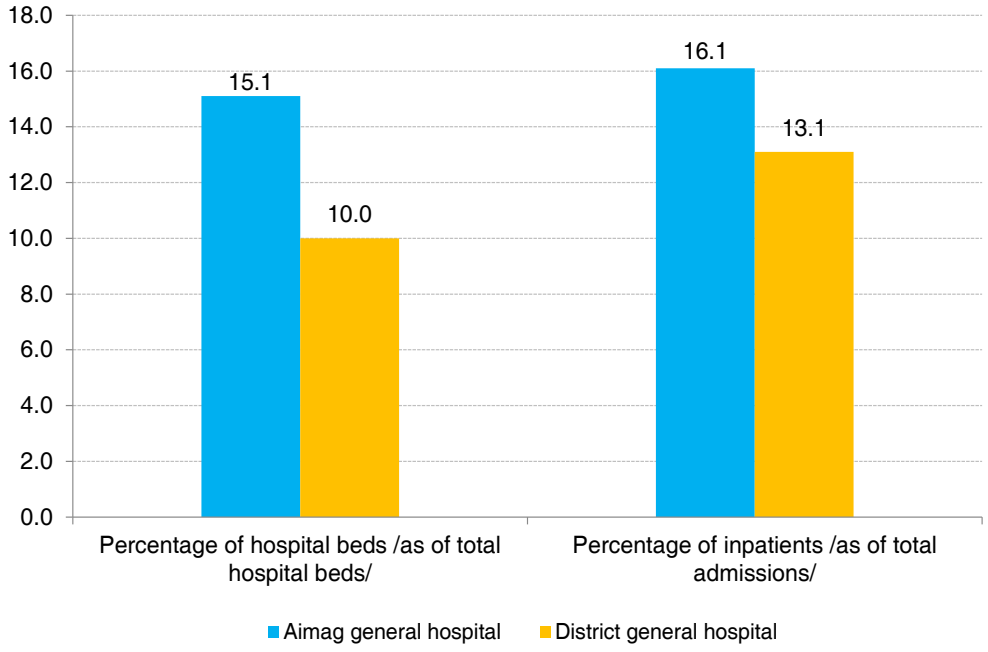



***Table 4.3.1*** *Some indicators for quality and accessibility of health services in province and district general hospitals, 2015-2017*

| Үзүүлэлт | 2015 | | 2016 | | 2017 | | Average for the last 3 years | |
|---|---|---|---|---|---|---|---|---|
| | Province general hospital | District general hospital | Province general hospital | District general hospital | Province general hospital | District general hospital | Province general hospital | District general hospital |
| Number of hospital beds | 3378 | 2112 | 3613 | 2168 | 3588 | 2386 | 3526 | 2222 |
| Number of physicians | 1030 | 795 | 1071 | 813 | 1113 | 840 | 1071 | 816 |
| Number of nurses | 1725 | 891 | 1723 | 889 | 1755 | 943 | 1734 | 908 |
| Average length of stay | 7.4 | 7.0 | 7.3 | 6.8 | 7.2 | 6.7 | 7 | 7 |
| Number of inpatients | 135,033 | 93,403 | 142,658 | 109,579 | 138,161 | 112,314 | 138,617 | 105,099 |
| Hospital deaths within 24 hrs of admission | 32.4 | 30.9 | 31.3 | 25.0 | 35.1 | 30.9 | 33 | 29 |
| Number of outpatients | 1558984 | 2484337 | 1568529 | 2382470 | 1684014 | 2384420 | 1603842 | 2417076 |
| Percentage of check-ups | 31.1 | 39.3 | 30.8 | 36.3 | 30.3 | 38.1 | 30.7 | 37.9 |
| Maternal mortality rate (per 100 000 live births) | 16.9 | - | 42.5 | - | 19.3 | - | 26.2 | - |
| Infant mortality (per 1 000 live births) | 11.7 | - | 14.1 | - | 9.5 | - | 11.8 | - |
| Number of referrals | 13.5 | - | 17.1 | - | 15.4 | - | 15.3 | - |

In 2017, the average length of stay decreased in aimag general hospitals by 0.2% and in district general hospitals by 0.3% compared to 2015.

In 2017, the percentage of deaths occurring within 24 hours of admission in aimag general hospitals increased by 2.7% compared to 2015, and the number was higher than the average of the last 3 years by 2.1%..

In 2017, the number of outpatients at aimag general hospital level was 1.6 million and district general hospital level was 2.3 million.

The percentage of preventive medical check-ups at aimag general hospitals and district general hospitals was lower than the average of the last 3 years by 0.4% and 0.8%, respectively.

The infant mortality rate at aimag general hospitals level was estimated at 11.7 per 1000 live births in 2015. The rate was reached to 9.5 per 1000 live births in 2017, which decreased by 2.3 deaths compared to 2015 and the average of the last 3 years.

In 2017, the maternal mortality rate was 19.3 per 100,000 live births at aimag general hospitals level, which decreased by 23.2 compared to the previous year and by 6.9 compared to an average of the last 3 years.

In the last three years, the number of inpatients referred from SHC and inter-soum hospitals accounted for 15.3% of total inpatients in aimag general hospitals. In 2017, the number of inpatients referred from SHC and inter-soum hospitals increased by 1.7% compared to 2016.

## 4.4 REGIONAL DIAGNOSTIC AND TREATMENT CENTERS MEDICAL CARE SERVICES

The regional diagnostic and treatment centres (RDTCs) are health organizations providing medical care services to the population of the given region, with the goal of giving the professional methodological advice to health institutions as well as conducting some training activities.

As of 2017, aimag general hospitals in Orkhon, Dornod, Uvurkhangai, Khovd and Umnugovi aimags were functioning under the status of RDTCs at the national level. A total of 1 957 medical personnel including 457 doctors, 714 nurses and 260 technical education and medical professional staffs were working at RDTCs.

***Table 4.4.1*** *Selected indicators for quality and accessibility of RDTCs services, 2015-2017*

| Indicators | Years | | | Average for the last 3 years |
|---|---|---|---|---|
| | 2015 | 2016 | 2017 | |
| Number of hospital beds | 1484 | 1539 | 1681 | 1568 |
| Average length of stay | 7.6 | 7.5 | 7.2 | 7.4 |
| Percentage of deaths occurred within 24 hrs of admission | 29.0 | 30.0 | 30.3 | 29.8 |
| Number of inpatients | 55769 | 57050 | 54794 | 55871 |
| Number of outpatients | 556035 | 544285 | 611328 | 570549 |
| Maternal mortality rate (per 100 000 live births) | 20.7 | 62.7 | 21.9 | 35.1 |
| Infant mortality rates (per 1 000 live births) | 8.8 | 11.3 | 8.4 | 9.5 |
| Percentage of inpatients referred form the lower level of care | 28.1 | 26.0 | 26.5 | 26.9 |

In 2017, total of 54.7 thousand inpatients were admitted to RDTCs and in average 14 503 patients were treated annually at the RDTCs referred from soum health centers, inter-soum hospitals and regional aimag general hospitals which accounted for 26.5% of the total inpatients.

The average length of stay at RDTC was 7.2 in 2017, which decreased by 0.2, compared to an average of the last 3 years. The percentage of deaths within 24 hours of admission was 30.3 percent in 2017, which decreased by 0.5% compared to an average of the last 3 years.

In reference to decreasing tendency of infant mortality rate in the country for last years, an average infant mortality rate was 9.5 per 1000 live births in RDTCs in 2015-2017, which is lower compared to the aimag average. In 2017, there were 2 maternal deaths (21.9 per 100,000 live births) registered in the RDTCs includingin Umnugovi and Khovd aimags 1 cases, respectively.

***Table 4.4.2.*** *RDTCs HR indicators, 2017*

| № | Province | Total number of employees | Doctors | Nurses | Medical professional and technical education, all other employees | Number of beds |
|---|---|---|---|---|---|---|
| 1 | Dornod | 496 | 104 | 172 | 73 | 336 |
| 2 | Orkhon | 479 | 107 | 205 | 54 | 434 |
| 3 | Uvurkhangai | 361 | 90 | 120 | 54 | 305 |
| 4 | Umnugovi | 218 | 56 | 68 | 33 | 348 |
| 5 | Khovd | 403 | 100 | 149 | 46 | 258 |
| **Total** | | **1957** | **457** | **714** | **260** | **1681** |

***Table 4.4.3.*** *Selected indicators of RDTCs medical care services, 2017*

| Province | Number of inpatients | Bed days | Average length of stay | Hospital deaths within 24 hrs of admission | Outpatient visits | Maternal mortality rate /per 1 00000 live births/ | Infant mortality rate /per 1 000 live births/ | Under-five mortality rate /per 1 000 live births/ | Stillbirth |
|---|---|---|---|---|---|---|---|---|---|
| Dornod | 11 587 | 88 910 | 7.7 | 34.1 | 135 221 | 0.0 | 7.5 | 8.5 | 5.8 |
| Orkhon | 14 525 | 100 977 | 7.0 | 35.0 | 143 778 | 0.0 | 3.5 | 3.5 | 6.6 |
| Uvurkhangai | 9 632 | 73 925 | 7.7 | 17.7 | 111 364 | 0.0 | 12.4 | 14.1 | 4.5 |
| Umnugovi | 7 070 | 48 525 | 6.9 | 43.4 | 97 585 | 94.3 | 9.4 | 10.4 | 8.4 |
| Khovd | 11 980 | 84 389 | 7.0 | 18.0 | 123 380 | 53.9 | 11.9 | 12.9 | 7.0 |
| **Total** | **54 794** | **396 726** | **7.2** | **30.3** | **611 328** | **21.9** | **8.4** | **9.3** | 6.3 |

## 4.5. CENTRAL HOSPITALS AND SPECIALIZED CENTERS MEDICAL CARE SERVICES

Central hospitals are health organizations to provide specialized professional medical inpatient and outpatient services at national level and carry out research and training activities, with the role of giving a professional consultations and methodological recommendations to other health organizations.

Specialized centers are health organizations to provide specialized professional medical inpatient and outpatient services at the national level and carry out reference, training, research and scientific activities, with the role of giving a professional consultations and methodological recommendations to other health organizations.

As of 2017, a total of 5 896 health professionals were worked in Central hospitals and specialized centers, including 1 225 medical doctors, 1 943 nurses and 489 professional and technical education medical staffs, respectively.

16.5% of all hospital beds and 17.5% of inpatients were accounted for central hospitals and specialized centres. The average length of stay in 2013 was 9.5 days, which decreased to 8.6 days in 2017.

Furthermore, the percentage of total in-hospital deaths occurring within 24 hours after admission decreased from 24.5% in 2013 to 18.1% in 2017, making the average over the last three years is 19.6%.

***Table 4.5.1.*** *Quality and accessibility indicators of medical care services in central hospitals and specialized centers, 2015-2017*

| Indicator | Years | | | Average for the last 3 years |
|---|---|---|---|---|
| | 2015 | 2016 | 2017 | |
| Number of hospital beds | 3837 | 3937 | 3941 | 3905.0 |
| Number of doctors | 1221 | 1217 | 1225 | 1221.0 |
| Number od nurses | 1912 | 1917 | 1943 | 1924.0 |
| Average length of stay | 8.9 | 8.7 | 8.6 | 8.7 |
| Percentage of deaths occurred within 24 hrs of admission | 20.5 | 20.3 | 18.1 | 19.6 |
| Number of inpatients | 141 977 | 146 033 | 149 647.5 | 145 885.8 |
| Number of outpatients | 1 279 401 | 1 285 282 | 139 8742 | 1 321 141.7 |
| Percentage of inpatients referred form the lower level of care | 30520 | 44040 | 30283 | 34947.7 |

Within the last 3 years, an average of 145.8 thousand patients hospitalized in central hospitals and specialized centers, out of them 24.0% patients were referred from countryside. Compared to 2013, the total number of inpatients has increased by 2.2% in 2017.

***Figure 4.5.1.*** *Referral percentage of patients from countryside to central hospitals and specialized centers, 2017*

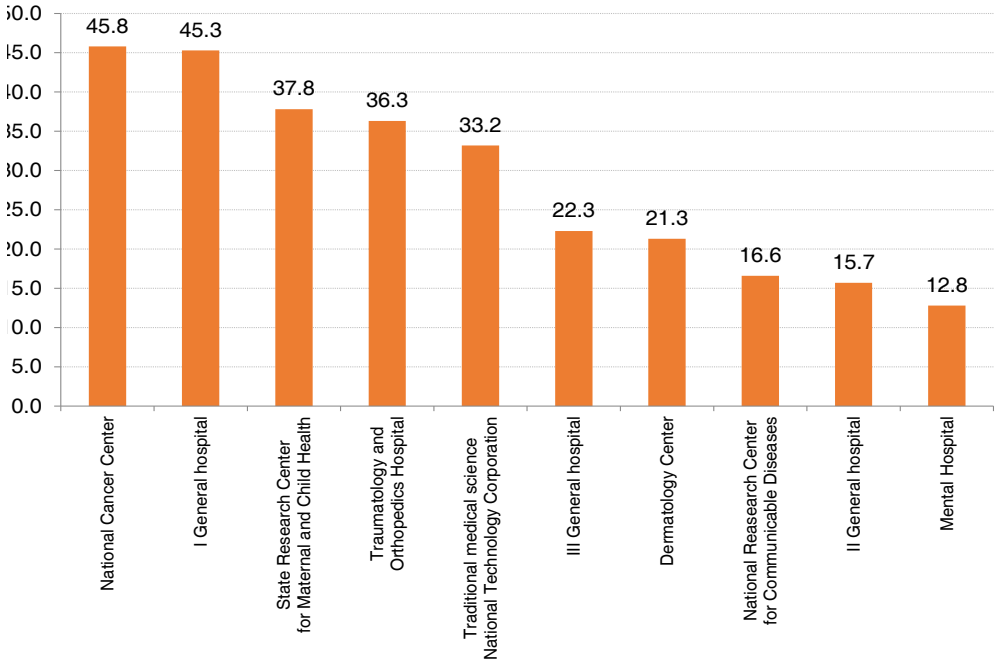


***Table 4.5.2.*** *Selected indicators for the central hospitals and specialized centers, 2017*

| Hospitals | Number of outpatient visits | Number of hospital admissions | Average length of hospital stay | Hospital deaths within 24 hrs after admission |
|---|---|---|---|---|
| I State Central Hospital | 314 321 | 22 850 | 7.0 | 14.4 |
| II State Central Hospital | 132 556 | 9 126 | 7.4 | 27.4 |
| III State Central Hospital | 174 413 | 19 491 | 7.4 | 11.7 |
| National Centre for Mother and Child | 210 243 | 40 300 | 6.4 | 4.3 |
| National Cancer Center | 98 693 | 11 577.5 | 6.8 | 19.5 |
| National Infectious Diseases Center | 155 107 | 10 904.5 | 11.6 | 15.2 |
| National Traumatology and Orthopaedics | 131 862 | 15 254 | 9.1 | 28.9 |
| National Center for Dermatology | 92 912 | 5 689 | 9.2 | 0.0 |
| National Center for Mental Health | 48 884 | 6 595 | 28.0 | 20.0 |
| Sanatorium for children | 709 | 1 510.5 | 18.0 | 0.0 |
| Triditional Medicine, Technology and Production National Corporation | 16 462 | 6 350 | 7.1 | 100.0 |
| Center of Forensic Medicine | 15 195 | 0 | 0.0 | 0.0 |
| National Gerontological Center | 22 580 | 0 | 0.0 | 0.0 |

## 4.6. PRIVATE HOSPITALS AND CLINICS MEDICAL CARE SERVICES

As of 2017, a total of 9 709 health professionals were worked in 240 private inpatient hospitals and 1 226 private outpatient clinics, including 3 298 physicians, 2 322 nurses respectively.

***Table 4.6.1*** *Selected indicators for medical care services of private hospitals and clinics, 2017*

| | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| Private hospitals | 466 | 160 | 166 | 171 | 179 | 197 | 202 | 224 | 234 | 240 |
| Private clinics | | 523 | 947 | 1013 | 851 | 822 | 969 | 1006 | 1076 | 1226 |
| Number of beds | 964 | 1 982 | 2 527 | 3 069 | 3 606 | 3 829 | 4 542 | 5 262 | 5 611 | 5756 |
| Percentage form all hospital beds | 5.4 | 10.8 | 14.2 | 16.2 | 18.4 | 19.3 | 22.1 | 24.2 | 24.4 | 24.1 |
| Number of doctors | 736 | 1 145 | 1 549 | 1 677 | 1 904 | 1 965 | 2 368 | 2 698 | 2 935 | 3298 |
| Number of nurses | 296 | 682 | 1 007 | 1 135 | 1 275 | 1 326 | 1 742 | 1 941 | 2 046 | 2322 |
| Outpatient visits | - | 1 016 705 | 1 036 934 | 1 986 901 | 1 320 932 | 1 756 769 | 1 786 670 | 1 912 718 | 2 063 450 | 2,269,110 |
| Number of inpatients | 23 592 | 63 267 | 86 117 | 97 821 | 111 338 | 121 452 | 124 610 | 142 052 | 159 194 | 167,957 |
| Average length of stay | 11.3 | 9 | 7.9 | 8.2 | 7.7 | 7.4 | 7.3 | 7 | 7.2 | 7.0 |

The number of private hospital beds was 2 527 in 2010, and the number has increased to 5 756 beds in 2017, which accounted for 24.1% of all hospital beds in the country.

Since 2005, the establishment of new private hospitals, especially with hospital beds has been restricting when types of services provided by these private hospitals were similar to services provided by state hospitals. However, if the types of services they deliver are complementary to existing public services health policy has been focusing on expanding activities of these private hospitals and supporting the establishment of diversifications.

In 2010, a total of 1 036 934 patients received outpatient services and there were 86 117 inpatients at the private hospitals, but in 2017, the number increased to 2 269 110 and 167 957 respectively.

In 2017, by looking at the type of medical specializations for private hospitals were as follows; 41.2% an internal medicine, 11.4% neurology, 13.7 % traditional medicine, 8.1% gynaecology, 6.4% surgery and 5.1% pediatrics, respectively.

***Table 4.6.2.*** *Bed capacity of private inpatient hospitals, 2017*

| Indicators | Number of hospitals | | Number of inpatients | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| 5-8 beds | 12 | 5.0 | 1 496 | 0.9 |
| 10-12 beds | 59 | 24.6 | 19 673 | 11.7 |
| 15 beds | 49 | 20.4 | 20 724.5 | 12.3 |
| 20-25 beds | 59 | 24.6 | 38 879.5 | 23.1 |
| 30 beds | 22 | 9.2 | 17 796.5 | 10.6 |
| 40-50 beds | 24 | 10.0 | 24 409 | 14.5 |
| 50 beds | 15 | 6.2 | 44 978 | 26.9 |
| **Total** | **240** | **100.0** | **167 956.5** | **100.0** |

Looking at the private hospitals by bed capacity, 5.0% of hospitals have 5-8 beds, 24.6% have 10-12 beds and 20.4% of hospitals have 15 beds.

The private hospitals with up to 15 beds accounted for 50.0 percent of total private pitals.

# CHAPTER 5.

# HUMAN RESOURCES IN HEALTH SECTOR

# CHAPTER 5.

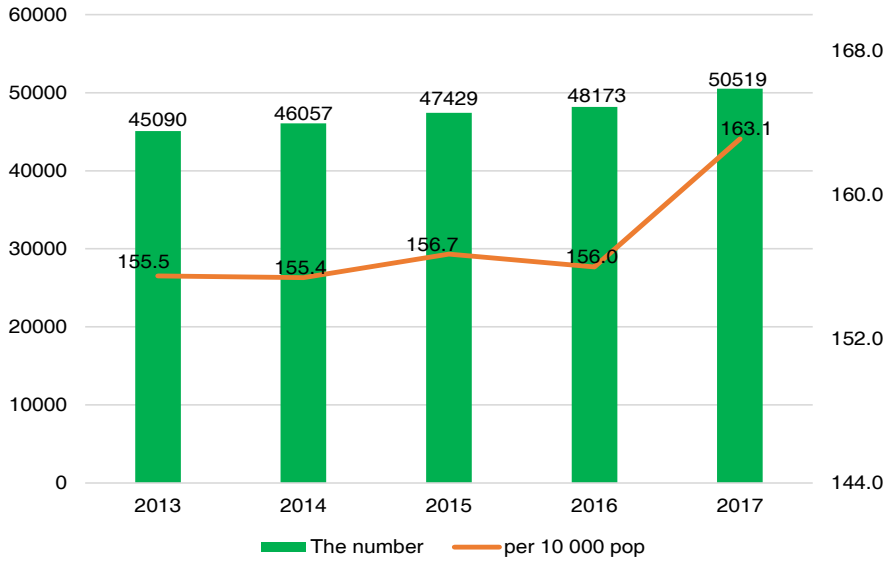
# HUMAN RESOURCES IN HEALTH SECTOR

In 2017, a total of 50.5 thousand healthcare employees were worked in public and private organizations of the health sector and this number has increased by 4.8% as compared to the previous year. Out of total health personnel, 92.8% employed by health sector and 7.2% of them represent health workers employed by other sectors.

***Table 5.1.*** *The number of health workers*

| Major | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total employees | 37952 | 38704 | 39608 | 41124 | 43626 | 45090 | 46057 | 47429 | 48173 | 50519 |
| Out: Fimale | 31215 | 32112 | 32591 | 33834 | 35609 | 36271 | 37495 | 38737 | 39415 | 41481 |
| Medical officer | 393 | 771 | 616 | 717 | 806 | 791 | 799 | 871 | 863 | 1008 |
| Pharmacists | 1088 | 1088 | 1176 | 1284 | 1475 | 1596 | 1611 | 1504 | 1586 | 1938 |
| Total-Physicians | 7584 | 7140 | 7497 | 7943 | 8597 | 8911 | 8645 | 9563 | 10000 | 10576 |
| Out: Fimale | 5959 | 5648 | 5919 | 6284 | 6744 | 6893 | 7183 | 7376 | 7677 | 8127 |
| General professional | 758 | 873 | 736 | 794 | 840 | 983 | 1898 | 2012 | 2131 | 2174 |
| Core and specialized professionals: | 5538 | 5341 | 5825 | 6029 | 6484 | 6664 | 5313 | 5833 | 6040 | 6366 |
| Internist | 756 | 809 | 749 | 811 | 844 | 883 | 899 | 951 | 939 | 1024 |
| Pediatric | 572 | 565 | 494 | 523 | 577 | 597 | 624 | 706 | 705 | 741 |
| Surgery and injuries and trauma | 443 | 488 | 491 | 530 | 559 | 575 | 556 | 632 | 668 | 714 |
| Intravenous and intensive care | 242 | 233 | 254 | 265 | 280 | 296 | 224 | 252 | 278 | 292 |
| Obstetrics and gynecology | 599 | 607 | 608 | 625 | 672 | 682 | 661 | 721 | 759 | 783 |
| Cancer | 63 | 65 | 73 | 70 | 69 | 75 | 55 | 58 | 60 | 60 |
| Neurologist | 238 | 237 | 240 | 262 | 270 | 270 | 269 | 290 | 294 | 327 |
| Mental | 131 | 124 | 130 | 137 | 136 | 128 | 125 | 127 | 139 | 145 |
| Ophtalmologist | 120 | 130 | 139 | 137 | 133 | 150 | 133 | 147 | 157 | 179 |
| Otorinolaryngologist | 135 | 119 | 127 | 120 | 140 | 135 | 126 | 138 | 154 | 163 |
| Dermatologist | 107 | 75 | 61 | 58 | 56 | 89 | 137 | 145 | 130 | 153 |
| Infectionist: | 127 | 149 | 165 | 146 | 141 | 142 | 122 | 285 | 307 | 329 |
| STI/AIDS | 89 | 67 | 69 | 67 | 80 | 78 | 72 | 82 | 86 | 89 |
| Tuberculosis | 97 | 101 | 105 | 100 | 104 | 105 | 102 | 97 | 104 | 101 |
| Rehabilitation | 126 | 100 | 81 | 95 | 108 | 130 | 115 | 127 | 143 | 140 |
| Phatogenist | 65 | 85 | 76 | 64 | 94 | 97 | 61 | 91 | 98 | 90 |
| X-ray diagnostic | 262 | 261 | 270 | 282 | 304 | 344 | 347 | 416 | 429 | 448 |
| Doctor laboratory | 243 | 251 | 264 | 281 | 308 | 322 | 291 | 308 | 318 | 334 |
| Other | 1123 | 875 | 1429 | 1456 | 1609 | 1566 | 394 | 439 | 462 | 444 |
| Traditional medicine doctor | 341 | 339 | 348 | 411 | 477 | 464 | 554 | 700 | 780 | 841 |
| Dentist | 552 | 587 | 588 | 709 | 796 | 800 | 880 | 1018 | 1049 | 1195 |

***Figure 5.1.1.*** *The number of health workers*




The total number of health workers employed by health sector by level of care is as follows: 22.3% of them working in primary health care, 18.0% in secondary health care, 16.1% in tertiary health care settings, 18.1% in private hospitals and clinics, and 25.5% in maternity hospitals and other health care organizations, respectively. Of total healthcare employees, there were 10.5 thousand physicians, 1.9 thousand pharmacists, 11.9 thousand nurses and 7.7 other medical professionals and technical education staffs, respectively. By looking at occupation of health care personnel who provide medical services are as follows; physicians 20.9 %, nurses 23.6% and other medical professionals and technical education staffs 15.4 %, respectively. Women are accounted for 82.1% of all employees.

***Table 5.2.*** *The number of health workers, by occupation*

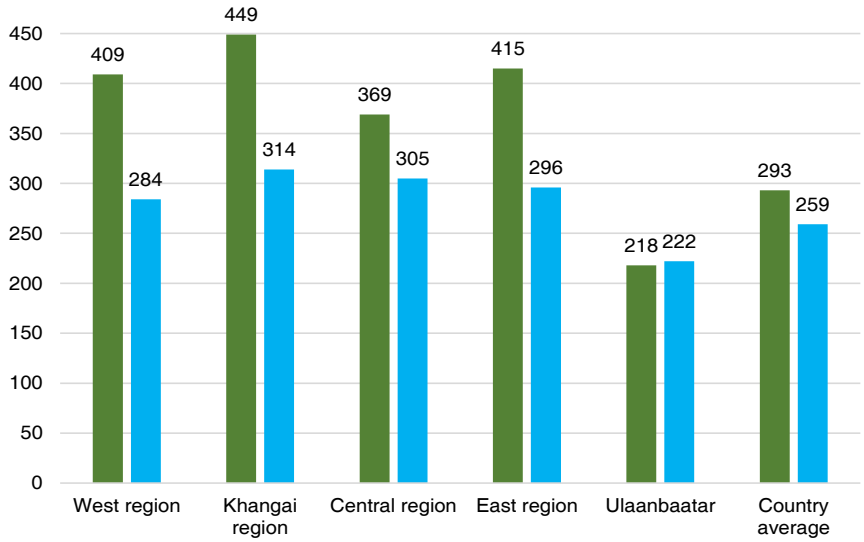
| Profession | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **16047** | **15789** | **15828** | **16487** | **16871** | **17402** | **18317** | **18779** | **18913** | **19709** |
| Feldsher | 2480 | 2527 | 2589 | 2706 | 2242 | 2278 | 2628 | 2611 | 2550 | 2526 |
| Laborant | 836 | 879 | 900 | 931 | 960 | 1011 | 1047 | 1107 | 1151 | 1129 |
| Pharmacist | 1899 | 1944 | 2030 | 2078 | 2270 | 2404 | 1840 | 1819 | 1790 | 1982 |
| Nurses | 8912 | 9017 | 9179 | 9420 | 9916 | 10150 | 10948 | 11357 | 11486 | 11939 |
| Technician | 341 | 340 | 349 | 362 | 392 | 388 | 469 | 510 | 519 | 613 |
| Midwives | 693 | 668 | 697 | 723 | 768 | 814 | 888 | 916 | 940 | 963 |
| Other | 518 | 414 | 84 | 267 | 323 | 357 | 497 | 459 | 477 | 557 |

As of 2017, a total of 10 576 physicians were working in the nationwide and the majority of them or 76.8% were women. Out of them, a total of 8 540 medical doctors/general practitioners were working and 74.5% of them were providing basic and specialized health care services. There were 841 traditional medicine doctors and 1195 dentists. 60.8% and 39.2% of all physicians were working in Ulaanbaatar city and in rural areas, respectively. By age groups, there were 29.7% of age 20-29 years, 30.2% of age 30-39 years, 18.5% of age 40-49 years, 9.5% of age 50-54 years, 7.6% of age 55-60 years and 4.5% of age above 60 years, respectively. Out of total physicians and nurses, 20.1/24.0% of them were working in the primary level, 20.3/27.9% in the secondary level and 16.7/ 22.8% in the tertiary level respectively. As of 2017, an average number of population per a physician was 293 and an average number of population per a nurse was 259, and the numbers have decreased by 16 and 10 persons, respectively as compared to the previous year. The average number of population per a physician was 449 in the Khangai region as reported at the highest, and this number was 409 in the

Western region, 415 in the Eastern region and 369 in the Central region.

In Ulaanbaatar city, the number of persons per a physician was 218 and the number of persons per a nurse was 222, respectively. In the Khangai region, the number of persons per a nurse was estimated at 314 which reported as the highest compared to other regions.

***Figure 5.1.2.*** *The average number of population per a physician and nurses, by region, 2017*




As of 2017, there were 34.1 physicians, 38.5 nurses and 25.1 other medical professionals and technical education staffs per 10 000 population, respectively. The total number of physicians and nurses per 10 000 population has increased by 1.7 and 0.3, respectively as compared to 2016. In regard to the numbers of physicians per 10 000 population by specialization were as follows: there were 3.9 dentists, 3.3 internists and 2.7 traditional medicine doctors per 10 000 population. As of 2017, a total of 741 pediatricians were working in the country, giving of 7.8 pediatricians per 10 000 children. And there were 784 obstetric and gynecologists which accounted at 4.9 doctors per 10 000 women.

***Table 5.3.*** *The number of doctor and nurse, by region /per 10 000 pop/ 2016-2017*

| Aimag/city | Per 10 000 population physicians | | Per 10 000 population nurses | | Number of physicians per doctor | | Number of per-nurse | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 |
| **National average** | **32.4** | **34.1** | **37.2** | **38.5** | **309** | **293** | **269** | **259** |
| **Western region** | **23.6** | **24.4** | **35.8** | **35.2** | **425** | **409** | **279** | **284** |
| Bayan-Ulgii | 18.6 | 20.2 | 30.7 | 31.5 | 539 | 495 | 325 | 318 |
| Govi-Altai | 31.4 | 32.8 | 44.9 | 44.5 | 319 | 305 | 223 | 225 |
| Zavkhan | 25.9 | 25.3 | 39.9 | 38.1 | 386 | 395 | 251 | 263 |
| Uvs | 21.0 | 20.6 | 34.6 | 31.6 | 477 | 485 | 289 | 317 |
| Khovd | 24.8 | 26.8 | 33.7 | 34.6 | 404 | 374 | 297 | 289 |
| **Khangai region** | **22.4** | **22.3** | **32.2** | **31.8** | **447** | **449** | **311** | **314** |
| Arkhangai | 19.9 | 18.3 | 29.8 | 29.0 | 503 | 548 | 335 | 345 |
| Bayankhongor | 20.6 | 21.7 | 34.6 | 34.0 | 485 | 461 | 289 | 294 |
| Bulgan | 19.9 | 19.8 | 32.2 | 31.5 | 503 | 505 | 311 | 317 |
| Orkhon | 32.1 | 31.9 | 41.3 | 41.3 | 312 | 313 | 242 | 242 |
| Uvurkhangai | 22.6 | 22.5 | 29.1 | 28.6 | 442 | 445 | 344 | 350 |
| Khuvsgul | 18.6 | 19.0 | 27.9 | 28.2 | 539 | 526 | 359 | 355 |
| **Central region** | **26.6** | **27.1** | **32.4** | **32.8** | **375** | **369** | **309** | **305** |
| Govisumber | 31.1 | 33.2 | 37.1 | 39.0 | 322 | 301 | 270 | 256 |
| Darkhan-Uul | 28.0 | 27.2 | 36.6 | 35.6 | 357 | 368 | 273 | 281 |
| Dornogovi | 33.9 | 32.9 | 34.3 | 37.7 | 295 | 304 | 291 | 265 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Dundgovi | 28.7 | 30.7 | 34.1 | 32.4 | 348 | 326 | 293 | 308 |
| Umnugovi | 29.1 | 29.2 | 29.0 | 27.1 | 343 | 342 | 345 | 369 |
| Selenge | 22.0 | 22.8 | 27.7 | 30.6 | 455 | 438 | 361 | 326 |
| Tuv | 21.9 | 23.3 | 32.4 | 31.5 | 457 | 430 | 309 | 317 |
| **Eastern region** | **23.4** | **24.1** | **34.6** | **33.8** | **427** | **415** | **289** | **296** |
| Dornod | 22.6 | 23.3 | 35.6 | 35.2 | 443 | 430 | 281 | 284 |
| Sukhbaatar | 25.6 | 25.2 | 36.0 | 35.4 | 391 | 397 | 278 | 282 |
| Khentii | 22.6 | 24.1 | 32.4 | 31.0 | 443 | 416 | 309 | 322 |
| **Ulaanbaatar** | **42.2** | **46.0** | **41.6** | **45.1** | **237** | **218** | **240** | **222** |

The physician to nurse ratio was 1.0:1.1 at the national level, 1.0:0.9 in Ulaanbaatar city and 1.0:1.4 in the aimag level respectively.

Looking by geographical distribution (location) of health professionals, there were 46.0 doctors and 45.1 nurses per 10 000 population in Ulaanbaatar city, while 24.4 doctors and 33.1 nurses per 10 000 population were in rural areas. This data indicates that a high density of doctors in Ulaanbaatar city.

Particularly, the number of surgeons were 2.3 times, trauma and orthopedic specialists were 2.7 times, and radiology and lab specialists were 3.1-3.6 times higher in Ulaanbaatar city than in other rural areas.

***Table 5.4.*** *The nember of physician,by region.*

| Aimag/city | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| **National average** | 7584 | 7140 | 7497 | 7943 | 8597 | 8911 | 9300 | 9563 | 10000 | 10576 |
| **Western region** | **642** | **604** | **658** | **680** | **742** | **761** | **791** | **862** | **923** | **971** |
| Bayan-Ulgii | 141 | 132 | 144 | 145 | 145 | 149 | 156 | 166 | 186 | 203 |
| Govi-Altai | 113 | 115 | 124 | 138 | 149 | 157 | 161 | 172 | 177 | 187 |
| Zavkhan | 126 | 118 | 120 | 128 | 143 | 150 | 153 | 161 | 182 | 181 |
| Uvs | 138 | 116 | 122 | 120 | 136 | 138 | 143 | 169 | 170 | 169 |
| Khovd | 124 | 123 | 148 | 149 | 169 | 167 | 178 | 194 | 208 | 231 |
| **Khangai region** | **990** | **880** | **935** | **973** | **1038** | **1083** | **1125** | **1183** | **1297** | **1313** |
| Arkhangai | 146 | 125 | 136 | 143 | 147 | 151 | 160 | 167 | 184 | 172 |
| Bayankhongor | 123 | 104 | 111 | 125 | 134 | 146 | 165 | 159 | 174 | 187 |
| Bulgan | 110 | 94 | 91 | 101 | 108 | 101 | 106 | 111 | 120 | 122 |
| Orkhon | 252 | 224 | 246 | 252 | 257 | 268 | 259 | 267 | 325 | 325 |
| Uvurkhangai | 186 | 173 | 176 | 180 | 194 | 213 | 218 | 248 | 255 | 258 |
| Khuvsgul | 173 | 160 | 175 | 172 | 198 | 204 | 217 | 231 | 239 | 249 |
| **Central region** | **997** | **943** | **958** | **989** | **1032** | **1126** | **1149** | **1220** | **1303** | **1347** |
| Govisumber | 43 | 41 | 39 | 45 | 48 | 56 | 58 | 56 | 52 | 57 |
| Darkhan-Uul | 237 | 231 | 231 | 242 | 248 | 250 | 252 | 263 | 284 | 274 |
| Dornogovi | 190 | 178 | 184 | 179 | 183 | 205 | 196 | 210 | 223 | 222 |
| Dundgovi | 93 | 91 | 88 | 84 | 99 | 106 | 111 | 123 | 128 | 141 |
| Umnugovi | 109 | 106 | 117 | 119 | 135 | 147 | 159 | 170 | 182 | 189 |
| Selenge | 187 | 165 | 161 | 166 | 160 | 182 | 189 | 209 | 235 | 246 |
| Tuv | 138 | 131 | 138 | 154 | 159 | 180 | 184 | 189 | 199 | 218 |
| **Eastern region** | **393** | **385** | **381** | **394** | **426** | **446** | **442** | **464** | **491** | **516** |
| Dornod | 133 | 138 | 134 | 138 | 159 | 172 | 170 | 169 | 174 | 183 |
| Sukhbaatar | 110 | 101 | 106 | 112 | 115 | 121 | 121 | 140 | 152 | 153 |
| Khentii | 150 | 146 | 141 | 144 | 152 | 153 | 151 | 155 | 165 | 180 |
| **Ulaanbaatar** | **4562** | **4328** | **4565** | **4907** | **5359** | **5495** | **5793** | **5834** | **5986** | **6429** |

In 2017, a total of 1 938 pharmacists were working in the nationwide, of which 3.6 and 9.5 per 10 000 population were in rural areas and in Ulaanbaatar city, respectively /the country average is 6.3/.

Out of all pharmacists, 76.0% were working in private drug stores, 5.2% in tertiary health care settings, 3.6% in secondary health care settings and 1.3% in primary health care settings, respectively.

The average number of population per a pharmacist was 2812 in rural areas and was 1048 in Ulaanbaatar city /the country average is 1598/.

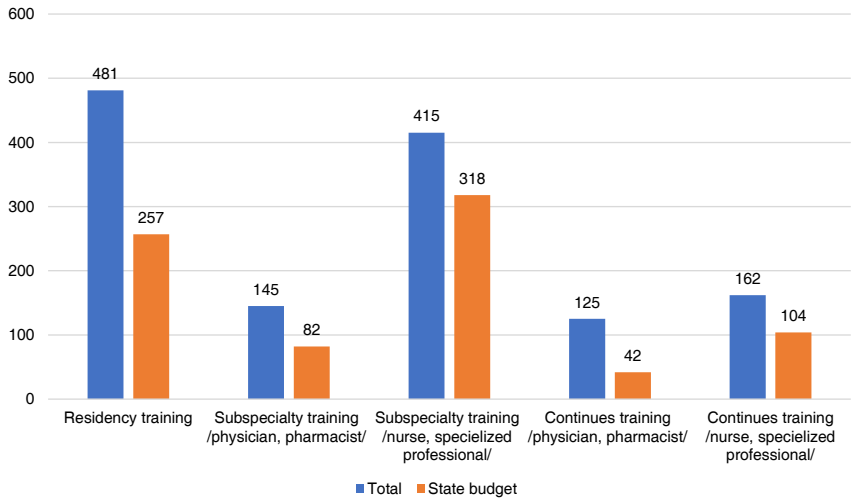
***Table 5.5.*** *Number of pharmacists, by region*

| Aimag/city | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| **National average** | **1088** | **1088** | **1176** | **1284** | **1475** | **1596** | **1611** | **1504** | **1586** | **1938** |
| **Western region** | **43** | **42** | **46** | **58** | **69** | **77** | **96** | **117** | **143** | **154** |
| Bayan-Ulgii | 8 | 7 | 10 | 9 | 10 | 13 | 19 | 26 | 27 | 28 |
| Govi-Altai | 5 | 6 | 10 | 10 | 11 | 15 | 16 | 20 | 24 | 23 |
| Zavkhan | 10 | 9 | 10 | 12 | 13 | 14 | 21 | 19 | 25 | 33 |
| Uvs | 11 | 11 | 9 | 9 | 15 | 15 | 20 | 28 | 31 | 29 |
| Khovd | 9 | 9 | 7 | 18 | 20 | 20 | 20 | 24 | 36 | 41 |
| **Khangai region** | **84** | **64** | **103** | **88** | **104** | **108** | **134** | **159** | **183** | **201** |
| Arkhangai | 11 | 6 | 13 | 11 | 11 | 12 | 18 | 24 | 18 | 21 |
| Bayankhongor | 7 | 8 | 11 | 12 | 13 | 13 | 18 | 18 | 19 | 19 |
| Bulgan | 8 | 3 | 8 | 7 | 6 | 10 | 11 | 12 | 13 | 14 |
| Orkhon | 38 | 29 | 46 | 33 | 42 | 42 | 42 | 51 | 74 | 75 |
| Uvurkhangai | 9 | 8 | 13 | 12 | 16 | 16 | 23 | 27 | 31 | 33 |
| Khuvsgul | 11 | 10 | 12 | 13 | 16 | 15 | 22 | 27 | 28 | 39 |
| **Central region** | **74** | **72** | **79** | **108** | **123** | **131** | **139** | **163** | **180** | **194** |
| Govisumber | 3 | 2 | 5 | 5 | 7 | 7 | 6 | 8 | 6 | 6 |
| Darkhan-Uul | 14 | 21 | 22 | 41 | 49 | 50 | 54 | 61 | 60 | 62 |
| Dornogovi | 17 | 18 | 17 | 20 | 22 | 19 | 22 | 26 | 30 | 28 |
| Dundgovi | 3 | 2 | 2 | 4 | 8 | 8 | 8 | 12 | 16 | 14 |
| Umnugovi | 13 | 14 | 15 | 17 | 16 | 17 | 21 | 25 | 29 | 35 |
| Selenge | 16 | 8 | 11 | 12 | 12 | 16 | 15 | 18 | 24 | 27 |
| Tuv | 8 | 7 | 7 | 9 | 9 | 14 | 13 | 13 | 15 | 22 |
| **Eastern region** | **20** | **21** | **23** | **26** | **26** | **32** | **34** | **40** | **43** | **55** |
| Dornod | 8 | 5 | 6 | 6 | 5 | 10 | 13 | 16 | 18 | 23 |
| Sukhbaatar | 5 | 5 | 6 | 7 | 9 | 10 | 9 | 9 | 9 | 10 |
| Khentii | 7 | 11 | 11 | 13 | 12 | 12 | 12 | 15 | 16 | 22 |
| **Ulaanbaatar** | **867** | **889** | **925** | **1004** | **1153** | **1248** | **1208** | **1025** | **1037** | **1334** |

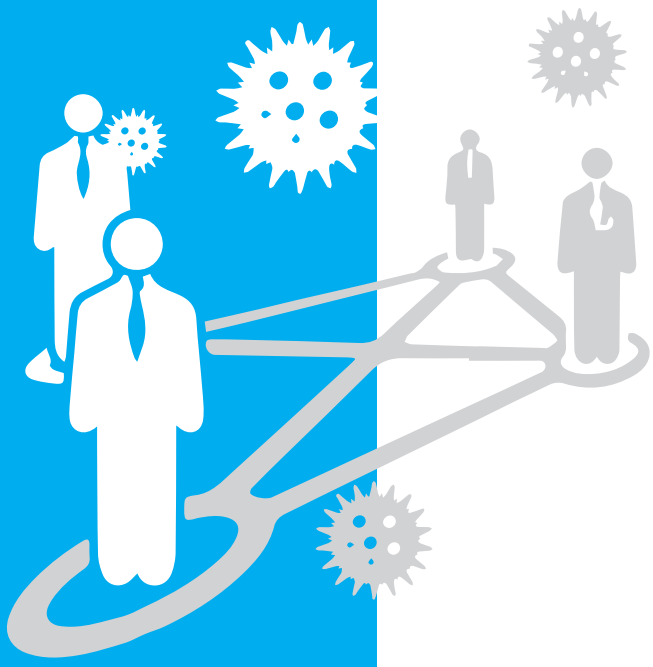
## Postgraduate training for medical professionals

In 2017, 257 medical doctors have completed general practitioners trainings, 90 medical doctors have attended in specialized qualification trainings and 318 nurses and other medical professionals have completed advanced professional trainings, financed by the state fund, Government of Mongolia.

***Figure 5.1.6.*** The number of physician, nurses and specialized qualifications, by advanced professional training, financed by the state budget, 2017




In 2017, total of 1 654 doctors, nurses and other medical professionals have completed the postgraduate trainings financed by the state budget. The number of medical professionals who participated in different types of trainings are presented as follows: 1 328 in general practitioners, specialized qualifications and advanced professional trainings, 95 in health management trainings, 126 in foreign trainings, 105 in distance learning trainings, respectively.



# CHAPTER 6.

# COMMUNICABLE DISEASES

# CHAPTER 6.

# COMMUNICABLE DISEASES

## 6.1. TOTAL COMMUNICABLE DISEASES

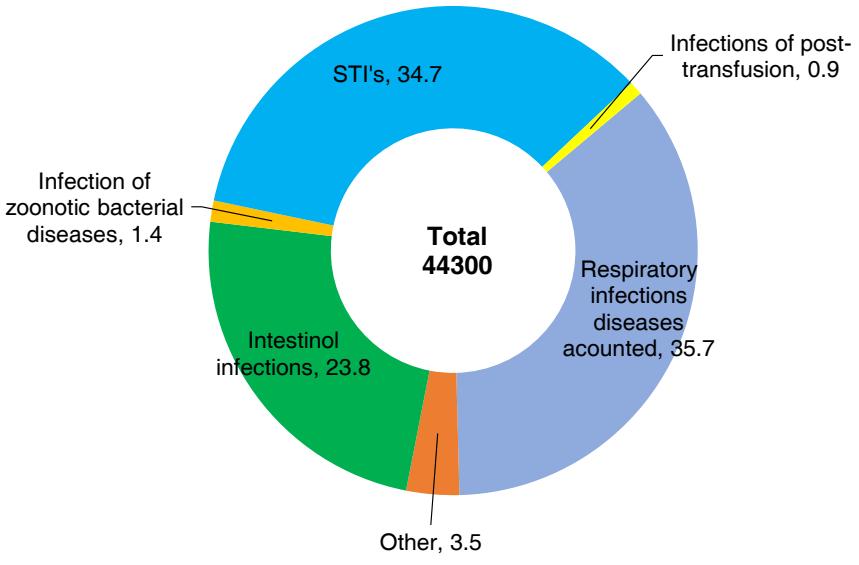
In 2017, a total of 44 300 cases with 28 different types of communicable diseases were reported (144.9 per 10 000 population) at the national level, which decreased by 25 363 cases or by 82.9 per 10 000 population as compared to the previous year.

Compared to the previous year, the incidence of certain communicable diseases such as varicella, shigellosis, enteroviral infections, syphilis, scarlet fever, tick-borne rickettsioses, fungal infections, infectious diarrhea, erysipelas, gonococcal infection, congenital syphilis, acute hepatitis A, tick-borne encephalitis, salmonella infections, meningococcal infections and plague increased by 0.2-31.5 cases per 10 000 population at the national level.

The incidence of reported communicable diseases in 2017 was higher than the national average /144.9 per 10 000 population/ in Dornod, Sukhbaatar aimags and in Ulaanbaatar city. 59.9% of all communicable diseases at the national level were registered in Ulaanbaatar city.

Of total registered cases of communicable diseases in 2017, 35.7 percent is respiratory infectious diseases, 34.7 percent is sexually transmitted infections, 23.8 percent is intestinal infections, 0.9 percent is blood-borne infections, 1.4 percent is zoonotic bacterial diseases and 3.5 percent is other infections.

***Figure 6.1.1.*** *Total communicable diseases registered at national level, 2017*



## 6.2 INTESTINAL INFECTIOUS DISEASES

In 2017, a total of 10 549 cases with 7 different types of intestinal infectious diseases including acute hepatitis A, shigellosis, bacterial foodborne intoxications, salmonella infections, diarrhoea and gastroenteritis of presumed, and hand-foot-mouth disease were registered at the national level, accounted for 23.8% of all communicable diseases. 7 948 cases (75.3%) of intestinal infections were registered in Ulaanbaatar city.

The reported intestinal infectious diseases were as follows: acute hepatitis A (0.4%), shigellosis (38.2%), hand-foot-mouth disease (57.4%), bacterial foodborne intoxications (1.3), salmonella (0.9%), and diarrhoea and gastroenteritis of presumed (0.9%).

***Table 6.2.1.*** *Number of cases of intestinal infections per 10 000 population, 2016-2017*

| Infectious diseases /ICD-10/ | 2016 | | 2017 | | Increase/ decrease |
|---|---|---|---|---|---|
| | Absolute number | Per 10 000 population | Absolute number | Per 10 000 population | Per 10 000 population |
| Typhoid and paratyphoid fever | 0 | 0.0 | 0 | 0.0 | 0.0 |
| Salmonella infections | 181 | 0.6 | 185 | 0.6 | 0.0 |
| Shigellosis | 2848 | 9.3 | 4026 | 13.2 | 3.9 |
| Other bacterial foodborne intoxications | 430 | 1.4 | 133 | 0.4 | -1.0 |
| Diarrhea infections | 19 | 0.1 | 103 | 0.3 | 0.2 |
| Viral hepatits A | 39 | 0.1 | 51 | 0.2 | 0.1 |
| Hand-foot-mouth disease | 5569 | 18.2 | 6051 | 19.8 | 1.6 |

### 6.2.1. OTHER BACTERIAL FOODBORNE INTOXICATIONS

In 2017, a total of 133 cases or 0.4 per 10 000 population of other bacterial foodborne intoxications were registered at the national level, accounted for 1.2% of all intestinal infectious diseases. Of the total number of other bacterial foodborne intoxications, 89 cases (66.9%) were registered in Ulaanbaatar city and the rate was 0.6 per 10 000 population.

In 2017, the incidence of these infections decreased by 297 cases in Ulaanbaatar city, compared to the previous year. For the past decade, the highest rates of other bacterial foodborne intoxications were reported in 2008 and 2012.

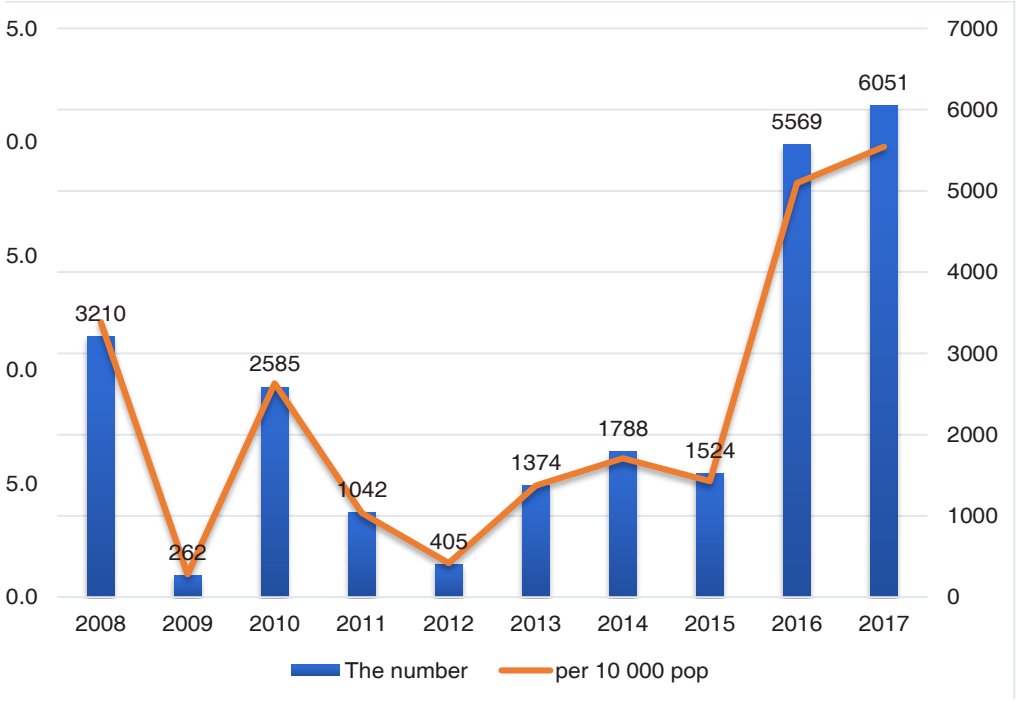
In 2017, the incidence rate of bacterial foodborne intoxication per 10 000 population was 1.7 in Darkhan-uul, 1.0 in Umnugovi, 0.8 in Bayan-Ulgii, 0.8 in Bayankhongor, 0.3 in Orkhon and 0.6 in Ulaanbaatar city. Looking by monthly, the most cases of other bacterial foodborne intoxications occurred in May and the fewest occurred in June and July. Incidence of the disease has been reported among all age groups, however, the highest incidence was reported among children 1-4 and 5-9 years old. By sex distribution, 58.6% of cases were females.

/Source: Annual report 2017, NCCD/

### 6.2.2 HAND-FOOT-MOUTH DISEASE

In 2017, a total of 6 051 cases, giving a rate of 19.8 per 10 000 population of hand-foot-mouth disease were registered at the national level, which has increased by 1.6 per 10 000 population as compared to the last year. The morbidity of hand-foot-mouth disease accounted for 13.7% of all communicable diseases and 57.4% of all intestinal infections.

***Figure 6.2.1.*** *Incidence of hand, foot and mouth disease, per 10 000 population, 2008-2017*




Several outbreaks of hand-foot and mouth disease occurred in the country in 2008, 2010, 2014, 2016 and 2017. The highest incidence rate was reported in 2017.

In 2017, the case rate was higher than the country average /19.8/ in the following aimags: Dornod 51.3, Sukhbaatar 47.4, Umnugovi 29.7, Govi-Altai 28.8, Dundgovi 23.6 and Ulaanbaatar city 30.6 per 10000 population. Compared to the same period of last year, the case rate decreased by 0.2-4.8 per 10 000 population in Khovd, Bayan-Ulgii, Bulgan and Bayankhongor aimags. A total of 4 274 cases or 30.6 per 10 000 population of hand-foot-mouth disease were registered in Ulaanbaatar city, which decreased by 1.8 per 10 000 population, compared to the previous year.

The incidence rate of hand-foot-mouth disease in 2017 was higher than the previous 3-year average rate and also higher than 2016's rate. In 2017, number of cases has increased significantly from March and decreased from June.

By age distribution, the disease affected the children particularly, with 82.3% of cases being in those children 0-4 years old. By sex distribution, 56.1% of the hand-foot-mouth cases were males and 43.9% were females. Out of all cases of hand-foot-mouth diseases, 54.1 percent were children at home and 37.1 percent were kindergartens.

/Source: Annual report, NCCD/

### 6.2.3. VIRAL HEPATITIS

A total of 534 new cases of viral hepatitis were registered at the national level, which accounts for 1.2% of all communicable diseases. The incidence decreased by 32 cases as compared to the previous year. Out of all viral infections, 9.6% was viral hepatitis A, 56.9% was viral hepatitis B, 16.7% was viral hepatitis C and 17.0% was other viral hepatitis. The incidence rates of hepatitis A increased by 0.1 and rates of hepatitis B decreased by 0.2 per 10 000 population respectively, compared to the same period of the previous year. Over the last decade it is seen that the highest rate of viral hepatitis A was 52.6 per 10 000 population in 2011.

In 2017, the incidence rates of viral hepatitis were higher than the country average in the following aimags: Umnugovi 2.8, Uvs 2.6, Ulaanbaatar city 2.3, Bayankhongor 2.3, Dornod 1.8 and Dundgovi

1.8 per 10 000 population.

Nationally, the incidence of viral hepatitis for over the last decade it is seen that the highest rate (peaks) was observed in December 2007, 2010 and in November 2011.

Since 2012, the incidence rate has decreased steadily. By the age groups, the incidence of acute viral hepatitis A was higher among 2-9 and 0-15 years old, viral hepatitis B was higher among 15-34 years old and viral hepatitis C was higher among 25-54 years old, respectively.

***Table 6.2.3.1*** *Viral hepatitis, per 10 000 population by province higher than national average, 2016-2017*

| Province | 2016 | | 2017 | | Increase/decrease |
|---|---|---|---|---|---|
| | Absolute number | Per 10 000 population | Absolute number | Per 10 000 population | Per 10 000 population |
| Umnugovi | 17 | 2.8 | 17 | 2.8 | 0.0 |
| Uvs | 13 | 1,6 | 21 | 2,6 | 1.0 |
| Ulaanbaatar | 350 | 2.5 | 327 | 2,3 | -0.2 |
| Bayankhongor | 18 | 2.1 | 19 | 2,3 | 0.2 |
| Dornod | 10 | 1,3 | 14 | 1.8 | 0.5 |
| Dundgovi | 5 | 1.1 | 8 | 1.8 | 0.7 |
| Darkhan-Uul | 24 | 2.4 | 17 | 1.7 | -0.7 |
| **National average** | **566** | **1.9** | **534** | **1.7** | **-0.2** |

### 6.2.3.1 Viral hepatitis A

In 2017, a total of 51 cases or 0.2 per 10 000 population of acute viral hepatitis A were registered at the national level, and the rate has increased by 0.1 per 10 000 population as compared to the previous year. Over the last decade it is seen that the highest rate of acute hepatitis A was 49.0 per 10 000 population in 2011.

In 2017, the incidence rates of acute viral hepatitis A were higher than the country average /0.1/ in the following aimags: Dundgovi 0.7, Uvs 0.5, Dornod 0.4, Khuvsgul 0.3, Umnugovi 0.3 and Sukhbaatar 0.3 per 10 000 population.

In terms of social status, incidence of viral hepatitis A was higher among pupils, employees and officers. 41.2% of total cases were registered among school pupils and the rate has increased as compared to the last year.

/Source: Annual report, NCCD/

### 6.2.3.2 Viral hepatitis B

As of 2017, a total of 304 cases of viral hepatitis B were reported in the nationwide, the case rate was 1.0 per 10 000 population, which decreased by 0.2 cases as compared to the same period of the previous year. There is a tendency that the incidence rate has decreased since 2011 for over the last decade. The incidence of viral hepatitis B was higher than the country average /1.2/ in Umnugovi /1.6/, Bayankhongor /1.3/, Ulaanbaatar /1.2/, Darkha-Uul /1.2/, Govi-Altai /1.2/, Uvs /1.1/ and Khuvsgul /1.1/ per 10 000 population, respectively.

Looking by age group, the incidence rates were high among people aged 15-34 years in 2017. By gender, 60.9% of viral hepatitis B cases were diagnosed in men.

Looking by social status, the incidence rates were high among the workers, students, unemployed people and employees. In 2017, the following main risk factors were identified for those people who infected with viral hepatitis B: 25.3% /21/ of them have received a dental treatment, 13.3% /11/ have received a medical treatment and service, 10.8% (9) had a surgery, 9.6% (8) had an injection at home, 8.4% /7/ have injured, 8,4% (7) had a family member with liver disease, 8.4% /7/ had tattoos, 7.2%

/6/ have received cosmetic treatment and services, 4.8% /4/ had a transfusion of blood and blood products and 2.4%/2/ had abortion, respectively.

### 6.2.3.3 Viral hepatitis C

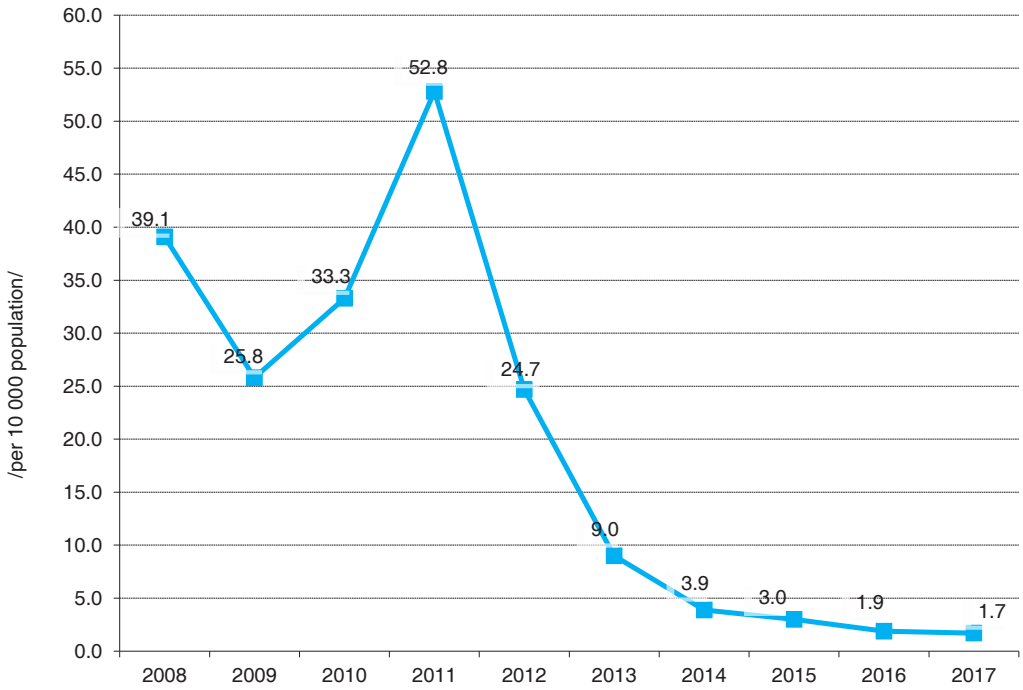
A total of 91 cases of viral hepatitis C were reported in 2017 in the country and the rate was 0.3 per 10 000 population, it was at the same level as compared to the previous year and average rate of the last decade.

The incidence rate of viral hepatitis C per 10 000 population was higher than the country average /0.3/ in Bayankhongor /1.0/, Umnugovi /0.8/, Darkhan-Uul /0.5/, Dornogovi /0.6/, Uvs /0.5/ and Ulaanbaatar city /0.4/.

Looking by age group, the incidence rates were high among people aged 17-65 years in 2017.

In 2017, the following main risk factors were identified for those people who infected with viral hepatitis C: 29.7% /11/ of them have received a dental treatment, 8.1% /11/ have received a medical treatment and service, 5.8% (5) had a surgery, 3.5% (3) had an injection at home, 3.5% /3/ had tattoos, 3.5% /3/ had abortion, 2.3% /2/ have received cosmetic treatment and services, 2.3% /2/ have injured and 1.2% (1) had a family member with liver disease, respectively.

***Figure 6.2.3.1.*** *Viral hepatitis, per 10 000 population, 2008-2017*




## 6.3 RESPIRATORY INFECTIONS

A total of 15 805 cases of respiratory infections were registered, accounted for 35.7% of all communicable diseases.

Majority of the respiratory infections were varicella (61.0%), tuberculosis (23.9%) and scarlet fever (11.3%). Compared to 2016, the incidence rate of tuberculosis and measles decreased by 0.8 and 98.9 per 10 000 population, while varicella, scarlet fever, mumps and erythema infections increased by 9.2, 1.4, 0.4 and 0.3 per 10 000 population, respectively.

***Table 6.3.1.*** *Number of registered cases of respiratory infections per 10 000 population, 2016-2017*

| "Infectious diseases /ICD-10/" | 2016 | | 2017 | | Increase/decrease |
|---|---|---|---|---|---|
| | Absolute number | Per 10 000 population | Absolute number | Per 10 000 population | Per 10 000 population |
| Tuberculosis | 4045 | 13.2 | 3779 | 12.4 | -0.8 |
| Scarlet fever | 1378 | 4.5 | 1797 | 5.9 | 1.4 |
| Meningococcal infection | 10 | 0.0 | 13 | 0.0 | -0.0 |
| Varicella | 6834 | 22.3 | 9643 | 31.5 | 9.2 |
| Measles | 30273 | 99.0 | 17 | 0.1 | -98.9 |
| Rubella | 48 | 0.2 | 11 | 0.0 | 0.2 |
| Mumps | 346 | 1.1 | 219 | 0.7 | 0.4 |
| Erysipelas | 160 | 0.5 | 236 | 0.8 | 0.3 |
| Gas gangrene | 0 | 0.0 | 0 | 0.0 | 0.0 |
| Erythema infectiosum | 104 | 0.3 | 90 | 0.3 | 0.0 |

## 6.3.1 TUBERCULOSIS

A total of 3 779 new cases of tuberculosis were registered which accounted for 8.5% of all communicable diseases. In total, 2 261 cases were reported in Ulaanbaatar city, it accounts for 59.8% of all reported cases of tuberculosis. In 2017, the incidence rate of tuberculosis per 10 000 population was higher than the national average.in Selenge /18.5/, Darkhan-Uul /19.0/, Dornod /16.1/, Govisumber /16.3/, Dornogovi /14.2/ aimags and Ulaanbaatar city /16.2/.

In 2017, among new registered tuberculosis, pulmonary tuberculosis was 55.0% /2 080 cases/, decreased by 51 cases and extra pulmonary tuberculosis was 45.0% /1 699 cases/, decreased by 215 cases as compared to the last year. Compared to 2016, rates of pulmonary tuberculosis increased by 2.4%, while rates of extra pulmonary tuberculosis decreased by 2.4%. Looking at the registered new cases by age group, the incidence rates were high among people 15-24, 25-34 years old and above 65 years old. By sex distribution, 55.1% were males and 44.9% were females.

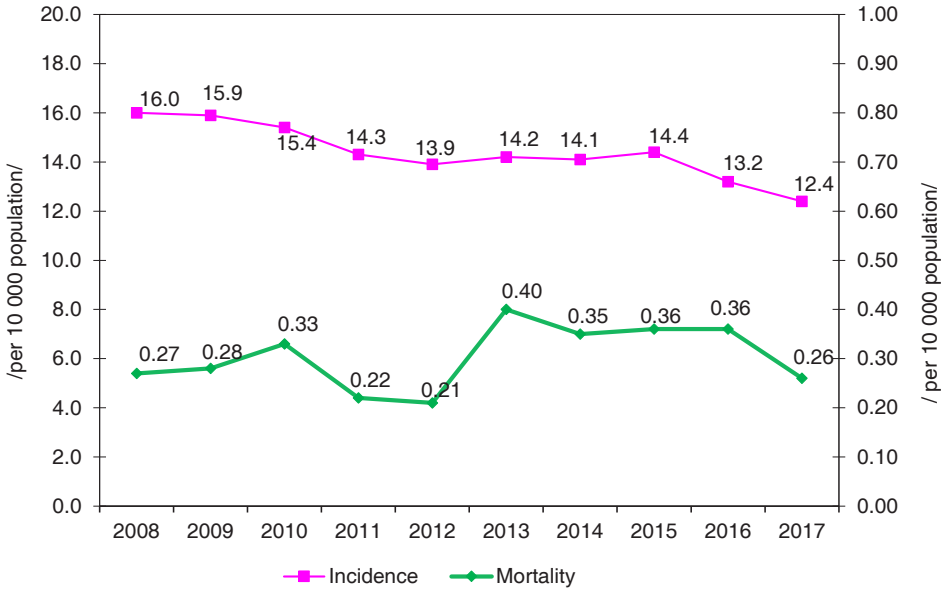
***Table 6.3.1.1.*** *Tuberculosis per 10 000 population by province higher than national average, 2016-2017*

| Province | 2016 | | 2017 | | Increase/decrease |
|---|---|---|---|---|---|
| | Absolute number | Per 10 000 population | Absolute number | Per 10 000 population | Per 10 000 population |
| Darkhan-Uul | 176 | 17.4 | 192 | 19.0 | 1.6 |
| Selenge | 191 | 18.0 | 197 | 18.5 | -0.5 |
| Govisumber | 25 | 15.1 | 27 | 16.3 | 1.2 |
| Dornod | 119 | 15.6 | 123 | 16.1 | -0.5 |
| Dornogovi | 83 | 12.7 | 93 | 14.2 | 1.5 |
| **Ulaanbaatar** | 2469 | 17.7 | 2261 | 16.2 | 1.5 |
| **National average** | **4045** | **13.2** | **3779** | **12.4** | **0.8** |

In 2017, 473 new cases of tuberculosis were reported in children aged 0-15 years old. There were 60 cases of pulmonary tuberculosis (12.7%) and 413 cases of extra pulmonary tuberculosis (87.3%). For the sever form of tuberculosis in children, 4 cases of acute military tuberculosis and 3 cases of tuberculosis meningitis were reported and these most sever forms of TB have decreased by 1 case respectively as compared to the previous year.

/Source: Annual report, NCCD/

***Figure 6.3.1.1.*** *Incidence of tuberculosis and mortality, 2008-2017*




In 2017, a total of 52 cases of deaths were reported and the number of cases decreased by 25 as compared to the previous year.

There was 1 child case of death due to tuberculosis meningitis which accounted for 1.9% of total TB deaths. Looking by causes, 40 cases (77%) of deaths occurred due to pulmonary tuberculosis and 12 cases (23%) of deaths occurred due to extra pulmonary tuberculosis.

According to the statistics for the last 7 years, the number of people who lost their working ability due to tuberculosis has been increasing year by year, particularly the number of people who insured by 70% or more. In 2017, a total of 2664 patients lost their working ability and received a disability pension or social welfare support. And the percentage of loss of working ability was determined as follows: 2541 people /95.4%/ were insured over 70% and 123 people /4.6%/ were insured 50-69%.

/Source: Annual report, NCCD/

### 6.3.2 MUMPS

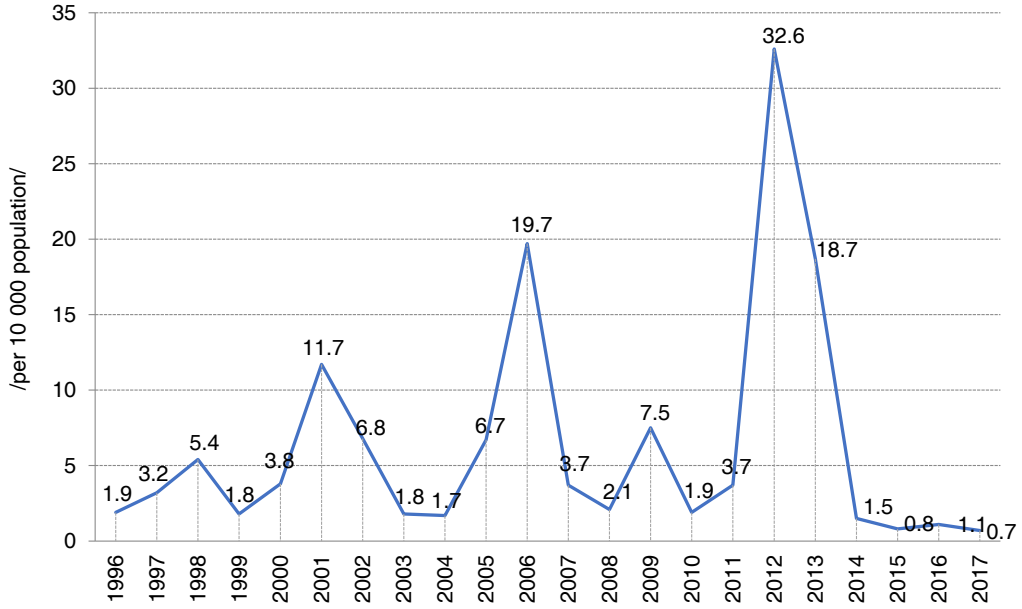
At the national level, a total of 219 cases or 0.7 per 10 000 population of mumps were registered and the rate has decreased by 127 cases or by 0.4 per 10 000 population as compared to the last year.

The incidence of mumps accounted for 0.5% of all communicable diseases. Compared to 2016, the incidence rate of mumps per 10 000 population increased by 0.9-1.3 in the following aimags: Dornod /4.4/, Darkhan-Uul /2.2/ and Ulaanbaatar city /0.9/.

However, the rate has decreased in other aimags. Out of all reported cases, 54.8% were reported in Ulaanbaatar city and the rate has decreased by 0.4 per 10 000 population as compared to the last year.

Incidence of the disease registered among people those aged up to 60 years old, and 53.7% of all cases registered in children 4-9 years old.

***Figure 6.3.2.1.*** *The number of mumps, 10 000 population, 1996-2017*




### 6.3.3 VARICELLA

At the national level, a total of 9 643 cases or 31.5 per 10 000 population of varicella were registered and the rate has increased by 9.2 per 10 000 population /2 800 cases/, compared to the previous year. Incidence of the disease accounted for 21.8% of all communicable diseases.

In 2017, incidence rate of varicella per 10 000 population was higher than the country average in the following aimags: Dornod 85.3, Sukhbaatar 58.4, Dundgovi 43.4, Uvurkhangai 35.2 and Ulaanbaatar city 42.2. Compared to the previous year, the incidence of varicella has decreased in Dornogovi. Zavkhan, Umnugovi, Tuv and Khovd aimags by 0.3-23.8, while the rate has increased by 0.8-35.7 in other aimags. 61.1% of all cases registered in Ulaanbaatar city and the rate has increased by 15.7 per 10 000 population compared to 2016.

### 6.3.4 SCARLET FEVER

In 2017, a total of 1 797 cases or 5.9 per 10 000 population of scarlet fever were registered and the rate increased by 1.4, compared to the previous year.

In 2017, scarlet fever incidence rate was higher in Ulaanbaatar city /12.0/, compared to the country average /6.1/. The incidence of scarlet fever has decreased by 0.2-4.1 per 10 000 population in Bulgan, Dornod, Sukhbaatar, Darkhan-Uul and Khuvsgul aimags, while the rate has increased by 0.1-1.4 per 10 000 population in other aimags.

### 6.3.5 MENINGOCOCCAL INFECIONS

According to the dynamics of meningococcal infections registered at the national level, there were several outbreaks of meningococcal infections occurred in the country in 1974 and 1994, the case rate was 14-19 per 10 000 population.

Since 1995, the incidence rate has decreased steadily, but it has increased slightly in 2007, giving a rate of 0.6 per 10 000 population. For the past decade, the case rate of meningococcal infections was 0.04-0.3 per 10 000 population.

In 2017, a total of 13 cases or 0.04 per 10 000 population of meningococcal infections were registered. The rate increased by 3 (0.01%) cases as compared to the previous year and decreased by 8 (0.03%) cases as compared to an average of the last 5 years.

/Source: Annual report 2017, NCCD/

## 6.4 SEXUALLY TRANSMITTED INFECTIONS

A total of 15 364 cases of STI's were registered, accounts for 34.7% of all communicable diseases, and the rate has increased by 2.7 percent or by 400 cases as compared to the last year. 28.8% of STI's were gonorrhea, 43.4% were syphilis, 27.6% were trichomoniasis and 0.2% were HIV/AIDS, respectively.

***Table 6.4.1.*** *Number of cases of STI's per 10 000 population, 2016-2017*

| Infectious diseases /ICD-10/ | 2016 | | 2017 | | Increase/decrease |
|---|---|---|---|---|---|
| | Absolute number | Per 10 000 population | Absolute number | Per 10 000 population | Per 10 000 population |
| Syphilis | 6193 | 20.3 | 6670 | 21.8 | 1.5 |
| Gonorrhea | 4374 | 14.3 | 4422 | 14.5 | 0.2 |
| Trichomoniasis | 4371 | 14.3 | 4247 | 13.9 | -0.4 |
| HIV/AIDS | 26 | 0.1 | 25 | 0.1 | 0.0 |

Incidence of syphilis per 10 000 population was higher than the national and aimag average in the following aimags: Govisumber, Bayankhongor, Dornod, Sukhbaatar, Khuvsgul, Govi-Altai aimags and Ulaanbaatar city.

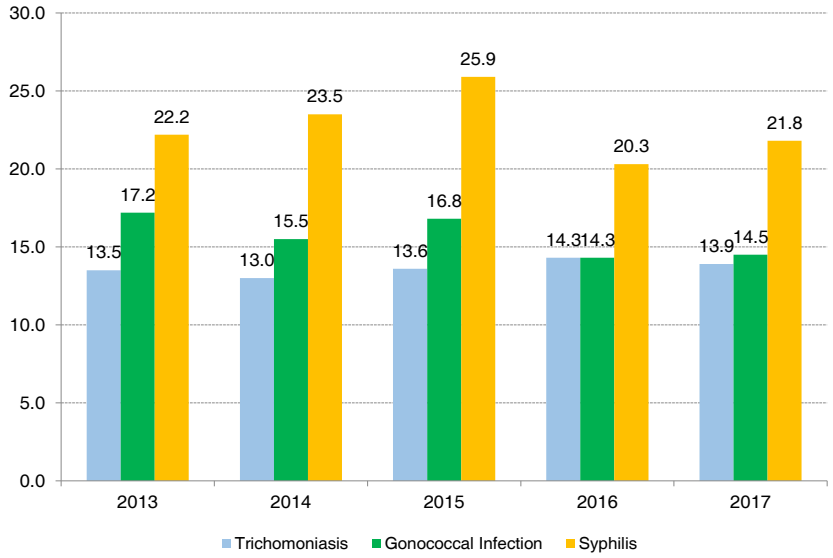
Incidence of gonorrhea was higher in Dornod, khuvsgul, Dornogobi, Bayankhongor, Sukhbaatar, Uvs aimags and Ulaanbaatar city. Incidence of trichomoniasis was higher than the national and aimag average in Dornod, Khuvsgul, Dornogovi, Bayankhongor, Sukhbaatar, Uvs aimags and Ulaanbaatar city.

In 2017, 59 cases of congenital syphilis were registered, which increased by 17 cases as compared to the last year. There were 3 cases of congenital syphilis in Arkhangai, 3 in Uvurkhangai, 3 in Khuvsgul, 2 in Dornogovi, 2 in Khentii, 1 in Bulgan, 1 in Dornod, 1 in Orkhon, 1 in Umnugovi, 1 in Selenge and 41 cases in Ulaanbaatar city. Out of the total registered cases, 13 deaths reported. 22 mothers who delivered infants with congenital syphilis have not attended the antenatal care or medical check-ups.

However, 37 pregnant women have attended the antenatal care service and 6 of them had been tested for syphilis 2 times, 12 of them had been tested for syphilis only 1 time (in their early or late period of pregnancy) and 10 pregnant women were not tested for syphilis. This shows poor quality and lack of antenatal care for pregnant women, and also lack of responsibility of those pregnant women.

*/Source: Annual Report 2017, NCCD/*

***Figure 6.4.1.*** *STI's, per 10 000 population, 2013-2017*




Reported cases of common STIs in 2017, 59.6% were females and 40.4% were males. By age groups, 12.3% were 15-19 years old, 26.4% were 20-24 years old, 25.2% were 25-29 years old, 14.8% were 30-34 years old, 8.9% were 35-39 years old and 12.4% were above the 40 years old, respectively.

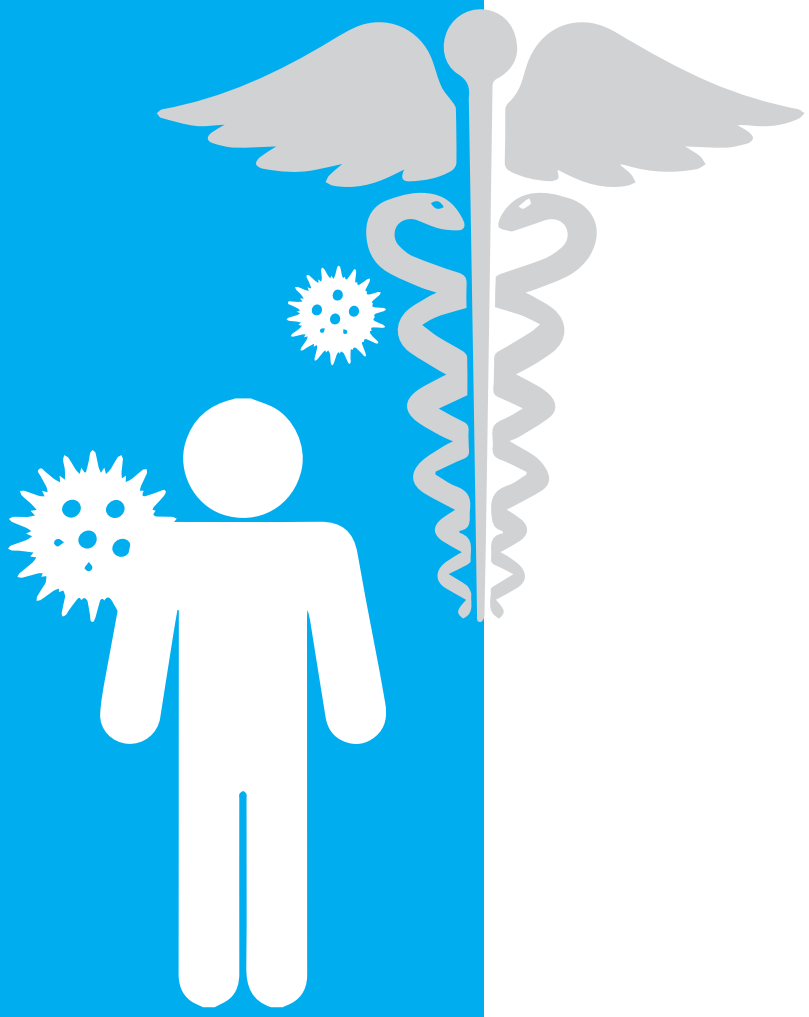
A total of 250 cases of HIV/AIDS reported in Mongolia and 25 of them reported in 2017 which increased by 1 case, compared to the previous year. In all cases, HIV transmitted through sexual intercourse.

81% of all total HIV\AIDS cases were males: 48.2% were homosexual, 19.8% were heterosexual, 1% was transgender and 31% were men with bisexual. There were 18.0 percent females and of them 95% have heterosexual orientation. Out of the total HIV infection, 5 deaths reported.

/Source: Annual Report 2017, NCCD/

## 6.5. COMMUNICABLE DISEASE MORTALITY

There were 117 deaths were registered which caused by communicable diseases. According to the registration of total cases of death, there were 80 cases of tuberculosis, 13 cases of congenital syphilis, 6 cases of viral hepatitis, 5 cases of tick-borne encephalitis, 5 cases of HIV/AIDS, 3 cases of meningococcal infection, 2 cases of tick-borne rickettsioses, 2 cases of bacterial sepsis of newborn and 1 case of varicella, respectively.



# CHAPTER.7

# NON-COMMUNICABLE DISEASES

# CHAPTER 7.

# NON-COMMUNICABLE DISEASES

## 7.1 MAIN CAUSES OF POPULATION MORBIDITY

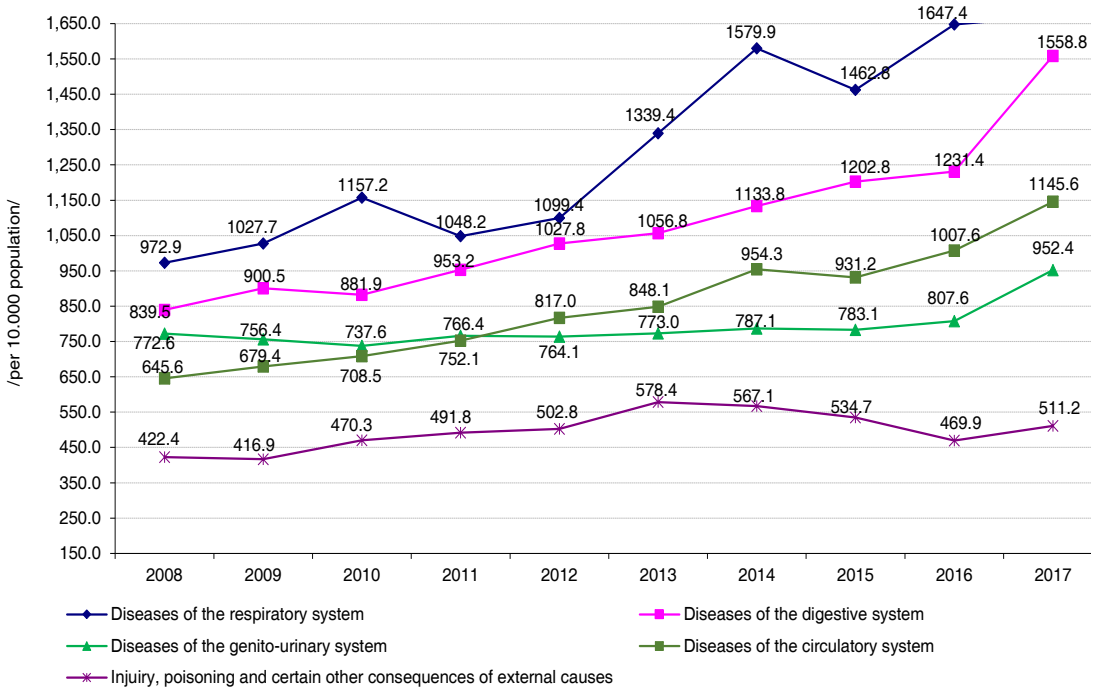
Non-communicable diseases are the largest cause of preventable death and disease worldwide, and even more, these numbers are rising. With an increasing number of people needing treatment, healthcare costs everywhere are growing. Achieving a healthy and sustainable environment is a key ingredient for preventing disease and enabling viable health care. Environmental factors are also main causes of non-communicable diseases, include urbanization, population density, ambient and household air pollution, unhealthy life style. According to the WHO's estimation, globally, 23% of all deaths could be prevented through healthier environments.

"WHO methods and data sources for global burden of disease estimates 2000-2015"

According to the WHO's estimation, the ten leading causes of non-communicable diseases are related to the environment as follows: stroke, ischemic heart disease, unintentional injuries, cancers, chronic lung diseases, asthma, respiratory infections, neonatal conditions and intentional injuries. Smoking is the most important risk factor for developing lung cancer, causing 68% of the burden and 41% of chronic obstructive pulmonary disease (COPD) is attributable to smoking. Air pollution is also an important cause, with 30% of COPD being attributable to ambient and household air pollution and 12% to workplace air pollution.

"Preventing noncommunicable disease by reducing environmental risk factors, WHO 2017"

***Figure 7.1.1.*** *Five leading causes of morbidity, per 10 000 population, 2008-2017*



As of 2017, the 5 leading causes of population morbidity per 10 000 population were:

- Diseases of the respiratory system /1671.4 per 10 000 population/
- Diseases of the digestive system /1558.8 per 10 000 population/
- Diseases of the circulatory system /1145.6 per 10 000 population/
- Diseases of the genito-urinary system /952.4 per 10 000 population/
- Injuries, poisoning and certain other consequences of external causes /511.2 per 10 000 population/

When the leading causes of population morbidity are stratified by location, diseases of the respiratory, digestive and cardiovascular systems are the three leading causes both in urban and rural areas in 2017. For instance, morbidity rates of diseases of the respiratory system per 10 000 population was 1520.0 in urban areas and 1796.1 in rural areas; diseases of the digestive system was 1655.8 in urban areas and 1478.8 in rural areas; diseases of the circulatory system was 1159.3 in urban areas and 1134.3 in rural areas, diseases of the genito-urinary system was 1001.2 in urban areas and 1134.3 in rural areas and the rates of injuries, poisoning and certain other consequences of external causes was 858.9 in urban and 224.8 in rural areas, respectively.

***Table 7.1.1.*** *Five leading causes of morbidity, by age and sex, 2017*

| | Total morbidity | Diseases of circulatory system | Respiratory system diseases | Digestive system diseases | Urogenital system diseases | Injurie, poisoning and certain other consequences of external causes |
|---|---|---|---|---|---|---|
| **Sex** | | | | | | |
| Male | 7362.7 | 888.5 | 1627.2 | 1238.0 | 442.5 | 650.0 |
| Female | 11285.3 | 1393.4 | 1714.0 | 1867.9 | 1443.9 | 377.4 |
| Age group | | | | | | |
| **Male** | | | | | | |
| Under 20 years old | 7509.8 | 36.5 | 3169.3 | 1299.9 | 240.6 | 542.6 |
| 20-44 | 4571.5 | 406.9 | 447.6 | 840.7 | 407.6 | 747.8 |
| 45-65 | 10808.3 | 2782.9 | 776.3 | 1731.6 | 755.9 | 630.8 |
| Over 65 years old | 20919.7 | 7261.6 | 1846.1 | 2593.4 | 1564.2 | 584.4 |
| **Female** | | | | | | |
| Under 20 years old | 7441.9 | 47.1 | 3033.3 | 1380.4 | 296.2 | 320.7 |
| 20-44 | 10158.5 | 650.9 | 742.1 | 1563.0 | 2010.6 | 355.5 |
| 45-65 | 17194.1 | 3850.6 | 1150.7 | 2945.1 | 2212.6 | 460.3 |
| Over 65 years old | 24551.5 | 8089.4 | 1709.1 | 3538.5 | 2051.5 | 585.8 |
| **Residency** | | | | | | |
| Urban | 10770.4 | 1159.3 | 1520.0 | 1655.8 | 1001.2 | 858.9 |
| Rural | 8198.5 | 1134.3 | 1796.1 | 1478.8 | 912.2 | 224.8 |
| **Regions** | | | | | | |
| Western | 6675.9 | 1056.7 | 1320.2 | 1374.1 | 907.0 | 182.5 |
| Khangai | 8642.4 | 1286.8 | 1845.2 | 1509.5 | 1052.0 | 198.5 |
| Central | 8670.7 | 1113.7 | 2147.4 | 1525.2 | 843.6 | 271.2 |
| Eastern | 7547.2 | 906.0 | 1727.7 | 1481.0 | 696.4 | 267.7 |
| **National average** | **9360.1** | **1145.6** | **1671.4** | **1558.8** | **952.4** | **511.2** |

The outpatient morbidity rate per 10 000 population was 1.5 times higher in females than in males. The outpatient morbidity rates for injuries, poisoning and certain other consequences of external causes were 1.0 times higher among men than women. However, the morbidity rates for other diseases were 1.0-3.3 times lower in males than females.

Morbidity rates of the three leading causes of diseases by region were as follows: diseases of the

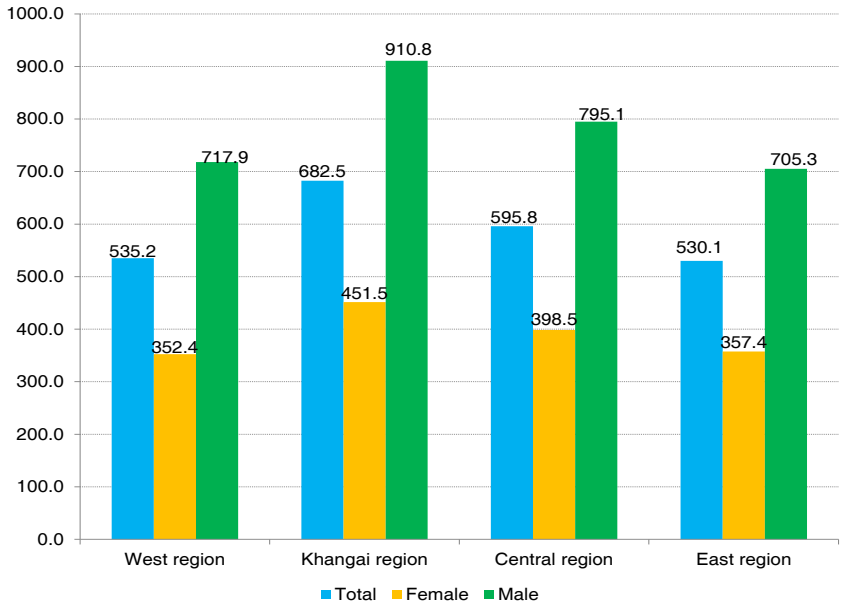
digestive system 1374.1, disease of the respiratory system 1320.2, and diseases of the circulatory system 1056.7 in the western region; diseases of the respiratory system 1845.2, diseases of the digestive system 1509.5 and diseases of the circulatory system 1286.8 in the khangai region; diseases of the respiratory system 2147.4 and 1727.7, diseases of the digestive system 1525.2 and 1481.0, and diseases of the circulatory system 1113.7 and 906.0 in the central and eastern regions respectively.

## 7.2 ARTERIAL HYPERTENSION

Arterial hypertension accounts for 49.2% of all diseases of the circulatory system, the morbidity rate was 564.3 per 10 000 population. By gender, the rate was 727.6 per 10 000 population for females and 394.7 for males per 10 000 population.

The morbidity rate was higher in the khangai and central regions compared to other regions. And the rate was higher in the following aimags: Arkhangai /1049.9/, Bulgan /926.5/, Bayankhongor /845.1/, Tuv /797.5/ and Umnugovi /706.2/.

***Figure 7.2.1.*** *Arterial hypertension by sex and regions, per 10 000 population, 2017*

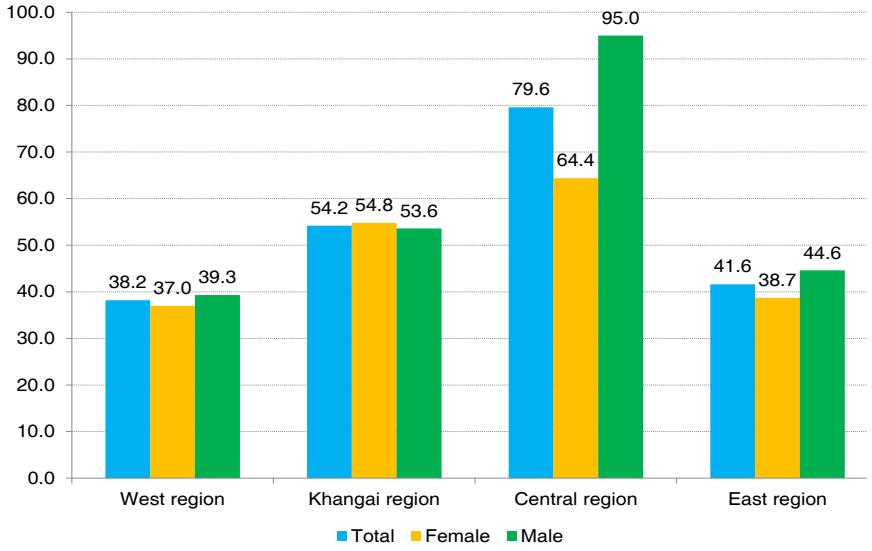



## 7.3. DIABETES

Diabetes accounted for 44.1% of all diseases of endocrine, nutritional and metabolic disorders and the morbidity rate was 100.8 per 10 000 population in 2017, which increased by 22.2 as compared to the last year /the rate was 78.6 in 2016/.

The gender specific incidence rate was 94.6 per 10 000 population for males and 106.8 per 10 000 population for females. Looking by age groups, the highest rate was recorded among people aged 45-65 years, giving a rate of 354.2 per 10 000 population (19 581 cases). When stratifying by location, the highest rate was reported in the central region as giving a rate of 79.6 per 10 000 population. In the central region, the rate was higher in Dornogovi /107.1/, Darkhan-Uul /99.6/ and Selenge /97.8/ aimags.

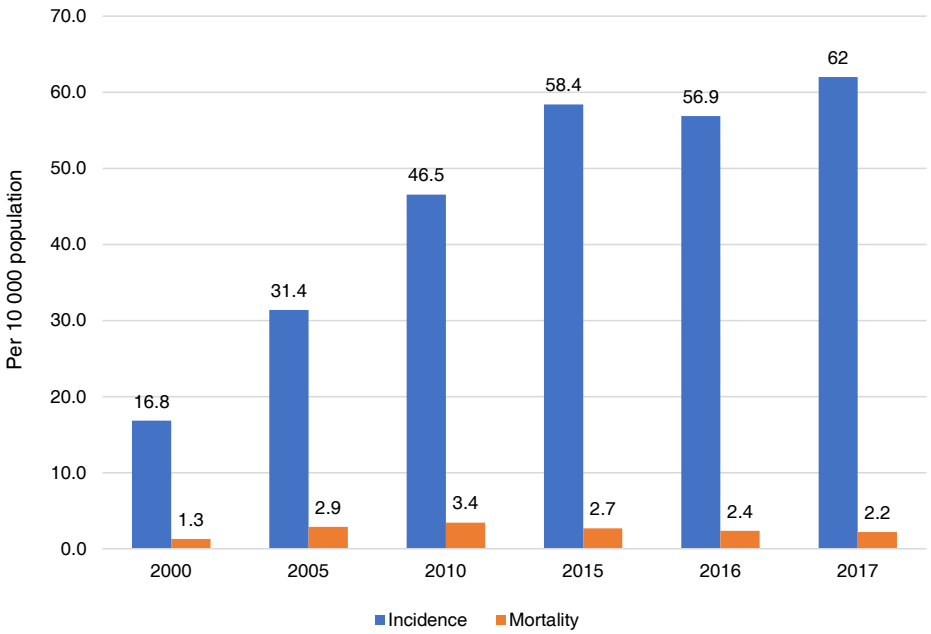
***Figure 7.3.1.*** *Diabetes by sex and regions, per 10 000 population, 2017*




## 7.4 DISEASES OF LIVER

The diseases of liver accounted for 13.4% of all diseases of the digestive system, the morbidity rate was 209.5 per 10 000 population. The chronic hepatitis accounts for 43.9% of the total reported liver diseases as considering main causes of cancer. In 2017, the incidence of liver diseases was 169 per 10 000 population for males and 249 per 10 000 population for females, and the rate has increased by 35 cases for males and by 97 cases for females, respectively as compared to 2008. In 2017, the morbidity of chronic hepatitis was 91.9 per 10 000 population, it has increased by 35.5 as compared to 2008. In 2017, the incidence rate of other diseases of liver was 48.5 per 10 000 population, it has increased by 20.8 as compared to 2008.

***Figure 7.4.1.*** *Incidence of liver cirrhosis and deaths, per 10 000 population,*



The morbidity of fibrosis and cirrhosis of liver was 16.8 per 10 000 population in 2000, while the rate has increased by 45.2 as giving a rate of 62.0 per 10 000 population in 2017. By age groups, the rate was 198.9 per 10 000 population among people aged 45-65 years.

## 7.5. LEADING CAUSES OF THE INPATIENT MORBIDITY

As of 2017, the five leading causes of inpatient morbidity per 10 000 population were:

- Diseases of respiratory system – 431.9
- Diseases of cardiovascular or circulatory system – 411.7
- Diseases of digestive system – 333.2
- Diseases of genitourinary system– 316.3
- Diseases of nervous system– 211.1

***Table 7.5.1.*** *Five leading causes of the inpatient morbidity by age, sex, 2017*

| | Total morbidity | Respiratory system diseases | Digestive system diseases | Urogenital system diseases | Cardiovascular system diseases | Nervous system diseases |
|---|---|---|---|---|---|---|
| **Sex** | | | | | | |
| Male | 2076.3 | 453.7 | 309.7 | 159.2 | 348.4 | 170.7 |
| Female | 3411.9 | 410.8 | 355.8 | 467.8 | 472.7 | 250.0 |
| **Age group /Male/** | | | | | | |
| Under 20 years old | 1887.2 | 1005.9 | 244.4 | 63.7 | 13.1 | 75.5 |
| 20-44 | 1342.9 | 98.2 | 254.8 | 159.6 | 148.2 | 158.1 |
| 45-65 | 3470.7 | 212.1 | 521.1 | 284.4 | 1072.1 | 302.3 |
| Over 65 years old | 7787.3 | 641.2 | 801.9 | 650.6 | 3209.4 | 538.0 |
| **Age group /Female/** | | | | | | |
| Under 20 years old | 1795.9 | 874.5 | 216.6 | 94.5 | 16.7 | 71.1 |
| 20-44 | 3679.1 | 121.4 | 24.9 | 597.4 | 178.5 | 198.2 |
| 45-65 | 4640.7 | 239.0 | 682.4 | 719.1 | 1221.1 | 491.0 |
| Over 65 years old | 8944.2 | 549.1 | 1141.7 | 937.6 | 3463.2 | 680.4 |
| **Residency** | | | | | | |
| Urban | 3151.6 | 488.8 | 406.3 | 311.4 | 421.5 | 221.7 |
| Rural | 2405.1 | 428.0 | 268.7 | 301.3 | 380.2 | 169.8 |
| **Regions** | | | | | | |
| Western | 2579.6 | 368.1 | 314.2 | 333.1 | 401.5 | 246.1 |
| Khangai | 2152.8 | 324.7 | 237.1 | 328.2 | 386.8 | 145.8 |
| Central | 2289.0 | 439.3 | 229.9 | 285.0 | 360.6 | 175.3 |
| Eastern | 2230.5 | 371.1 | 240.6 | 225.2 | 307.0 | 182.1 |
| **National average** | **2756.4** | **431.9** | **333.2** | **316.3** | **411.7** | **211.1** |

Hospital admission rates were 2076.3 per 10 000 in males and 3411.9 per 10 000 in females. Inpatient admission rate per 10 000 population was 1.6 times lower in males than females.

As of 2017, the five leading causes among hospitalized patients were as follows: among patients with diseases of the genito-urinary system 63.1% had pyelonephritis; among patients with diseases of the respiratory system 49.1% had pneumonia; among patients with diseases of the digestive system 25.5% had liver problems; and among patients with diseases of the cardiovascular system 40.1% had suffered from arterial hypertension and 24.1 % had ischemic heart disease.

There is a tendency that the morbidity of pyelonephritis has been decreasing steadily since 2008.

***Table 7.5.2.*** *Inpatient morbidity, by percentage, 2008-2017*

| Diseases classification | Leading cause | Percent of diseases group | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Urogenital system diseases | Nephritis (N10-N16) | 69.1 | 66.6 | 68.3 | 67.4 | 67.1 | 66.1 | 64.1 | 63.6 | 63.0 | 63.1 |
| Respiratory system diseases | Pneumonia (J12-J18) | 41.9 | 38.8 | 44.8 | 46.2 | 46.9 | 46.1 | 51.3 | 44 | 52.4 | 49.1 |
| Digestive system diseases | Liver diseases (K70-K77) | 25.6 | 25.7 | 25.2 | 26.1 | 26.6 | 27 | 27.8 | 26.9 | 26.0 | 25.5 |
| | Appendicitis (K35-K38) | 17 | 16.9 | 16.7 | 15.4 | 14.6 | 14.1 | 13.5 | 13.1 | 12.6 | 12.2 |
| | Diseases of gall bladder (K80-K81) | 13.7 | 14.2 | 13.8 | 14.2 | 14.3 | 14.6 | 13.6 | 13.2 | 13.4 | 13.5 |
| Cardiovascular system diseases | Hypertension (I10-I15) | 33.2 | 34.4 | 36.6 | 36.8 | 37.7 | 37.6 | 38.5 | 40.2 | 39.7 | 40.1 |
| | Ischemic heart disease (I20, I23-I25) | 30.1 | 29.5 | 26.6 | 26 | 26.1 | 26.7 | 24.6 | 23.6 | 24.3 | 24.1 |
| Nervous system diseases | Disorders on neural radixes and plexuses (G50-G59) | 24.3 | 26 | 26.7 | 28.8 | 30.9 | 33.8 | 27.7 | 34.8 | 36.4 | 37.2 |
| | Epilepsy (G40-G41) | 11.2 | 10.9 | 13.3 | 12.6 | 12.1 | 11.4 | 11.4 | 11.1 | 10.6 | 9.5 |

The incidence of pneumonia accounted for 41.9% of all inpatient morbidity caused by diseases of the respiratory system in 2008, however the percentage increased to 46.9% in 2012, and the morbidity rate has decreased by 3.3% in 2017 as compared to 2016.

In 2008, the diseases of liver and gallbladder accounted for 25.6% and 13.7% of all diseases of the digestive system. However, the morbidity rates of diseases of liver and gallbladder were 25.5% and 13.5% in 2017, the rates were at the same level as compared to 2016. Ischemic heart diseases accounted for 30.1% of all inpatients due to diseases of the cardiovascular system in 2008, while the morbidity has decreased to 24.1% in 2017.

## 7.6. SCREENING FOR NON-COMMUNICABLE DISEASES

In 2017, a total of 512 388 people were screened to detect arterial hypertension at early stage. Out of them, 66.7% was the target population group and the participation rate increased by 7.7% compared to the previous year. Out of the total screened people, 42.0% were males and 58% were females.

In regard to the Body Mass Index (BMI), 4.7% of the participants were underweight, 51.1% were

normal weight, 31.9% were overweight and 12.2% were obese or more than 30 kg/m2. Out of all participants, 62.1% were invited by public health workers for the screening, 16.7% by voluntarily and 9.4% by advertisement.

By early screening result, 87.3% of the participants were normal, 12.7% were identified at high risk for arterial hypertension and invited for follow-up medical examination.

A total of 69 653 people were involved in the follow-up medical examination after screening. Out of them, 9 843 people (1.9%) were diagnosed with arterial hypertension.

In total, 485 315 people were screened for early detection of diabetes and the participation rate was 63.2%. As a result, 97.1% of the participants were normal, and 2.9% were at high risk for diabetes or changes in the fasting plasma glucose test and they were referred to the secondary level hospitals. The participation rate for the screening of type 2 diabetes by gender was: 42.0% were males and 58.0% were females. As a result of the screening, a total of 22 188 people were referred to the assigned secondary level hospitals. Out of them, 1 279 people (0.3%) were diagnosed with type 2 diabetes.

***Table 7.6.1.*** *Percentage of screening coverage, by province, 2016-2017*

| Province, city | Screening for arterial hypertension | | | | Screening for diabetes type 2 | | | |
|---|---|---|---|---|---|---|---|---|
| | Percentage of people screened | | Diagnosis verified | | Percentage of people screened | | Diagnosis verified | |
| | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 |
| Arkhangai | 56.8 | 64.4 | 6.6 | 6.5 | 60.2 | 71.2 | 0.2 | 0.2 |
| Bayan-Ulgii | 32.9 | 50.8 | 12.5 | 8.5 | 22.6 | 41.8 | 0.7 | 0.8 |
| Bayankhongor | 67.6 | 73.6 | 1.8 | 2.0 | 66.5 | 69.1 | 0.1 | 0.1 |
| Bulgan | 63.6 | 69.0 | 1.5 | 1.1 | 65.2 | 69.5 | 0.1 | 0.1 |
| Govi-Altai | 50.5 | 51.8 | 5.3 | 3.9 | 52.1 | 53.3 | 0.2 | 0.2 |
| Govisumber | 24.0 | 40.4 | 2.6 | 1.2 | 20.4 | 35.8 | 0.4 | 0.5 |
| Darkhan-Uul | 81.9 | 76.3 | 1.7 | 1.2 | 80.8 | 77.0 | 0.3 | 0.3 |
| Dornogovi | 97.4 | 93.8 | 1.8 | 1.3 | 92.2 | 87.5 | 0.3 | 0.3 |
| Dornod | 90.9 | 94.2 | 2.2 | 1.1 | 89.9 | 93.7 | 0.1 | 0.2 |
| Dundgovi | 57.8 | 68.7 | 2.7 | 1.2 | 58.4 | 67.9 | 0.2 | 0.1 |
| Zavkhan | 41.0 | 67.1 | 4.6 | 3.1 | 33.9 | 58.2 | 0.6 | 0.8 |
| Orkhon | 51.9 | 52.7 | 2.2 | 0.9 | 47.9 | 49.7 | 0.3 | 0.4 |
| Uvurkhangai | 83.1 | 73.8 | 2.2 | 1.6 | 83.6 | 74.6 | 0.2 | 0.1 |
| Umnugovi | 49.6 | 48.3 | 3.4 | 1.9 | 52.5 | 52.1 | 0.3 | 0.3 |
| Sukhbaatar | 88.2 | 81.3 | 2.3 | 1.3 | 88.2 | 81.3 | 0.1 | 0.1 |
| Selenge | 33.6 | 62.7 | 4.6 | 3.7 | 23.5 | 55.6 | 1.0 | 0.6 |
| Tuv | 80.9 | 72.4 | 1.8 | 1.5 | 78.5 | 70.5 | 0.2 | 0.2 |
| Uvs | 42.9 | 73.5 | 2.1 | 2.5 | 40.9 | 78.8 | 0.1 | 0.1 |
| Khovd | 35.0 | 52.6 | 5.1 | 6.6 | 30.8 | 50.7 | 0.5 | 0.9 |
| Khuvsgul | 57.6 | 77.4 | 3.6 | 3.7 | 57.9 | 78.1 | 0.1 | 0.0 |
| Khentii | 73.3 | 73.0 | 1.4 | 0.6 | 71.4 | 70.4 | 0.2 | 0.2 |
| **Province average** | **61.3** | **68.8** | **3.0** | **2.6** | **59.1** | **67.4** | **0.2** | **0.3** |
| Ulaanbaatar | 56.1 | 64.1 | 1.5 | 1.1 | 50.9 | 58.0 | 0.4 | 0.3 |
| **National average** | **59.0** | **66.7** | **2.3** | **1.9** | **55.5** | **63.2** | **0.3** | **0.3** |

## 7.7. SURGICAL SERVICES

In 2017, a total of 207 524 people underwent surgical treatment, of which 82.7% were in Ulaanbaatar city and 17.3% were in rural hospitals. 19.8% or 41 177 cases were pediatric surgeries, under 15 years old.

***Table 7.7.1.*** *Number of surgeries performed in Ulaanbaatar hospitals, 2017*

| Operation | Number of people operated | | Out | | Postoperative complications | | Mortality rate | |
|---|---|---|---|---|---|---|---|---|
| | Total number | Out: children up to the age of 15 | Endoscopic surgery | Repeat surgery | Total number | Out: children up to the age of 15 | Total number | Out: children up to the age of 15 |
| National Centre for Mother and Child | 15404 | 8021 | 264 | 51 | 51 | 15 | 0 | 0 |
| State hospitals under Ulaanbaatar Health Authority | 113617 | 24784 | 1310 | 349 | 8 | 0 | 15 | 0 |
| I State Central Hospital | 10752 | 12 | 1942 | 12 | 12 | 0 | 11 | 0 |
| National Centre of Traumatology and Orthopaedics | 10037 | 1993 | 276 | 5 | 0 | 0 | 155 | 9 |
| III State Central Hospital | 6281 | 157 | 777 | 14 | 16 | 0 | 14 | 1 |
| Private hospitals under Ministry of Health | 9788 | 563 | 1904 | 13 | 7 | 0 | 0 | 0 |
| II State Central Hospital | 2568 | 0 | 1041 | 15 | 23 | 0 | 17 | 0 |
| National Cancer Centre | 2587 | 6 | 138 | 9 | 32 | 0 | 17 | 0 |
| National infectious Diseases Centre | 614 | 90 | 7 | 4 | 0 | 0 | 0 | 0 |
| **Total** | **171648** | **35626** | **7659** | **472** | **149** | **15** | **229** | **10** |

***Figure 7.7.1.*** *Number of surgery, by province, 2017*

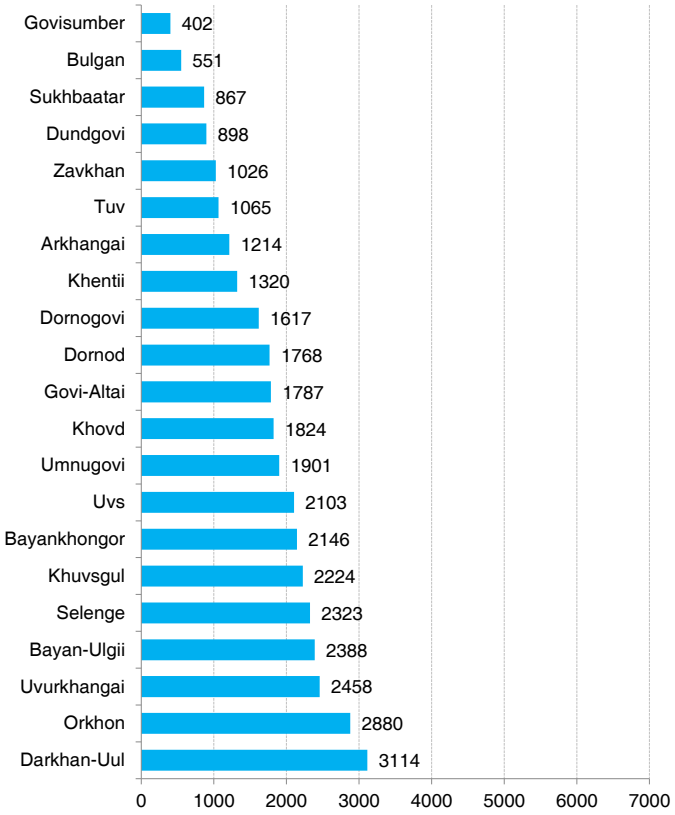
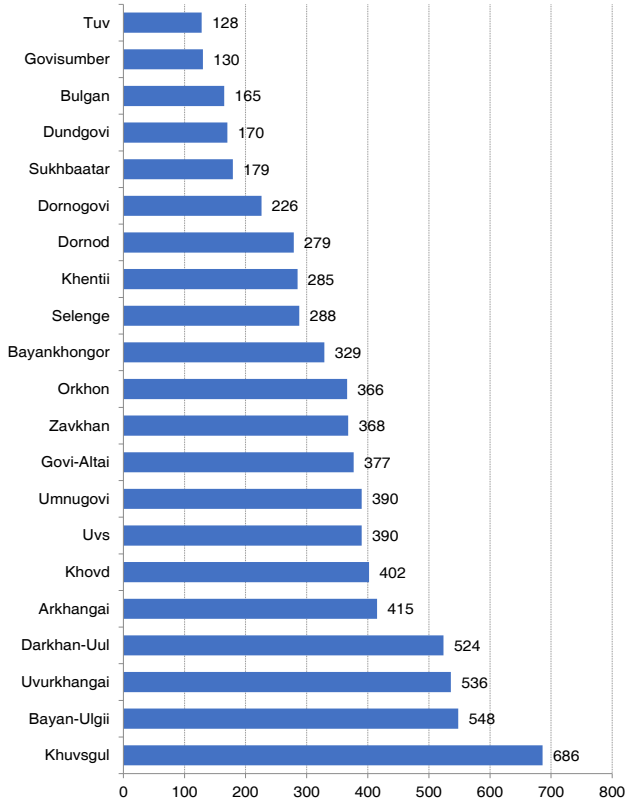


***Table 7.7.2.*** *Types of surgeries performed, 2017*

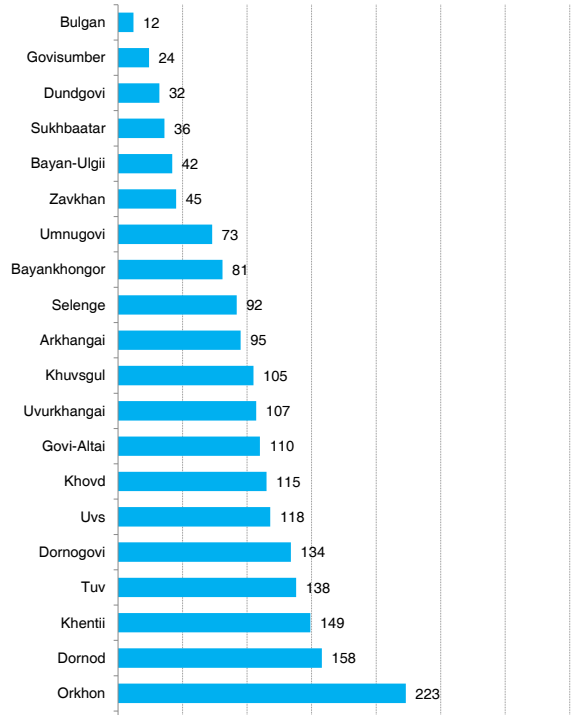
| Surgery | Number of people operated | | Endoscopic surgery | Repeat surgery | Postoperative operations | | Mortality rate | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percentage | | | Number | Percentage | Number | Percentage |
| The nervous system performed surgical operations | 2256 | 1.1 | 0 | 12 | 8 | 4.1 | 113 | 44.8 |
| Endocrine system made surgical operations | 585 | 0.3 | 5 | 1 | 3 | 1.5 | 1 | 0.4 |
| Eyes made surgical operations | 8078 | 3.9 | 234 | 57 | 3 | 1.5 | 0 | 0.0 |
| Ear surgery done to treat arthritis | 1626 | 0.8 | 15 | 2 | 0 | 0.0 | 0 | 0.0 |
| Nose, mouth, pharynx performed surgical operations | 91214 | 44.0 | 331 | 270 | 5 | 2.6 | 3 | 1.2 |
| Respiratory system performed surgical operations | 987 | 0.5 | 51 | 1 | 2 | 1.0 | 13 | 5.2 |
| Cardiovascular surgery done to treat arthritis | 2996 | 1.4 | 47 | 2 | 6 | 3.1 | 4 | 1.6 |
| Blood and lymphatic system performed surgical operations | 226 | 0.1 | 1 | 3 | 3 | 1.5 | 4 | 1.6 |
| Digestive system performed surgical operations | 29829 | 14.4 | 5296 | 133 | 103 | 53.1 | 80 | 31.7 |
| Urinary tract fallow | 1929 | 0.9 | 835 | 3 | 1 | 0.5 | 4 | 1.6 |
| Male genital surgery done to treat arthritis | 2434 | 1.2 | 286 | 2 | 1 | 0.5 | 0 | 0.0 |
| Female genital surgery done to treat arthritis | 22058 | 10.6 | 890 | 32 | 22 | 11.3 | 0 | 0.0 |
| Obstetric procedures | 21113 | 10.2 | 31 | 22 | 30 | 15.5 | 0 | 0.0 |
| Bone and muscle system performed surgical operations | 14257 | 6.9 | 422 | 4 | 4 | 2.1 | 20 | 7.9 |
| Surgeries in the external organs | 7936 | 3.8 | 1 | 0 | 3 | 1.5 | 10 | 4.0 |
| **Total** | **207524** | **100.0** | **8445** | **544** | **194** | **100.0** | **252** | **100.0** |

***Figure 7.7.2.*** *Appendectomy due to acute cases, by province, 2017*



In the nationwide, a total of 11 885 cases of appendectomy were performed. Out of them, 39.9% or 4 741 cases were performed in Ulaanbaatar city.

***Figure 7.7.3.*** *Cholecystectomy by province, 2017*




In the nationwide, a total of 7 984 cases of surgery for gallbladder diseases were performed. Out of them, 73.2% (5 971 cases) were performed in Ulaanbaatar city.

## 7.8. CERVICAL AND BREAST CANCER SCREENING IN 2017

As of 2017, a total of 84 716 women were screened for cervical cancer and 37.4% of them were the target groups of women. Out of them, 4.7% of women have diagnosed with positive Pap smear test or abnormal findings in the cervical cells.

***Source:*** *National cancer center*

***Figure 7.8.1.*** *Cervical cancer screening coverage by percentage, 2012-2017*

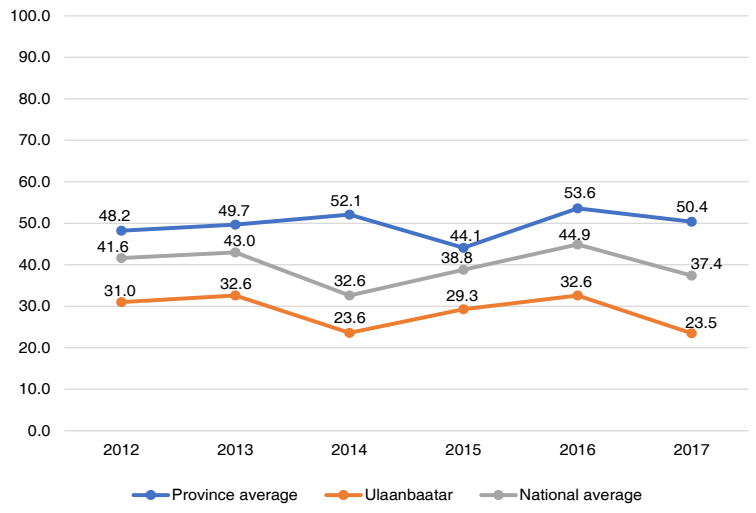


***Table 7.8.1.*** *The cervical cancer phase of the early detection /2012-2017/*

| Indicator | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| Number of confirmed cases of examinations | 39 | 118 | 103 | 78 | 68 | 55 |
| I stage | 13.2 | 16.3 | 41.2 | 52.5 | 58.8 | 47.3 |
| II stage | 16.4 | 13.3 | 10.3 | 23.0 | 16.2 | 18.2 |
| Prevalence percentage | 29.6 | 51.5 | 75.5 | 75.0 | 29.6 | 65.5 |

In 2017, a total of 95 385 Pap smear test samples were collected for cervical cancer screening and resulted as follows: specimen not meets the requirement (3.2%), normal (89.9%), STDs (1.4%) and Pap smear positive (4.7%).

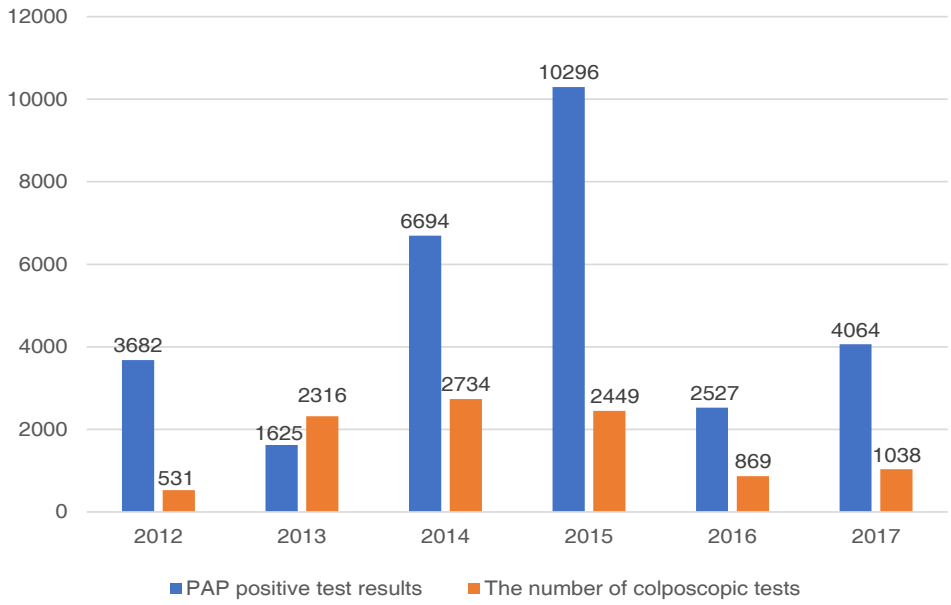
***Table 7.8.2.*** *Percentage of cervical cancer screening, 2017*

| № | Aimag | The number of women to be covered | Number of target women covered by early detection | Percentage of coverage |
|---|---|---|---|---|
| 1 | Arkhangai | 6.202 | 3.310 | 53.4 |
| 2 | Bayan-Ulgii | 5.901 | 1.711 | 29.0 |
| 3 | Bayankhongor | 6.015 | 4.035 | 67.1 |
| 4 | Bulgan | 4.407 | 2.303 | 52.3 |
| 5 | Gobi-Altai | 4.034 | 1.658 | 41.1 |
| 6 | Gobi-Sumber | 1.223 | 335 | 27.4 |
| 7 | Darkhan-Uul | 7.514 | 3.919 | 52.2 |
| 8 | Dornogobi | 4.728 | 2.569 | 54.3 |
| 9 | Dornod | 5.418 | 3.638 | 67.1 |
| 10 | Dundgobi | 3.219 | 2.254 | 70.0 |
| 11 | Zavkhan | 5.049 | 2.216 | 43.9 |
| 12 | Orkhon | 7.766 | 1.991 | 25.6 |
| 13 | Uvurkhangai | 7.753 | 5.306 | 68.4 |
| 14 | Umnugobi | 4.378 | 1.539 | 35.2 |
| 15 | Sukhbaatar | 4.221 | 2.641 | 62.6 |
| 16 | Selenge | 7.750 | 3.375 | 43.5 |
| 17 | Tuv | 6.375 | 2.885 | 45.3 |
| 18 | Uvs | 5.126 | 2.708 | 52.8 |
| 19 | Khovd | 5.411 | 2.441 | 45.1 |
| 20 | Khuvsgul | 9.212 | 5.296 | 57.5 |
| 21 | Khentii | 5.206 | 2.801 | 53.8 |
| 22 | Province average | 116.908 | 58.931 | 50.4 |
| 23 | Ulaanbaatar | 109.663 | 25.785 | 23.5 |
| 24 | National average | 226.571 | 84.716 | 37.4 |

A total of 1 068 women were screened by colposcopy, 165 women underwent Loop electrosurgical excision procedure (LEEP) and 419 women had a pre-cancer treatment.

As a result of the screening, 55 new cases of cervical cancer have been detected and 65.5% of them diagnosed in early stage. The participation rate of the screening varies across aimags and the highest rate was reported in Dundgobi aimag, while the lowest rate was reported in Bayan-Ulgii aimag in 2017.

***Figure 7.8.2.*** *Colposcopy indicators, 2012-2017*




According to the clinical guideline for early diagnosis of cervical cancer, woman who diagnosed with positive Pap smear test have to be screened by colposcopy. However, the participation rate of screening was only 14-37%. In 2017, examination of vaginal endoscopy has not been performed in 9 aimags and 6 districts of Ulaanbaatar city.

***Table 7.8.3*** *Early detection of breast cancer*

| № | Indicator | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|
| 1 | The number of women covered by the possible detection of breast cancer | 104615 | 92123 | 179233 | 226304 | 286921 | 354572 |
| 2 | The number of women tested by mammography | 83 | 623 | 396 | 285 | 169 | 130 |
| 3 | Number of confirmed cases of examinations | 10 | 24 | 23 | 20 | 15 | 13 |

A total of 354 572 women were screened to detect of breast cancer. Out of them, 130 women were screened by mammography and 66 women had cytology. In addition, a total of 262 women at high risk for breast cancer were screened. As a result, 13 new cases of breast cancer have been detected and 65.5% of them diagnosed in early stage.

*Source: National Cancer Center*

## 7.9. CANCER

### 7.9.1 Cancer incidence

In 2017, a total of 6 073 new cancer cases were diagnosed in Mongolia, of which 63.8% occurred in rural areas and 36.3% occurred in Ulaanbaatar city. Out of all new cancer cases, 50.7% (3 078 cases) were males and 49.3% (2 995 cases) were females.

A total of 2 312 new cases of liver cancer were recorded, which accounts for 38.1% of the total new cancer cases. (Table 7.9.1A, 7.9.1B, Appendix 1).

***Table 7.9.1.*** *Common carcinoma, by sex, 2017*

| | Total | Percent | Male | Percent | Female | Percent |
|---|---|---|---|---|---|---|
| 1 | Liver | 38.1 | Liver | 40.4 | Liver | 35.7 |
| 2 | Stomach | 14.6 | Stomach | 18.7 | Cervical | 11.9 |
| 3 | Lungs | 7.2 | Lungs | 11.6 | Stomach | 10.5 |
| 4 | Cervical | 5.9 | Esophagus | 6.0 | Breast | 8.2 |
| 5 | Esophagus | 5.7 | Colon and rectum | 3.4 | Esophagus | 5.3 |
| 6 | Breast | 4.1 | Urology, nephrology | 2.3 | Colon and rectum | 4.5 |
| 7 | Colon and rectum | 4.0 | Pancreas | 2.0 | Ovary | 3.0 |
| 8 | Urology, nephrology | 2.7 | Lymphoid leukemia | 1.9 | Urology, nephrology | 3.0 |
| 9 | Pancreas | 2.3 | Brain nerves | 1.4 | Pancreas | 2.6 |
| 10 | Ovary | 1.5 | Pharynx | 1.2 | Lungs | 2.6 |

In 2017, the leading primary cancer sites in men were liver (40.4% of male cancers), stomach (18.7%), lung (11.6%), esophagus (6.0%) and colon/rectum (3.4%); while in women, liver (35.7% of female cancers), cervix (11.9%), stomach (10.5%), breast (4.1%) and esophagus (5.3%) cancers were most common. (Table 7.9.1)

### 7.9.2. Common types of cancer

In 2017, liver cancer accounted for 38.1%, stomach 14.6%, lung 7.2%, cervix 5.9%, esophagus 5.7%, colon and rectum 4.0% and breast cancer 4.1% of all new recorded cancer cases. And these common types of cancers accounted for 79.4% of all cancers.

#### 7.9.2.1. Liver cancer

A total of 2312 new cases of liver cancer were recorded, of which 53.8% (1 244 cases) in males and 46.2% (1 068 cases) in females. The incidence rate of liver cancer was 74.6 per 100 000 population, which 81.9 for males and 68.0 for females. Compared to the region, the incidence rate of liver cancer was higher in the eastern aimags than the country average, the rate was 135.5 per 100 000 population for males and 105.3 per 100 000 population for females.

The cancer incidence rate per 100 000 population was higher than the country average by 51-69 cases in the following aimags: Dornod (144.1), Orkhon (138.8), Bulgan (137.6), Zavkhan (129.6) and Tuv (126.3).

#### 7.9.2.2. Stomach cancer

A total of 889 new cases of stomach cancer were recorded, of which 64.7% in males and 35.3% in females. The incidence rate of stomach cancer was 28.8 per 100 000 population, which 37.9 for males and 20.0 for females.

Compared to the region, stomach cancer rate was higher in the western aimags than the country average, the rate was 48 per 100 000 population for males and 25 per 100 000 population for females.

The cancer incidence rate per 100 000 population was higher than the country average by 8-24 cases in the following aimags: Uvs (53.1), Orkhon (52.3), Darkhan-Uul (48.3), Bulgan (48.3) and Gov-Altai (37.2).

#### 7.9.2.3. Lung cancer

A total of 435 new cases of lung cancer were recorded, of which 82.3% in males and 17.7% in females. The incidence rate of lung cancer was 14.1 per 100 000 population. By sex, the rate was 24 per 100 000 population for males and 4.9 per 100 000 population for females.

Compared to the region, lung cancer rate was higher in the khangai region than the country average,

the rate was 30 per 100 000 population for males and 6 per 100 000 population for females.

The cancer incidence rate per 100 000 population was higher than the country average by 9-17 cases in the following aimags: Tuv (31.9), Govisumber (29.9), Zavkhan (25.6), Khentii (24.6) and Gobi-Altai (23.1).

#### 7.9.2.4. Esophagus cancer

A total of 344 new cases of esophagus cancer were reported, of which 54.1% in males and 45.9% in females. The incidence of esophagus cancer was 11.1 per 100 000 population. By sex, the rate was 12 per 100 000 population for males and 10 per 100 000 population for females.

Compared to the region, esophagus cancer rate was higher in the western aimags than the mean country rate. The cancer rate was 21.9 per 100 000 population for males and 26.0 per 100 000 population for females.

The cancer incidence rate per 100 000 population was higher than the country average by 6-19 cases in the following aimags: Uvs (30.9), Bayan-Ulgii (28.9), Khovd (20.2), Gobi-Altai (17.7) and Zavkhan (17.1).

#### 7.9.2.5. Colorectal cancer

A total of 241 new cases of colorectal cancer were recorded, of which 44.0% in males and 56.0% in females. The incidence rate of colorectal cancer was 7.8 per 100 000 population, which 7 cases for males and 8 cases for females.

Compared to the region, the incidence of cancer per 100 000 population was higher in the central aimags than the country average, giving a rate of 11 per 100 000 population for both males and females.

The cancer incidence rate per 100 000 population was higher than the country average by 3-7 cases in the following aimags: Darkhan-Uul (14.8), Govisumber (12.0), Orkhon (11.9), Sukhbaatar (11.8) and Zavkhan (11.4).

#### 7.9.2.6. Cervical cancer

A total of 356 new cases of cervical cancer were recorded, giving a rate of 12.9 per 100 000 population, the rate was 22.7 per 100 000 women.

Compared to the region, the incidence rate was higher in the khangai region than the mean country rate. The cancer incidence rate per 100 000 population was higher than the country average by 7-13 cases in the following aimags: Orkhon (24.7), Govisumber (23.9), Tuv (19.8), Darkhan-Uul (18.7) and Selenge (18.7).

### 7.9.3. Mortality of cancer

#### 7.9.3.1 The leading causes of mortality

In 2017, a total of 4 004 cancer deaths (2262 cases in males and 1742 cases in females) were reported in Mongolia, which accounted for 25.4% of all deaths in the country.

Liver cancer is the most common cancer in men, it accounts for 40% of all deaths caused by cancer.

***Table 7.9.3.1.*** *The number of death of a common cancer, 2017*

| № | Male | Number | Percent | Female | Number | Percent |
|---|---|---|---|---|---|---|
| 1 | Liver | 920 | 40.7 | Liver | 694 | 39.8 |
| 2 | Stomach | 402 | 17.8 | Stomach | 219 | 12.6 |
| 3 | Lungs | 316 | 14.0 | Cervical | 127 | 7.3 |
| 4 | Esophagus | 155 | 6.9 | Esophagus | 120 | 6.9 |
| 5 | Colon and rectum | 68 | 3.0 | Colon and rectum | 89 | 5.1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | Pancreas | 50 | 2.7 | Breast | 75 | 4.3 |
| 7 | Lip, oral cavity and pharynx | 30 | 1.3 | Pancreas | 69 | 4.0 |
| 8 | Brain | 30 | 1.3 | Lung, bronchial | 66 | 3.8 |
| 9 | Lymphoid leukemia | 30 | 1.3 | Ovary | 55 | 3.2 |
| 10 | Urology, nephrology | 28 | 1.2 | Brain | 32 | 1.8 |
| | **Total** | **2262** | | **Total** | **1742** | |

### Stages of cancer diagnosis /TNM classification/

According to TNM staging system, the percentage of new cases of cancer in the country by stage was as follows: 48.0% of cases of cervical cancer were diagnosed at stage I and II, which the detection rate has decreased by 1.6 percent as compared to the last year. 79.5% of liver cancers were detected at stage III/IV or in a late stage.

***Table 7.9.3.2.*** *The percentage of new cases of cancer /TNM classification/ 2017*

| № | Location of cancer | Байран | I stage | II stage | III stage | IV stage |
|---|---|---|---|---|---|---|
| 1 | Cervical | 21.1 | 8.7 | 18.3 | 42.4 | 9.6 |
| 2 | Urology, nephrology | 0.4 | 4.5 | 26.8 | 52.4 | 15.9 |
| 3 | Ovary | 0.0 | 8.8 | 23.1 | 40.7 | 27.5 |
| 4 | Pancreas | 0.0 | 0.0 | 9.9 | 33.3 | 56.7 |
| 5 | Esophagus | 0.6 | 1.5 | 5.8 | 63.1 | 29.1 |
| 6 | Breats | 0.4 | 4.5 | 26.8 | 52.4 | 15.9 |
| 7 | Lungs | 0.0 | 0.9 | 5.3 | 53.6 | 40.2 |
| 8 | Stomach | 1.0 | 3.1 | 10.3 | 43.9 | 41.6 |
| 9 | Liver | 0.3 | 3.7 | 16.4 | 43.7 | 35.8 |
| 10 | Colon and rectum | 1.6 | 1.6 | 13.7 | 40.8 | 42.3 |
| | **Total** | **1.9** | **4.9** | **14.9** | **44.6** | **33.6** |

### 7.9.4. Cancer control

At the end of 2017, a total of 18053 cancer patients have been controlled by oncologists at the aimag and district health care levels in the country. Out of these patients, 35.7% /6436/ were males and 64.3% /11617/ were females.

In regard to survival rate, 33.1% of people diagnosed with cancer survived longer than 5 years after being diagnosed and the rate has increased by 1.0% as compared to the previous year.

48.8% of women who diagnosed with cervical cancer survived longer than 5 years and the survival rate was the highest as compared to the rates of other cancer types.

### 7.9.5. Childhood cancer and mortality

In 2017, a total of 122 new cases of cancer were recorded among children, of which 60.7% /74/ in males and 39.3% /48/ in females in the country. The incidence has increased by 14 cases compared to the previous year.

By age groups, 39.3% of cancer cases occurred among children aged 0-4 years, 24.6% were among children aged 5-9 years, 18.9% were in children aged 10-14 years and 17.2% were among children aged 15-19 years. The most common types of cancer are lymphoid leukemia, brain cancer and neurologic cancer in children.

# CHAPTER 8.

# POPULATION MORTALITY

# CHAPTER 8.

# POPULATION MORTALITY

Diseases of the circulatory system, cancer and injuries, poisoning and certain other consequences of external causes have been the leading causes of death of the population since 1995.

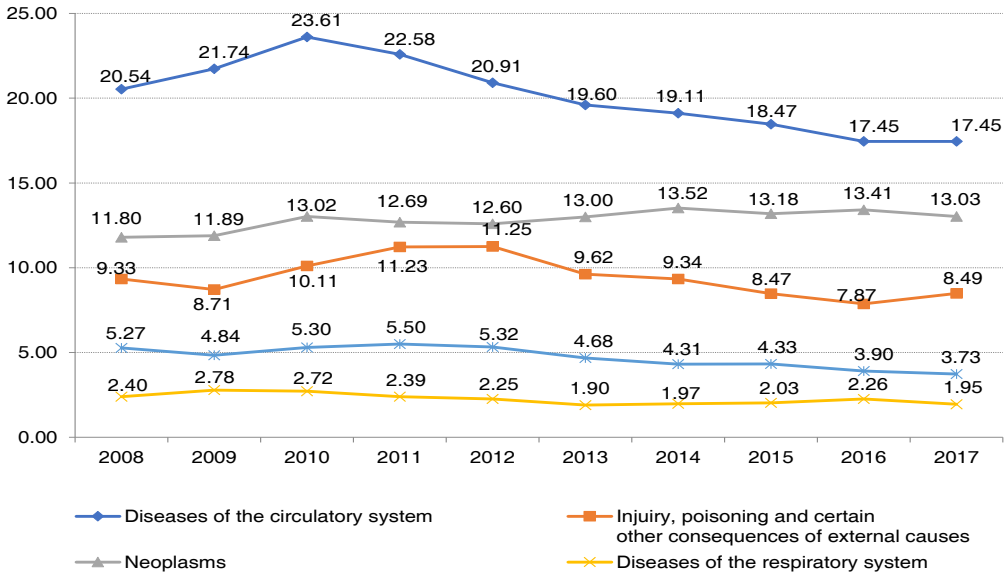
***Table 8.1.*** *The number of death, leading causes.*

| Disease group | 1995 | | 2005 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Female | Total | Female | Total | Female | Total | Female | Total | Female | Total | Female | Total | Female |
| **Total** | **16184** | **7164** | **15469** | **6003** | **16192** | **6459** | **16495** | **6558** | **16374** | **6552** | **16181** | **6519** | **15812** | **6204** |
| Cardiovascular disease | 4992 | 2505 | 5923 | 2566 | 5682 | 2482 | 5669 | 2460 | 5591 | 2374 | 5390 | 2270 | 5405 | 2204 |
| Cancer | 2997 | 1303 | 2918 | 1309 | 3795 | 1678 | 4011 | 1773 | 4028 | 1807 | 4142 | 1837 | 4037 | 1748 |
| Injury, poisoning and external causes | 1406 | 301 | 2824 | 517 | 2788 | 558 | 2758 | 563 | 2563 | 493 | 2431 | 498 | 2630 | 544 |
| Diseases of the digestive system | 1284 | 592 | 1249 | 535 | 1357 | 615 | 1274 | 572 | 1311 | 630 | 1205 | 559 | 1155 | 539 |
| Some disorders occur in the perinatal period | 413 | 166 | 452 | 188 | 617 | 263 | 692 | 286 | 735 | 310 | 583 | 242 | 559 | 233 |
| Diseases of the respiratory system | 2553 | 1119 | 699 | 287 | 551 | 210 | 585 | 230 | 613 | 244 | 699 | 295 | 605 | 253 |
| Infectious and parasitic diseases | 897 | 363 | 474 | 156 | 301 | 111 | 311 | 93 | 328 | 105 | 462 | 177 | 276 | 82 |
| Diseases of the nervous system | 288 | 138 | 233 | 94 | 288 | 119 | 315 | 115 | 306 | 111 | 330 | 140 | 267 | 121 |
| Disorders of the urinary system | 429 | 207 | 310 | 133 | 171 | 78 | 209 | 98 | 267 | 128 | 246 | 117 | 245 | 126 |
| Congenital malformations, abnormal development and chromosomal disorders | 137 | 68 | 145 | 74 | 232 | 98 | 228 | 115 | 163 | 72 | 220 | 102 | 197 | 93 |

By the end of 2017, a total of 15 812 deaths were registered in the nationwide, which reduced by 369 cases or 2.3% as compared to the last year. Of the total deaths, 60.8% were males and 39.2% were females.

Of the total mortality, 4 292 deaths or 27.1% were occurred in hospital, and the proportion of deaths that occurred within 24 hours of admission was 22.5%.

***Figure 8.1.*** *Five leading causes of mortality per 10 000 population, 2017*




The leading causes of mortality in 2017 were diseases of the circulatory system (34.2%), cancer (25.5%), injuries, poisonings and certain other consequences of external causes (16.6%), diseases of the digestive system (7.3%), and diseases of the respiratory system (3.8%). Deaths from these diseases accounted for a combined 87.4% of all deaths.

Considering the five leading causes of death in 2017, annual average of 5 000-5 500 people or one in third of all deaths were due to diseases of the circulatory system, and over 4 000 people died from cancer and over 2500 people or one in six of all deaths were due to injuries and poisoning.

As of 2017, the five leading causes of mortality were:

- Diseases of the circulatory system (17.45 per 10 000 population)
- Cancer/Neoplasms (13.03 per 10 000 population)
- Injuries, poisoning and certain other consequences of external causes (8.49 per 10 000 population)
- Diseases of the digestive system (3.73 per 10 000 population)
- Diseases of the respiratory system (1.95 per 10 000 population)

The population mortality rate is 63.20 per 10 000 in males and 39.33 per 10 000 in females. The mortality rate is greater in men by 1.5 times than in women.

Out of all deaths, 6.4% occurred in children until 1 year old, 7.9% in children under-five year and 1.3% in children aged 5-14 years old.

In 2017, the top 8 causes of death are liver and biliary tract cancers, ischemic heart disease and stroke, accounting for a combined 52.2 percent of all deaths. Suicide accounted for 2.8% of total deaths nationwide, making it the 9th leading cause of death. Suicide is one of the leading causes of death among the population and a major health issue.

***Figure 8.2.*** *The first 11 cause and deaths of the death, 2017*

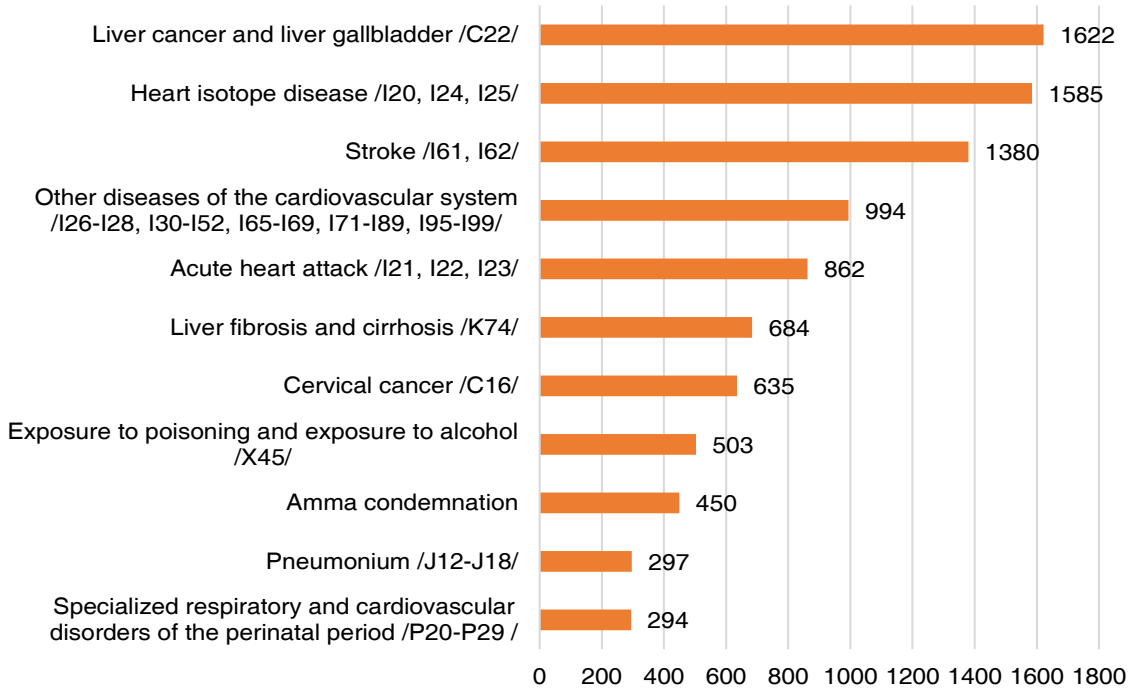



***Table 8.2.*** *The number of 11 leading causes of death, 2017*

| | Total morbidity | Diseases of circulatory system | Neaplasms | Injuries, poisoning and certain other consequences of external causes | Diseases of digestive system | Diseases of respiratory system |
|---|---|---|---|---|---|---|
| **Sex** | | | | | | |
| Males | 63.20 | 21.06 | 15.06 | 13.72 | 4.05 | 2.32 |
| Females | 39.33 | 13.97 | 11.08 | 3.45 | 3.42 | 1.60 |
| **Age group** | | | | | | |
| Under 20 years old | 13.75 | 0.25 | 0.49 | 3.16 | 0.44 | 1.54 |
| 20-44 | 20.01 | 3.65 | 2.43 | 9.73 | 1.72 | 0.41 |
| 45-65 | 119.54 | 36.23 | 32.83 | 16.15 | 8.48 | 2.82 |
| Over 65 years old | 474.83 | 233.48 | 148.75 | 9.87 | 33.22 | 17.25 |
| **Residency** | | | | | | |
| Urban | 51.51 | 14.83 | 12.52 | 10.04 | 4.47 | 1.97 |
| Rural | 50.66 | 19.60 | 13.46 | 7.21 | 3.12 | 1.94 |
| **Regions** | | | | | | |
| Western | 49.81 | 19.54 | 13.92 | 6.12 | 2.54 | 1.66 |
| Khangai | 52.52 | 20.93 | 13.77 | 7.76 | 3.12 | 1.87 |
| Central | 49.42 | 18.79 | 12.52 | 8.40 | 3.22 | 1.91 |
| Eastern | **51.23** | **16.48** | **15.86** | **6.51** | **3.82** | **2.60** |
| **National average** | **51.04** | **17.45** | **13.03** | **8.49** | **3.73** | **1.95** |

## 8.1 MORTALITY CAUSED BY DISEASES OF THE CIRCULATORY SYSTEM

Each year due to diseases of the circulatory system 5 000-5 500 people, or 1 out of 3 of people died, which remains the leading cause of death. The gender-specific mortality rates for cardiovascular diseases were 21.06 per 10 000 population for males and 13.97 per 10 000 population for females in 2017. The mortality rate due to cardiovascular diseases was higher in the Khangai, Central and

Western regions, and lower in the Eastern aimags than the mean country rate.

The main causes of mortality rates of cardiovascular diseases compared by age group and sex are as follows: Ischemic heart disease was 25.7, stroke was 19.2 and arterial hypertension was 1.3 per 10 000 population in males aged 45-64. Compared to the mortality rate of women at the same age group, rates of ischemic heart disease was 5.7 times higher, stroke was 1.9 times higher and arterial hypertension was 1.8 times higher in men than in women (Table 8.1.1).

The stroke was the leading cause of mortality among Mongolian men and the mortality rate was 6.08 per 10 000 population in 2017, which has decreased by 0.4 promile as compared to the previous year.

Until 2003, the mortality rates for ischemic heart disease and stroke were in close proximity but starting from 2012, an increased trend has been observed for the mortality rate of stroke.

***Table 8.1.1.*** *Cause-specific cardiovascular disease mortality rate age-group per 10 000 population, 2017*

| | Diseases of circulatory system | Stroke | Arterial hypertension | Ischemic heart diseases |
|---|---|---|---|---|
| **Total mortality** | **17.45** | **5.17** | **0.67** | **7.90** |
| Under 20 years old | 0.2 | 0.1 | 0.0 | 0.0 |
| 20-44 | 3.7 | 1.2 | 0.1 | 1.5 |
| 45-64 | 36.2 | 14.3 | 1.0 | 14.3 |
| Over 65 years old | 233.5 | 51.6 | 11.8 | 116.7 |
| **Male** | **21.06** | **6.08** | **0.58** | **10.12** |
| Under 20 years old | 0.3 | 0.1 | 0.0 | 0.1 |
| 20-44 | 5.6 | 1.7 | 0.1 | 2.5 |
| 45-64 | 56.1 | 19.2 | 1.3 | 25.7 |
| Over 65 years old | 281.8 | 64.8 | 10.5 | 144.8 |
| **Female** | **13.97** | **4.30** | **0.75** | **5.76** |
| Under 20 years old | 0.2 | 0.1 | 0.0 | 0.0 |
| 20-44 | 1.8 | 0.8 | 0.0 | 0.6 |
| 45-64 | 19.2 | 10.1 | 0.7 | 4.5 |
| Over 65 years old | 201.4 | 42.8 | 12.7 | 98.1 |

## 8.2. CANCER MORTALITY

Since 1990, cancer has been the second leading cause of population mortality in Mongolia. In 2017, cancer related mortality rate accounted for 25.5% of total deaths and the rate was 15.06 per 10 000 population for males and 11.08 per 10 000 population for females.

The five leading causes of cancer by primary sites in males were liver, stomach, lung, bronchial tubes, esophagus and colon/rectum, while in females they were liver, stomach, cervix, esophagus, lung and bronchial tubes. In 2017, 78.3% of cancer patients diagnosed at stage III/IV or in a late stage and 82.4% of people who died from cancer survived for less than 1 year after being diagnosed.

Compared to 2008, the percentage of cancer diagnosed during the late stages was recorded at the same level and the percentage of cancer patients survived for less than a year after the diagnosis was 15.3%.

***Figure 8.2.1.*** *Leadind causes of cancer mortality by survival years after the diagnosis, 2017*

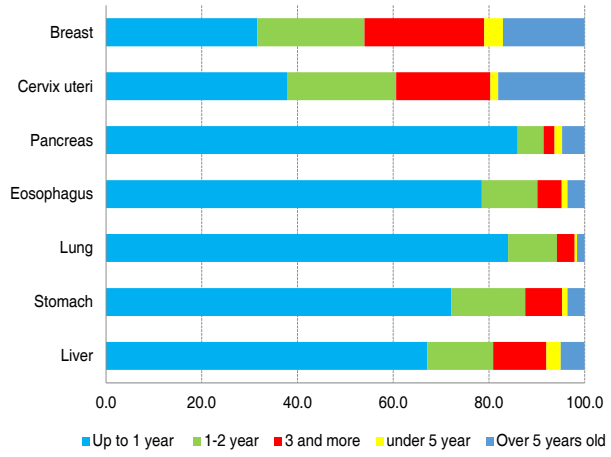
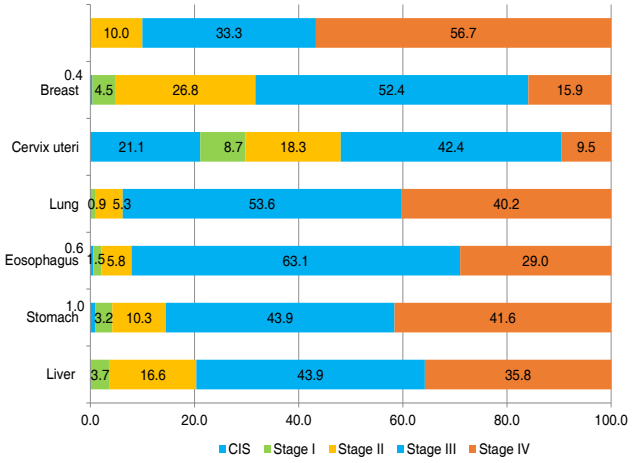


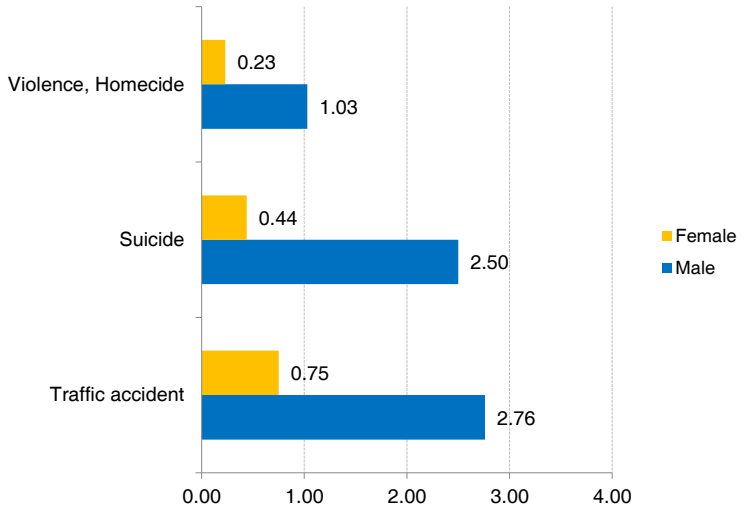

***Figure 8.2.2.*** *Leading causes of cancer morbidity by the stage diagnosis, 2017*




## 8.3 MORTALITY DUE TO INJURIES, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES

Mortality due to injuries, poisoning and certain other consequences of external causes has increased significantly for the last years. It was ranked as the fifth leading cause of population mortality in 1990 and has been ranked as the third leading cause since 2000. The mortality rate caused by injuries, poisoning and certain other consequences of external causes per 10 000 population was 6.0 in 1995, 7.6 in 2000 and 11.7 in 2007, which the rate has increased by almost 2 times. However, the mortality rate of injuries, poisoning and certain other consequences of external causes has declined since 2008 for over the last decade. The rate was reported at 9.3 per 10 000 population in 2008 and at 8.7 per 10 000 population in 2009. In 2011, the mortality rate was 11.2 per 10 000 population, while the rate reached 8.49 per 10 000 population in 2017, decreased by 2.7 promile. In 2017, a total of 2 630 deaths from injuries, poisoning and certain other consequences of external causes were reported, of which the rate was 8.49 per 10 000 population. And the rate has increased by 0.62 as compared to the previous year. By sex, 79.3% were males and 20.7% were females. The mortality rate for men was reported at 13.72 per 10 000, which the rate was higher in men by 4.0 times than in women.

***Figure 8.3.1.*** *Injury-caused mortality rate per 10 000 population, 2017*



Over the last 15 years, approximately 15 000 deaths were recorded per a year an average, of which 446 cases or 3% of deaths were suicide deaths.

In 2003, a mortality rate of suicide was reported at 0.9 per 10 000 population, but the rate has increased by 1.5 in 2017.

According to the mean mortality rate during 2003-2017, 60.3% of total deaths occurred among men and 84.7% of suicides were males. In 2017, the number of suicide was 450, it has accounted for 2.8% of total deaths.

Despite the small percentage of suicides in total deaths, there are different pattern observed in terms of age groups. For instance, there were 1 in 5 persons aged 10-14 and 25-29, 1 in 4 persons aged 15-24 and 1 in 6 persons aged 30-34 died by suicide, of all deaths in each ages groups in 2017.

**Table 8.3.1.** *Percentage of suicides in total mortality, by age group, 2003-2017*

| Year | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 1.47 | 2.88 | 2.90 | 3.06 | 3.28 | 2.70 | 2.85 | 2.67 | 2.59 | 2.85 | 2.87 | 2.99 | 2.93 | 2.78 | 2.84 |
| 0-4 | 0.0 | 0.1 | 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 |
| 5-9 | 2.0 | 0.0 | 1.1 | 1.1 | 1.6 | 0.8 | 1.6 | 1.0 | 1.2 | 1.2 | 2.2 | 0.0 | 0.9 | 2.8 | 0.8 |
| 10-14 | 3.3 | 9.8 | 8.3 | 7.3 | 6.6 | 13.0 | 17.4 | 14.3 | 15.2 | 17.6 | 13.3 | 21.4 | 15.0 | 21.2 | 18.0 |
| 15-19 | 9.4 | 19.7 | 19.5 | 15.4 | 17.5 | 17.7 | 20.6 | 23.3 | 18.8 | 21.4 | 20.8 | 25.3 | 24.5 | 23.5 | 25.8 |
| 20-24 | 9.1 | 17.9 | 17.1 | 16.1 | 15.7 | 17.2 | 14.6 | 20.7 | 16.9 | 20.0 | 21.7 | 19.4 | 25.6 | 23.3 | 28.48 |
| 25-29 | 8.5 | 13.1 | 14.6 | 14.1 | 18.4 | 14.9 | 17.4 | 16.6 | 16.3 | 19.2 | 20.4 | 19.4 | 23.3 | 19.2 | 18.94 |
| 30-34 | 6.7 | 9.4 | 9.9 | 12.1 | 11.7 | 9.8 | 13.2 | 12.1 | 9.9 | 8.9 | 11.5 | 16.9 | 13.9 | 15.3 | 15.5 |
| 35-39 | 3.1 | 6.2 | 7.3 | 7.7 | 8.8 | 7.4 | 8.7 | 7.0 | 6.3 | 7.2 | 8.3 | 7.9 | 9.2 | 8.3 | 6.8 |
| 40-44 | 2.9 | 4.9 | 3.9 | 5.3 | 4.9 | 4.4 | 5.0 | 3.8 | 4.2 | 4.7 | 4.7 | 4.9 | 5.0 | 4.5 | 5.2 |
| 45-49 | 1.8 | 2.9 | 2.9 | 2.6 | 2.8 | 2.7 | 2.6 | 2.1 | 2.1 | 2.3 | 3.1 | 2.5 | 2.8 | 3.1 | 2.9 |
| 50-54 | 0.7 | 1.4 | 1.5 | 2.3 | 1.9 | 1.7 | 1.7 | 1.3 | 1.6 | 2.0 | 2.0 | 1.8 | 1.9 | 1.2 | 2.2 |
| 55-59 | 0.3 | 1.4 | 1.0 | 1.1 | 1.4 | 0.7 | 1.3 | 0.3 | 0.9 | 0.4 | 1.2 | 0.9 | 0.6 | 1.3 | 1.1 |
| 60-64 | 0.3 | 0.7 | 0.6 | 0.8 | 1.3 | 0.3 | 0.5 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.4 | 0.6 |
| 65+ | 0.0 | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 |

Looking by above table, in 2003, suicide accounted for 3.3% of all deaths among children 10-14 years old. However, suicide death reached 18.0% in 2017 as increased by 5 times, with the most difference, compared to other age groups.

A high trend of suicide in males among 20-24 years old was observed, it was still high in 2017. In 2017, the female suicide rate was high among children 15-19 years old.

Furthermore, looking for age groups and causes, suicide rate was the leading cause of death among adolescents and young people, and majority of them were males.

For instance, the male suicide rate accounted for 75.0% of all deaths among children 10-14 years old, 65.0% among people 15-19 years old, 81.5% among people 20-24 years old, 85.2% among people 25-29 years old and 90.7% among people 30-34 years old, respectively.

***Figure 8.3.2.*** *Injury-caused morbidity and mortality per 10 000 population, 2008-2017*

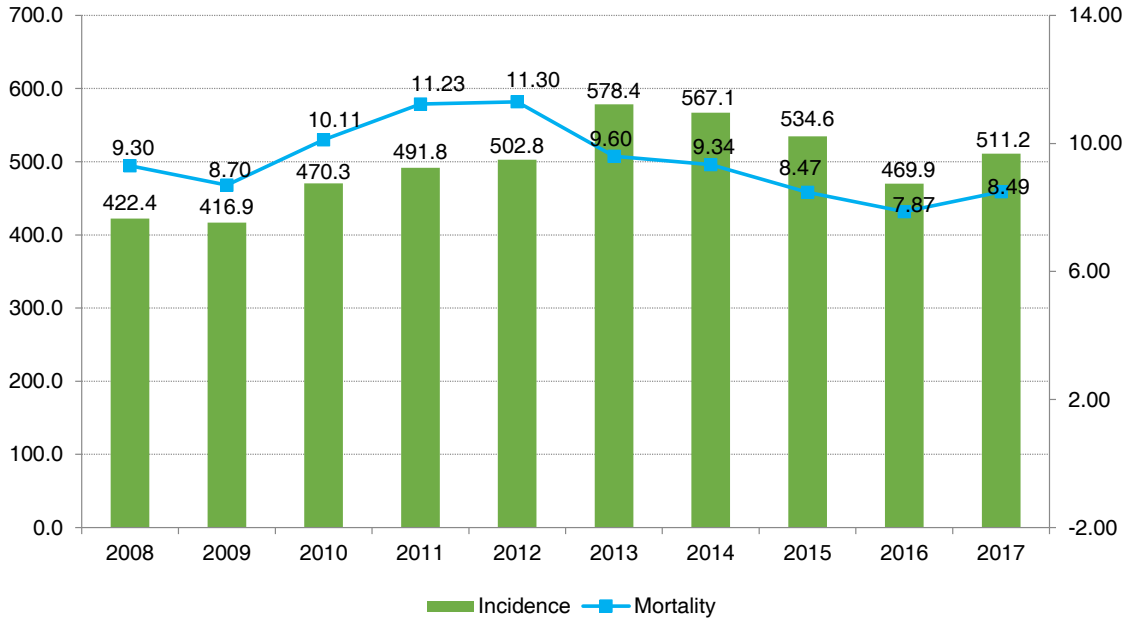



***Table 8.3.2*** *Mortality projection of the world population, 2017*

| 2030 Disease and injure | Deaths /%/ | Rank | Rank | Deaths /%/ | 2016 Disease and injure |
|---|---|---|---|---|---|
| Isheamic heart diseases | 14.2 | 1 | 1 | 15.5 | Isheamic heart diseases |
| Cerebrovascular diseases | 12.1 | 2 | 2 | 10.1 | Cerebrovascular diseases |
| Chronic obstructive pulmonary diseases | 8.6 | 3 | 17 | 1.2 | Chronic obstructive pulmonary diseases |
| Lower respiratury infections | 3.8 | 4 | 6 | 2.6 | Lower respiratury infections |
| Road traffic accidents | 3.6 | 5 | 7 | 3.4 | Road traffic accidents |
| Trachea, bronchus, lung cancers | 3.4 | 6 | 9 | 2.5 | Trachea, bronchus, lung cancers |
| Diabetes mellitus | 3.3 | 7 | 16 | 1.1 | Diabetes mellitus |
| Hepyrtensive heart diseases | 2.1 | 8 | 15 | 1.3 | Hepyrtensive heart diseases |
| Stomach cancer | 1.9 | 9 | 6 | 3.9 | Stomach cancer |
| HIV-AIDS | 1.8 | 10 | 23 | 0.0 | HIV-AIDS |
| Nephritic and nephross | 1.6 | 11 | 13 | 1.5 | Nephritic and nephross |
| Self-inficted injures | 1.5 | 12 | 8 | 2.8 | Self-inficted injures |
| Liver cancer | 1.4 | 13 | 3 | 10.2 | Liver cancer |
| Colon and rectum cancers | 1.4 | 14 | 18 | 1.0 | Colon and rectum cancers |
| Oesophagus cancer | 1.3 | 15 | 11 | 1.7 | Esophagus cancer |
| Violence | 1.2 | 16 | 14 | 1.2 | Violence |
| Diarrheal diseases | 1.2 | 17 | 21 | 0.0 | Diarrheal diseases |
| Cirrhosis of the liver | 1.2 | 18 | 4 | 4.3 | Cirrhosis of the liver |
| Breast cancer | 1.1 | 19 | 19 | 0.5 | Breast cancer |
| Tuberculosis | 1 | 20 | 12 | 0.5 | Tuberculosis |
| Neonatal infections and other | 0.9 | 21 | 22 | 0.0 | Neonatal infections and other |
| Prenatality and low birth weight | 0.9 | 22 | 20 | 0.3 | Prenatality and low birth weight |
| Birth asphydia and birth trauma | 0.7 | 23 | 10 | 1.9 | Birth asphydia and birth trauma |
| Malaria | 0.4 | 24 | 24 | 0.0 | Malaria |

According to the WHO estimation in 2008, the five leading causes of death globally are projected to be ischemic heart disease, cerebrovascular disease, chronic obstructive pulmonary disease, lower respiratory infections and traffic injuries in 2030.

As of 2017, the leading causes of deaths were ischemic heart disease, cerebrovascular disease and liver cancer in Mongolia.

# CHAPTER 9.

# INDICATORS OF PHARMACEUTICAL SECTOR

# CHAPTER 9.

# INDICATORS OF PHARMACEUTICAL SECTOR

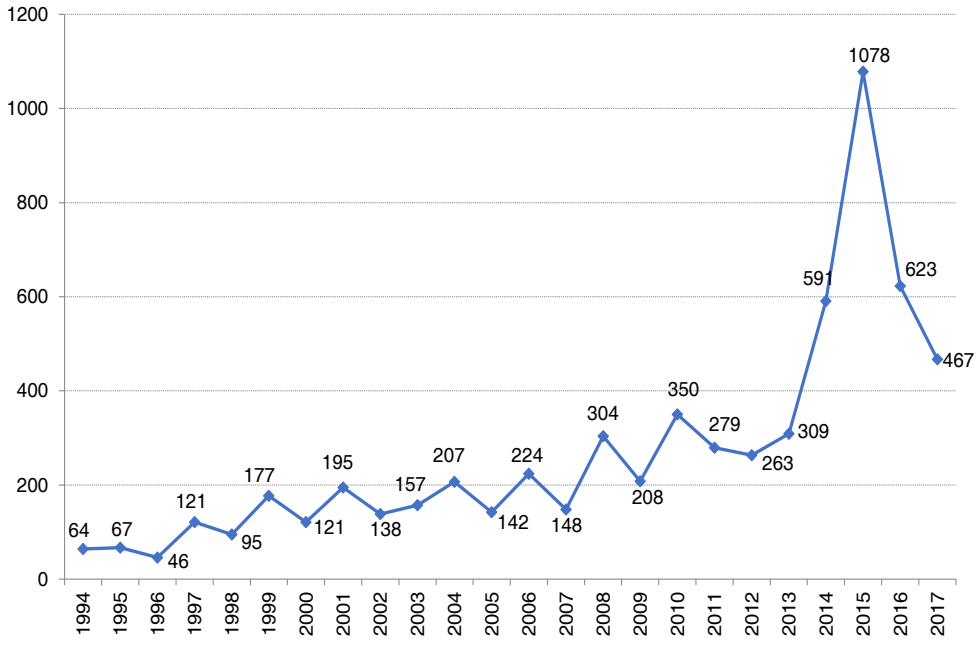
9.1. Drug Registration

Under the State legislation on the implementation of drug policy, creating a single stream reporting system of pharmaceutical sector, the statistics and information of pharmaceutical sector are integrated with a purpose of ensuring information transparency, improving accessibility and strengthening a good governance of pharmacy.

In order to provide good quality, safe and effective drugs/medicines to health organizations and people drug registration has been started in Mongolia since 1994.

Based on the 22nd provision of Law on Drug and Medical Devices, drug registration is regulated by "The Registration Rule of Pharmaceuticals and Raw materials", approved by Health Minister's order N13 in 2015.

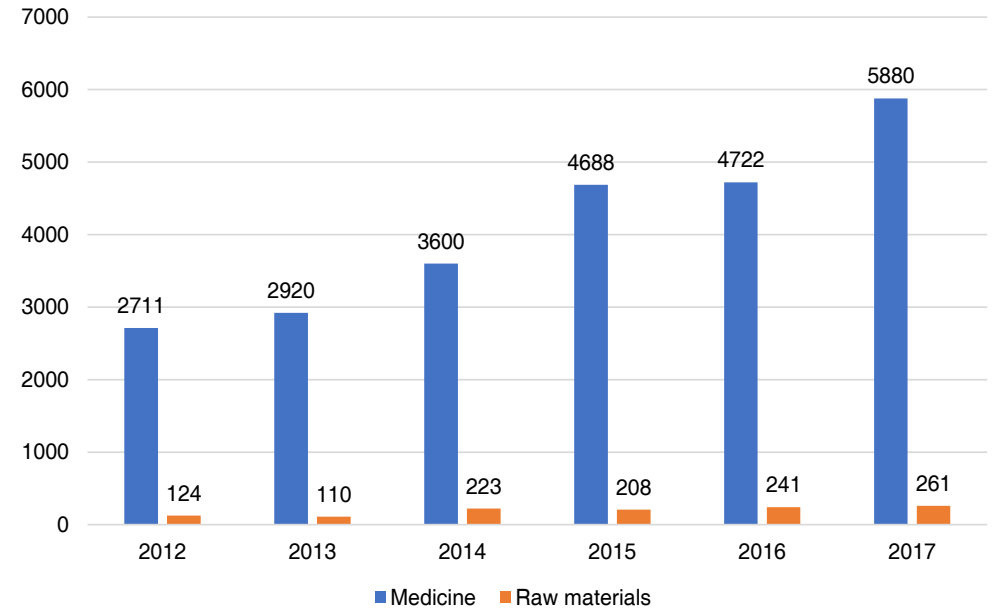
***Figure 9.1.1.*** *Number of newly registered medicine, /1994-2017/*




In 2017, 467 new drugs have been registered, and 278 of them are imported drugs, 126 traditional medicines and 43 domestically produced drugs. In 2017, 21 medical raw materials have been newly registered and the registration time of 382 drugs and 2 medical raw materials was extended, 382 registered drugs were amended and 17 drugs were removed from the registration.

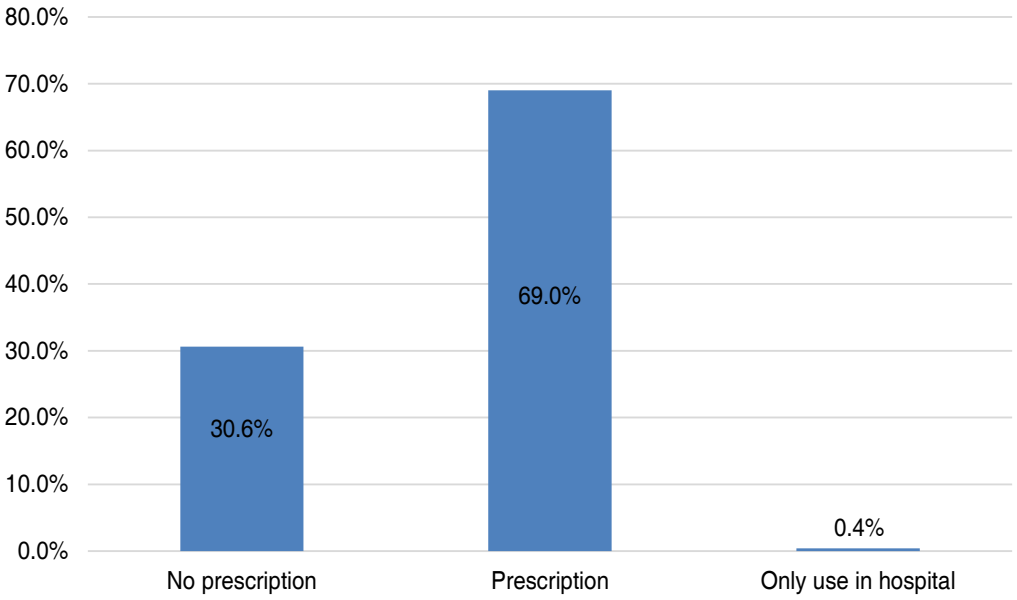
As of 2017, there are 5 880 drugs and 261 pharmaceutical raw materials have been registered in Drug Registry of Mongolia, which the numbers have increased by 1 158 drugs and 20 pharmaceutical raw materials as compared to the previous year.

***Figure 9.1.2.*** *Registered medicine and raw materials, /2013-2017 он/*



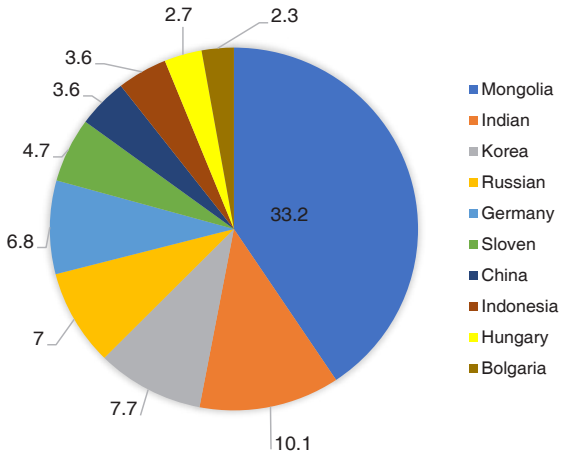

In 2017, a total of 5 880 registered drugs, 30.6% of them are non-prescription medicines, 69% are prescription medicines and 0.4% drugs to be used in medical conditions.

***Figure 9.1.3.****Registered medicine by prescriptionclassification /%/, 2017*



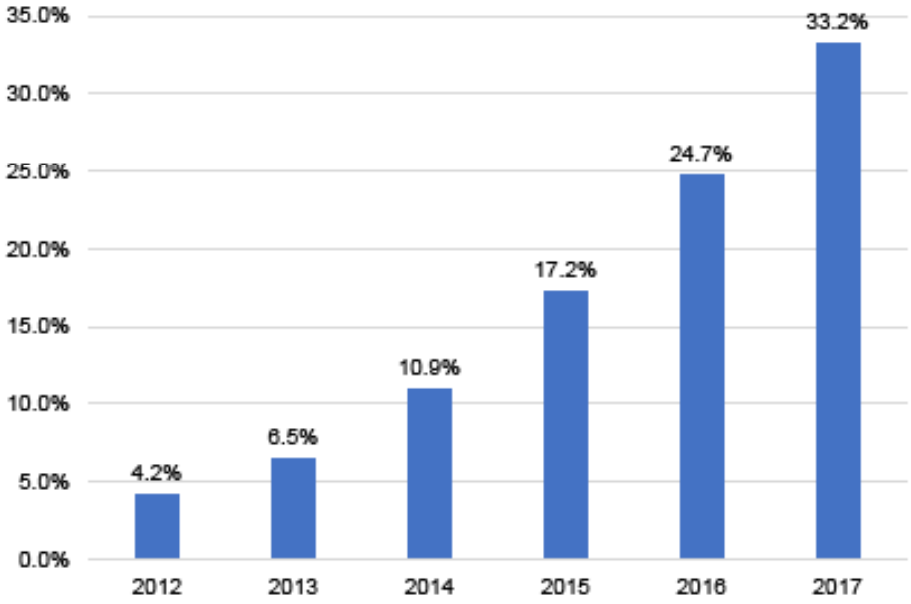
Of the 59 countries 5880 registered drugs, in Drug Registry of Mongolia, looking them by the leading 10 countries.

***Figure 9.1.4.*** *Registered medicine, by country, 2017*




The registration of domestically produced drugs has been improved over the recent years. In 2017, domestically produced drugs accounted for 33.2% of all registered drugs, the percentage has increased by 8.5% as compared to the previous year.

***Figure 9.1.5.*** *Percentage of domestically ,anufactured pharmacentical products in registered medicine, /2012-2017/*




By the end of 2017, all registered drugs are shown according to the Anatomical Therapeutic Chemical (ATC) classification in Mongolia as follows:

***Figure 9.1.6.*** *ATC classification, 2017*

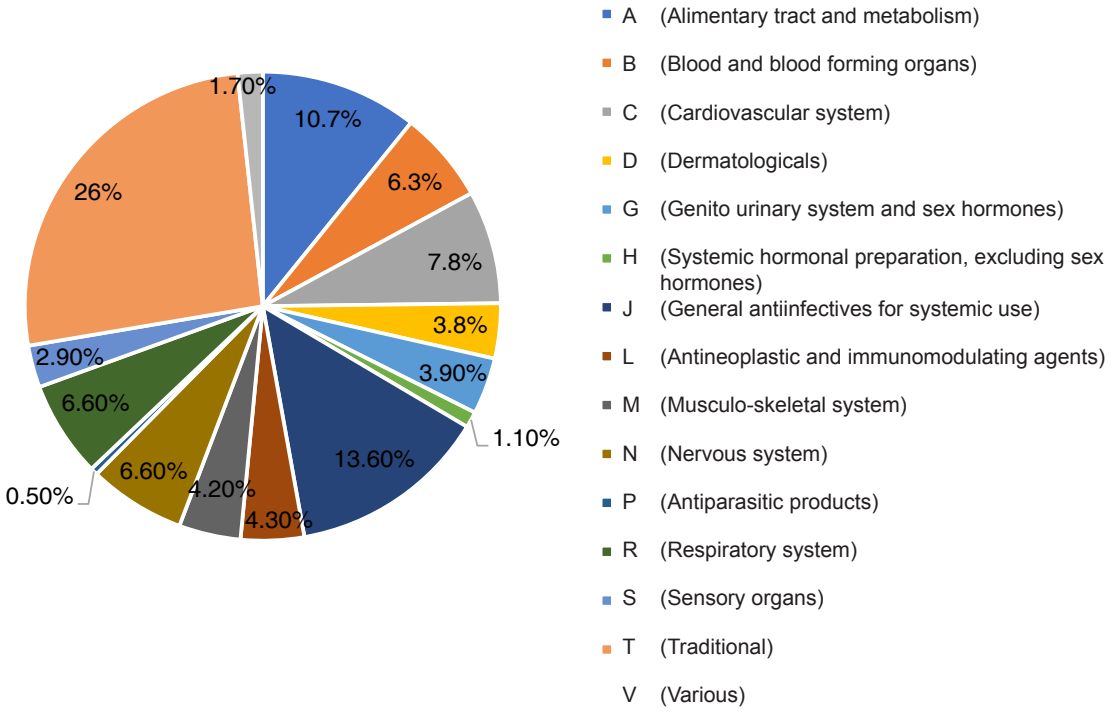



***Figure 9.1.7****.Registered domestically medicine, by registered year, /2014-2017/*

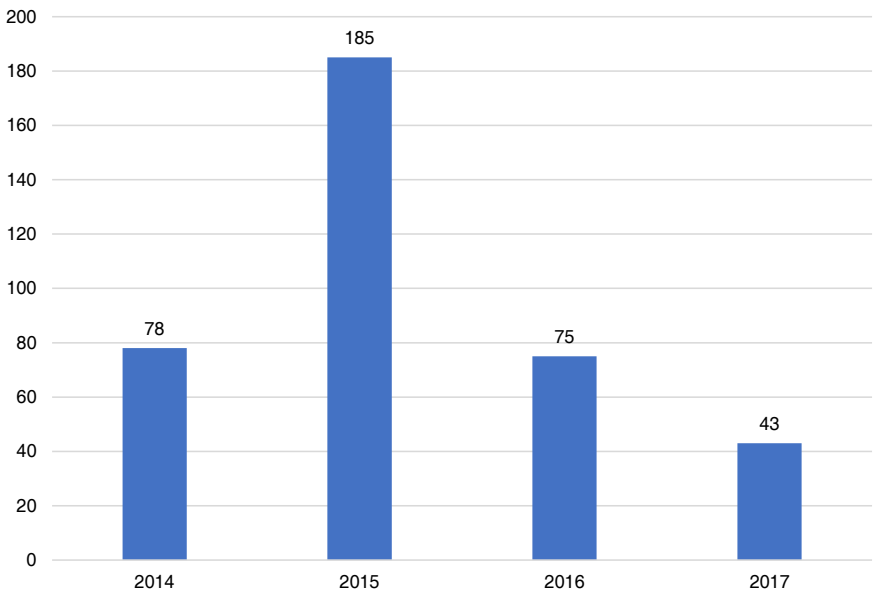
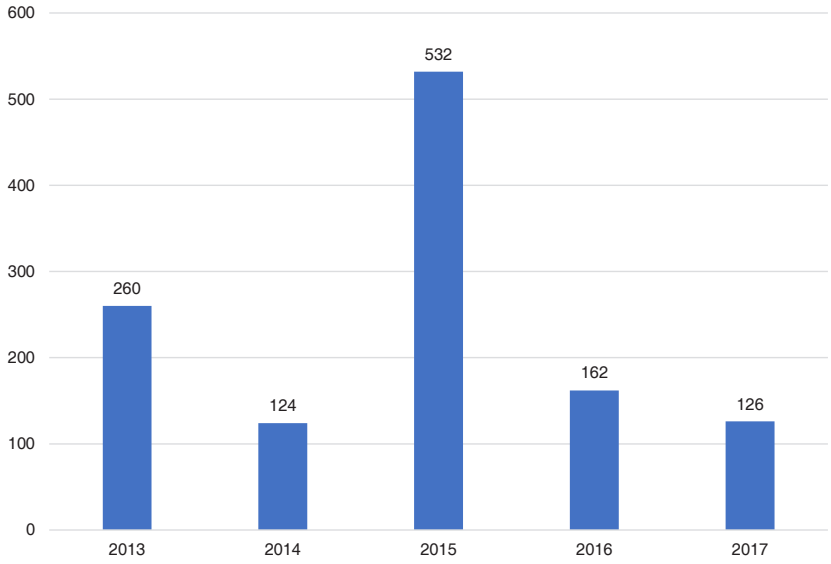
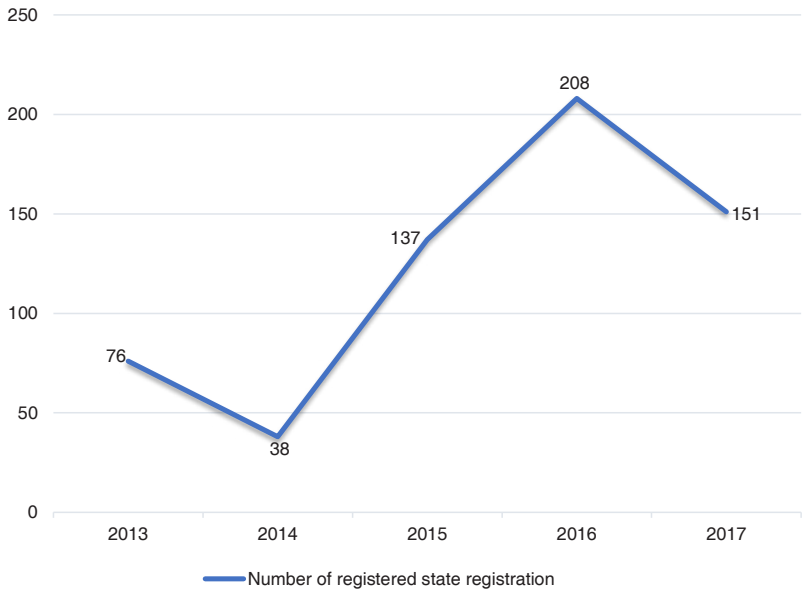


***Figure 9.1.8.*** *Registered traditional medicine, /2013-2017/*




In 2017, 151 new Biologically Active Products have been registered. The registration of Biologically Active Products has been increased over the recent years, however it has decreased by 57 products in 2017.

***Figure 9.1.9.*** *Registered biologically active products, /2013-2017/*



## 9.2. DRUG SIDE EFFECTS AND SAFETY

Registration of drug side effects and safety are regulated by the Order No.415, “Registration Rule of Drug Side Effects and Safety”, approved by Minister of Health in 2013.

During 2012-2017, 777 cases of drug side effects were registered from 99 health care organizations and those cases were conversed by the Subcommittee of Drug Research.

***Table 9.2.1.*** *Number of adverse drug reactions and reported hospitals*

| Indicators | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|
| Hospitals and pharmacies in Ulaanbaatar | Number of reported health organization | 8 | 14 | 11 | 5 | 16 | 9 |
| | Number of adverse drug reactions | 57 | 111 | 98 | 44 | 117 | 59 |
| Hospitals and pharmacies in rural areas | Number of reported health organization | 2 | 7 | 7 | 8 | 6 | 7 |
| | Number of adverse drug reactions | 8 | 66 | 60 | 24 | 106 | 27 |
| Total | Number of reported health organization | 10 | 21 | 18 | 13 | 22 | 15 |
| | Number of adverse drug reactions | 65 | 177 | 158 | 68 | 223 | 86 |

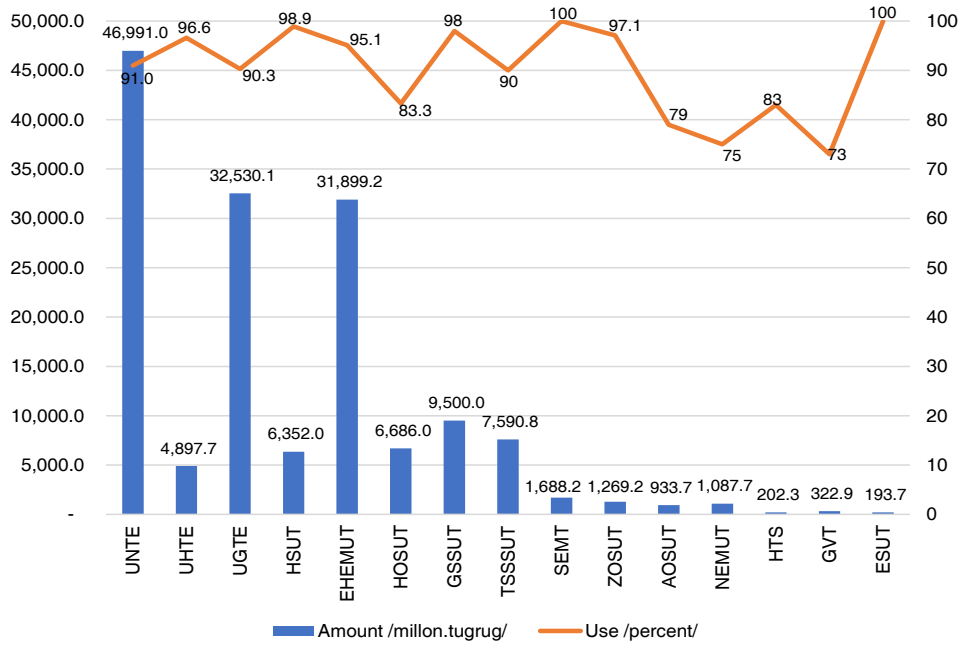
The Subcommittee of Drug Research evaluates and certifies those drug side effects reported from health care organizations according to the “Naranjo scale/Наранжогийн горим”.

## 9.3 THE UTILIZATION OF MEDICAL EQUIPMENT

In total, 2790 different types of (by double count) 8640 medical equipments worth of 152.1 billion MNT are being used in central hospitals and specialized health centers.

The utilization coefficient of medical equipments is 70-100%, with an average of 90.02%.

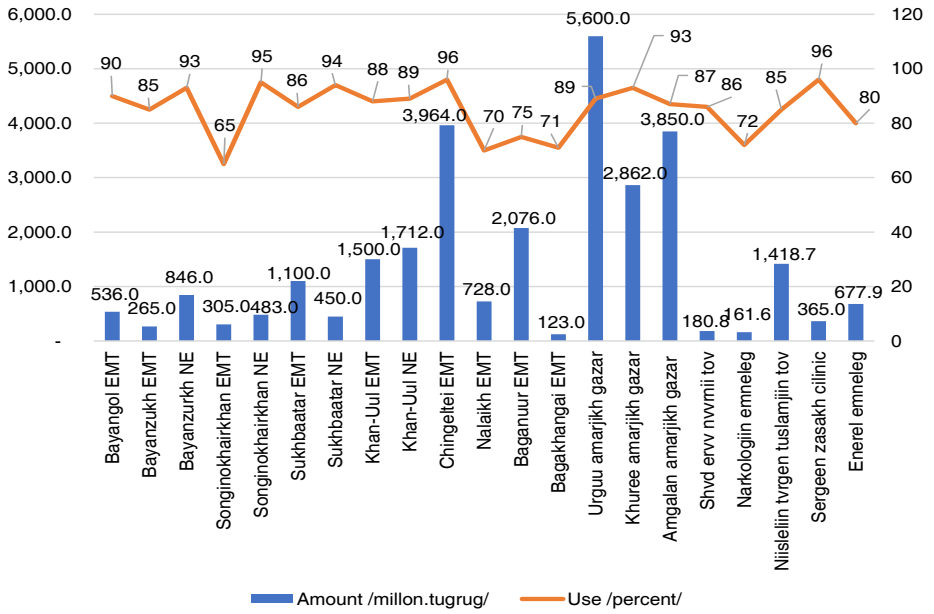
***Figure 9.3.1*** *Medical equipment supplies and usage rates of central and specialized hospitals, 2017*



In total, 2506 different types of (by double count) 7276 medical equipments worth of 26.204 million MNT are being used in health care organizations of the Ulaanbaatar City Health Department.

The utilization coefficient of medical equipment is of 65-96% with an average of 85.1%.

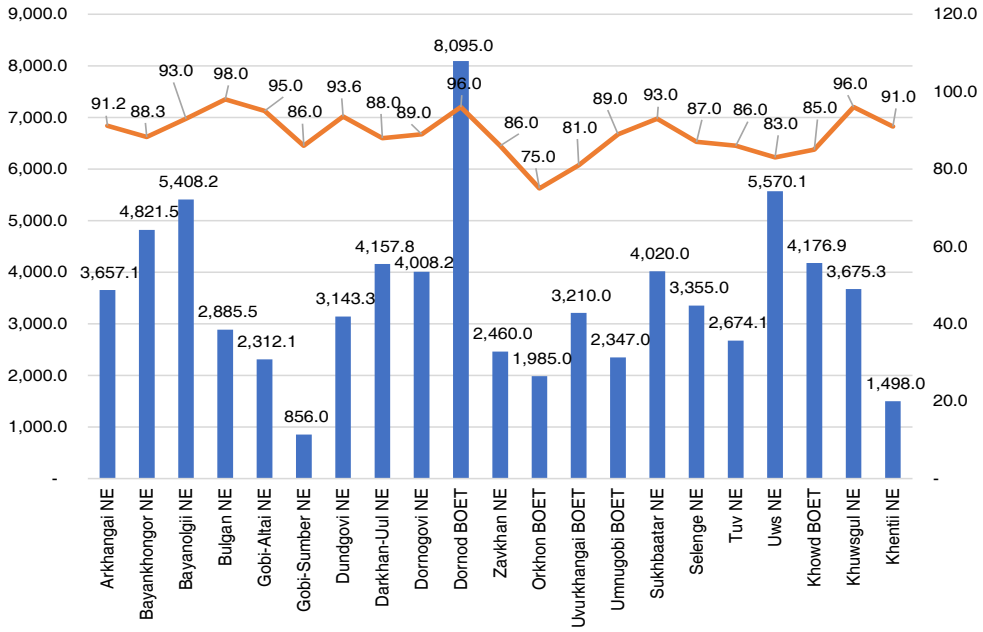
***Figure 9.3.2.*** *Medical equipment supplies and usage rates of state hospitals under Ulaanbaatar city health department, 2017*




In total, 3329 different types of (by double count) 11 288 medical equipments worth of 74.316.1 million MNT are being used in Aimag general hospitals and RDTC's.

The utilization coefficient of medical equipment is 65-96%, with an average of 85.1%.

***Figure 9.3.3.*** *Medical equipment supplies and usage rates of province general hospital and regional diagnostic and treatment centres, 2017*



# CHAPTER 10.

# BLOOD TRANSFUSION SERVICES

# CHAPTER 10.

# BLOOD TRANSFUSION SERVICES

In 2017, the National Center for Transfusion Medicine (NCTM) has worked under the slogan of “The power of cooperation - the key to success” and supplied safe blood and blood products to healthcare facilities.

The NCTM’s team worked in the technical working group on the revision of “Law on Organ Donors” and approval of the amendments of the Law legalized for improving management of donors and ensuring blood safety.

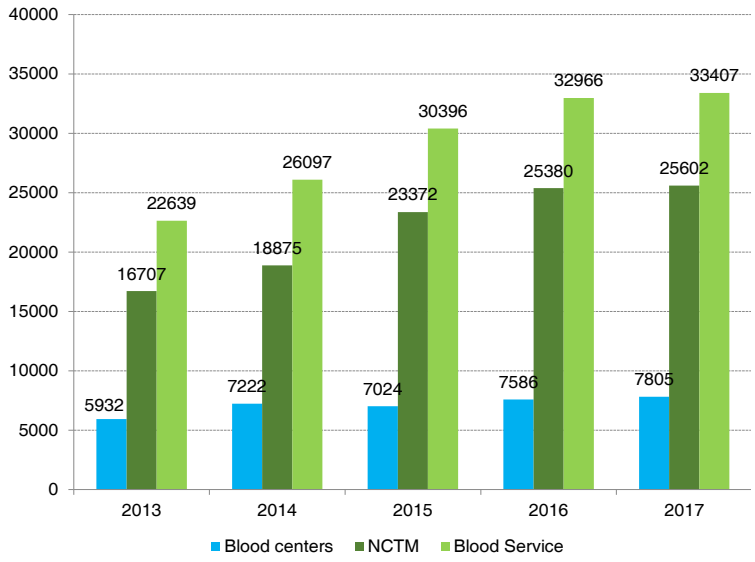
The NCTM has been accredited by the national ISO standards and certified for 3 years, and implemented MNS ISO 9001:2015 standards of quality management system at the national level. In addition, MNS ISO 15189:2015 quality standards have been implemented for the laboratory services. The laboratory has been evaluated again in 2017 and certified for 4 years.

In 2017, “The instruction for transfusing blood and blood products in common diseases” has approved by Health Minister’s order No.3 and the NCTM provides specialized professional guidance to hospitals and health facilities.

The number of blood donating was 16 707 in 2013, but the number reached 25 602 in 2017, an increase by 53.0% at the NCTM. For the Blood bank branches, the number of blood donating was 5 932 in 2013, while this number increased by 31.5%, reached 7805 in 2017.

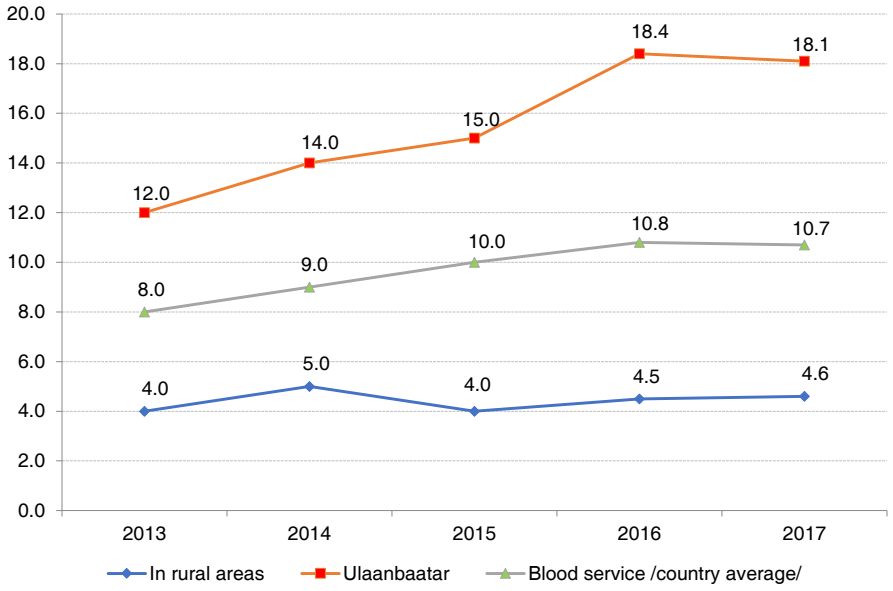
The number of blood donating has increased by 47% for the blood transfusion services as a whole since 2013 (Figure 10.1).

***Figure 10.1.*** *The number of blood donating, by the selected years*



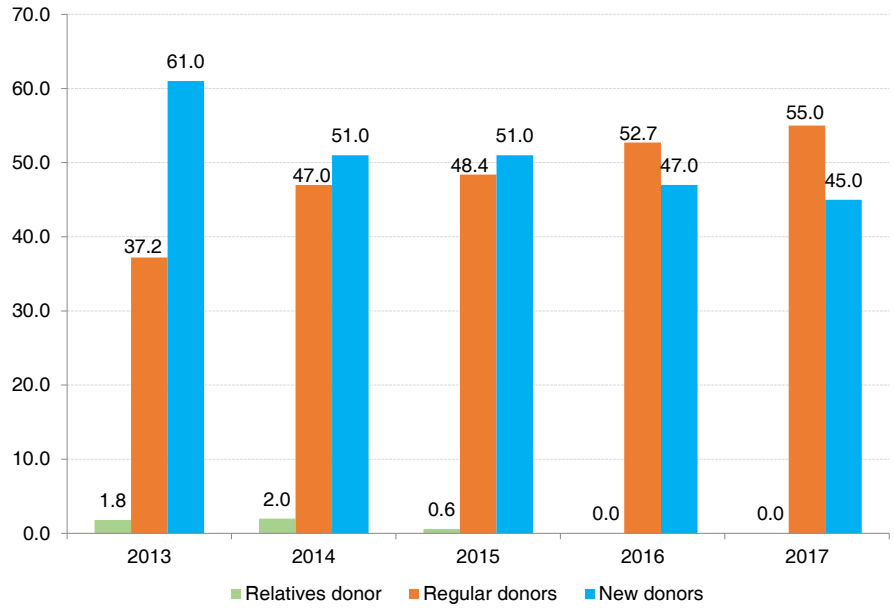
In 2013, the number of blood donating was 12.0 per 1000 population in Ulaanbaatar capital city and 4.0 per 1000 population in countryside, it has increased and reached 18.1 and 4.6 in Ulaanbaatar city and in countryside, respectively. The number of blood donating per 1000 population is relatively low in rural areas related to number of the population and usage of blood and blood products (Figure 10.2).

***Figure 10.2**. The number of blood donating per 1 000 population, by the selected years*



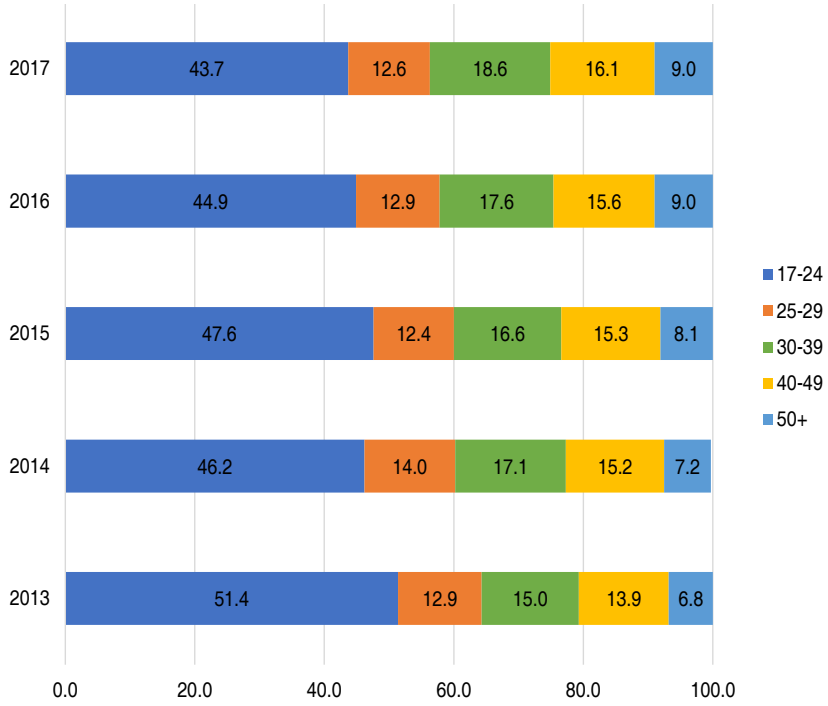

In 2013, the percentage of regular blood donors was reported at 37.2% and its number reached 55.0% in 2017, an increase by 17.8%. An increasing percentage of regular blood donors indicated that improvement of blood donor recruitment and storage of blood and blood products. And this has allowed establishing reserves and supplying safe and quality assured blood and blood products (Figure10.3).

***Figure 10.3.** The type of blood donating to blood service /by percentage/*



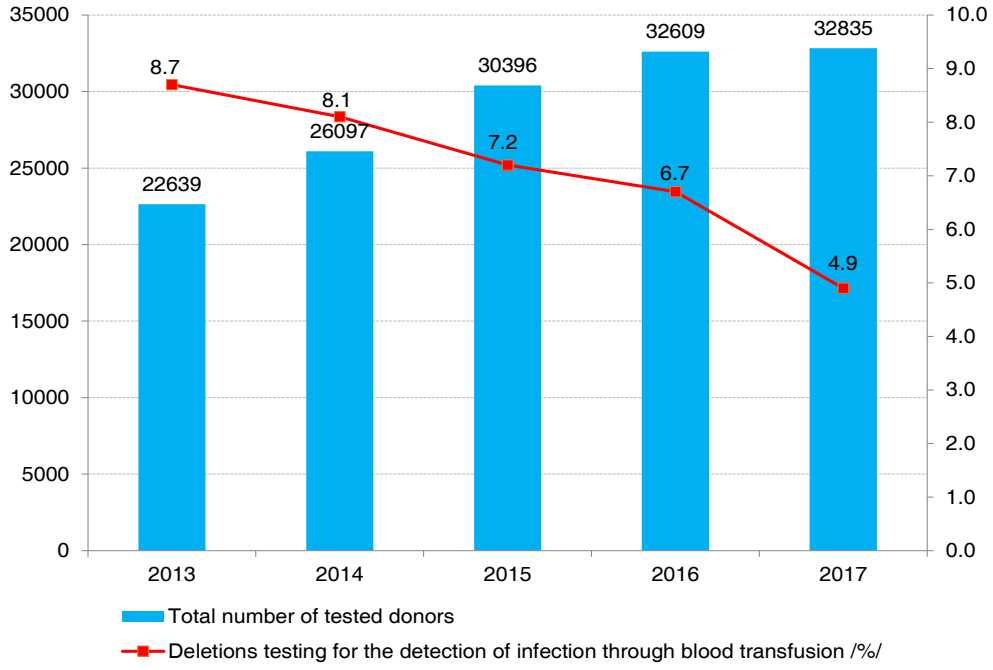
In 2013, 51.4% of all blood donors accounted for age group of people 17-24. However, this percentage has reached 43.7%, a decrease by 10.4% in 2017. There is a tendency, the number of blood donors aged above 30 has been increasing (Figure 10.4).

***Figure 10.4.*** *Blood donors by age groups*




The percentage of deletions testing for the detection of infection through blood transfusion was estimated at 4.9% in 2017 (Figure 10.5).

***Figure 10.5.*** *Deletions of donors by screening of blood-borne infections*



The production of blood and blood products was 43 033 units in 2013, and reached 73 087 units in 2017, an increase by 69.8% at the NCTM. For Blood bank branches, the production was 11 569 units in 2013 and increased by 50.0%, reached 17 416 units in 2017. The production of blood and blood products has increased by 65.7% for the blood transfusion services as a whole since 2013 (Figure 10.7).

***Figure 10.6.*** *The production of blood and blood products /by units/*

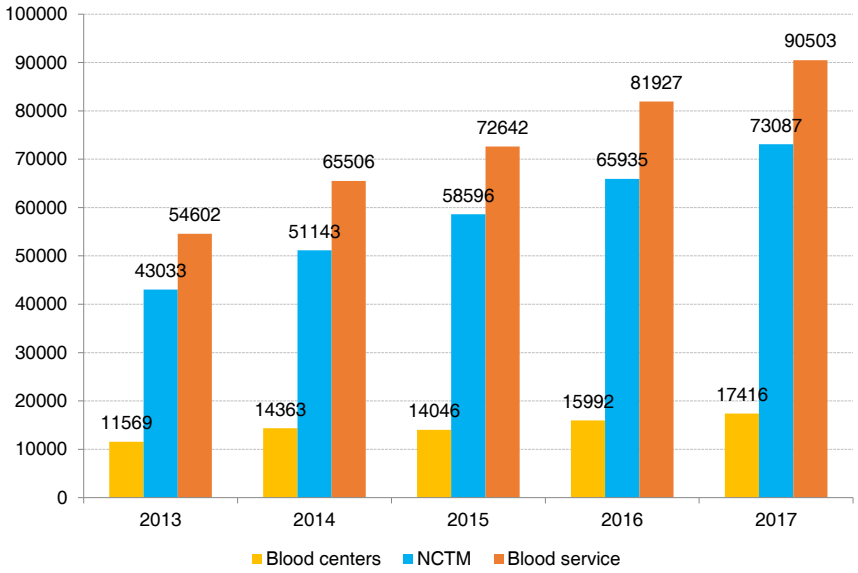
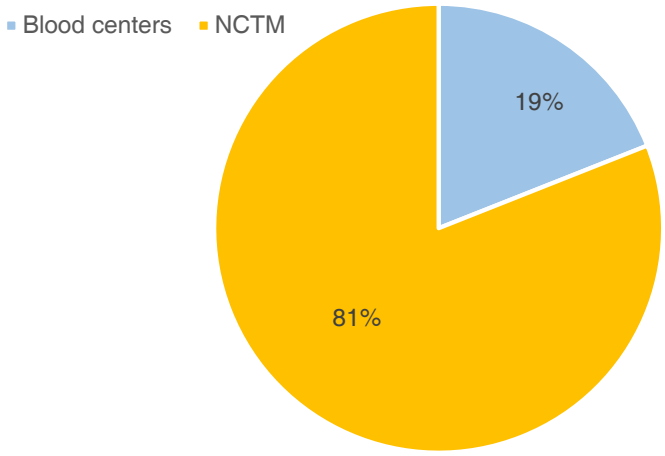



***Figure 10.7.*** *Production of blood and blood products in the NCTM and in Blood bank branches /by percentage/, 2017*




In the nationwide, 81% of blood and blood products are produced by the NCTM and 19% by the Blood bank branches.

# CHAPTER 11.

# HEALTH ECONOMICS

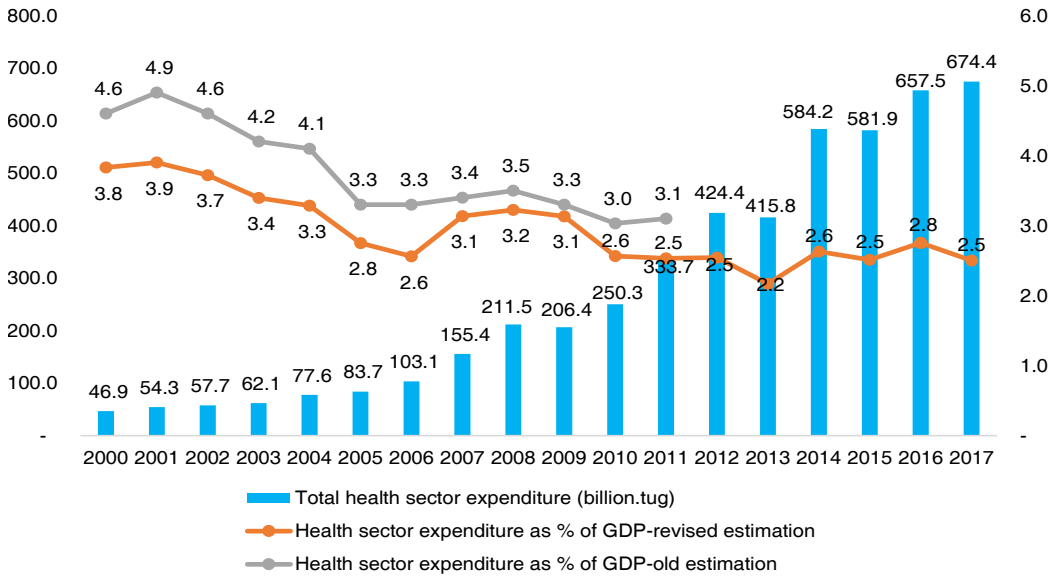
# CHAPTER 11.

# HEALTH ECONOMICS

This chapter is based on the financial performance report of the General Budget Governor in charge of health issues and information on Health Insurance Fund's income and expenditure.

## 11.1. BUDGET PERFORMANCE OF THE HEALTH SECTOR

***Figure 11.1.1.*** *Expenditure of Health sector as share of GDP*




Source: Ministry of Finance and Economic Department and NSC

The National Statistics Office has amended the estimation of the gross domestic product (GDP) 3 times in 2006, 2010 and 2014 and revised the method of estimating GDP and Gross National Income in 2007 and 2013 and amended 5 times.

The GDP has increased according to the estimation of the revised methodology and the amended calculation of Gross National Income and Gross Domestic Product.

The share of healthcare expenditure to the revised estimation of GDP has declined as compared to the previous estimation.

The healthcare expenditure has increased by amount and equivalent to 2.5% of GDP in 2017.

***Figure 11.1.2.A.*** *Total health sector expenditure by line items (billion MNT)*

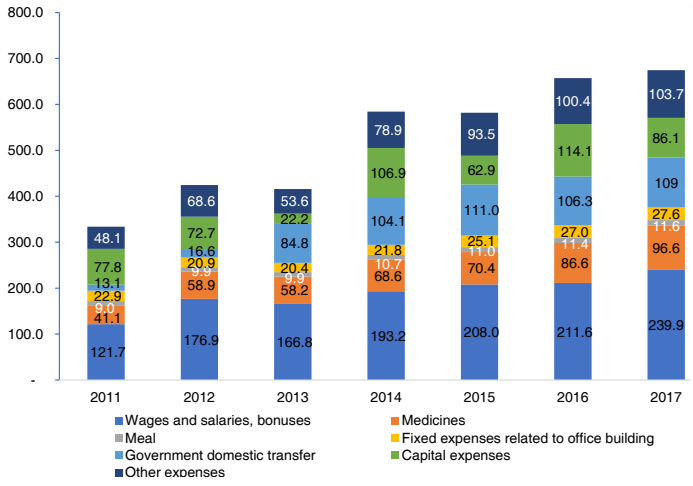
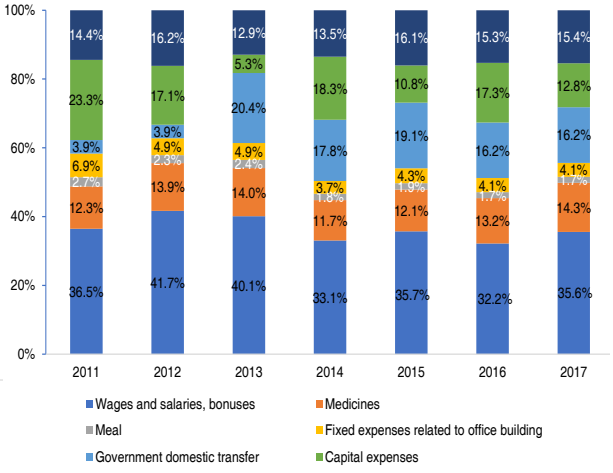



***Figure 11.1.2.B.*** *Total health sector expenditure by line items (percentage)*




Source: Ministry of Finance and Economic Department of the Ministry of Health

Considering by 6 economic categories, the most healthcare expenditures have increased, but the capital expenditure has decreased.

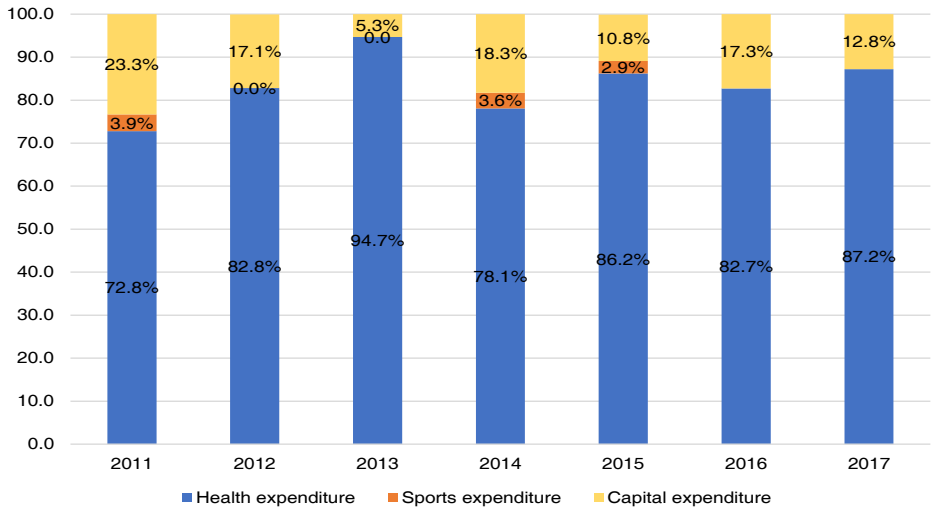
In 2017, the share of capital expenditure has decreased by 1.3 times as compared to 2016 and it has fluctuated significantly.

“Standard cost per citizen” or expenditures of family health centers have been allocated to the expenditure of the Government internal transfer until 2012. Since 2013, expenditure on soum health centers has been allocated to this expenditure, so, it has increased significantly.

In 2016, the Sports sector was separated from the Health sector and transferred to the Ministry of Education, Culture, Science and Sports. And the expenditure of the Government internal transfer has decreased by 1.2 times in 2016 as compared to 2015. However, the expenditure has increased by MNT 2.7 billion in 2017 as compared to 2016.

Looking at the sector’s total expenditure by financial classification, salaries and incentives are accounted for the highest proportion of health expenditure.

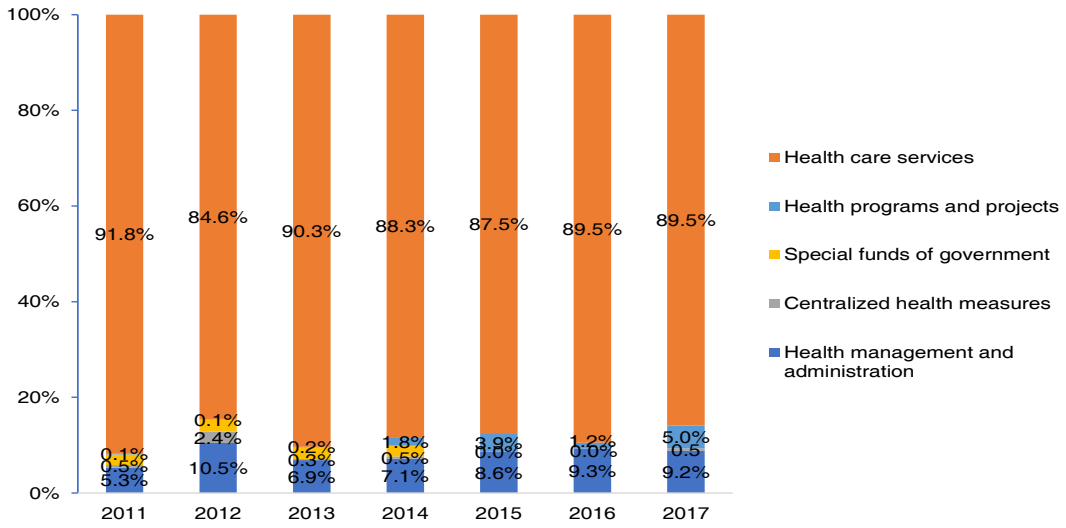
***Figure 11.1.3.*** *Total Health sector expenditure by main activities (percentage)*




Source: Ministry of Finance and Economic Department of the Ministry of Health

The last 2 years data shows that healthcare expenditure was equivalent to 82.7% in 2016, it has increased to 87.2% in 2017 and the capital expenditure has decreased from 17.3% to 12.8%.

***Figure 11.1.4.*** *Health expenditure by sub activities (percentage)*




Source: Ministry of Finance and Economic Department of the Ministry of Health

Health expenditure by sub-category indicates that expenditure on health care services accounted for 89.5% of total funding in 2016, and remained at the same level in 2017 as in the previous year.

The expenditure on health management has decreased by 0.1% from 9.3% to 9.2% and the expenditure on health programs and projects has increased by 3.8% from 1.2% to 5.0%, respectively.

During the years of 2014 and 2015, there was no expenditure on the Government Special Funds, however, the special fund expenditure was MNT 2.97 billion (0.5%) in 2017.

***Figure 11.1.5.A.*** *Health care expenditure by health care level (billion MNT)*

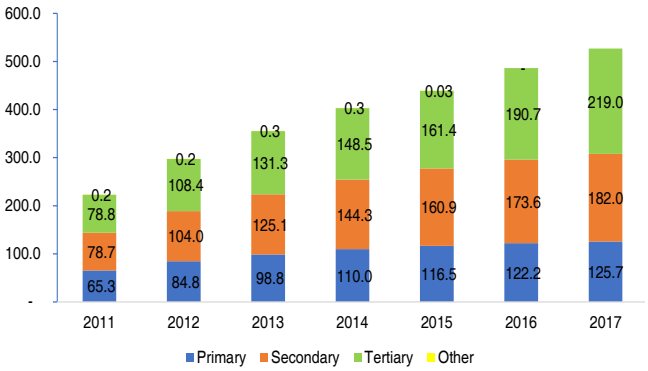
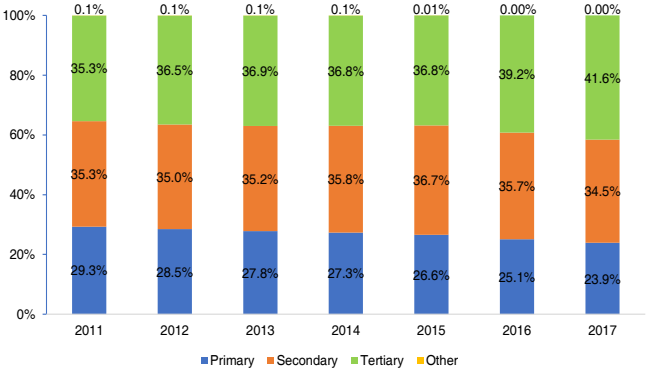



***Figure 11.1.5.B.*** *Health care expenditure by health care level (percentage)*




Source: Ministry of Finance and Economic Department of the Ministry of Health

In regard to health expenditure by level of care, a share of the expenditure has increased by 5.2 billion MNT in primary health care level, by 12.6 in secondary level and by 23.5 in tertiary level with an annual average over the last 3 years. In 2017, a share of the expenditure has increased by 3.5 billion MNT for primary health care providers, by 8.4 for secondary health care providers and by 28.3 for tertiary health care providers, respectively as compared to the previous year.

The dynamics of the last five years indicates that 23.9-27.8% of total funding was expended for providers of primary health care service, 34.5-36.7% for providers of secondary health care service, 36.8-41.6% for providers of tertiary healthcare service and 0-0.1% for other organizations, respectively.

The share of healthcare expenditure on primary health care has decreased by 5.4%, from 29.3% to 23.9% between 2001 and 2017.

The share of healthcare expenditure on secondary health care was equivalent to 35.3% in 2011, while it has decreased by 0.8% as estimated at 34.5% in 2017.

***Figure 11.1.6.A.*** *Capital expenditure by type of asset (billion MNT)*

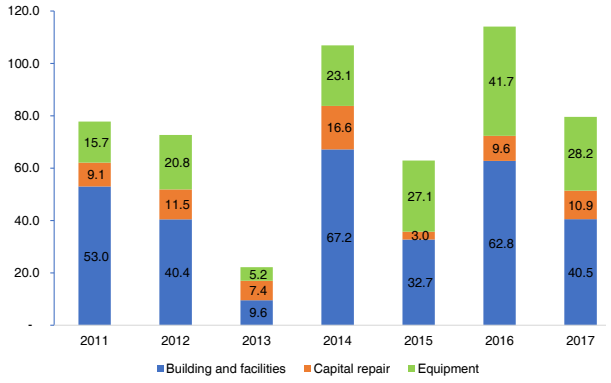
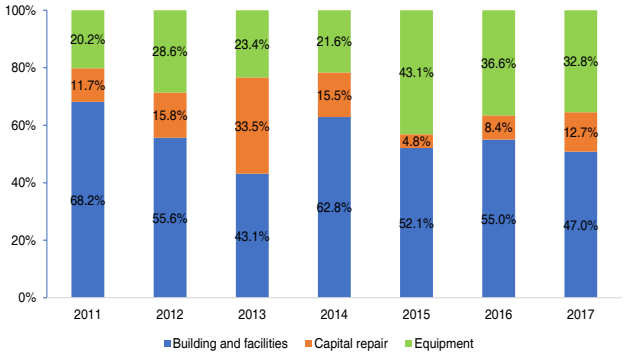



***Figure 11.1.6.B.*** *Capital expenditure by type of asset (percentage)*

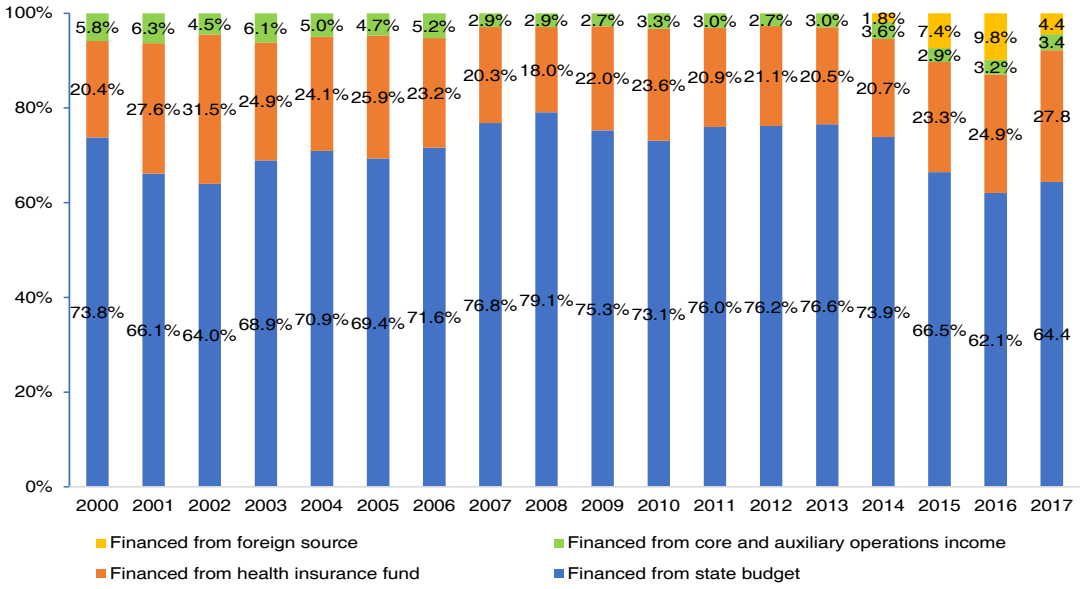



Source: Ministry of Finance and Economic Department of the Ministry of Health

The share of expenditure on tertiary health care was 35.3% in 2011, while it has increased by 6.3% as reported at 41.6% in 2017.

Capital expenditures are grouped that funds paid out for buildings, renovation, vehicles, equipment and others. The share of capital expenditures on these groups has fluctuated significantly, so, it can be seen that there is a lack of regulation of sustainable investment policy. The share of capital expenditure, which accounted for 43.1-62.8% for building, 4.8-33.5% for renovation, 20.2-43.1% for automobiles and equipment, respectively.

***Figure.11.1.7.*** *Financing sources of health and sports expenditure (percentage)*




Source: Ministry of Finance and Economic Department of the Ministry of Health

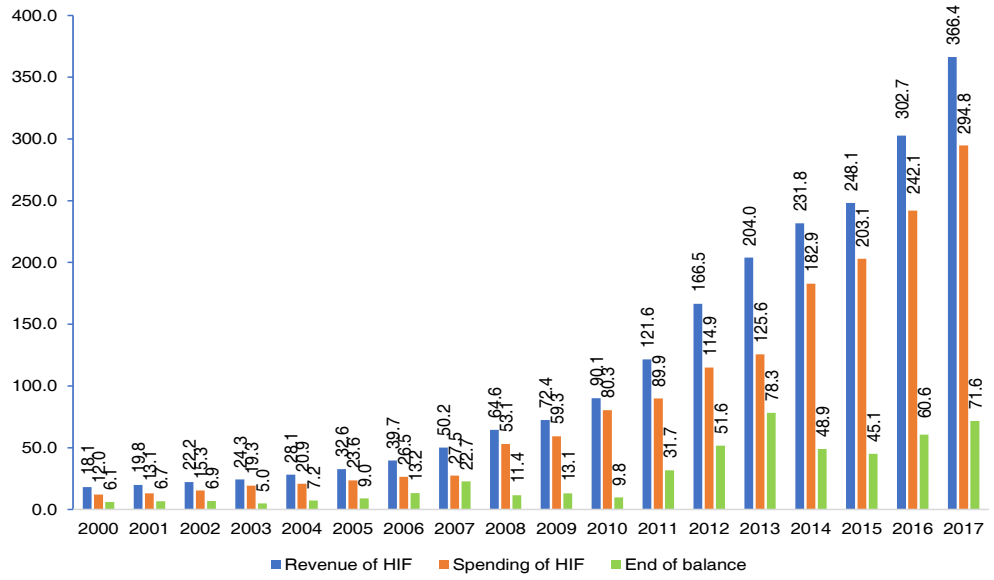
Funding sources of the health sector are the State budget, Health Insurance Fund, basic income and subsidies, and external funding.

Since 2014, external funding sources have been registered and expended for medical care, public health programs and investment activities.

As of 2017, the percentage of funding sources is as follows: 64.4% the State budget, 27.8% Health insurance fund, 3.4% basic income and subsidies and 4.4% external funding.

## 11.2. INCOME AND EXPENDITURE OF HEALTH INSURANCE FUND

***Figure 11.2.1.*** *Revenue and expenditure of Health insurance fund (billion MNT)*




In 2017, a total income of health insurance fund was 366.4 and expenditure was 294.8 billion MNT, there were remaining of 71.6 billion MNT. An average, 76.4% of total revenue has been expended per year.

***Figure 11.2.2.A.*** *Revenue of health insuranse fund by source of revenue (billion MNT)*

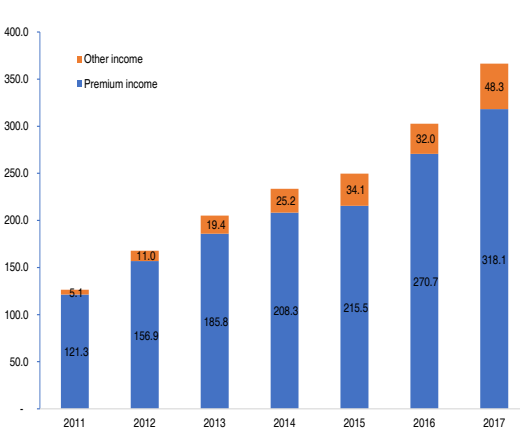
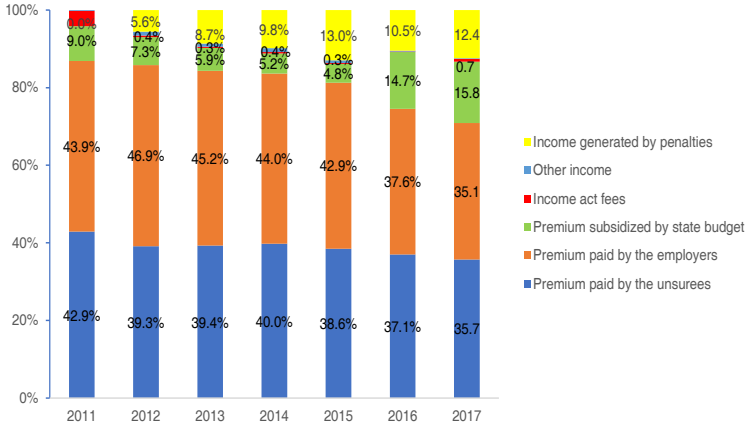



***Figure 11.2.2.B.*** *Revenue of health insurance fund by source of revenue (percentage)*

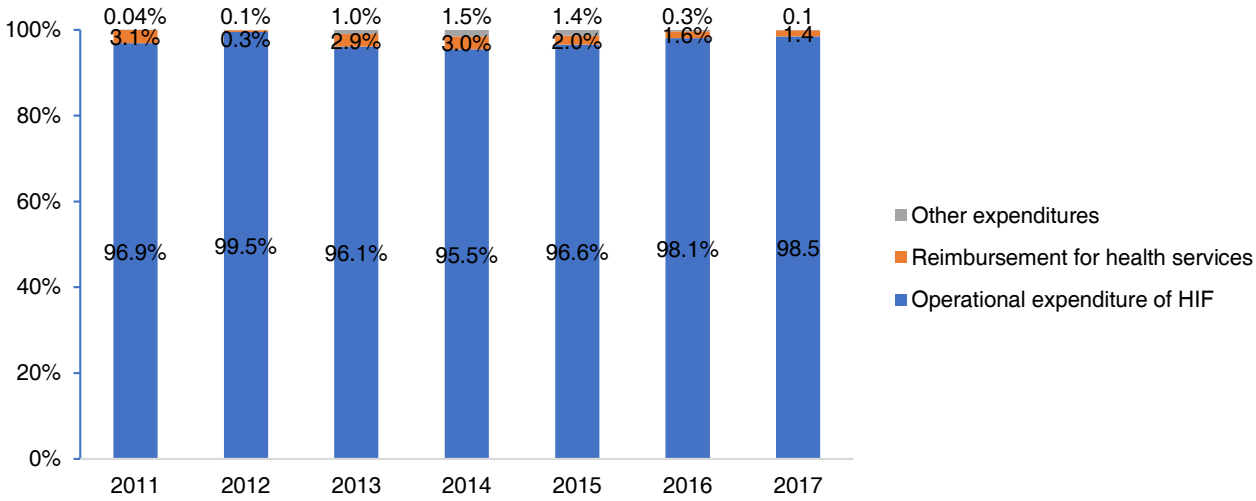


Revenues of the Health Insurance Fund are raised through two sources: insurance premiums and other incomes As of 2017, income from health insurance premium was amounted at MNT 318.1 billion and other incomes were amounted at MNT 46.3 billion.

Other income sources of the fund include act, payment of transaction, bank saving interest of free balance of the fund and donations from international donor organizations.

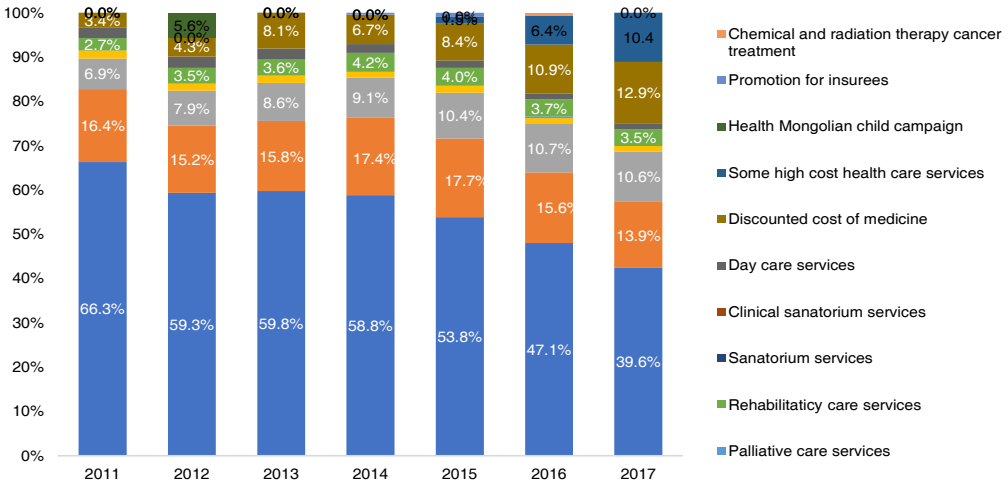
Out of total income of health insurance fund in 2017, 35.7% of premium paid by insured, 35.1% of premium paid by employers, 15.8% of premium paid by Human Development Fund/State budget and 12.4% of revenue from other income source such as bank saving interest of free balance of the fund.

***Figure 11.2.3.*** *Expenditure of Health insurance fund (percentage)*




In regard to the fund expenditure, 95.5-99.5% of expenses for the insured for receiving health care service, 1.4-3.0% of expenses for functions of the organizations and 0.1% of expenses for others. The fund expenditure has decreased by 0.2% as compared to the previous year.

***Figure 11.2.4.*** *Reimbursement for health services by classification of health care services (percentage)*



The expenditures of Health insurance fund in 2017 by service summarized as follows: 39.6% for hospital/inpatient treatment service, 13.9% for ambulatory treatment service, 12.9% for necessary drug discount, 10.0% for diagnosing and testing, and 23.6% for other aids and service. The expenses for hospital/inpatient treatment service has decreased from 66.3% to 39.6%.

***Table 11.2.1.*** *Expenditure of inpatient and day care health services financed by health insurance fund for insurers, as planned (10 most expensive diagnosis related group), 2017*

| Order | Diagnosis-related group | Thousand people | Billion tugrik |
|---|---|---|---|
| 1 | Hypertensive diseases | 46.6 | 11.1 |
| 2 | Diseases of renal and urinary, nephrit | 40.0 | 10.0 |
| 3 | Pneumonia, disease of pulmonary | 41.0 | 8.9 |
| 4 | Disease of respiratory | 62.7 | 6.6 |
| 5 | Other disorders of the nervous system | 25.8 | 5.9 |
| 6 | Operation of spine, joint and organs injure | 23.2 | 4.7 |
| 7 | Myocardial infarction, ischaemic embolism, pericarditis | 9.1 | 4.2 |
| 8 | Diseases of noninfective gastric and intestinal | 13.1 | 3.9 |
| 9 | Arthritis, arthropathy, other disorders of joint | 14.9 | 3.7 |
| 10 | Chronic disease of liver | 13.5 | 3.2 |
| | **Total** | **290.0** | **62.2** |

As of 2017, expenses for 10 leading causes accounted for the highest proportion of the total expenditures on hospital/inpatient treatment and a day treatment aids and service funded by health insurance fund (table 11.2.1). The expenses for 10 leading causes accounting 51.7%, of total estimated expenditure for these healthcare services.

***Table 11.2.2.*** *Main indicators of health sector expenditure*

| Indicators | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GDP, by production approaches, at current price (million tugrik) | 4 956 647.2 | 6 555 569.4 | 6 590 637.1 | 9 756 588.4 | 13 173 763.4 | 16 688 419.6 | 19 174 242.6 | 22 227 054.3 | **66,779.1** | 23,886,409.5 | 27,167,034.7 |
| Total health and sports expemditure (million tugrik) | 155 400.0 | 211 497.1 | 206 429.3 | 250 264.7 | 333 702.5 | 424 387.9 | 415 823.8 | 584 164.7 | 581,851.5 | 657,478.0 | 674,392.3 |
| Health and sports expenditure as % of GDP | 3.1 | 3.2 | 3.1 | 2.6 | 2.5 | 2.5 | 2.2 | 2.6 | 2.5 | 2.8 | 2.5 |
| Total health and sports expemditure per capita (tugrik) | 43 092.0 | 79 529.7 | 76 183.0 | 90 732.5 | 119 764.5 | 149 447.6 | 143 436.4 | 197 145.6 | 192,229.2 | 217,214.3 | 212,213.3 |
| **Financing source of health end sports expenditure (million tugrik)** | | | | | | | | | | | |
| State budget | 118 900.0 | 167 680.3 | 154 356.2 | 183 939.8 | 236 443.9 | 310 604.8 | 318 346.3 | 438 232.1 | 386,847.1 | 409,356.7 | 435,061.5 |
| HIF | 31 400.0 | 38 212.4 | 45 086.7 | 59 457.4 | 65 127.3 | 85 955.7 | 85 133.5 | 122 842.7 | 135,363.3 | 164,436.8 | 187,605.4 |
| Core and auxiliary operations income | 4 500.0 | 6 178.5 | 5 630.0 | 8 199.1 | 9 467.8 | 11 073.2 | 12 339.1 | 21 351.3 | 16,995.7 | 20,769.2 | 22,870.6 |
| Foreign source | - | - | - | - | - | - | - | 10 850.8 | 42,821.2 | 64,757.9 | 29,679.0 |

***Table 11.2.3.*** *Health sector expenditure by line items (MNT)*

| Line Items | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total expenditure | 103 168.3 | 155 400.0 | 211 497.1 | 206 429.3 | 250 264.7 | 333 702.5 | 424 387.9 | 415 823.8 | 584 164.7 | 581 851.5 | 657,500.0 | 674,392.3 |
| Wages and salaries, bonuses | 33 437.3 | 63 300.0 | 92 982.4 | 92 743.8 | 100 363.8 | 121 680.3 | 176 880.1 | 166 808.4 | 193 195.5 | 207 980.8 | 211,600.0 | 239,864.69 |
| Medicines | 13 361.1 | 15 600.0 | 23 298.1 | 25 415.6 | 34 982.2 | 41 101.3 | 58 893.5 | 58 227.2 | 68 589.4 | 70 433.6 | 86,648.8 | 11,566.40 |
| Meal | 3 577.1 | 4 100.0 | 5 814.1 | 6 911.5 | 7 777.9 | 9 011.3 | 9 933.1 | 9 859.1 | 10 677.2 | 11 041.4 | 11,424.8 | 109,024.43 |
| Fixed expenses related to office building | 12 118.7 | 14 400.0 | 14 974.6 | 15 096.3 | 19 576.8 | 22 896.9 | 20 871.8 | 20 355.7 | 21 828.3 | 25 110.3 | 26,968.8 | 96,552.90 |
| Government domestic transfer * | 4 056.2 | | 9 230.1 | 9 674.1 | 10 209.8 | 13 125.7 | 16 557.3 | 84 776.0 | 104 056.9 | 110 959.1 | 106,330.8 | 27,585.60 |
| Capital expenses | 5 799.5 | 10 846.1 | 15 758.7 | 20 591.4 | 41 112.8 | 77 765.9 | 72 694.5 | 22 161.8 | 106 870.7 | 62 870.5 | 114,060.3 | 86,130.92 |
| Building and facilities | 2 054.3 | 6 603.5 | 7 378.8 | 12 156.9 | 24 299.8 | 53 023.2 | 40 440.3 | 9 558.4 | 67 160.1 | 32 740.2 | 62,789.5 | 40,457.0 |
| Capital repair | 886.9 | 1 756.5 | 4 593.2 | 5 434.9 | 7 631.0 | 9 060.3 | 11 457.2 | 7 426.6 | 16 589.5 | 3 003.3 | 9,569.3 | 10,945.0 |
| Equipment | 2 858.3 | 2 486.1 | 3 786.7 | 2 999.6 | 9 181.9 | 15 682.4 | 20 797.0 | 5 176.7 | 23 121.0 | 27 127.1 | 41,695.1 | 28,244.2 |
| Other expenses | 30 818.5 | 47 153.9 | 49 439.1 | 35 996.6 | 36 241.5 | 48 121.2 | 68 557.5 | 53 635.5 | 78 946.7 | 93 455.8 | 100,446.5 | 103,667.32 |

***Table 11.2.4.*** *Composition of health sector expenditure (MNT)*

| Health and Sports expenditure | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| **Health expenditure** | **393 662.0** | **456 415.3** | **501 823.2** | **543,417.8** | **588 394.1** |
| Health management and administration | 27 034.2 | 32 618.0 | 43 150.3 | 50,535.6 | 53 919.7 |
| Health care services | 355 565.6 | 403 125.5 | 438 897.0 | 486,401.8 | 526 726.7 |
| Family health centers | 84 776.0 | 94 655.2 | 101 279.3 | 106,330.8 | 109 024.4 |
| Soum health centers | | | | | |
| Village health centers | 1 081.6 | 1 147.2 | | | |
| Inter-soum hospitals | 12 982.2 | 14 187.3 | 15 260.5 | 15,826.8 | 16 683.5 |
| Ambulance service center | 5 494.7 | 5 766.4 | 6 151.3 | 6,663.4 | 7 076.8 |
| Zoonotic disease centers of provinces | 2 818.3 | 2 982.6 | 3 156.7 | 3,238.6 | 3 358.3 |
| Centers of traditional medicine and sanatoriums of provinces | 1 471.7 | 1 741.8 | 1 838.6 | 1,885.7 | 2 054.4 |
| Maternity hospitals | 9 766.7 | 12 094.3 | 13 634.2 | 14,930.9 | 15 769.0 |
| Rural general hospital | 66 142.4 | 7 969.7 | 9 126.4 | 9,780.8 | 10 640.4 |
| Province general hospitals | | 70 825.3 | 78 901.8 | 83,752.4 | 91 541.3 |
| District health centers and general hospitals | 34 521.6 | 37 697.3 | 42 103.8 | 47,481.4 | 45 263.5 |
| Other hospitals under UB health department | 4 920.8 | 5 268.3 | 5 989.9 | 5,847.5 | 6 269.0 |
| RDTC | 26 455.2 | 28 275.1 | 30 958.2 | 32,946.4 | 34 692.0 |
| Central hospitals | 34 129.5 | 38 571.0 | 44 828.8 | 58,651.6 | 68 991.4 |
| Specialized centers | 69 389.5 | 80 182.3 | 84 130.1 | 97,505.1 | 113 693.8 |
| Institute of traditional medicine and technology | 1 363.9 | 1 504.6 | 1 510.0 | 1,560.4 | 1 668.7 |
| Others | 251.4 | 257.0 | 27.4 | - | - |
| Centralized health measures | 1 023.7 | 2 271.9 | - | - | - |
| Special funds of government | 9 410.7 | 10 375.0 | 128.9 | - | 2 967.6 |
| Health programs and projects | 627.8 | 8 024.9 | 19 646.9 | 6,480.2 | 29 411.5 |
| **Sports expenditure** | **-** | **20 878.7** | **17 157.8** | **-** | **-** |
| **Capital expenditure** | **22 161.8** | **106 870.7** | **62 870.5** | **114,060.3** | **85 998.2** |
| **Total expenditure** | **415 823.8** | **584 164.7** | **581 851.5** | **657,478.1** | **674 392.3** |

## *Table 11.2.5. Health insurance fund income, expenditure*

| Indicators | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand people | (million MNT) | Thousand people | (million MNT) | Thousand people | (million MNT) | Thousand people | (million MNT) | Thousand people | (million MNT) | Thousand people | (million MNT) |
| Revenue of health insurance fund | 2 593.6 | 166 500.8 | 2 864.5 | 203 954.2 | 3 064.8 | 231 800.2 | 3 003.7 | 248 130.7 | 2,966.3 | 302,676.9 | 2,983.9 | 366,423.4 |
| Premium paid by the insurees | 1 123.8 | 65 681.0 | 1 206.3 | 80 596.0 | 1 241.3 | 92 995.2 | 1 204.8 | 96 114.6 | 1,374.4 | 112,153.9 | 1,224.9 | 130,929.5 |
| Premium paid by the employees | 742.0 | 61 639.5 | 803.9 | 75 943.9 | 832.9 | 87 980.2 | 799.8 | 91 111.7 | - | - | 836.5 | 110,990.5 |
| Premium paid by self employer, herdsman, un-employed people | 381.8 | 4 041.5 | 402.4 | 4 652.1 | 408.4 | 5 015.1 | 405.0 | 5 003.0 | - | - | 388.4 | 19,939.0 |
| Premium paid by the employers | | 78 375.0 | | 92 417.1 | | 102 420.0 | | 106 726.7 | - | 113,730.3 | - | 128,719.2 |
| Premium subsidized by state budget | 1 469.8 | 12 151.5 | 1 658.3 | 12 151.5 | 1 823.5 | 12 033.2 | 1 798.9 | 12 040.2 | 1,591.9 | 44,469.1 | 1,759.0 | 58,064.8 |
| Income generated by penalties | | 9 341.8 | | 17 695.7 | | 22 896.8 | | 32 249.6 | - | 31,800.0 | | 408.1 |
| Interest of health insurance surplus placed in bank account | | 669.6 | | 590.3 | | 883.9 | | 643.7 | - | - | - | 45,617.1 |
| Fee fro premium overdue | | 215.4 | | 308.2 | | 468.3 | | 279.8 | - | 454.5 | - | 214.5 |
| Others | | 66.4 | | 195.4 | | 102.6 | | 76.1 | - | 69.0 | - | 2,470.1 |
| Expenditure of health insurance fund by classifiaction of health services | | 114 898.9 | | 125 636.0 | | 182 919.3 | | 203 070.5 | 5,708.11 | 246,778.3 | 6,860.85 | 294,851.0 |
| Reimbursement for health services by classification of health services, actual | | 114 357.7 | | 120 737.4 | | 174 680.9 | | 196 133.5 | 5,708.1 | 242,077.6 | 6,860.8 | 290,370.3 |
| Reimbursement for health services by classification of health services, planned | 4 126.4 | 113 786.6 | 3 843.2 | 120 813.5 | 4 452.1 | 174 592.7 | 5 042.6 | 196 392.1 | - | 242,077.6 | 6,860.8 | 294,851.0 |
| Inpatient care services | 362.3 | 67 516.9 | 374.1 | 72 187.8 | 419.1 | 102 733.1 | 427.0 | 105 733.6 | 462.6 | 113,971.9 | 474.3 | 116,671.1 |
| Outpatient care services | 1 636.8 | 17 286.4 | 1 755.1 | 19 091.2 | 1 971.6 | 30 434.3 | 2 242.0 | 34 849.2 | 2,411.1 | 37,854.8 | 2,653.4 | 41,109.1 |
| Diagnostic procedures and laboratory tests | 716.0 | 8 947.6 | 753.6 | 10 369.9 | 861.9 | 15 808.8 | 939.1 | 20 371.3 | 1,116.6 | 25,940.1 | 1,544.9 | 31,113.3 |
| Traditional medicine | 20.6 | 1 853.7 | 22.0 | 2 044.0 | 20.6 | 2 327.8 | 26.0 | 2 966.2 | 28.1 | 3,193.5 | 29.8 | 3,409.9 |
| Palliative care services | 0.1 | 11.5 | 0.1 | 10.8 | 0.2 | 61.1 | 0.4 | 123.9 | 2.9 | 870.8 | 5.0 | 1,489.9 |
| Rehabilitative care services | 55.8 | 4 017.8 | 58.7 | 4 342.8 | 67.7 | 7 402.3 | 71.4 | 7 847.3 | - | 9,035.4 | 94.0 | 10,351.9 |
| Sanatorium services | 54.9 | 3 955.3 | 57.4 | 4 244.9 | 66.8 | 7 298.1 | 70.5 | 7 748.1 | 82.1 | 9,035.4 | 92.2 | 10,140.4 |
| Clinical sanatorium services | 0.9 | 62.6 | 1.3 | 97.8 | 0.9 | 104.2 | 0.9 | 99.2 | - | - | 1.9 | 211.5 |
| Day care services | 24.5 | 2 931.3 | 24.8 | 3 033.2 | 28.4 | 3 444.4 | 27.8 | 3 383.6 | 25.5 | 3,106.4 | 30.5 | 3,729.2 |
| Discounted cost of medicine | 706.9 | 4 886.4 | 854.5 | 9 727.4 | 1 073.3 | 11 634.6 | 1 286.3 | 16 450.8 | 1,564.9 | 26,291.0 | 1,580.3 | 38,114.9 |
| Some high cost health care services | - | - | - | - | - | - | 2.1 | 3 036.4 | 11.4 | 15,562.0 | 18.6 | 30,566.0 |
| Family health centers | - | - | - | - | - | - | - | - | - | - | - | - |
| "Healthy Mongolian Child" campaign | 603.3 | 6 335.1 | - | - | - | - | - | - | - | - | - | - |
| Элэгний С вирусын ачаалал тоолох | - | - | - | - | - | - | - | - | - | - | 63 | 6.6 |
| Элэгний В. С вирусын илрүүлэг | - | - | - | - | - | - | - | - | - | - | 303 | 0.8 |
| Урьдчилан сэргийлэх, эрт илрүүлэх үзлэг, оношилогоо, шинжилгээ /багц/ | - | - | - | - | - | - | - | - | - | - | 42 | 2.1 |
| Төр төлбөрийг нь хариуцах эрүүл мэндийн тусламж, үйлчилгээний зардал / Гемодиализ/ | - | - | - | - | - | - | - | - | - | - | 18 | 2.3 |
| Promotion for insurees | - | - | 0.3 | 6.4 | 9.3 | 746.4 | 20.4 | 1 629.7 | - | - | - | - |
| Operational expenditure of HIF | | 398.2 | | 3 693.7 | | 5 491.0 | | 4 114.0 | | 3,913.9 | | 4,110.9 |
| Other expenditures | | 143.0 | | 1 204.9 | | 2 747.4 | | 2 823.0 | | 786.7 | | 369.8 |
| Expenditure of health insurance fund by property type* | | 113 786.6 | | 120 813.5 | | 174 592.7 | | 196 392.1 | | 54,765.8 | | 0.0 |
| Public health organizations | | 89 374.7 | | 89 760.2 | | 128 768.0 | | 141 626.2 | | 54,765.8 | | - |
| Private health organizations | | 24 411.9 | | 31 053.4 | | 45 824.8 | | 54 765.8 | | - | | - |
| Annual surplus of HIF | | 51 601.9 | | 78 318.2 | | 48 880.9 | | 45 060.2 | | 55,898.6 | | 71,572.4 |
| Average health insurance coverage | 90.4% | | 97.7% | | 102.3% | | 98.1% | | 86.8% | | 95.6% | |

***Table 11.2.6.*** *In 2017 Planned expenditure of health insurance fund by DRG*

| DRG cod | DRG name | Number if person | Expenditure |
|---|---|---|---|
| 1 | Haemorrhage, cerebral infarction | 4,241 | 1,073,533,610 |
| 2 | Cerebrovascular disease, stroke and it's siquelae | 13,499 | 3,195,060,823 |
| 3 | Disease of nerve, nerve peripheral nervous system | 8,122 | 1,667,976,214 |
| 4 | Meningitis | 223 | 78,859,214 |
| 5 | Seizures, convulsions, status epilepticus | 4,473 | 1,379,914,338 |
| 6 | Migraine and Other headache syndroms | 14,099 | 3,036,114,691 |
| 7 | Other disorders of nervous system | 23,168 | 4,699,002,421 |
| 8 | Operations of brain, spinal, peripheral nerve | 401 | 247,971,711 |
| 9 | Disorders of globe and lens | 818 | 150,757,610 |
| 10 | Disorders of eye | 859 | 153,319,839 |
| 11 | Disorders of eye reason of nerve | 287 | 49,247,595 |
| 12 | Other disorders of eye | 541 | 94,566,109 |
| 13 | Operations of eye | 5,928 | 1,566,573,405 |
| 14 | Disorders of vestibular function and deafness | 947 | 142,456,118 |
| 15 | Diseases of ear, nose and tube | 4,536 | 918,260,841 |
| 16 | Other diseases of ear, nose, mouth and tube | 11,768 | 2,312,362,722 |
| 17 | Operations of ear, nose, mouth, tube and upper respiratory | 1,644 | 409,387,916 |
| 18 | Other operations of ear, nose, mouth, tube and tubotympanic organs | 5,371 | 1,279,546,279 |
| 19 | Diseases of respiratory system | 25,829 | 5,904,758,011 |
| 20 | Pneumonia, infection of pulmonary | 46,631 | 11,101,178,853 |
| 21 | Asthma, Status asthmaticus, Bronchiectasis | 2,568 | 478,169,062 |
| 22 | Disorders of interstitial pulmonary, pleural | 263 | 57,922,445 |
| 23 | Emphysema, pneumothorax, effusion and other diseases | 3,757 | 1,003,917,315 |
| 24 | Operation of thoracic | 140 | 55,357,943 |
| 25 | Injury of intrathoracic organs and intra-abdominal organs | 384 | 98,352,576 |
| 26 | Myocardial infarction, ischaemic embolism, pericarditis | 14,916 | 3,676,745,434 |
| 27 | Heart failure, complications | 250 | 56,079,084 |
| 28 | Disorders of veins,  thrombosis, thrombophlebitis | 1,771 | 217,570,462 |
| 29 | Disorders of aortic and arterial | 153 | 34,456,400 |
| 30 | Atherosclerosis | 1,946 | 390,393,631 |
| 31 | Hypertensive diseases | 40,041 | 10,035,441,379 |
| 32 | Disorders of rheumatic heart and valve | 1,490 | 291,995,636 |
| 33 | Disorder of cardiac arrhythmias and conduction | 613 | 118,318,255 |
| 34 | Angina pectoris | 6,555 | 1,272,017,826 |
| 35 | Cardiomyopathy, myocarditis, rheumatic disease | 5,269 | 1,085,103,241 |
| 36 | Other disorders of the circulatory system | 232 | 39,270,859 |
| 37 | Operation of heart | 90 | 68,249,422 |
| 38 | Operation of vessels | 4,267 | 1,398,211,036 |
| 39 | Diseases of tooth and oral cavity, treatment of dental caries | 2,129 | 313,911,946 |
| 40 | Operations of face and floor of mouth | 262 | 112,800,137 |
| 41 | Peritonitis, disorder of intestine | 176 | 47,306,898 |
| 42 | Disorders of appendix | 393 | 100,446,372 |
| 43 | Operation of acute appendicitis | 10,610 | 2,688,788,834 |
| 44 | Inguinal and Femoral hernia | 101 | 20,584,815 |
| 45 | Other hernia | 39 | 10,326,184 |
| 46 | Operation of hernia | 1,572 | 405,559,924 |
| 47 | Gastric and intestinal ulcer, diverticular disease of intestine | 11,377 | 2,332,310,532 |
| 48 | Operation of gastric ucler | 132 | 59,141,823 |
| 49 | Disorder of oesophagus | 718 | 139,285,325 |
| 50 | Vascular disorders of intestine and other diagnosis of intestine | 150 | 42,591,420 |
| 51 | Intestinal ileus and obstruction | 305 | 66,039,096 |
| 52 | Diseases of noninfective gastric and intestines | 11,476 | 3,080,385,768 |
| 53 | Other diseases of digestive system | 1,302 | 277,585,128 |
| 54 | Operation of enteritis and colitis | 876 | 273,112,593 |
| 55 | Toxic, cirrhosis and failure of liver | 9,125 | 2,212,305,891 |
| 56 | Disorder of pancreas | 5,706 | 1,284,858,749 |
| 57 | Operation of liver and pancreas | 128 | 74,112,180 |
| 58 | Chronic disorders of liver | 13,179 | 2,930,630,772 |
| 59 | Disorders of biliary tract | 4,347 | 930,371,386 |
| 60 | Operation of biliary tract | 2,719 | 1,340,826,809 |
| 61 | Endoscopic operation of digestive tract | 5,021 | 1,432,983,080 |

| DRG cod | DRG name | Number if person | Expenditure |
|---|---|---|---|
| 62 | Other operation of digestive tract | 2,333 | 734,549,188 |
| 63 | Injury, amputation, crushing of organs | 246 | 65,109,518 |
| 64 | Operation of spine, joint and other organs injury | 9,130 | 4,164,030,517 |
| 65 | Superficial injury and open wound of organs, injury of nerve, vessels and tendon | 6,199 | 1,662,555,307 |
| 66 | Fracture, dislocation, sprain and strain | 4,357 | 1,305,083,210 |
| 67 | Osteomyelitis, osteoporosis, osteomalacia and other osteopathies | 845 | 203,104,309 |
| 68 | Disorder of spinal | 7,711 | 1,426,235,091 |
| 69 | Arthritis, arthropathy, other disorders of joint | 13,861 | 3,174,581,683 |
| 70 | Other injuries and it's sequelae | 1,735 | 385,357,027 |
| 71 | Other operations not elsewhere classified | 5,042 | 1,418,594,860 |
| 72 | Pyoderma and mycoses of skin | 7,040 | 1,607,792,739 |
| 73 | Diseases of Pemphigus and Bullous of skin | 80 | 16,675,438 |
| 74 | Disease of skin reason of allergy | 12,853 | 2,320,755,070 |
| 75 | Diseases of skin appendages | 167 | 30,104,527 |
| 76 | Other diseases of skin | 1,694 | 344,259,839 |
| 77 | Diabetes mellitus, nutritional and metabolic disorders | 13,105 | 3,872,454,167 |
| 78 | Other disorders of endocrine | 1,192 | 339,910,826 |
| 79 | Operation of thyroid gland | 414 | 91,245,567 |
| 80 | Operation of endocrine, nutritional and metabolic diseases | 98 | 37,998,600 |
| 81 | Renal failure | 1,003 | 267,347,696 |
| 82 | Disorders of the genitourinary system | 40,950 | 8,943,910,001 |
| 83 | Operation of kidney | 154 | 55,765,803 |
| 84 | Calculus of kidney and ureter | 425 | 104,635,613 |
| 85 | Operation of calculus of kidney | 32 | 14,908,644 |
| 86 | " Symptoms and signs involving the urinary system " | 557 | 137,768,251 |
| 87 | Other disorders of kidney and ureter | 1,458 | 340,925,704 |
| 88 | Endoscopic operation of genitourinary organs | 1,423 | 384,841,117 |
| 89 | Operation of bladder | 43 | 13,849,446 |
| 90 | Other operations of kidney and ureter | 121 | 41,325,541 |
| 91 | Diseases of male genital organs | 1,705 | 401,245,489 |
| 92 | Operation of prostate | 199 | 72,454,065 |
| 93 | Other operations of male genital organs | 1,091 | 367,956,336 |
| 94 | Inflammatory diseases of female pelvic organs | 8,274 | 1,499,564,492 |
| 95 | Other diseases of female pelvic organs | 6,759 | 1,440,322,829 |
| 96 | Operations of  pelvic peritoneal | 648 | 221,694,542 |
| 97 | Endoscopic operation of female | 704 | 116,069,988 |
| 98 | Other operation of female | 2,168 | 475,446,495 |
| 99 | Benign neoplasms, polyp | 2,345 | 482,863,327 |
| 100 | Coagulation defects | 249 | 61,302,585 |
| 101 | Anaemias | 1,034 | 211,906,129 |
| 102 | Other disorders of blood and blood-forming organs | 1,233 | 221,462,104 |
| 103 | Poisoning by drugs and others, adverse effects | 212 | 62,961,664 |
| 104 | Burns, frostbite, Chilblains | 1,847 | 624,892,987 |
| 105 | Foreign body entering through natural orifice, unspecified injuries | 139 | 43,193,101 |
| 106 | Congenital malformations, deformations and chromosomal abnormalities | 1,708 | 493,660,636 |
| 107 | Factors influencing health status and contact with health services | 279 | 58,490,623 |
| 108 | Non-operational outpatient visit | 1,562,970 | 23,444,957,236 |
| 109 | Diagnostic procedures and laboratory tests | 1,090,395 | 17,664,085,014 |
| 110 | Traditional medicine | 1,544,917 | 31,113,421,222 |
| 111 | Palliative care services | 29,833 | 3,409,858,215 |
| 112 | Sanatorium services | 5,029 | 1,489,857,486 |
| 113 | Clinical sanatorium services | 92,317 | 10,144,139,903 |
| 114 | long term rehabilitative care services | 1,264 | 146,979,184 |
| 115 | Long-term rehabilitation services | 459 | 60,772,544 |
| 116 | Өндөр өртөгтэй тусламж үйлчилгээ | 18,580 | 30,590,619,514 |
| 117 | Хорт хавдрын химийн өдрийн эмчилгээ | 3,552 | 1,598,400,000 |
| 118 | Хорт хавдрын туяаны өдрийн эмчилгээ | 224 | 331,650,000 |
| 119 | Эмийн үнийн хөнгөлөлт | 1,580,303 | 38,114,976,055 |
| 120 | | - | - |
| 121 | Төр төлбөрийг нь хариуцах эрүүл мэндийн тусламж, үйлчилгээний зардал / Гемодиализ/ | 16,743 | 2,092,875,000 |
| 122 | | 1,675 | 196,700,275 |
| 123 | Элэгний B,C вирүсийн илрүүлэг | 303,027 | 848,475,600 |
| 124 | Элэгний С вирүсийн ачаалал тоолох | 1,570 | 125,060,000 |
| 125 | Элэгний С вирүсийн ачаалал тоолох | 61,133 | 6,518,505,000 |
| 126 | Урьдчилан сэргийлэх /Багц/ | 42,063 | 2,103,150,000 |
| **Total** | | **6,860,849** | **290,370,330,927** |

# CHAPTER 12.

# HEALTH STATISTICAL INDICATORS, 2007-2017 YEAR

## NUMBER OF BIRTHS

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 1742 | 1989 | 2045 | 1946 | 2005 | 1973 | 2101 | 2170 | 2037 | 1951 | 1890 |
| 2 | Bayan-Ulgii | 2520 | 2647 | 2558 | 2459 | 2569 | 2568 | 2783 | 2801 | 2761 | 2838 | 2844 |
| 3 | Bayankhongor | 1725 | 2046 | 2047 | 1874 | 2098 | 2119 | 2308 | 2174 | 2125 | 1960 | 1997 |
| 4 | Bulgan | 814 | 942 | 1060 | 975 | 962 | 953 | 1023 | 999 | 985 | 868 | 825 |
| 5 | Govi-Altai | 1209 | 1365 | 1374 | 1303 | 1310 | 1373 | 1376 | 1265 | 1284 | 1176 | 1216 |
| 6 | Govisumber | 286 | 304 | 361 | 379 | 352 | 443 | 478 | 488 | 442 | 446 | 416 |
| 7 | Darkhan-Uul | 1951 | 2163 | 2592 | 2469 | 2496 | 2609 | 2680 | 2843 | 2628 | 2476 | 2249 |
| 8 | Dornogovi | 1119 | 1239 | 1337 | 1288 | 1348 | 1405 | 1502 | 1483 | 1534 | 1426 | 1318 |
| 9 | Dornod | 1481 | 1796 | 1927 | 1842 | 1993 | 1923 | 1972 | 1982 | 1958 | 2067 | 1922 |
| 10 | Dundgovi | 894 | 978 | 1085 | 864 | 766 | 811 | 890 | 947 | 996 | 955 | 878 |
| 11 | Zavkhan | 1553 | 1811 | 1878 | 1656 | 1383 | 1448 | 1501 | 1612 | 1628 | 1413 | 1321 |
| 12 | Orkhon | 1875 | 2232 | 2489 | 2294 | 2570 | 2581 | 2891 | 2826 | 2680 | 2598 | 2566 |
| 13 | Uvurkhangai | 2424 | 2734 | 2942 | 2752 | 2511 | 2582 | 2779 | 2742 | 2741 | 2664 | 2417 |
| 14 | Umnugovi | 908 | 1176 | 1280 | 1167 | 1213 | 1293 | 1536 | 1439 | 1509 | 1401 | 1297 |
| 15 | Sukhbaatar | 945 | 1038 | 1192 | 1149 | 1288 | 1248 | 1217 | 1329 | 1395 | 1251 | 1275 |
| 16 | Selenge | 1518 | 1713 | 1848 | 1896 | 1859 | 1932 | 1924 | 2024 | 1945 | 1826 | 1712 |
| 17 | Tuv | 765 | 911 | 934 | 922 | 923 | 1126 | 1238 | 1325 | 1279 | 1226 | 1192 |
| 18 | Uvs | 1792 | 2253 | 2379 | 1953 | 1964 | 2041 | 1994 | 2110 | 1996 | 2027 | 2029 |
| 19 | Khovd | 2012 | 2240 | 2227 | 2076 | 2396 | 2346 | 2364 | 2306 | 2312 | 2208 | 2196 |
| 20 | Khuvsgul | 2513 | 3043 | 3149 | 2933 | 3108 | 3186 | 3297 | 3306 | 3119 | 2963 | 2767 |
| 21 | Khentii | 1304 | 1441 | 1560 | 1388 | 1483 | 1490 | 1611 | 1630 | 1633 | 1638 | 1442 |
| **22** | **Province average** | **31350** | **36061** | **38264** | **35585** | **36597** | **37450** | **39465** | **39801** | **38987** | **37378** | **35769** |
| 23 | Ulaanbaatar | 24284 | 27026 | 30280 | 30075 | 33731 | 37024 | 39906 | 41427 | 41447 | 40425 | 38115 |
| **24** | **National average** | **55634** | **63087** | **68544** | **65660** | **70328** | **74474** | **79371** | **81228** | **80434** | **77803** | **73884** |

## NUMBER OF LIVE BIRTHS

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 1741 | 1990 | 2049 | 1950 | 2013 | 1985 | 2115 | 2180 | 2051 | 1957 | 1902 |
| 2 | Bayan-Ulgii | 2486 | 2609 | 2518 | 2415 | 2546 | 2546 | 2762 | 2789 | 2770 | 2831 | 2849 |
| 3 | Bayankhongor | 1725 | 2043 | 2058 | 1884 | 2107 | 2124 | 2316 | 2183 | 2133 | 1966 | 2001 |
| 4 | Bulgan | 819 | 946 | 1068 | 978 | 964 | 962 | 1024 | 1008 | 991 | 871 | 835 |
| 5 | Govi-Altai | 1214 | 1358 | 1379 | 1303 | 1315 | 1370 | 1387 | 1265 | 1293 | 1176 | 1221 |
| 6 | Govisumber | 285 | 304 | 360 | 377 | 354 | 443 | 479 | 491 | 446 | 450 | 418 |
| 7 | Darkhan-Uul | 1963 | 2173 | 2612 | 2477 | 2500 | 2634 | 2698 | 2855 | 2644 | 2486 | 2260 |
| 8 | Dornogovi | 1131 | 1243 | 1332 | 1296 | 1355 | 1414 | 1509 | 1488 | 1549 | 1436 | 1325 |
| 9 | Dornod | 1485 | 1797 | 1930 | 1847 | 1999 | 1922 | 1984 | 1984 | 1970 | 2076 | 1934 |
| 10 | Dundgovi | 897 | 985 | 1093 | 867 | 764 | 817 | 890 | 948 | 1001 | 953 | 881 |
| 11 | Zavkhan | 1547 | 1804 | 1877 | 1651 | 1377 | 1452 | 1512 | 1615 | 1631 | 1421 | 1329 |
| 12 | Orkhon | 1867 | 2243 | 2506 | 2306 | 2585 | 2589 | 2911 | 2831 | 2696 | 2621 | 2579 |
| 13 | Uvurkhangai | 2432 | 2734 | 2946 | 2752 | 2510 | 2590 | 2783 | 2757 | 2755 | 2675 | 2428 |
| 14 | Umnugovi | 911 | 1180 | 1282 | 1178 | 1221 | 1301 | 1544 | 1441 | 1505 | 1409 | 1301 |
| 15 | Sukhbaatar | 951 | 1039 | 1190 | 1160 | 1297 | 1259 | 1224 | 1330 | 1395 | 1262 | 1275 |
| 16 | Selenge | 1519 | 1711 | 1845 | 1909 | 1858 | 1940 | 1934 | 2029 | 1956 | 1836 | 1720 |
| 17 | Tuv | 766 | 919 | 932 | 927 | 923 | 1127 | 1240 | 1334 | 1274 | 1218 | 1197 |
| 18 | Uvs | 1794 | 2262 | 2386 | 1946 | 1964 | 2045 | 1999 | 2127 | 2009 | 2040 | 2036 |
| 19 | Khovd | 2020 | 2240 | 2227 | 2075 | 2391 | 2351 | 2372 | 2320 | 2313 | 2220 | 2212 |
| 20 | Khuvsgul | 2506 | 3054 | 3160 | 2932 | 3114 | 3197 | 3295 | 3317 | 3128 | 2965 | 2775 |
| 21 | Khentii | 1304 | 1445 | 1575 | 1386 | 1495 | 1496 | 1615 | 1637 | 1634 | 1638 | 1446 |
| **22** | **Province average** | **31363** | **36079** | **38325** | **35616** | **36652** | **37564** | **39593** | **39929** | **39144** | **37507** | **35924** |
| 23 | Ulaanbaatar | 24411 | 27183 | 30437 | 30273 | 33924 | 37214 | 40187 | 41786 | 41731 | 40687 | 38404 |
| **24** | **National average** | **55774** | **63262** | **68762** | **65889** | **70576** | **74778** | **79780** | **81715** | **80875** | **78194** | **74328** |

## MATERNAL MORTALITY, / PER 100 000 LIVE BIRTHS /

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 57.4 | 0.0 | 48.8 | 51.3 | 49.7 | 50.4 | 0.0 | 45.9 | 0.0 | 102.2 | 0.0 |
| 2 | Bayan-Ulgii | 241.4 | 76.7 | 198.6 | 41.4 | 78.6 | 117.8 | 144.8 | 35.9 | 72.2 | 35.3 | 35.1 |
| 3 | Bayankhongor | 173.9 | 48.9 | 97.2 | 0.0 | 0.0 | 188.3 | 0.0 | 137.4 | 46.9 | 101.7 | 0.0 |
| 4 | Bulgan | 0.0 | 0.0 | 187.3 | 0.0 | 103.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | Govi-Altai | 411.9 | 0.0 | 72.5 | 76.7 | 76.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | Govisumber | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | Darkhan-Uul | 50.9 | 46.0 | 0.0 | 0.0 | 0.0 | 38.0 | 37.1 | 0.0 | 0.0 | 40.2 | 0.0 |
| 8 | Dornogovi | 0.0 | 80.5 | 0.0 | 0.0 | 0.0 | 0.0 | 66.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | Dornod | 67.3 | 55.6 | 0.0 | 0.0 | 50.0 | 52.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | Dundgovi | 111.5 | 101.5 | 91.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | Zavkhan | 64.6 | 110.9 | 159.8 | 60.6 | 72.6 | 206.6 | 66.1 | 0.0 | 0.0 | 0.0 | 150.5 |
| 12 | Orkhon | 107.1 | 0.0 | 39.9 | 86.7 | 38.7 | 38.6 | 0.0 | 35.3 | 0.0 | 0.0 | 0.0 |
| 13 | Uvurkhangai | 123.4 | 36.6 | 67.9 | 0.0 | 159.4 | 38.6 | 35.9 | 0.0 | 36.3 | 74.8 | 0.0 |
| 14 | Umnugovi | 329.3 | 0.0 | 78.0 | 169.8 | 0.0 | 0.0 | 0.0 | 69.4 | 66.4 | 212.9 | 76.9 |
| 15 | Sukhbaatar | 0.0 | 0.0 | 168.1 | 0.0 | 77.1 | 79.4 | 0.0 | 0.0 | 0.0 | 158.5 | 78.4 |
| 16 | Selenge | 0.0 | 58.4 | 54.2 | 52.4 | 107.6 | 51.5 | 0.0 | 0.0 | 51.1 | 108.9 | 0.0 |
| 17 | Tuv | 0.0 | 0.0 | 321.9 | 0.0 | 0.0 | 177.5 | 0.0 | 0.0 | 78.5 | 82.1 | 0.0 |
| 18 | Uvs | 55.7 | 44.2 | 0.0 | 205.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 49.1 |
| 19 | Khovd | 99.0 | 44.6 | 89.8 | 96.4 | 83.6 | 0.0 | 84.3 | 86.2 | 0.0 | 90.1 | 45.2 |
| 20 | Khuvsgul | 39.9 | 32.7 | 94.9 | 34.1 | 64.2 | 31.3 | 91.0 | 30.1 | 32.0 | 101.2 | 0.0 |
| 21 | Khentii | 76.7 | 138.4 | 127.0 | 0.0 | 0.0 | 133.7 | 0.0 | 0.0 | 61.2 | 0.0 | 69.2 |
| **22** | **Province average** | **102.0** | **44.3** | **83.5** | **44.9** | **51.8** | **58.6** | **32.8** | **25.0** | **23.0** | **56.0** | **22.3** |
| 23 | Ulaanbaatar | 73.7 | 55.2 | 78.9 | 46.2 | 44.2 | 43.0 | 52.3 | 35.9 | 28.8 | 41.8 | 31.2 |
| **24** | **National average** | **89.6** | **49.0** | **81.4** | **45.5** | **48.2** | **50.8** | **42.6** | **30.6** | **26.0** | **48.6** | **26.9** |

## INFANT MORTALITY RATE, / PER 1 000 LIVE BIRTHS /

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 17.8 | 28.6 | 25.9 | 26.2 | 16.4 | 19.6 | 18.4 | 13.3 | 14.1 | 18.9 | 16.8 |
| 2 | Bayan-Ulgii | 18.5 | 17.6 | 27.0 | 22.8 | 24.7 | 23.2 | 17.4 | 23.7 | 24.9 | 27.9 | 13.3 |
| 3 | Bayankhongor | 20.9 | 26.9 | 22.8 | 26.5 | 19.5 | 14.1 | 18.1 | 15.1 | 14.1 | 23.9 | 15.5 |
| 4 | Bulgan | 22.0 | 13.7 | 18.7 | 20.4 | 11.4 | 18.7 | 17.6 | 20.8 | 17.2 | 13.8 | 10.8 |
| 5 | Govi-Altai | 30.5 | 25.8 | 26.8 | 20.7 | 24.3 | 20.4 | 25.2 | 24.5 | 13.1 | 16.2 | 16.4 |
| 6 | Govisumber | 3.5 | 29.6 | 22.2 | 2.7 | 8.5 | 11.3 | 14.6 | 6.1 | 13.5 | 15.6 | 7.2 |
| 7 | Darkhan-Uul | 8.2 | 10.6 | 9.6 | 8.1 | 9.2 | 8.0 | 8.2 | 7.0 | 10.2 | 12.5 | 10.6 |
| 8 | Dornogovi | 23.0 | 30.6 | 21.8 | 24.7 | 13.3 | 16.3 | 15.2 | 13.4 | 12.3 | 14.6 | 12.8 |
| 9 | Dornod | 18.9 | 16.7 | 17.1 | 20.0 | 20.0 | 14.6 | 13.1 | 9.6 | 7.6 | 11.1 | 13.4 |
| 10 | Dundgovi | 14.5 | 14.2 | 20.1 | 21.9 | 13.1 | 11.0 | 10.1 | 16.9 | 7.0 | 16.8 | 9.1 |
| 11 | Zavkhan | 19.4 | 20.5 | 22.9 | 26.7 | 22.5 | 22.7 | 17.9 | 23.5 | 25.8 | 15.5 | 16.6 |
| 12 | Orkhon | 16.1 | 17.8 | 15.6 | 14.7 | 13.5 | 14.7 | 11.3 | 14.5 | 12.2 | 12.6 | 5.0 |
| 13 | Uvurkhangai | 28.4 | 31.5 | 23.1 | 28.3 | 27.1 | 23.2 | 14.7 | 12.7 | 14.2 | 20.6 | 16.1 |
| 14 | Umnugovi | 22.0 | 23.7 | 21.1 | 22.1 | 19.7 | 16.9 | 16.8 | 20.1 | 16.6 | 19.2 | 16.1 |
| 15 | Sukhbaatar | 20.0 | 23.1 | 18.5 | 21.6 | 18.5 | 22.2 | 15.5 | 20.3 | 18.6 | 22.2 | 17.3 |
| 16 | Selenge | 9.2 | 7.6 | 14.1 | 8.4 | 5.4 | 6.7 | 7.8 | 6.4 | 8.2 | 14.7 | 11.0 |
| 17 | Tuv | 5.2 | 7.6 | 18.2 | 25.9 | 27.1 | 19.5 | 13.7 | 16.5 | 13.3 | 20.5 | 10.0 |
| 18 | Uvs | 35.1 | 22.1 | 30.6 | 33.4 | 23.4 | 15.2 | 17.0 | 18.8 | 20.4 | 21.6 | 18.7 |
| 19 | Khovd | 18.8 | 16.1 | 18.9 | 24.1 | 18.4 | 18.3 | 14.3 | 19.4 | 20.8 | 18.9 | 16.7 |
| 20 | Khuvsgul | 29.5 | 27.2 | 29.4 | 29.7 | 29.9 | 26.0 | 23.1 | 16.0 | 22.4 | 28.3 | 22.0 |
| 21 | Khentii | 17.6 | 27.7 | 29.2 | 19.5 | 18.7 | 16.0 | 18.0 | 15.3 | 17.1 | 15.3 | 19.4 |
| **22** | **Province average** | **20.3** | **21.2** | **21.9** | **22.1** | **19.2** | **17.5** | **15.7** | **15.7** | **15.9** | **18.8** | **14.5** |
| 23 | Ulaanbaatar | 14.7 | 17.5 | 18.0 | 16.1 | 13.3 | 13.1 | 13.6 | 15.0 | 14.7 | 15.0 | 12.7 |
| **24** | **National average** | **17.8** | **19.6** | **20.2** | **19.4** | **16.3** | **15.3** | **14.6** | **15.3** | **15.3** | **16.8** | **13.6** |

## PERINATAL MORTALITY RATE, /PER 1 000 BIRTHS/

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 15.9 | 18.5 | 17.0 | 20.4 | 13.8 | 12.5 | 15.1 | 13.2 | 9.7 | 12.7 | 10.5 |
| 2 | Bayan-Ulgii | 36.0 | 29.6 | 28.3 | 30.7 | 33.9 | 23.5 | 22.8 | 18.5 | 16.9 | 16.8 | 13.2 |
| 3 | Bayankhongor | 18.4 | 24.7 | 16.9 | 20.0 | 16.0 | 13.1 | 15.8 | 17.7 | 14.0 | 10.6 | 11.4 |
| 4 | Bulgan | 20.6 | 7.4 | 12.1 | 8.2 | 16.4 | 14.5 | 12.6 | 13.8 | 16.1 | 12.5 | 7.2 |
| 5 | Govi-Altai | 20.5 | 27.6 | 16.5 | 18.3 | 21.1 | 18.8 | 18.0 | 22.7 | 9.2 | 15.2 | 14.7 |
| 6 | Govisumber | 7.0 | 19.5 | 11.1 | 7.9 | 5.6 | 6.8 | 12.5 | 8.1 | 8.9 | 6.6 | 4.8 |
| 7 | Darkhan-Uul | 3.1 | 6.9 | 8.8 | 8.4 | 9.5 | 7.2 | 9.6 | 7.7 | 9.4 | 8.4 | 9.3 |
| 8 | Dornogovi | 20.2 | 28.7 | 25.3 | 20.7 | 11.0 | 8.5 | 15.2 | 10.7 | 9.7 | 11.1 | 14.3 |
| 9 | Dornod | 15.4 | 18.2 | 17.5 | 15.6 | 14.9 | 16.5 | 12.0 | 13.5 | 8.6 | 10.1 | 13.3 |
| 10 | Dundgovi | 11.1 | 7.1 | 12.8 | 13.8 | 16.9 | 12.2 | 8.9 | 13.6 | 4.0 | 16.7 | 9.0 |
| 11 | Zavkhan | 19.2 | 19.7 | 16.9 | 22.2 | 28.0 | 23.2 | 12.5 | 14.8 | 17.6 | 10.5 | 16.5 |
| 12 | Orkhon | 21.2 | 16.8 | 13.1 | 16.4 | 16.5 | 14.2 | 14.0 | 14.4 | 13.3 | 11.4 | 8.9 |
| 13 | Uvurkhangai | 22.9 | 21.4 | 17.2 | 19.4 | 21.7 | 19.6 | 12.9 | 12.6 | 11.6 | 10.8 | 11.1 |
| 14 | Umnugovi | 12.0 | 16.0 | 15.5 | 19.4 | 13.1 | 14.6 | 16.1 | 18.6 | 17.1 | 13.4 | 14.5 |
| 15 | Sukhbaatar | 13.6 | 18.1 | 20.0 | 12.0 | 16.8 | 13.5 | 10.6 | 13.4 | 16.4 | 13.4 | 11.7 |
| 16 | Selenge | 11.8 | 8.1 | 11.3 | 9.4 | 8.6 | 9.8 | 7.2 | 9.3 | 8.1 | 7.1 | 7.0 |
| 17 | Tuv | 10.4 | 14.0 | 18.1 | 17.2 | 21.5 | 14.1 | 16.0 | 9.7 | 18.6 | 21.1 | 9.2 |
| 18 | Uvs | 24.2 | 17.5 | 18.3 | 25.9 | 18.2 | 17.9 | 16.4 | 15.9 | 14.9 | 14.1 | 15.6 |
| 19 | Khovd | 13.3 | 17.3 | 18.2 | 22.5 | 18.6 | 16.8 | 16.7 | 15.5 | 19.3 | 15.2 | 15.7 |
| 20 | Khuvsgul | 20.9 | 17.6 | 18.5 | 18.6 | 17.2 | 19.3 | 17.1 | 17.3 | 18.1 | 16.8 | 12.9 |
| 21 | Khentii | 13.7 | 19.2 | 17.1 | 17.2 | 12.7 | 12.6 | 12.3 | 15.8 | 12.8 | 8.5 | 11.0 |
| **22** | **Province average** | **18.2** | **18.3** | **17.0** | **18.2** | **17.4** | **15.4** | **14.4** | **14.3** | **13.4** | **12.6** | **11.9** |
| 23 | Ulaanbaatar | 14.1 | 16.2 | 16.8 | 15.4 | 13.2 | 14.4 | 14.3 | 14.7 | 15.6 | 13.2 | 12.9 |
| **24** | **National average** | **16.4** | **17.4** | **16.9** | **16.9** | **15.4** | **14.9** | **14.4** | **14.5** | **14.6** | **12.9** | **12.4** |

## UNDER FIVE MORTALITY RATE, /PER 1 000 LIVE BIRTHS/

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 20.1 | 31.7 | 28.8 | 31.3 | 20.9 | 23.7 | 22.7 | 18.3 | 18.0 | 27.6 | 20.5 |
| 2 | Bayan-Ulgii | 26.1 | 23.8 | 36.9 | 33.1 | 29.1 | 27.9 | 23.9 | 26.5 | 31.4 | 32.1 | 17.9 |
| 3 | Bayankhongor | 23.8 | 28.9 | 26.7 | 32.9 | 25.6 | 17.9 | 20.7 | 19.7 | 18.3 | 30.0 | 18.0 |
| 4 | Bulgan | 28.1 | 13.7 | 21.5 | 24.5 | 13.5 | 19.8 | 20.5 | 23.8 | 19.2 | 16.1 | 13.2 |
| 5 | Govi-Altai | 36.2 | 33.1 | 35.5 | 26.9 | 25.9 | 22.6 | 30.3 | 26.9 | 15.5 | 20.4 | 19.7 |
| 6 | Govisumber | 17.5 | 32.9 | 27.8 | 5.3 | 8.5 | 11.3 | 14.6 | 6.1 | 15.7 | 20.0 | 14.4 |
| 7 | Darkhan-Uul | 10.7 | 14.3 | 11.9 | 11.7 | 12.8 | 11.0 | 10.7 | 8.4 | 12.1 | 15.3 | 12.8 |
| 8 | Dornogovi | 25.6 | 33.8 | 24.0 | 28.5 | 19.2 | 18.4 | 21.9 | 19.5 | 12.3 | 16.7 | 13.6 |
| 9 | Dornod | 26.9 | 22.3 | 20.2 | 23.8 | 25.5 | 16.6 | 19.2 | 13.1 | 10.2 | 15.4 | 18.1 |
| 10 | Dundgovi | 15.6 | 16.2 | 22.9 | 30.0 | 15.7 | 12.2 | 14.6 | 20.0 | 10.0 | 21.0 | 15.9 |
| 11 | Zavkhan | 23.9 | 25.5 | 24.5 | 32.7 | 26.1 | 28.2 | 21.2 | 26.6 | 28.2 | 19.0 | 17.3 |
| 12 | Orkhon | 17.7 | 18.3 | 16.8 | 18.2 | 15.9 | 16.6 | 13.4 | 16.2 | 15.2 | 14.5 | 5.4 |
| 13 | Uvurkhangai | 31.3 | 35.1 | 25.8 | 33.1 | 33.1 | 27.0 | 19.4 | 16.0 | 18.9 | 28.4 | 20.2 |
| 14 | Umnugovi | 27.4 | 28.8 | 23.4 | 26.3 | 22.9 | 23.1 | 19.4 | 26.4 | 19.9 | 24.1 | 20.0 |
| 15 | Sukhbaatar | 27.3 | 26.0 | 22.7 | 25.9 | 24.7 | 26.2 | 21.2 | 24.8 | 22.9 | 27.7 | 20.4 |
| 16 | Selenge | 14.5 | 12.9 | 16.3 | 13.1 | 9.7 | 10.3 | 11.4 | 8.9 | 11.8 | 19.1 | 15.1 |
| 17 | Tuv | 7.8 | 9.8 | 20.4 | 30.2 | 32.5 | 29.3 | 14.5 | 17.2 | 17.3 | 30.4 | 17.5 |
| 18 | Uvs | 40.1 | 26.5 | 36.5 | 43.2 | 27.5 | 19.6 | 20.0 | 23.0 | 23.4 | 27.0 | 22.1 |
| 19 | Khovd | 23.3 | 21.0 | 25.1 | 29.9 | 22.6 | 22.5 | 17.7 | 24.1 | 23.3 | 23.4 | 22.2 |
| 20 | Khuvsgul | 33.9 | 31.8 | 33.9 | 37.9 | 32.8 | 29.1 | 28.8 | 19.3 | 27.5 | 32.4 | 26.3 |
| 21 | Khentii | 20.7 | 37.4 | 31.7 | 28.1 | 27.4 | 23.4 | 23.5 | 18.3 | 18.4 | 23.2 | 24.9 |
| **22** | **Province average** | **24.6** | **25.3** | **25.7** | **28.0** | **23.5** | **21.3** | **19.7** | **19.0** | **19.2** | **23.7** | **18.1** |
| 23 | Ulaanbaatar | 18.8 | 20.8 | 21.0 | 20.6 | 16.2 | 16.0 | 16.3 | 17.8 | 17.3 | 18.2 | 15.4 |
| **24** | **National average** | **22.1** | **23.4** | **23.6** | **24.6** | **20.0** | **18.7** | **18.0** | **18.4** | **18.3** | **20.8** | **16.7** |

## COMMUNICABLE DISEASE, / PER 10 000 POPULATION/

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 104.8 | 89.0 | 61.0 | 68.1 | 127.4 | 89.7 | 82.0 | 62.6 | 64.1 | 159.7 | 53.3 |
| 2 | Bayan-Ulgii | 48.0 | 112.5 | 86.1 | 72.1 | 53.0 | 33.4 | 45.5 | 40.7 | 65.5 | 61.8 | 33.1 |
| 3 | Bayankhongor | 183.2 | 207.0 | 266.4 | 339.6 | 272.0 | 161.0 | 126.4 | 142.5 | 183.1 | 268.8 | 134.3 |
| 4 | Bulgan | 149.9 | 226.6 | 191.0 | 135.2 | 207.4 | 161.6 | 90.9 | 73.4 | 68.5 | 125.5 | 80.0 |
| 5 | Govi-Altai | 159.8 | 174.8 | 72.3 | 161.4 | 125.0 | 80.8 | 49.2 | 88.1 | 75.8 | 171.7 | 140.0 |
| 6 | Govisumber | 244.4 | 225.0 | 113.9 | 206.2 | 213.4 | 140.6 | 137.2 | 106.1 | 74.5 | 176.7 | 141.6 |
| 7 | Darkhan-Uul | 199.6 | 206.7 | 176.8 | 144.8 | 153.9 | 114.1 | 96.2 | 101.0 | 77.3 | 313.8 | 93.0 |
| 8 | Dornogovi | 271.5 | 205.0 | 190.7 | 238.6 | 209.3 | 166.9 | 172.5 | 134.6 | 139.8 | 266.9 | 105.3 |
| 9 | Dornod | 226.4 | 298.1 | 281.4 | 257.9 | 332.8 | 315.8 | 421.7 | 334.5 | 337.8 | 337.1 | 381.2 |
| 10 | Dundgovi | 103.9 | 54.2 | 44.4 | 75.8 | 171.3 | 116.0 | 80.7 | 91.0 | 125.3 | 144.7 | 110.5 |
| 11 | Zavkhan | 92.0 | 96.4 | 81.3 | 96.9 | 143.1 | 108.0 | 107.9 | 66.7 | 75.2 | 112.8 | 65.4 |
| 12 | Orkhon | 171.2 | 174.7 | 148.4 | 132.4 | 147.9 | 107.2 | 74.0 | 68.5 | 104.2 | 138.6 | 66.8 |
| 13 | Uvurkhangai | 224.2 | 178.1 | 140.1 | 103.0 | 128.7 | 94.6 | 105.5 | 57.7 | 81.2 | 196.0 | 99.2 |
| 14 | Umnugovi | 184.8 | 119.4 | 64.5 | 60.6 | 166.7 | 84.3 | 91.8 | 82.7 | 155.9 | 158.6 | 115.8 |
| 15 | Sukhbaatar | 101.9 | 237.0 | 164.5 | 145.1 | 155.8 | 146.9 | 182.2 | 102.4 | 142.5 | 218.3 | 216.1 |
| 16 | Selenge | 138.7 | 127.8 | 123.2 | 99.7 | 115.2 | 92.9 | 83.7 | 81.7 | 84.9 | 174.0 | 72.9 |
| 17 | Tuv | 77.4 | 98.4 | 53.6 | 70.7 | 116.6 | 100.9 | 81.0 | 57.0 | 136.6 | 133.5 | 88.9 |
| 18 | Uvs | 91.0 | 113.2 | 107.9 | 108.8 | 167.3 | 86.9 | 63.7 | 64.8 | 109.8 | 88.3 | 88.0 |
| 19 | Khovd | 45.9 | 124.6 | 88.0 | 72.4 | 114.0 | 175.2 | 93.3 | 71.8 | 102.7 | 146.0 | 61.8 |
| 20 | Khuvsgul | 124.6 | 229.2 | 220.5 | 192.1 | 150.3 | 115.4 | 144.9 | 120.1 | 151.2 | 172.8 | 119.5 |
| 21 | Khentii | 307.7 | 200.7 | 134.8 | 169.5 | 193.8 | 148.3 | 132.1 | 98.8 | 142.0 | 157.4 | 95.0 |
| **22** | **Province average** | **147.3** | **164.0** | **137.3** | **136.9** | **158.3** | **121.7** | **114.3** | **95.4** | **118.7** | **177.5** | **106.8** |
| 23 | Ulaanbaatar | 228.1 | 228.1 | 205.5 | 216.1 | 179.7 | 204.2 | 158.0 | 136.0 | 295.9 | 287.7 | 190.2 |
| **24** | **National average** | **178.7** | **239.6** | **164.8** | **169.4** | **168.0** | **159.5** | **132.7** | **114.4** | **200.5** | **227.8** | **144.9** |

## HEALTH CARE WORKERS, /PER 10 000 POPULATION /

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 107.4 | 111.7 | 114.0 | 121.6 | 135.1 | 134.8 | 137.3 | 134.3 | 135.6 | 134.7 | 129.9 |
| 2 | Bayan-Ulgii | 102.8 | 98.0 | 99.2 | 103.3 | 118.4 | 118.4 | 124.1 | 123.9 | 122.1 | 121.5 | 125.1 |
| 3 | Bayankhongor | 120.4 | 122.8 | 120.9 | 120.5 | 140.9 | 146.2 | 151.9 | 146.5 | 139.8 | 138.2 | 135.7 |
| 4 | Bulgan | 129.0 | 129.1 | 126.7 | 123.9 | 145.6 | 147.4 | 141.4 | 138.1 | 127.5 | 126.8 | 125.3 |
| 5 | Govi-Altai | 148.3 | 162.7 | 167.6 | 174.5 | 194.5 | 196.1 | 203.5 | 195.9 | 190.5 | 195.9 | 192.8 |
| 6 | Govisumber | 154.8 | 167.6 | 168.1 | 167.0 | 172.9 | 169.7 | 175.2 | 168.5 | 160.2 | 148.3 | 152.6 |
| 7 | Darkhan-Uul | 128.0 | 131.1 | 129.9 | 126.3 | 128.0 | 133.2 | 131.5 | 131.8 | 136.7 | 138.6 | 137.8 |
| 8 | Dornogovi | 139.8 | 147.1 | 141.9 | 145.3 | 145.8 | 152.3 | 157.0 | 149.9 | 150.6 | 158.2 | 165.4 |
| 9 | Dornod | 118.2 | 124.1 | 129.6 | 128.8 | 136.8 | 142.3 | 142.4 | 139.6 | 136.3 | 132.7 | 131.0 |
| 10 | Dundgovi | 121.3 | 129.9 | 139.1 | 140.2 | 165.6 | 182.8 | 185.3 | 169.9 | 157.9 | 156.7 | 154.3 |
| 11 | Zavkhan | 127.7 | 131.6 | 136.0 | 138.9 | 169.0 | 176.3 | 182.8 | 177.4 | 168.1 | 158.3 | 155.7 |
| 12 | Orkhon | 114.9 | 130.2 | 121.6 | 138.0 | 126.2 | 134.1 | 137.5 | 135.3 | 133.0 | 150.3 | 148.7 |
| 13 | Uvurkhangai | 98.0 | 98.2 | 101.5 | 104.1 | 121.9 | 123.3 | 126.4 | 125.0 | 123.6 | 123.6 | 125.4 |
| 14 | Umnugovi | 112.1 | 123.3 | 124.5 | 125.4 | 106.2 | 108.7 | 110.2 | 118.7 | 128.1 | 132.0 | 126.5 |
| 15 | Sukhbaatar | 124.6 | 128.7 | 136.3 | 138.8 | 148.8 | 150.0 | 151.2 | 136.7 | 136.2 | 133.6 | 128.9 |
| 16 | Selenge | 108.7 | 109.1 | 108.6 | 107.7 | 110.2 | 107.5 | 116.7 | 112.6 | 112.6 | 116.9 | 121.8 |
| 17 | Tuv | 110.9 | 120.5 | 120.0 | 118.6 | 132.5 | 135.4 | 141.6 | 145.3 | 135.2 | 139.5 | 143.4 |
| 18 | Uvs | 118.2 | 118.7 | 121.8 | 124.6 | 134.3 | 138.4 | 146.0 | 148.5 | 146.4 | 141.2 | 133.8 |
| 19 | Khovd | 101.7 | 107.4 | 109.4 | 113.3 | 130.0 | 135.9 | 136.4 | 134.9 | 134.1 | 138.8 | 141.5 |
| 20 | Khuvsgul | 98.6 | 110.8 | 110.9 | 111.9 | 120.8 | 125.8 | 125.3 | 122.6 | 119.7 | 117.0 | 115.7 |
| 21 | Khentii | 137.8 | 138.0 | 135.2 | 134.9 | 146.2 | 147.1 | 147.5 | 146.2 | 140.6 | 139.2 | 135.7 |
| **22** | **Province average** | **116.4** | **121.2** | **122.1** | **124.4** | **134.7** | **138.1** | **141.1** | **138.7** | **136.2** | **137.2** | **136.6** |
| 23 | Ulaanbaatar | 167.3 | 175.6 | 173.5 | 171.2 | 163.1 | 172.0 | 172.2 | 174.9 | 181.2 | 178.0 | 195.3 |
| **24** | **National average** | **136.1** | **142.7** | **142.8** | **143.6** | **147.6** | **153.6** | **155.5** | **155.4** | **156.7** | **156.0** | **163.1** |

## PHYSICIANS, /PER 10 000 POPULATION/

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 14.7 | 15.8 | 13.5 | 14.8 | 16.9 | 17.3 | 17.7 | 17.9 | 18.0 | 19.9 | 18.3 |
| 2 | Bayan-Ulgii | 15.0 | 14.0 | 13.0 | 14.2 | 16.4 | 16.2 | 16.3 | 16.6 | 17.0 | 18.6 | 20.2 |
| 3 | Bayankhongor | 13.5 | 14.5 | 12.2 | 13.0 | 16.4 | 17.3 | 18.7 | 20.4 | 19.0 | 20.6 | 21.7 |
| 4 | Bulgan | 17.8 | 18.0 | 15.2 | 14.6 | 18.7 | 19.9 | 18.5 | 18.4 | 18.4 | 19.9 | 19.8 |
| 5 | Govi-Altai | 17.9 | 18.8 | 19.3 | 21.1 | 25.9 | 27.9 | 29.3 | 29.3 | 30.5 | 31.4 | 32.8 |
| 6 | Govisumber | 31.9 | 33.8 | 31.3 | 28.8 | 33.1 | 34.1 | 38.5 | 37.6 | 34.4 | 31.1 | 33.2 |
| 7 | Darkhan-Uul | 24.7 | 27.0 | 25.9 | 25.4 | 25.3 | 25.6 | 25.4 | 25.3 | 26.2 | 28.0 | 27.2 |
| 8 | Dornogovi | 28.4 | 33.7 | 30.8 | 31.2 | 30.1 | 30.1 | 33.1 | 31.0 | 32.5 | 33.9 | 32.9 |
| 9 | Dornod | 18.0 | 18.2 | 18.7 | 18.2 | 19.7 | 22.5 | 24.1 | 23.2 | 22.3 | 22.6 | 23.3 |
| 10 | Dundgovi | 17.9 | 19.2 | 19.0 | 18.7 | 22.0 | 26.2 | 28.2 | 27.2 | 27.7 | 28.7 | 30.7 |
| 11 | Zavkhan | 14.3 | 15.7 | 14.8 | 15.4 | 19.8 | 22.2 | 23.2 | 22.8 | 23.1 | 25.9 | 25.3 |
| 12 | Orkhon | 28.8 | 31.1 | 27.1 | 29.1 | 27.6 | 27.9 | 28.7 | 27.5 | 27.4 | 32.1 | 31.9 |
| 13 | Uvurkhangai | 16.6 | 16.0 | 14.8 | 15.0 | 17.8 | 19.1 | 20.9 | 20.3 | 22.0 | 22.6 | 22.5 |
| 14 | Umnugovi | 20.3 | 23.0 | 21.8 | 23.3 | 19.0 | 21.0 | 22.2 | 25.1 | 28.0 | 29.1 | 29.2 |
| 15 | Sukhbaatar | 20.0 | 20.0 | 18.4 | 19.3 | 21.7 | 22.0 | 22.9 | 21.9 | 24.0 | 25.6 | 25.2 |
| 16 | Selenge | 19.0 | 18.5 | 16.1 | 15.3 | 16.8 | 15.8 | 17.6 | 18.1 | 19.7 | 22.0 | 22.8 |
| 17 | Tuv | 14.9 | 16.0 | 14.9 | 15.4 | 18.0 | 18.4 | 20.8 | 20.9 | 20.9 | 21.9 | 23.3 |
| 18 | Uvs | 17.1 | 17.2 | 14.6 | 15.5 | 16.4 | 18.5 | 18.7 | 19.1 | 21.6 | 21.0 | 20.6 |
| 19 | Khovd | 14.1 | 14.0 | 13.9 | 16.7 | 19.3 | 21.7 | 21.2 | 22.2 | 23.5 | 24.8 | 26.8 |
| 20 | Khuvsgul | 13.9 | 14.1 | 12.9 | 14.1 | 14.9 | 17.0 | 17.3 | 17.7 | 18.2 | 18.6 | 19.0 |
| 21 | Khentii | 20.6 | 21.1 | 20.5 | 19.7 | 21.8 | 22.7 | 22.7 | 21.8 | 21.6 | 22.6 | 24.1 |
| **22** | **Province average** | **18.1** | **18.8** | **17.4** | **18.0** | **20.0** | **21.1** | **22.0** | **22.0** | **22.6** | **24.0** | **24.4** |
| 23 | Ulaanbaatar | 44.4 | 43.4 | 39.6 | 40.3 | 38.8 | 41.1 | 40.9 | 42.4 | 42.3 | 42.2 | 46.0 |
| **24** | **National average** | **28.3** | **28.5** | **26.4** | **27.2** | **28.5** | **30.3** | **30.7** | **31.4** | **31.6** | **32.4** | **34.1** |

## NURSES, / PER 10 000 POPULATION /

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 25.5 | 27.1 | 28.0 | 27.8 | 30.1 | 30.9 | 30.6 | 30.2 | 29.5 | 29.8 | 29.0 |
| 2 | Bayan-Ulgii | 22.6 | 22.9 | 24.3 | 24.9 | 27.5 | 27.3 | 27.5 | 30.2 | 30.4 | 30.7 | 31.5 |
| 3 | Bayankhongor | 27.6 | 29.3 | 28.8 | 29.1 | 33.1 | 35.3 | 36.2 | 36.8 | 35.0 | 34.6 | 34.0 |
| 4 | Bulgan | 29.5 | 30.3 | 30.1 | 29.7 | 36.4 | 36.4 | 35.4 | 35.8 | 32.9 | 32.2 | 31.5 |
| 5 | Govi-Altai | 34.6 | 36.8 | 37.4 | 38.2 | 42.5 | 42.9 | 44.5 | 44.3 | 43.6 | 44.9 | 44.5 |
| 6 | Govisumber | 38.6 | 45.6 | 40.5 | 37.8 | 39.0 | 41.2 | 38.5 | 42.1 | 37.4 | 37.1 | 39.0 |
| 7 | Darkhan-Uul | 39.5 | 37.2 | 36.7 | 35.6 | 35.3 | 36.6 | 37.9 | 37.5 | 39.7 | 36.6 | 35.6 |
| 8 | Dornogovi | 30.1 | 31.2 | 30.1 | 31.1 | 30.1 | 29.3 | 31.7 | 31.3 | 32.2 | 34.3 | 37.7 |
| 9 | Dornod | 30.5 | 30.9 | 30.8 | 31.4 | 34.5 | 34.3 | 36.3 | 36.5 | 35.6 | 35.6 | 35.2 |
| 10 | Dundgovi | 29.4 | 29.3 | 30.7 | 32.0 | 36.1 | 38.1 | 39.7 | 37.0 | 35.6 | 34.1 | 32.4 |
| 11 | Zavkhan | 26.3 | 28.3 | 31.0 | 28.9 | 34.6 | 37.6 | 39.5 | 38.7 | 39.2 | 39.9 | 38.1 |
| 12 | Orkhon | 37.0 | 37.9 | 38.9 | 38.1 | 34.5 | 35.5 | 35.2 | 36.2 | 36.3 | 41.3 | 41.3 |
| 13 | Uvurkhangai | 22.7 | 23.3 | 23.7 | 24.5 | 28.1 | 28.7 | 28.7 | 29.1 | 28.7 | 29.1 | 28.6 |
| 14 | Umnugovi | 26.2 | 28.3 | 25.8 | 24.1 | 22.1 | 24.4 | 23.1 | 26.8 | 27.9 | 29.0 | 27.1 |
| 15 | Sukhbaatar | 27.8 | 27.4 | 30.4 | 29.1 | 30.4 | 31.8 | 32.5 | 36.7 | 36.6 | 36.0 | 35.4 |
| 16 | Selenge | 27.0 | 26.0 | 27.3 | 26.0 | 26.6 | 25.9 | 29.3 | 26.9 | 27.5 | 27.7 | 30.6 |
| 17 | Tuv | 26.0 | 27.1 | 26.8 | 25.8 | 28.4 | 29.3 | 29.9 | 33.5 | 31.1 | 32.4 | 31.5 |
| 18 | Uvs | 29.2 | 32.2 | 30.5 | 31.2 | 33.0 | 31.5 | 36.3 | 36.2 | 34.4 | 34.6 | 31.6 |
| 19 | Khovd | 26.7 | 28.6 | 28.4 | 28.1 | 30.3 | 29.8 | 29.7 | 34.4 | 33.5 | 33.7 | 34.6 |
| 20 | Khuvsgul | 25.8 | 26.2 | 26.1 | 26.8 | 26.4 | 28.3 | 28.3 | 28.5 | 28.6 | 27.9 | 28.2 |
| 21 | Khentii | 29.9 | 30.5 | 31.0 | 30.8 | 34.0 | 34.9 | 35.0 | 34.0 | 33.7 | 32.4 | 31.0 |
| **22** | **Province average** | **28.4** | **29.2** | **29.5** | **29.4** | **31.2** | **32.0** | **32.8** | **33.5** | **33.1** | **33.4** | **33.1** |
| 23 | Ulaanbaatar | 39.0 | 40.1 | 38.8 | 38.2 | 36.9 | 38.4 | 37.6 | 40.9 | 42.8 | 41.6 | 45.1 |
| **24** | **National average** | **32.4** | **33.5** | **33.3** | **33.0** | **33.8** | **34.9** | **35.0** | **36.9** | **37.5** | **37.2** | **38.5** |

## NUMBER OF HOSPITAL BEDS, /PER 10 000 POPULATION/

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 64.1 | 61.9 | 62.1 | 60.7 | 79.2 | 80.1 | 66.6 | 57.2 | 55.2 | 56.0 | 55.0 |
| 2 | Bayan-Ulgii | 59.2 | 55.5 | 58.7 | 60.8 | 70.9 | 82.1 | 74.8 | 70.5 | 68.9 | 72.7 | 77.1 |
| 3 | Bayankhongor | 63.1 | 60.9 | 58.5 | 58.5 | 65.3 | 64.6 | 66.5 | 57.8 | 57.1 | 62.2 | 63.4 |
| 4 | Bulgan | 60.7 | 57.1 | 60.0 | 59.2 | 72.3 | 71.8 | 73.0 | 57.7 | 55.1 | 62.3 | 60.4 |
| 5 | Govi-Altai | 76.7 | 77.3 | 77.2 | 73.9 | 85.6 | 84.4 | 84.1 | 68.1 | 66.4 | 77.8 | 78.7 |
| 6 | Govisumber | 93.4 | 96.8 | 81.0 | 78.3 | 77.3 | 74.6 | 85.9 | 55.7 | 64.5 | 70.6 | 72.2 |
| 7 | Darkhan-Uul | 57.3 | 58.6 | 56.9 | 57.4 | 57.8 | 58.7 | 57.8 | 66.0 | 67.1 | 73.2 | 73.6 |
| 8 | Dornogovi | 66.7 | 64.3 | 61.6 | 62.1 | 61.5 | 60.2 | 59.1 | 62.8 | 62.6 | 66.5 | 68.8 |
| 9 | Dornod | 65.3 | 64.9 | 65.2 | 65.2 | 70.1 | 69.3 | 70.7 | 58.3 | 56.4 | 69.8 | 69.9 |
| 10 | Dundgovi | 71.1 | 72.2 | 62.1 | 63.4 | 78.0 | 78.9 | 79.3 | 55.6 | 51.1 | 67.5 | 65.5 |
| 11 | Zavkhan | 88.2 | 84.0 | 66.6 | 68.9 | 96.6 | 93.4 | 104.3 | 66.4 | 71.2 | 81.7 | 82.1 |
| 12 | Orkhon | 47.4 | 53.7 | 50.9 | 50.9 | 51.4 | 55.2 | 58.3 | 62.7 | 61.4 | 64.2 | 63.4 |
| 13 | Uvurkhangai | 57.0 | 54.3 | 54.4 | 54.1 | 62.3 | 61.9 | 62.9 | 63.7 | 60.7 | 63.5 | 72.7 |
| 14 | Umnugovi | 63.6 | 63.0 | 55.9 | 56.0 | 46.6 | 45.2 | 43.9 | 69.1 | 73.5 | 71.4 | 102.5 |
| 15 | Sukhbaatar | 61.3 | 58.5 | 57.7 | 57.6 | 61.4 | 60.7 | 60.3 | 66.0 | 62.7 | 61.4 | 66.7 |
| 16 | Selenge | 71.5 | 62.2 | 63.0 | 61.5 | 63.3 | 65.2 | 60.4 | 59.3 | 58.4 | 66.2 | 65.7 |
| 17 | Tuv | 57.2 | 56.4 | 48.3 | 47.3 | 49.6 | 49.2 | 49.1 | 59.2 | 57.7 | 57.4 | 53.8 |
| 18 | Uvs | 67.6 | 67.8 | 60.3 | 60.9 | 65.4 | 65.1 | 66.4 | 68.8 | 69.0 | 70.5 | 67.2 |
| 19 | Khovd | 62.7 | 64.3 | 63.1 | 65.8 | 71.4 | 74.7 | 73.6 | 70.5 | 67.6 | 67.4 | 66.8 |
| 20 | Khuvsgul | 59.1 | 59.4 | 48.9 | 49.7 | 54.4 | 52.9 | 56.7 | 54.8 | 60.2 | 61.2 | 59.7 |
| 21 | Khentii | 64.2 | 61.9 | 60.9 | 60.6 | 65.6 | 64.8 | 64.3 | 58.4 | 60.2 | 67.5 | 63.0 |
| **22** | **Province average** | **63.8** | **62.5** | **59.1** | **59.2** | **65.3** | **65.9** | **65.5** | **62.4** | **62.1** | **66.6** | **68.1** |
| 23 | Ulaanbaatar | 78.6 | 76.4 | 74.8 | 72.3 | 71.5 | 72.6 | 72.0 | 77.6 | 83.2 | 83.4 | 88.1 |
| **24** | **National average** | **69.5** | **68.0** | **65.4** | **64.6** | **68.1** | **69.0** | **68.5** | **69.4** | **71.8** | **74.3** | **77.1** |

## INPATIENTS, /PER 10 000 POPULATION /

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 2487.8 | 2498.4 | 2428.0 | 2525.3 | 2585.3 | 2524.5 | 2410.6 | 2319.9 | 2052.7 | 2255.0 | 2128.3 |
| 2 | Bayan-Ulgii | 2300.3 | 2301.9 | 2256.9 | 2327.6 | 2665.0 | 2679.5 | 2775.1 | 2831.9 | 2793.4 | 2916.3 | 2724.3 |
| 3 | Bayankhongor | 2472.5 | 2334.2 | 2216.6 | 2272.8 | 2625.9 | 2518.9 | 2513.0 | 2481.0 | 2280.9 | 2442.3 | 2308.3 |
| 4 | Bulgan | 2067.8 | 2097.6 | 2118.8 | 2048.1 | 2380.9 | 2420.3 | 2316.5 | 2075.7 | 1931.3 | 2039.9 | 1919.0 |
| 5 | Govi-Altai | 2456.2 | 2507.9 | 2291.1 | 2334.4 | 2767.8 | 2682.1 | 2713.1 | 2669.5 | 2562.2 | 2586.3 | 2517.4 |
| 6 | Govisumber | 3143.2 | 3263.1 | 3251.1 | 3434.7 | 3336.8 | 3213.7 | 3050.6 | 3399.9 | 2804.2 | 3003.5 | 2826.4 |
| 7 | Darkhan-Uul | 2085.5 | 2284.0 | 2336.6 | 2525.1 | 2409.5 | 2401.9 | 2465.0 | 2891.5 | 2818.1 | 3010.9 | 2976.8 |
| 8 | Dornogovi | 2379.0 | 2381.6 | 2236.8 | 2345.6 | 2279.4 | 2184.2 | 2074.1 | 2220.0 | 2103.9 | 2415.8 | 2381.9 |
| 9 | Dornod | 2096.2 | 2290.3 | 2293.1 | 2214.0 | 2489.7 | 2473.0 | 2400.5 | 2327.0 | 2238.1 | 2528.0 | 2416.5 |
| 10 | Dundgovi | 2121.0 | 2260.9 | 2232.6 | 2269.5 | 2634.5 | 2879.8 | 2736.1 | 2662.7 | 2271.0 | 2548.0 | 2403.5 |
| 11 | Zavkhan | 2206.9 | 2244.9 | 2296.9 | 2337.4 | 2771.3 | 2767.2 | 2668.9 | 2485.0 | 2339.3 | 2457.3 | 2279.4 |
| 12 | Orkhon | 1731.7 | 1980.6 | 1935.7 | 2030.5 | 1956.4 | 2072.7 | 2070.8 | 2124.9 | 2073.9 | 2197.5 | 2248.2 |
| 13 | Uvurkhangai | 1920.5 | 1813.6 | 1842.1 | 1961.9 | 2073.4 | 2183.7 | 2162.0 | 2206.7 | 2076.2 | 2241.1 | 2111.6 |
| 14 | Umnugovi | 2177.7 | 2285.4 | 2143.6 | 1941.7 | 1593.1 | 1615.4 | 1620.7 | 1877.3 | 2008.9 | 2174.1 | 2105.9 |
| 15 | Sukhbaatar | 2232.6 | 2336.0 | 2354.7 | 2314.9 | 2444.3 | 2354.0 | 2306.2 | 2342.6 | 2167.6 | 2242.6 | 2168.3 |
| 16 | Selenge | 2288.3 | 2141.7 | 2126.6 | 2222.8 | 2222.2 | 2182.7 | 1959.7 | 2029.8 | 1935.6 | 2196.7 | 2105.7 |
| 17 | Tuv | 1754.9 | 1866.8 | 1789.7 | 1760.5 | 1823.6 | 1789.4 | 1746.8 | 1812.8 | 1615.5 | 1826.9 | 1663.9 |
| 18 | Uvs | 2284.0 | 2576.9 | 2384.6 | 2467.4 | 2724.0 | 2617.2 | 2654.7 | 2663.9 | 2401.1 | 2592.1 | 2635.7 |
| 19 | Khovd | 2269.7 | 2458.7 | 2530.4 | 2523.6 | 2714.6 | 2765.2 | 2921.4 | 2958.2 | 2773.8 | 2758.1 | 2647.7 |
| 20 | Khuvsgul | 2117.0 | 2176.7 | 2163.0 | 2159.8 | 2272.3 | 2285.8 | 2246.6 | 2200.2 | 2149.3 | 2280.2 | 2139.7 |
| 21 | Khentii | 2486.4 | 2382.9 | 2279.9 | 2304.1 | 2475.4 | 2475.8 | 2341.2 | 2376.5 | 2147.9 | 2297.8 | 2085.4 |
| **22** | **Province average** | **2191.5** | **2251.8** | **2210.2** | **2251.4** | **2380.5** | **2375.7** | **2339.6** | **2378.2** | **2242.0** | **2406.7** | **2302.3** |
| 23 | Ulaanbaatar | 2707.3 | 2628.0 | 2672.5 | 2769.4 | 2625.2 | 2712.8 | 2750.2 | 2872.1 | 3012.2 | 3151.6 | 3307.7 |
| **24** | **National average** | **2391.9** | **2400.6** | **2396.5** | **2464.0** | **2491.6** | **2530.4** | **2530.1** | **2606.1** | **2593.1** | **2748.8** | **2756.4** |

## OUTPATIENT MORBIDITY, / PER 10 000 POPULATION /

| № | Province/city | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Arkhangai | 5066.9 | 5624.6 | 6619.1 | 6460.4 | 7500.0 | 7766.6 | 6722.2 | 7996.4 | 7977.1 | 9203.9 | 10178.0 |
| 2 | Bayan-Ulgii | 3560.3 | 3455.3 | 3513.3 | 3493.6 | 4459.4 | 4541.3 | 4594.0 | 5155.5 | 4711.8 | 4573.3 | 5408.8 |
| 3 | Bayankhongor | 5047.8 | 6250.6 | 7379.4 | 8010.9 | 9872.4 | 8642.9 | 9389.0 | 9639.1 | 9644.5 | 9799.2 | 10745.8 |
| 4 | Bulgan | 5059.3 | 4822.3 | 4403.3 | 4282.2 | 4318.8 | 4965.2 | 5888.1 | 7309.8 | 8042.1 | 8347.8 | 10707.1 |
| 5 | Govi-Altai | 5846.6 | 5841.1 | 5930.6 | 6967.4 | 7480.1 | 7262.7 | 6865.1 | 6592.9 | 5646.5 | 6819.7 | 7442.8 |
| 6 | Govisumber | 7369.5 | 8755.5 | 9228.1 | 13085.5 | 12232.4 | 9023.3 | 6396.6 | 6743.4 | 6415.0 | 6337.6 | 6338.3 |
| 7 | Darkhan-Uul | 6650.3 | 6877.8 | 7899.2 | 7337.7 | 7178.6 | 7246.7 | 7787.0 | 8668.3 | 7998.5 | 8334.3 | 8945.2 |
| 8 | Dornogovi | 4999.1 | 5311.6 | 5534.0 | 6078.2 | 6131.2 | 6239.6 | 6374.9 | 7232.2 | 7821.0 | 9302.9 | 13795.3 |
| 9 | Dornod | 5290.8 | 6179.4 | 7281.9 | 6753.0 | 7306.1 | 7676.5 | 7430.7 | 6779.5 | 8009.9 | 7419.5 | 7837.1 |
| 10 | Dundgovi | 3605.0 | 3638.1 | 3656.6 | 3991.7 | 5200.0 | 5397.4 | 5974.4 | 6064.3 | 5392.2 | 6353.6 | 5926.6 |
| 11 | Zavkhan | 3499.9 | 3614.5 | 3760.7 | 3877.4 | 4592.0 | 6604.6 | 4686.1 | 5501.9 | 5559.1 | 6545.3 | 8723.5 |
| 12 | Orkhon | 4135.7 | 4524.5 | 4560.7 | 4773.7 | 4358.2 | 4259.1 | 4180.8 | 4496.2 | 5813.7 | 6556.9 | 5959.4 |
| 13 | Uvurkhangai | 5802.6 | 6231.1 | 5944.1 | 6242.5 | 7051.8 | 6845.7 | 7152.3 | 6982.1 | 6691.5 | 7129.5 | 7804.1 |
| 14 | Umnugovi | 5910.4 | 6233.3 | 6845.6 | 8427.2 | 7143.1 | 7251.9 | 7597.4 | 8094.4 | 9652.7 | 11227.6 | 10970.7 |
| 15 | Sukhbaatar | 4396.1 | 5673.7 | 5234.2 | 5286.4 | 4889.7 | 5307.6 | 5561.6 | 5508.2 | 7832.5 | 7876.5 | 7478.0 |
| 16 | Selenge | 5065.6 | 4786.7 | 4168.8 | 5065.1 | 5326.1 | 4962.3 | 4874.9 | 4950.3 | 4543.7 | 4661.9 | 5046.2 |
| 17 | Tuv | 3214.5 | 5504.8 | 7062.2 | 5948.7 | 5985.9 | 7104.8 | 6968.1 | 7923.9 | 8298.5 | 9053.2 | 9041.8 |
| 18 | Uvs | 5555.5 | 5621.4 | 6059.3 | 5661.0 | 6420.5 | 6578.9 | 7223.3 | 6938.8 | 7439.0 | 7853.6 | 8278.3 |
| 19 | Khovd | 3999.4 | 4153.0 | 3979.4 | 4235.9 | 7008.4 | 6696.0 | 5966.4 | 5459.2 | 5566.8 | 5913.1 | 7297.1 |
| 20 | Khuvsgul | 4951.5 | 5604.2 | 5524.1 | 5202.8 | 4499.3 | 6154.3 | 5866.9 | 5911.4 | 5542.4 | 6498.2 | 8001.0 |
| 21 | Khentii | 5092.0 | 5159.2 | 5429.0 | 5375.5 | 6646.0 | 6299.0 | 6199.3 | 6348.9 | 6016.5 | 7039.9 | 7298.4 |
| **22** | **Province average** | **4853.1** | **5291.5** | **5575.4** | **5695.7** | **6217.2** | **6417.6** | **6349.0** | **6658.7** | **6816.5** | **7392.0** | **8198.5** |
| 23 | Ulaanbaatar | 5610.8 | 6712.3 | 6601.0 | 6405.5 | 6151.2 | 6879.2 | 7949.9 | 8770.3 | 8644.1 | 9250.5 | 10770.4 |
| **24** | **National average** | **5147.5** | **5853.2** | **5988.7** | **5987.0** | **6187.2** | **6629.3** | **7091.8** | **7633.2** | **7649.5** | **8245.4** | **9360.1** |

# CHAPTER 13.

# NATIONAL HEALTH PROGRAMME

# "NATIONAL, CHILD, REUSE HEALTH" NATIONAL PROGRAM

| Indicators | Details |
|---|---|
| Date and number of the Government Resolution which approved the programm | Resolution # 78 of 2017 |
| Duration | 2017-2021 |
| Main objective | To reduce maternal and child mortality by delivering accessible, equitable and quality health care for all creating a favorable socio-economic environment and sustained funding for programme implementation and ensuring the participation of the community and civil society organizations. |

| Programme goal and objectives | | | Baseline 2016 (unless otherwise stated) | 2017 | 2020 Baseline and targets |
|---|---|---|---|---|---|
| **Outcome indicators** | | | | | |
| Goal | Reduce maternal and child mortality by delivering accessible, equitable and quality health care for all, creating a favorable socio-economic environment and sustained funding for programe imeplemmtation, and ensuring the participation of the community and civil society organizations | Maternal mortality ratio (per 100,000 live births) | 48.6 | 26.9 | 25.0 |
| | | Under 5 child mortality rate (per 1000 live births) | 20.8 | 16.7 | 15.0 |
| | | infant mortality rate (per 1000 live births) | 16.8 | 13.6 | 13.0 |
| | | Neonatal mortality rate (1000 live births) | 9.2 | 8.7 | 9.0 |
| | | Pernatal mortality rate (per 1000 live births) | 12.9 | 12.4 | 11.9 |
| **Outcome indicators** | | | | | |
| Objective 1 | Create a mother nd child frindly legal environment by incirporating the maternal, child and reproductive health issues in the policies of other sectors, and supporting partnerships with governmental and non-governmental organizations, and private sector | The number of new and amended laws to improve maternal, child and reproductive health | | | Not less than 5 |
| | | The number of aimag and districts with reproductive health untis /complexes/ | Every year 3-5 | 3-5 | 15-25 |
| | | The number of adolescent -friendly health clinics | 29 | 29 | 35.0 |
| | | The amount of government budget spent on procurement of contraceptives | 150 million | 150 | 400 million |
| Objective 2 | deliver accessible and equitable quality maternal, child and reproductive health services for all | First trimester antenatal care (ANC) enrollment | 84.7 | 86.8 | 90 |
| | | Proportion of pregnant women with at least 6 ANC visits | 77.5 | 85.8 | 88.0 |
| | | Congenital syphilis rate (per 100,000 live birhhs) | 53.7 | 79.4 | 20.0 |
| | | Proportion of pregnant women screened for structural fetal abnormality at 18-21 weeks of pregnancy | 50 | 50 | 80 |
| | | Proportion of deliveries where disposable delivery kits were used | 30.0 | 30 | 100.0 |
| | | Proportion of maternal 'near misses ' after cesarean section | 24.8 | 1 | 20.0 |
| | | Proportion of newborn who received early essential newborn care | 70.0 | 65-70 | 100.0 |
| Objective 3 | Reduce unwanted pregnancies and induced abortions by increasing the access to and demand for reproductive rights- based family planning services | Percentage of reproductive age women using modern contraception | 48.2 (Baseline) | 53.2 | 60.0 |
| | | Contraceptive demand satisfied | 70 /2014 (Baseline) | 70 | 80.0 |
| | | Abortion rate (per 1000 live briths) | 224.6 | 235.8 | 200.0 |
| | | Percentage of primary health facilities with at least 5 contraceptive methods | 30.4 /2015 (Baseline)/ | 30.4 | 50.0 |

| | | | | | |
|---|---|---|---|---|---|
| Objective4 | Provide the population with gender-sensitive health education to increase healthy behavior, and the participation and accountability of family and community members in safeguarding maternal, child and reproductive . | HIV/AIDS comprehensive correct knowledge among 15-24 years old male and female | 22.8 20.7/2014 (Baseline) | 22.8 | 50.0 |
| | | Abolescent birth rate (per 1000 girls with age of 15-19 | 40.4/2014 (Baseline) | 23.1 | 30.0 |
| | | The number of chid deaths due to accidents | 210.0 | 168 | 116.0 |
| | | Proportion of deaths due to pneumonia in the structure of causes of under 5 mortality | 15.5 | 12.9 | 10.0 |
| | | Proportion of babies who are exclusively breastfed for first 6 months | 47.1/2014 (Baseline) | 47.1 | 60.0 |
| Objective5 | Improve the registry surveillance, and demand for reproductive rights-based family planning services | Percentage of health facilities reporting under 5 deaths according to the approved form | all facilities | all facilities | all facilities |
| | | Proportion of health facilities reporting under 5 congenital abnormalities according to the approved from | all facilities | all facilities | all facilities |
| | | Proportion of hospitals implementing the early essential newborn care screening | all facilities | all facilities | all facilities |

# NATIONAL PROGRAMME ON THE PREVENTION AND CONTROL OF COMMUNICABLE DISEASES

| Indicator | Details |
|---|---|
| Date and number of the Government Resolution which approved the programm | Resolution # 11of 2017 |
| Duration | 2017-2021 |
| Main objective | “To increase the involvement of other sectors in the surveillance, prevention and response of epidemics to the flexibility, quality, accessibility and prompt delivery of the disease and to reduce the spread of infectious diseases through financial sustainability of the program” |

| № | Indicators | | Baseline 2015 (unless otherwise stated) | Хүрэх үр дүн | | |
|---|---|---|---|---|---|---|
| | | | | 2016 | 2017 | 2020 Baseline and targets |
| **Objective 1. Intensification of surveillance of vaccine preventable diseases and decrease infectious disease incidence and mortality through increasing immunization coverage.** | | | | | | |
| 1 | % of soum and district level to reach >95% of the vaccination coverage | | 80% | 65.2% | 65.2% | 95% |
| 2 | Percentage of Immunization coverage, at the national level. | | | 98.9% | 99.6% | 88% |
| 3 | % dropout for Immunization coverage, at the national level<br>Pentavac, MMR<br>1 MMR1-HepA1<br>HepA1-HepA2 | | <br>3%<br>6.7%<br>8% | <br>1.1%<br>4.1%<br>0.1% | <br>0.2%<br>0.3%<br>0.1% | <br>1.5%<br>2.0%<br>2.0% |
| 4 | The number of reconnaissance for acute paralysis and of indicators for laboratory. | | 18 | 7 | 6 | 19 |
| 5 | Percentage of aimag and districts, to confirmed of outbreaks and suspected cases of measles, by laboratory validation. | | 20% | 100% | 100% | 100% |
| 6 | The number of new vaccines and biopsies | | | 1 | 1 | 3 |
| **Objective 2. Prevention and early diagnosis of viral hepatitis, contain prevalence of hepatitis virus infection among general population and decrease viral hepatitis incidence and mortality.** | | | | | | |
| 1 | Number of units to connected online software for register whit people of virus hepatitis. | | 0 | 30 | 62 | 30 |
| 2 | Percentage of infants received first dose of hepatitis B vaccine within the first 24 hours | | 93% | 97% | 98% | 95% |
| 3 | Percentage of immunization coverage of hepatitis B, for health workers. | | | 80% | 82% | 90% |
| 4 | The incidence rate of viral hepatitis / an average last 5 years/ | Viral hepatitis /total/ | 3.0 | 1.9 | 1.7 | 13 |
| 5 | | Viral hepatitis A | 0.3 | 0.1 | 0.2 | 10 |
| 6 | | Viral hepatitis B | 1.6 | 1.2 | 1 | 0.5 |
| 7 | | Viral hepatitis C | 0.4 | 0.3 | 0.3 | 0.5 |
| 8 | Percentage of health organization, with system of quality of disinfectant by biological indicator and of monitor test of spread of steam. | | 30% | 40% | Biological indicator 60% spread of steam 80% | 70% |
| 9 | Percentage of population permitted for hepatitis B and hepatitis C testing. | | 0 | B-11% C-21% | 47% | 40% |
| 10 | Percentage of population cured of hepatitis C, of all target population group. | | 0 | 4% | 4% | 40% |
| 11 | Percentage of population cured of hepatitis B, of all target population group. | | | 2-4% | 4 | 30% |
| **Objective 3. Ensure response preparedness through extending surveillance of emerging and re-emerging infections, pandemic, influenza and influenza like illnesses.** | | | | | | |
| 1 | Number of tuberculosis /per 100.000 population/ | | 154.7 | 146.2 | 136.6 | 158.9 |
| 2 | Mortality rate of tuberculosis. /per 100 000 population/ | | 8.5 | 9.0 | 7.1 | 6.5 |

| | | | | | |
|---|---|---|---|---|---|
| 3 | Percentage of screening for tuberculosis | 37% | 38.9% | 32.00% | 45% |
| 4 | The results of treatment for new cases to compirmed by pulmonary bacteriological examination. | 84.2% | 84.5% | 84.80% | 90% |
| 5 | Percentage of drug sensitive tested from the drug resistant types. | 61% | 81% | 85% | 90% |
| 6 | The result of treatment for multidrug resistance and rifampicin resistance types | | 67.2% | 63.50% | 71% |
| **Objective 4. Provide client oriented integrated tuberculosis care and services through introduction of new methods of detection, diagnosis and treatment and expanding intersectoral multilateral collaboration.** | | | | | |
| 1 | Number of tuberculosis /per 100.000 population/ | 154.7 | 146.2 | 136.6 | 158.9 |
| 2 | Mortality rate of tuberculosis. /per 100 000 population/ | 8.5 | 9.0 | 7.1 | 6.5 |
| 3 | Percentage of screening for tuberculosis | 37% | 38.9% | 32.0% | 45% |
| 4 | The results of treatment for new cases to compirmed by pulmonary bacteriological examination. | 84.2% | 84.5% | 84.8% | 90% |
| 5 | Percentage of drug sensitive tested from the drug resistant types. | 61% | 81% | 85% | 90% |
| 6 | The result of treatment for multidrug resistance and rifampicin resistance types | | 67.2% | 63.5% | 71% |
| **Objective 5. Reduce prevalence of STIs and HIV through prevention, early detection and increasing integrated and quality care & services.** | | | | | |
| 1 | The prevalence of syphilis among female sex workers | 29.7% / ХТС 2014 он/ | 29.7 | 24.5% | 24% |
| 2 | The prevalence of syphilis among men who have sex with men | 7.1% /ХТС 2014 он/ | 7.1 | 9.2% | 4% |
| 3 | Percentage of treating HIV-infected people, of all target population with access to antiretroviral therapy | 83%/2015 он/ | 97.5 | 90.0% | 90%< |
| 4 | Incidence rate of among 15-24 ages (per 10000 population) | 66% | 54.20% | 53.1% | 46% |
| 5 | Percentage of confirmed with HIV, by laboratory testing. | | 35.5 | 32.0% | 90% |
| **Objective 6. Extend surveillance of diseases of zoonotic origin, vector borne and neglected zoonotic diseases and improve outbreak response capacity.** | | | | | |
| 1 | Percentage of epicenter of the zoonosis, new and renewable zoonotic diseases. | 40% | 48% | 52% | 70% |
| 2 | Incidence rate of zoonotic diseases (per 10000 population) | 0.07 | 1.08 | 1.5 | 0.5 |
| 3 | Percentage of the soum health centers that provides remote, diagnosis and treatment for brucellosis. | 50% | 50% | 50% | 100% |
| 4 | "Percentage of aimag general hospitals and RDTC's, of using infection diagnostic enzyme immune system of brucellosis. " | 0% | 9.5% | 5.0% | 100% |
| 5 | Tested by laboratory analysis of local zoonotic disease center certified by national reference laboratory | 30% | 0% | 100% | 80% |
| 6 | Number of laboratories with quality control over diagnostic disease of zoonosis | | 1 | 1 | 1 |
| **Objective 7. Improve field epidemiology training programme and strengthen and improve risk communication capacity.** | | | | | |
| 1 | Number of new established units for field epidemiology training. | 0 | 0 | 1 | 2 |
| 2 | Number of research, reports and recommendations, performed by field epidemiologists | | 18 | 9 | 20 |
| **Outcome indicators** | | | | | |
| 1 | Incidence of tuberculosis /per 10000 population/ | 14.1 | 13.1 | 12.2 | 10.0 |
| 2 | Mortality rate of tuberculosis /per 100 000 population/ | 8.5 | 9.0 | 7.1 | 6.5 |
| 3 | Acute hepatitis A (per 10000 population) | 9.1 | 0.1 | 0.16 | 8.0 |
| 4 | Acute hepatitis B (per 10000 population) | 1.6 | 1.2 | 1.1 | 1.3 |
| 5 | Shigellosis (per 10000 population) | 9.2 | 9.3 | 13.2 | 7.0 |
| 6 | Syphilis, gonorrhea and trichomoniasis in common sexually transmitted diseases (per 10000 population) | 56..3 | 48.4 | 49.5 | 10.0 |
| 7 | Prevalence of pregnant women with syphilis | 3% | 2.4% | 2.4% | 2% |
| 8 | Number of congenital syphilis | 52 | 42 | 59 | 34 |
| 9 | Brucellosis (per 10000 population) | | 0.5 | 0.5 | 0.5 |

# NATIONAL PROGRAMME ON THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

| Indicator | Details |
|---|---|
| Date and number of the Government Resolution which approved the programm | Resolution # 289 of 2017 |
| Duration | 2017-2030 |
| Main objective | The goal of the Programme is to contain the prevalence of commonly occurring NCDs and their risk factors based on the multilateral cooperation among organizations, communities, families and individual citizens, to strengthen the prevention, control, early detection and surveillance of diseases. |

| № | Indicators | 2016 | 2017 | Expected | |
|---|---|---|---|---|---|
| | | | | 2019 | 2021 |
| | **A. Outcome indicators:** | | | | |
| | **I.Indicators on primary risk factors for NCDs** | | | | |
| 1 | Smoking population rate, by percentage | 27.1 | 27.1 | 27 | 26 |
| 2 | Adolescents aged 13-15 years who smoke cigarettes 1.2 times in the past 30 days, by percentage | 5.9 | 5.9 | 5.4 | 4.9 |
| 3 | Adolescents aged 16-17 years who smoke cigarettes 1.2 times in the past 30 days, percentage | 17.5 | 17.5 | 16.0 | 14.5 |
| 4 | People who were exposed to secondhand smoke at workplace in the past 30 days, by percentage | 25.5 | 25.5 | 23.4 | 21.3 |
| 5 | Amount of recorded alcohol consumption per person aged 15 years or older, bylitres (in pure alcohol) | 7.2 | 9.8 | 7.0 | 6.9 |
| 6 | People who excessively consume alcohol, by percentage | 10.3 | 23.5 | 10 | 9.6 |
| 7 | School children aged 15-17 years who have excessively consumed alcohol 1-2 times, by percentage | 23.1 | 23.1 | 22.3 | 21.6 |
| 8 | Average daily salt intake of the population aged 25-64 years old (grammes/ day) | 11.1 | 11.1 | 10 | 8.9 |
| 9 | Population with physical inactivity, by percentage | 22.3 | 22.3 | 21.6 | 20.3 |
| | **II. Indicators on intermediate risk factors for NCDs** | | | | |
| 1 | Percentage of the population with overweight and obesity, (BMI>25kg/m) | 54.4 | 54.4 | 49.9 | 45.3 |
| 2 | Prevalence of hypertension (systolic blood pressure >140,diastolic blood pressure >90 and use of antihypertensive medication),by percentage | 27.5 | 27.5 | 25.2 | 22.9 |
| 3 | Percentage of the population who have total blood cholesterol level of 5 mmol/l or above, by percentage | 61.9 | 61.9 | 56.7 | 51.9 |
| 4 | Percentage of the population who have blood glucose level of 5.6-6.0 mmol/l or above, by percentage | 8.3 | 8.3 | 7.6 | 6.9 |
| 5 | Population who have increased blood glucose level of 6.1 mmol/l or higher and on glucose-lowering medication, by percentage | 6.9 | 6.9 | 6.3 | 5.8 |
| | **III.Indicators on early detection of NCD and morbidity** | | | | |
| 1 | Population early screened for cervical cancer, by percentage (30-60 years old) | 44.9 | 37.4 | 46.3 | 51.9 |
| 2 | Population early screened for breast cancer, by actual number (30-60 years old) | 286921 | 354572 | 291121 | 307921 |
| 3 | Population early screened for liver cancer, by percentage (40-65 years old) | 30.0 | 37.8 | 30.0 | 70.0 |
| 4 | Percentage of the population diagnosed with early stage liver cancer (percentage of 1,2 stages) | 18.9 | 20.3 | 20.7 | 28.0 |
| 5 | Percentage of the population diagnosed with early stage cervical cancer (percentage of 1stages) | 37.5 | 37.4 | 42.5 | 62.5 |
| 6 | Population early screened for high blood pressure, by percentage (40-64 years old) | 65.1 | 66.7 | 69 | 79.5 |
| 7 | Population early screened for diabetes, by percentage (40-64 years old) | 60.3 | 63.2 | 65.0 | 77.5 |
| | **B.Indicators on the Programme effciency** | | | | |
| 1 | Mortality from cancer (10 000 population ) | 13.8 | 13.0 | 11.6 | 10.5 |
| 2 | Mortality from cardiovascular diseases (10 000 population ) | 17.8 | 17.4 | 17.6 | 17.4 |
| 3 | Patients hospitalized due to nephritis, by percentage | 63.9 | 63.1 | 63.5 | 62 |

## MENTAL HEALTH SECOND NATIONAL PROGRAMME

| Indicators | Details |
|---|---|
| Date and number of the Government Resolution which approved the programme | Resolution №303, 2009 |
| Duration | 2010-2019 |
| | I stage - 2010-2014 |
| | II stage - 2015-2019 |
| Main objective | To reduce prevalence of mental and behavioral disorders through building a supportive environment to support mental health promotion, expand mental health services at primary level and community based health care |

| № | Indicators | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Changes as planned in 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **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 | 2.2 | 2.2 | 2.1 | 2.3 | 2.4 | 2.5 | 1.60 | Decrease by 10% |
| 2 | Number of bed for mental disorders at province, district hospitals (per 10 000 population) | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | Increase by 10 % |
| 3 | Number of family centers that operate in communities | 12 | 12 | 14 | 14 | 14 | 14 | 12 | 12 | 12 | 16 |
| 4 | Number of mental health doctors at province, district level (per 10 000 population) | 0.1 | 0.1 | 0.43 | 0.4 | 0.4 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 |
| 5 | Percentage of soums, family clinics' doctors who attended training on mental health care and services at primary level | 25.0 | 32.0 | 32.0 | 25.0 | 25.0 | 25.0 | 50.0 | 80.0 | 80.0 | 85.0 |
| 6 | Percentage of mental health education in Medical science and nursing schools training curriculum | 5.0 | 5.5 | 5.5 | 5.5 | 2.7 | 5.5 | 5.5 | 5.5 | 5.5 | 15.0 |
| 7 | Percentage of province, district, soum and family hospitals that are provided with medicines on mental health from the national list of essential drugs | 86.0 | 41.0 | 45.0 | 41.0 | 20.0 | 29.0 | 29.0 | 29.0 | 29.0 | 100.0 |

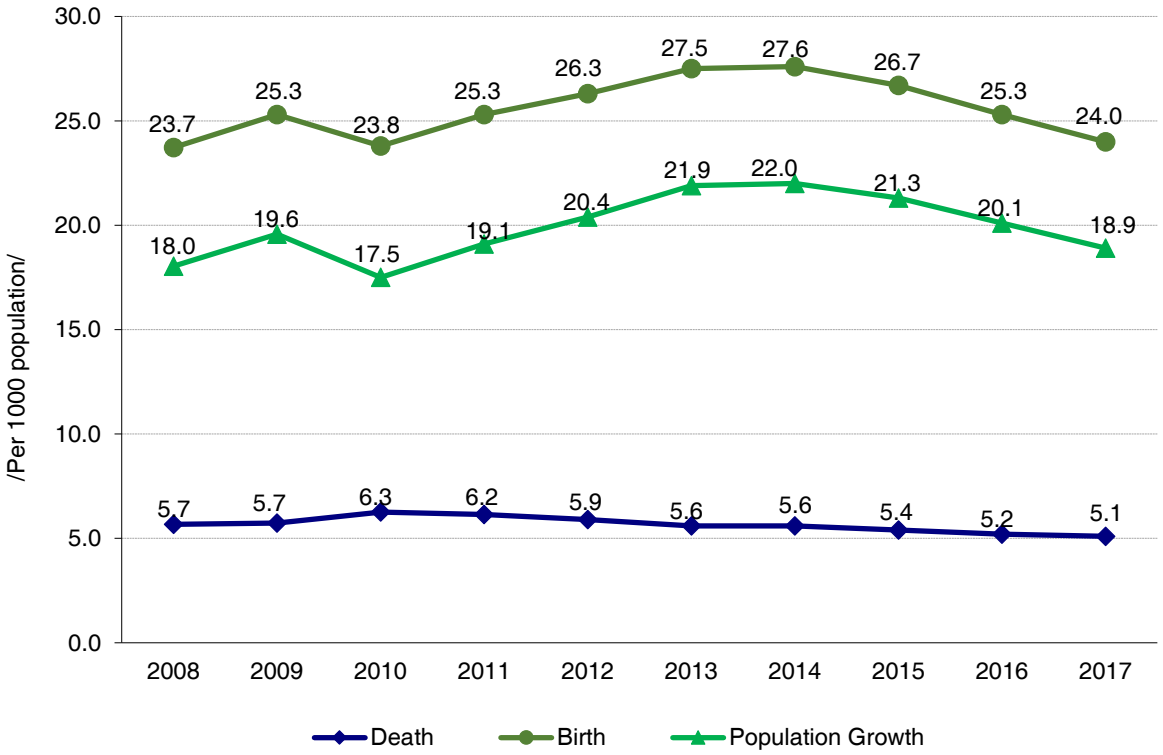
# CHAPTER 14.

# HEALTH INDICATORS

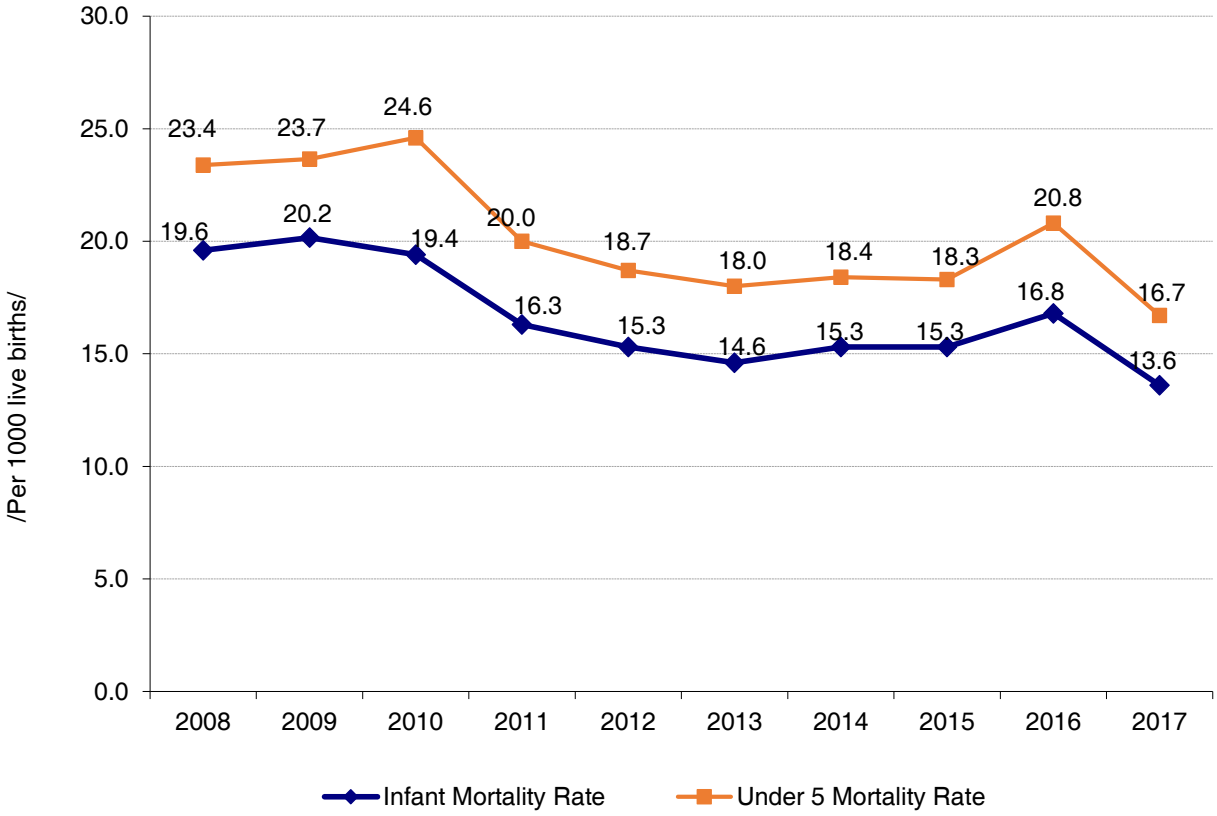
## MAIN HEALTH INDICATORS, 2017

| № | Province and city | Population, 2017 | Per 10 000 population | | | | | Number of persons per hospital bed | Number of persons per physician | Number of midlevel personnel per physician | Number of nursing personnel per physician | Average outpatient visits per person per year | Per 1 000 population | | | Infant mortality rate per 1 000 live births | Under 5 mortality rate | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Hospital beds | Physicians | Nurses | Medical professional and technical education, all other employees | All health care workers | | | | | | Crude birth rate | Crude death rate | Population growth rate | | Under 5 children per 1 000 | Live births per 1 000 |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 1 | Arkhangai | 95106 | 55.0 | 18.3 | 29.0 | 30.5 | 129.9 | 181.9 | 547.8 | 1.7 | 1.6 | 3.4 | 20.2 | 4.8 | 15.4 | 16.8 | 3.5 | 20.5 |
| 2 | Bayan-Ulgii | 102604 | 77.1 | 20.2 | 31.5 | 25.0 | 125.1 | 129.6 | 494.9 | 1.2 | 1.6 | 3.6 | 28.4 | 4.5 | 23.9 | 13.3 | 3.8 | 17.9 |
| 3 | Bayankhongor | 86594 | 63.4 | 21.7 | 34.0 | 33.5 | 135.7 | 157.7 | 461.4 | 1.5 | 1.6 | 3.1 | 23.2 | 5.1 | 18.1 | 15.5 | 3.4 | 18.0 |
| 4 | Bulgan | 61289 | 60.4 | 19.8 | 31.5 | 30.5 | 125.3 | 165.6 | 504.8 | 1.5 | 1.6 | 3.1 | 13.6 | 5.5 | 8.1 | 10.8 | 1.7 | 13.2 |
| 5 | Govi-Altai | 57484 | 78.7 | 32.8 | 44.5 | 44.2 | 192.8 | 127.1 | 305.2 | 1.3 | 1.4 | 4.3 | 21.4 | 5.1 | 16.3 | 16.4 | 4.0 | 19.7 |
| 6 | Govisumber | 17383 | 72.2 | 33.2 | 39.0 | 31.5 | 152.6 | 138.4 | 301.2 | 0.9 | 1.2 | 6.7 | 24.3 | 5.3 | 19.0 | 7.2 | 2.6 | 14.4 |
| 7 | Darkhan-Uul | 104074 | 73.6 | 27.2 | 35.6 | 26.1 | 137.8 | 135.9 | 368.0 | 1.0 | 1.3 | 5.9 | 22.4 | 5.4 | 17.0 | 10.6 | 2.4 | 12.8 |
| 8 | Dornogovi | 68147 | 68.8 | 32.9 | 37.7 | 33.1 | 165.4 | 145.3 | 303.6 | 1.0 | 1.1 | 5.0 | 19.7 | 5.0 | 14.6 | 12.8 | 2.2 | 13.6 |
| 9 | Dornod | 79445 | 69.9 | 23.3 | 35.2 | 26.1 | 131.0 | 143.0 | 429.7 | 1.1 | 1.5 | 5.0 | 24.6 | 5.5 | 19.1 | 13.4 | 3.5 | 18.1 |
| 10 | Dundgovi | 45755 | 65.5 | 30.7 | 32.4 | 32.0 | 154.3 | 152.7 | 325.9 | 1.0 | 1.1 | 4.0 | 19.2 | 5.0 | 14.1 | 9.1 | 2.7 | 15.9 |
| 11 | Zavkhan | 71551 | 82.1 | 25.3 | 38.1 | 40.2 | 155.7 | 121.8 | 394.9 | 1.6 | 1.5 | 4.8 | 18.6 | 5.2 | 13.4 | 16.6 | 2.9 | 17.3 |
| 12 | Orkhon | 103997 | 63.4 | 31.9 | 41.3 | 25.4 | 148.7 | 157.8 | 313.1 | 0.8 | 1.3 | 5.8 | 25.3 | 4.8 | 20.5 | 5.0 | 1.2 | 5.4 |
| 13 | Uvurkhangai | 115098 | 72.7 | 22.5 | 28.6 | 26.0 | 125.4 | 137.5 | 445.0 | 1.2 | 1.3 | 3.4 | 21.2 | 5.2 | 15.9 | 16.1 | 3.7 | 20.2 |
| 14 | Umnugovi | 65314 | 102.5 | 29.2 | 27.1 | 28.9 | 126.5 | 97.5 | 342.1 | 1.0 | 0.9 | 4.9 | 20.1 | 4.7 | 15.4 | 16.1 | 3.2 | 20.0 |
| 15 | Sukhbaatar | 61131 | 66.7 | 25.2 | 35.4 | 28.5 | 128.9 | 149.8 | 396.6 | 1.1 | 1.4 | 4.0 | 21.0 | 5.2 | 15.8 | 17.3 | 3.5 | 20.4 |
| 16 | Selenge | 109605 | 65.7 | 22.8 | 30.6 | 25.7 | 121.8 | 152.2 | 437.9 | 1.1 | 1.3 | 3.4 | 16.0 | 4.6 | 11.4 | 11.0 | 2.2 | 15.1 |
| 17 | Tuv | 94041 | 53.8 | 23.3 | 31.5 | 23.2 | 143.4 | 185.8 | 429.6 | 1.0 | 1.4 | 3.0 | 12.8 | 4.5 | 8.3 | 10.0 | 1.9 | 17.5 |
| 18 | Uvs | 82688 | 67.2 | 20.6 | 31.6 | 39.8 | 133.8 | 148.8 | 485.2 | 1.9 | 1.5 | 4.8 | 24.8 | 5.2 | 19.6 | 18.7 | 4.4 | 22.1 |
| 19 | Khovd | 86376 | 66.8 | 26.8 | 34.6 | 31.6 | 141.5 | 149.6 | 373.8 | 1.2 | 1.3 | 4.1 | 25.6 | 4.9 | 20.7 | 16.7 | 4.5 | 22.2 |
| 20 | Khuvsgul | 131561 | 59.7 | 19.0 | 28.2 | 32.0 | 115.7 | 167.4 | 526.3 | 1.7 | 1.5 | 2.9 | 21.2 | 6.0 | 15.1 | 22.0 | 4.8 | 26.3 |
| 21 | Khentii | 75683 | 63.0 | 24.1 | 31.0 | 25.7 | 135.7 | 158.8 | 415.6 | 1.1 | 1.3 | 4.6 | 19.3 | 4.7 | 14.6 | 19.4 | 4.1 | 24.9 |
| **22** | **Province average** | **1714926** | **68.1** | **24.4** | **33.1** | **29.8** | **136.6** | **146.8** | **409.6** | **1.2** | **1.4** | **4.1** | **21.1** | **5.1** | **16.1** | **14.5** | **3.2** | **18.1** |
| 23 | Ulaanbaatar | 1462973 | 88.1 | 46.0 | 45.1 | 19.3 | 195.3 | 113.5 | 217.6 | 0.4 | 1.0 | 7.6 | 27.4 | 5.2 | 22.3 | 12.7 | 3.3 | 15.4 |
| **24** | **National average** | **3177899** | **77.1** | **34.1** | **38.5** | **25.1** | **163.1** | **129.6** | **292.9** | **0.7** | **1.1** | **5.7** | **24.0** | **5.1** | **18.9** | **13.6** | **3.3** | **16.7** |

## Crude Birth and Death Rates and Population Growth /2008-2017/



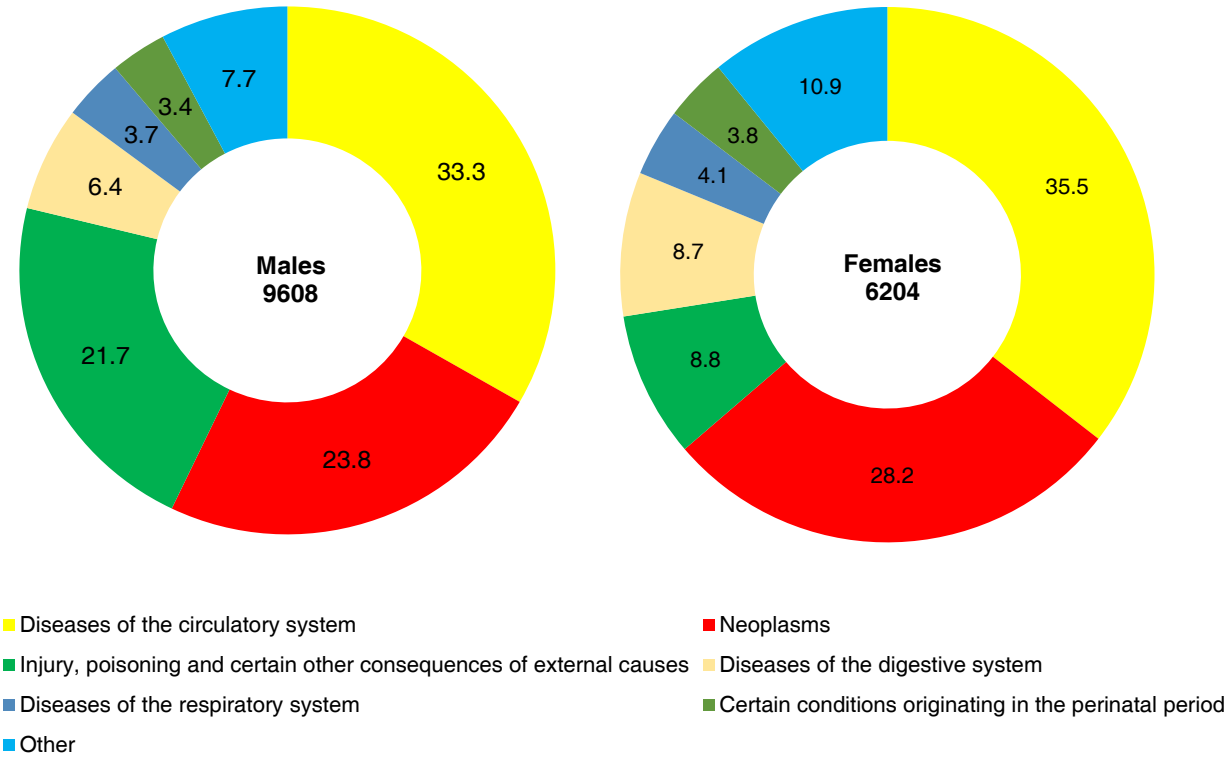

## Infant and Under Five Mortality Rates /2008-2017/



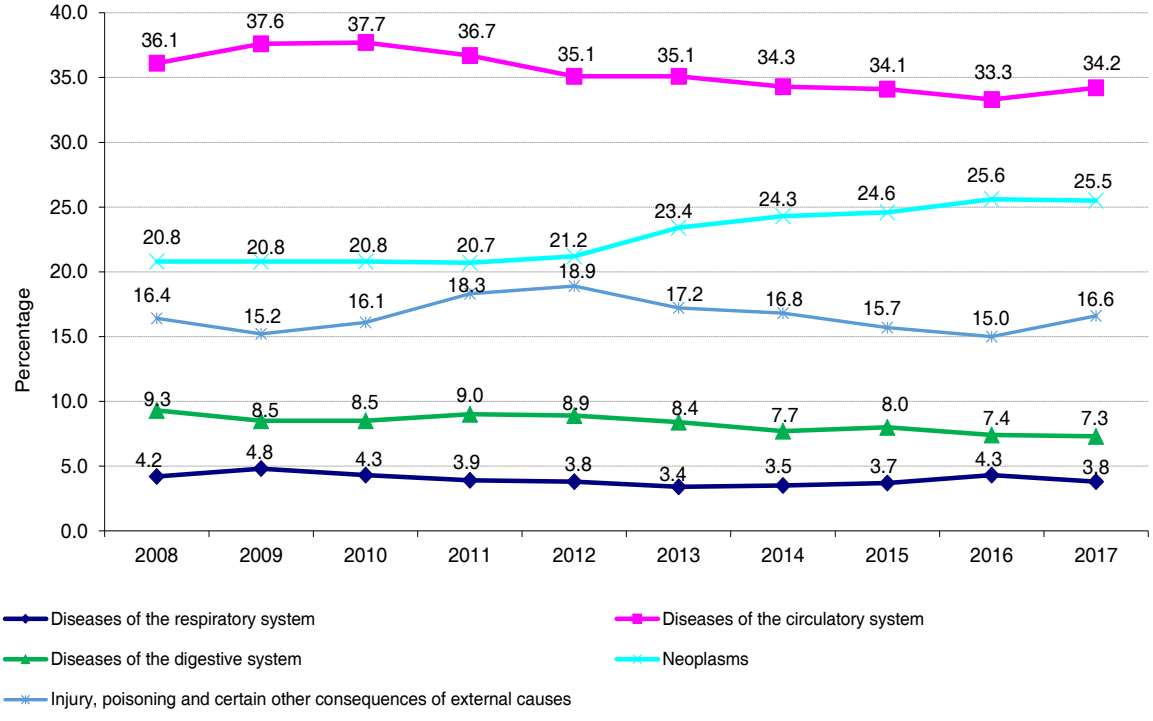
## DEATHS BY CAUSES AND SEX, 2017

| Main Causes ICD-10 | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| | "Abs. number" | per 10 000 pop | "Abs. number" | per 10 000 pop | "Abs. number" | per 10 000 pop |
| Diseases of the circulatory system | 5405 | 17.45 | 3201 | 21.06 | 2204 | 13.97 |
| Neoplasms | 4037 | 13.03 | 2289 | 15.06 | 1748 | 11.08 |
| Injuiry, poisoning and certain other consequences of external causes | 2630 | 8.49 | 2086 | 13.72 | 544 | 3.45 |
| Diseases of the digestive system | 1155 | 3.73 | 616 | 4.05 | 539 | 3.42 |
| Diseases of the respiratory system | 605 | 1.95 | 352 | 2.32 | 253 | 1.60 |
| Certain conditions originating in the perinatal period | 559 | 1.80 | 326 | 2.14 | 233 | 1.48 |
| Certain infectious and parasitic diseases | 276 | 0.89 | 194 | 1.28 | 82 | 0.52 |
| Diseases of the nervous system | 267 | 0.86 | 146 | 0.96 | 121 | 0.77 |
| Diseases of the genito-urinary system | 245 | 0.79 | 119 | 0.78 | 126 | 0.80 |
| Congenital malformations, deformations and chromosomal abnormalities | 197 | 0.64 | 104 | 0.68 | 93 | 0.59 |
| Others | 436 | 1.41 | 175 | 1.15 | 261 | 1.65 |
| **Total** | **15812** | **51.04** | **9608** | **63.20** | **6204** | **39.33** |

## Main Causes of Death, by percentage and sex 2017




## Five Leading Causes of Death, /2008-2017/



## FIVE LEADING CAUSES OF DEATH (BY PROVINCE), 2017

| № | Province, city | per 10 000 population | | | | |
|---|---|---|---|---|---|---|
| | | 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 |
| A | B | 1 | 2 | 3 | 4 | 5 |
| 1 | Arkhangai | 16.98 | 12.63 | 7.32 | 2.23 | 1.91 |
| 2 | Bayan-Ulgii | 20.80 | 7.96 | 4.68 | 1.99 | 3.88 |
| 3 | Bayankhongor | 18.08 | 11.82 | 8.58 | 4.52 | 2.55 |
| 4 | Bulgan | 24.19 | 16.07 | 7.31 | 3.09 | 0.97 |
| 5 | Govi-Altai | 20.50 | 15.77 | 6.48 | 2.98 | 0.70 |
| 6 | Govisumber | 18.64 | 15.15 | 11.07 | 2.91 | 2.91 |
| 7 | Darkhan-Uul | 21.72 | 14.68 | 8.53 | 2.38 | 1.39 |
| 8 | Dornogovi | 13.80 | 12.31 | 12.91 | 3.56 | 1.48 |
| 9 | Dornod | 18.69 | 17.04 | 7.50 | 3.69 | 2.42 |
| 10 | Dundgovi | 18.50 | 14.36 | 8.49 | 1.96 | 1.74 |
| 11 | Zavkhan | 20.99 | 15.53 | 6.16 | 1.26 | 1.12 |
| 12 | Orkhon | 17.39 | 16.02 | 7.07 | 2.55 | 1.38 |
| 13 | Uvurkhangai | 21.52 | 12.02 | 6.97 | 3.83 | 2.35 |
| 14 | Umnugovi | 18.56 | 8.51 | 8.35 | 4.18 | 2.47 |
| 15 | Sukhbaatar | 15.66 | 16.65 | 5.60 | 3.63 | 2.31 |
| 16 | Selenge | 18.66 | 11.42 | 5.94 | 4.64 | 1.67 |
| 17 | Tuv | 21.68 | 11.21 | 3.52 | 2.88 | 1.71 |
| 18 | Uvs | 18.17 | 16.10 | 5.73 | 4.39 | 0.98 |
| 19 | Khovd | 17.26 | 14.25 | 7.53 | 2.08 | 1.62 |
| 20 | Khuvsgul | 27.39 | 14.04 | 9.31 | 2.52 | 2.06 |
| 21 | Khentii | 15.10 | 13.90 | 6.42 | 4.14 | 3.07 |
| **22** | **Province average** | **19.60** | **13.46** | **7.21** | **3.12** | **1.94** |
| 23 | Ulaanbaatar | 14.83 | 12.52 | 10.04 | 4.47 | 1.97 |
| **24** | **National average** | **17.45** | **13.03** | **8.49** | **3.73** | **1.95** |

## CAUSES OF INFANT AND UNDER 5 DEATHS, 2017

| Diseases group according to ICD-10 | 0-1 age | | under 5 | |
|---|---|---|---|---|
| | "Abs. number" | % | "Abs. number" | % |
| Certain conditions originating in the perinatal period | 559 | 55.4 | 559 | 44.9 |
| Diseases of the respiratory system | 122 | 12.1 | 162 | 13.0 |
| Congenital malformations, deformations and chromosomal abnormalities | 148 | 14.7 | 169 | 13.6 |
| Injuiry, poisoning and certain other consequences of external causes | 65 | 6.4 | 162 | 13.0 |
| Diseases of the digestive system | 34 | 3.4 | 46 | 3.7 |
| Diseases of the nervous system | 17 | 1.7 | 38 | 3.1 |
| Certain infectious and parasitic diseases | 21 | 2.1 | 31 | 2.5 |
| Other | 43 | 4.3 | 77 | 6.2 |
| **Total** | **1009** | **100.0** | **1244** | **100.0** |

## CAUSES OF INFANT MORTALITY BY PERCENTAGE (2013-2017)

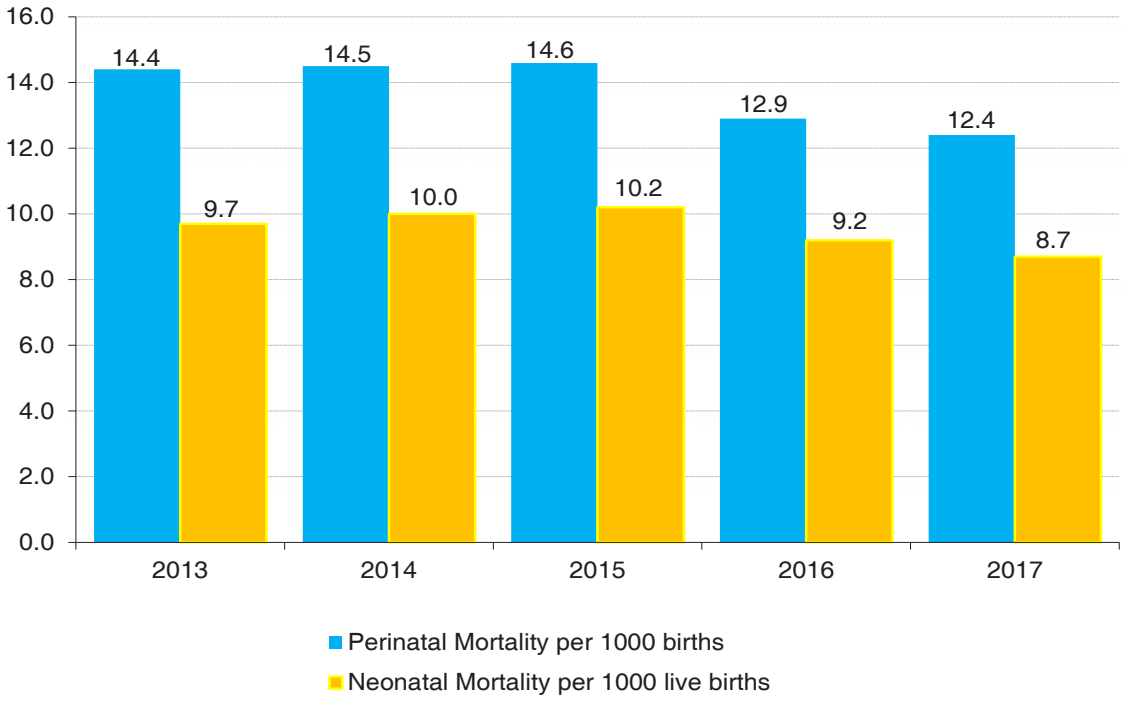
| Causes | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| Certain conditions originating in the perinatal period | 52.9 | 55.3 | 59.6 | 44.3 | 55.4 |
| Diseases of the respiratory system | 15.7 | 14.2 | 12.1 | 16.4 | 12.1 |
| Congenital malformations, deformations and chromosomal abnormalities | 15.1 | 13.3 | 10.4 | 12.5 | 14.7 |
| Injuiry, poisoning and certain other consequences of external causes | 6.9 | 6.6 | 5.6 | 5.8 | 6.4 |
| Diseases of the digestive system | 2.7 | 2.7 | 2.9 | 2.4 | 3.4 |
| Diseases of the nervous system | 4.4 | 4.2 | 3.7 | 4.8 | 1.7 |
| Certain infectious and parasitic diseases | 1.1 | 1.2 | 2.6 | 10.7 | 2.1 |

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

## INFANT MORTALITY, 2017

| Causes | Rate |
|---|---|
| Infant mortality rate /per 1 000 live births/ | 13.6 |
| Early neonatal mortality rate /per 1 000 live births/ | 6.4 |
| Post neonatal mortality rate /per 1 000 live births/ | 2.3 |
| Neonatal mortality rate /per 1 000 live births/ | 8.7 |
| Perinatal mortality rate /per 1 000 births/ | 12.4 |

### Infant Mortality, /2013-2017/



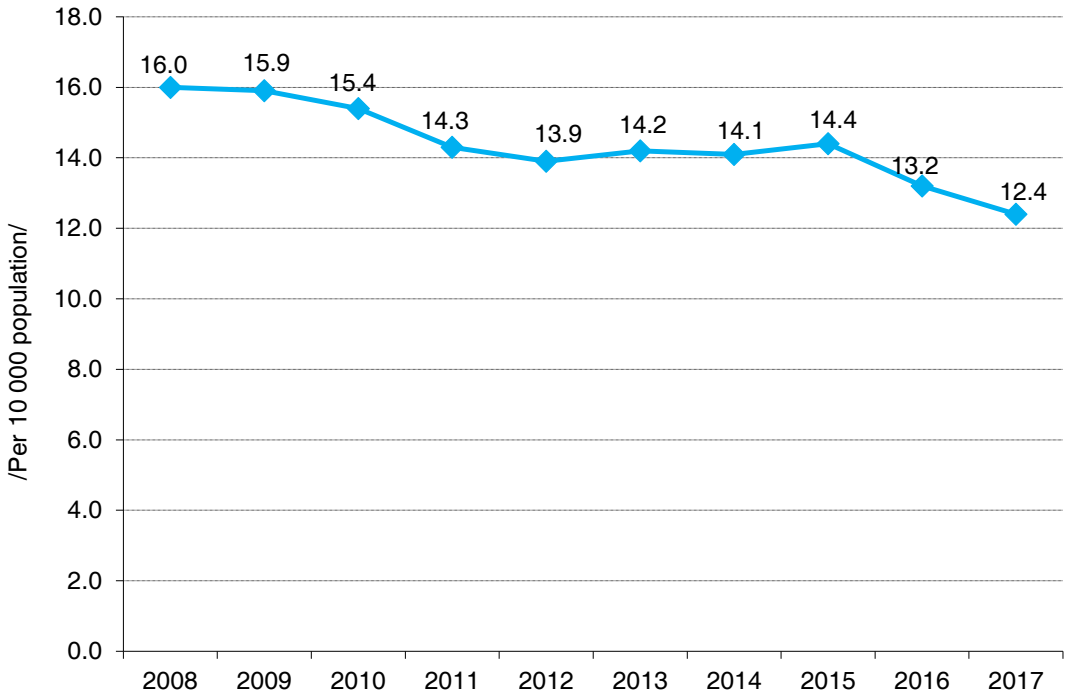
## INFANT MORTALITY, 2017

| № | Province and city | Perinatal mortality per 1 000 births | Still births per 1 000 births | Neonatal mortality per 1 000 live births | Early neonatal mortality per 1 000 live births | Post neonatal mortality per 1 000 live births |
|---|---|---|---|---|---|---|
| A | B | 1 | 2 | 3 | 4 | 5 |
| 1 | Arkhangai | 10.5 | 3.1 | 10.0 | 7.4 | 2.6 |
| 2 | Bayan-Ulgii | 13.2 | 8.7 | 6.0 | 4.6 | 1.4 |
| 3 | Bayankhongor | 11.4 | 5.0 | 8.0 | 6.5 | 1.5 |
| 4 | Bulgan | 7.2 | 0.0 | 7.2 | 7.2 | 0.0 |
| 5 | Govi-Altai | 14.7 | 5.7 | 11.5 | 9.0 | 2.5 |
| 6 | Govisumber | 4.8 | 4.8 | 2.4 | 0.0 | 2.4 |
| 7 | Darkhan-Uul | 9.3 | 3.5 | 6.6 | 5.8 | 0.9 |
| 8 | Dornogovi | 14.3 | 4.5 | 10.6 | 9.8 | 0.8 |
| 9 | Dornod | 13.3 | 7.2 | 8.8 | 6.2 | 2.6 |
| 10 | Dundgovi | 9.0 | 3.4 | 5.7 | 5.7 | 0.0 |
| 11 | Zavkhan | 16.5 | 6.0 | 11.3 | 10.5 | 0.8 |
| 12 | Orkhon | 8.9 | 6.5 | 2.7 | 2.3 | 0.4 |
| 13 | Uvurkhangai | 11.1 | 4.1 | 9.5 | 7.0 | 2.5 |
| 14 | Umnugovi | 14.5 | 8.4 | 10.8 | 6.1 | 4.6 |
| 15 | Sukhbaatar | 11.7 | 5.5 | 9.4 | 6.3 | 3.1 |
| 16 | Selenge | 7.0 | 3.5 | 5.8 | 3.5 | 2.3 |
| 17 | Tuv | 9.2 | 3.3 | 5.8 | 5.8 | 0.0 |
| 18 | Uvs | 15.6 | 6.8 | 11.8 | 8.8 | 2.9 |
| 19 | Khovd | 15.7 | 7.2 | 10.4 | 8.6 | 1.8 |
| 20 | Khuvsgul | 12.9 | 5.4 | 13.0 | 7.6 | 5.4 |
| 21 | Khentii | 11.0 | 5.5 | 7.6 | 5.5 | 2.1 |
| **22** | **Province average** | **11.9** | **5.5** | **8.5** | **6.5** | **2.1** |
| 23 | Ulaanbaatar | 12.9 | 6.6 | 8.9 | 6.3 | 2.6 |
| **24** | **National average** | **12.4** | **6.0** | **8.7** | **6.4** | **2.3** |

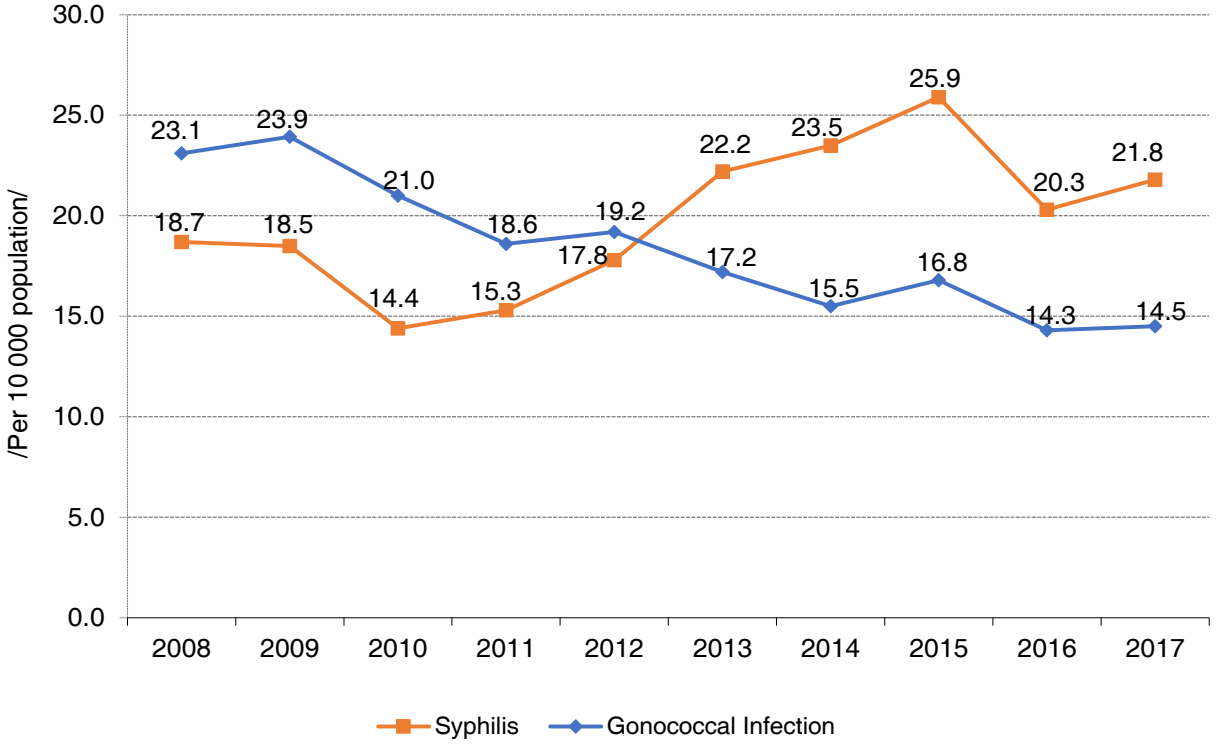
## REGISTERED REPORTABLE INFECTIOUS DISEASES, PER 10 000 POPULATION, (2013-2017)

| Certain infectious and parasitic diseases | Per 10 000 population | | | | |
|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| Typhoid and paratypoid fevers | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Salmonella infections | 0.3 | 0.3 | 0.5 | 0.6 | 0.6 |
| Shigellosis | 7.0 | 7.9 | 9.2 | 9.3 | 13.2 |
| Tuberculosis | 14.6 | 14.2 | 14.4 | 13.2 | 12.4 |
| Plague | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anthrax | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Brucellosis | 1.3 | 0.9 | 1.0 | 0.5 | 0.5 |
| Scarlet fever | 1.0 | 0.9 | 2.5 | 4.5 | 5.9 |
| Meningococcal infection | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Varicella | 16.6 | 15.8 | 19.0 | 22.3 | 31.5 |
| Measles | 0.0 | 0.0 | 79.2 | 99.0 | 0.1 |
| Rubella | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 |
| Viral hepatitis | 9.0 | 3.9 | 3.0 | 1.9 | 1.7 |
| Acute hepatitis A | 5.7 | 1.1 | 0.3 | 0.1 | 0.2 |
| Acute hepatitis B | 2.2 | 2.0 | 1.6 | 1.2 | 1.0 |
| Acute hepatitis C | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 |
| Mumps | 18.7 | 1.5 | 0.8 | 1.1 | 0.7 |
| Mycoses | 4.0 | 6.5 | 5.8 | 4.6 | 4.8 |
| Syphilis | 22.2 | 23.5 | 25.9 | 20.3 | 21.8 |
| Gonococcal infection | 17.2 | 15.5 | 16.8 | 14.3 | 14.5 |
| Trichomoniasis | 13.5 | 13.0 | 13.6 | 14.3 | 13.9 |

## Incidence of Tuberculosis /2008-2017/




## Incidence of Syphilis and Gonococcal Infections /2008-2017/



## PREVALENCE, INCIDENCE AND DEATH RATES OF MALIGNANT NEOPLASMS, 2017

| "Malignant neoplasms" | № | Prevalence | | Incidence | | | | | | Deaths | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Abs.number | | | per 10 000 population | | | Abs.number | | | per 10 000 population | | |
| | | Abs.number | per 10 000 population | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Lip, oral cavity and pharynx | 1 | 895 | 2.89 | 156 | 72 | 84 | 0.50 | 0.47 | 0.53 | 89 | 58 | 31 | 0.29 | 0.38 | 0.20 |
| Oesophagus | 2 | 881 | 2.84 | 344 | 186 | 158 | 1.11 | 1.22 | 1.00 | 275 | 155 | 120 | 0.89 | 1.02 | 0.76 |
| Stomach | 3 | 2829 | 9.13 | 889 | 575 | 314 | 2.87 | 3.78 | 1.99 | 621 | 402 | 219 | 2.00 | 2.64 | 1.39 |
| Colon | 4 | 653 | 2.11 | 188 | 79 | 109 | 0.61 | 0.52 | 0.69 | 113 | 48 | 65 | 0.36 | 0.32 | 0.41 |
| Rectus and anus | 5 | 211 | 0.68 | 53 | 27 | 26 | 0.17 | 0.18 | 0.16 | 44 | 20 | 24 | 0.14 | 0.13 | 0.15 |
| Liver | 6 | 6142 | 19.83 | 2312 | 1244 | 1068 | 7.46 | 8.18 | 6.77 | 1614 | 920 | 694 | 5.21 | 6.05 | 4.40 |
| Pancreas | 7 | 307 | 0.99 | 141 | 63 | 78 | 0.46 | 0.41 | 0.49 | 129 | 60 | 69 | 0.42 | 0.39 | 0.44 |
| Other in digestive organs | 8 | 141 | 0.46 | 45 | 24 | 21 | 0.15 | 0.16 | 0.13 | 36 | 24 | 16 | 0.12 | 0.16 | 0.10 |
| Larynx | 9 | 158 | 0.51 | 34 | 32 | 2 | 0.11 | 0.21 | 0.01 | 18 | 16 | 2 | 0.06 | 0.11 | 0.01 |
| Trachea | 10 | 39 | 0.13 | 11 | 9 | 2 | 0.04 | 0.06 | 0.01 | 9 | 8 | 1 | 0.03 | 0.05 | 0.01 |
| Lung | 11 | 927 | 2.99 | 435 | 358 | 77 | 1.40 | 2.35 | 0.49 | 382 | 316 | 66 | 1.23 | 2.08 | 0.42 |
| Other in the respiratory system | 12 | 71 | 0.23 | 19 | 11 | 8 | 0.06 | 0.07 | 0.05 | 13 | 7 | 6 | 0.04 | 0.05 | 0.04 |
| Bone and articular cartilage | 13 | 259 | 0.84 | 50 | 22 | 28 | 0.16 | 0.14 | 0.18 | 36 | 16 | 20 | 0.12 | 0.11 | 0.13 |
| Skin | 14 | 317 | 1.02 | 43 | 21 | 22 | 0.14 | 0.14 | 0.14 | 24 | 14 | 10 | 0.08 | 0.09 | 0.06 |
| Mesothelial and soft tissue | 15 | 175 | 0.56 | 39 | 18 | 21 | 0.13 | 0.12 | 0.13 | 17 | 8 | 9 | 0.05 | 0.05 | 0.06 |
| Breast | 16 | 1495 | 4.83 | 246 | 0 | 246 | 0.79 | 0.00 | 1.56 | 76 | 1 | 75 | 0.25 | 0.01 | 0.48 |
| Cervix uteri | 17 | 3704 | 11.96 | 356 | 0 | 356 | 1.15 | 0.00 | 2.26 | 127 | 0 | 127 | 0.41 | 0.00 | 0.81 |
| Uterus | 18 | 190 | 0.61 | 28 | 0 | 28 | 0.09 | 0.00 | 0.18 | 6 | 0 | 6 | 0.02 | 0.00 | 0.04 |
| Ovary | 19 | 520 | 1.68 | 91 | 0 | 91 | 0.29 | 0.00 | 0.58 | 55 | 0 | 55 | 0.18 | 0.00 | 0.35 |
| Other female genital organs | 20 | 120 | 0.39 | 10 | 0 | 10 | 0.03 | 0.00 | 0.06 | 7 | 0 | 7 | 0.02 | 0.00 | 0.04 |
| Male genital organs | 21 | 285 | 0.92 | 47 | 47 | 0 | 0.15 | 0.31 | 0.00 | 27 | 27 | 0 | 0.09 | 0.18 | 0.00 |
| Cyst | 22 | 203 | 0.66 | 37 | 29 | 8 | 0.12 | 0.19 | 0.05 | 25 | 19 | 6 | 0.08 | 0.12 | 0.04 |
| Urology, nephrology | 23 | 810 | 2.61 | 161 | 72 | 89 | 0.52 | 0.47 | 0.56 | 50 | 28 | 22 | 0.16 | 0.18 | 0.14 |
| Other urinary organs | 24 | 46 | 0.15 | 2 | 1 | 1 | 0.01 | 0.01 | 0.01 | 3 | 1 | 2 | 0.01 | 0.01 | 0.01 |
| Ophtalmology | 25 | 75 | 0.24 | 10 | 4 | 6 | 0.03 | 0.03 | 0.04 | 3 | 1 | 2 | 0.01 | 0.01 | 0.01 |
| Brain | 26 | 334 | 1.08 | 74 | 39 | 35 | 0.24 | 0.26 | 0.22 | 57 | 29 | 28 | 0.18 | 0.19 | 0.18 |
| Luekaemia | 27 | 248 | 0.80 | 87 | 58 | 29 | 0.28 | 0.38 | 0.18 | 50 | 30 | 20 | 0.16 | 0.20 | 0.13 |
| Other | 28 | 586 | 1.89 | 165 | 87 | 78 | 0.53 | 0.57 | 0.49 | 98 | 58 | 40 | 0.32 | 0.38 | 0.25 |
| **Total** | **29** | **22621** | **73.03** | **6073** | **3078** | **2995** | **19.61** | **20.25** | **18.99** | **4004** | **2266** | **1742** | **12.93** | **14.90** | **11.04** |

* Source: National Center for Cancer, 2017 report.

## PREVALENCE, INCIDENCE AND DEATHS OF MALIGNANT NEOPLASMS, 2017 ( BY PROVINCE)

| № | Province and city | Prevalence | | Incidence | | | | | | Deaths | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Abs.number | | | per 10 000 population | | | Abs.number | | | per 10 000 population | | |
| | | Abs.number | per 10 000 pop | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Arkhangai | 639 | 67.8 | 169 | 94 | 75 | 17.9 | 19.9 | 16.0 | 132 | 70 | 62 | 14.0 | 14.8 | 13.2 |
| 2 | Bayan-Ulgii | 397 | 39.5 | 146 | 71 | 75 | 14.5 | 14.2 | 14.9 | 78 | 37 | 41 | 7.8 | 7.4 | 8.1 |
| 3 | Bayankhongor | 418 | 48.4 | 120 | 61 | 59 | 13.9 | 14.3 | 13.5 | 102 | 56 | 46 | 11.8 | 13.2 | 10.5 |
| 4 | Bulgan | 538 | 87.4 | 181 | 102 | 79 | 29.4 | 32.6 | 26.1 | 112 | 61 | 51 | 18.2 | 19.5 | 16.8 |
| 5 | Govi-Altai | 521 | 91.3 | 155 | 84 | 71 | 27.2 | 29.6 | 24.8 | 95 | 56 | 39 | 16.6 | 19.7 | 13.6 |
| 6 | Govisumber | 122 | 71.1 | 42 | 25 | 17 | 24.5 | 29.1 | 19.8 | 36 | 19 | 17 | 21.0 | 22.1 | 19.8 |
| 7 | Darkhan-Uul | 900 | 89.3 | 265 | 141 | 124 | 26.3 | 28.5 | 24.1 | 170 | 96 | 74 | 16.9 | 19.4 | 14.4 |
| 8 | Dornogovi | 446 | 66.2 | 134 | 67 | 67 | 19.9 | 19.9 | 19.9 | 97 | 59 | 38 | 14.4 | 17.5 | 11.3 |
| 9 | Dornod | 650 | 82.7 | 204 | 113 | 91 | 25.9 | 28.6 | 23.2 | 153 | 91 | 62 | 19.5 | 23.1 | 15.8 |
| 10 | Dundgovi | 367 | 79.9 | 114 | 53 | 61 | 24.8 | 22.9 | 26.7 | 72 | 39 | 33 | 15.7 | 16.9 | 14.4 |
| 11 | Zavkhan | 664 | 92.9 | 209 | 106 | 103 | 29.2 | 29.7 | 28.8 | 117 | 78 | 39 | 16.4 | 21.9 | 10.9 |
| 12 | Orkhon | 1033 | 101.5 | 369 | 162 | 207 | 36.3 | 32.5 | 39.9 | 178 | 107 | 71 | 17.5 | 21.4 | 13.7 |
| 13 | Uvurkhangai | 823 | 71.7 | 285 | 138 | 147 | 24.8 | 24.1 | 25.5 | 162 | 79 | 83 | 14.1 | 13.8 | 14.4 |
| 14 | Umnugovi | 419 | 64.8 | 79 | 40 | 39 | 12.2 | 12.3 | 12.1 | 67 | 36 | 31 | 10.4 | 11.1 | 9.6 |
| 15 | Sukhbaatar | 445 | 73.3 | 134 | 68 | 66 | 22.1 | 22.2 | 21.9 | 107 | 56 | 51 | 17.6 | 18.3 | 17.0 |
| 16 | Selenge | 946 | 87.8 | 248 | 124 | 124 | 23.0 | 22.8 | 23.3 | 139 | 82 | 57 | 12.9 | 15.0 | 10.7 |
| 17 | Tuv | 858 | 91.6 | 262 | 144 | 118 | 28.0 | 29.9 | 25.9 | 157 | 99 | 58 | 16.8 | 20.6 | 12.7 |
| 18 | Uvs | 580 | 70.7 | 167 | 104 | 63 | 20.4 | 25.2 | 15.5 | 140 | 90 | 50 | 17.1 | 21.8 | 12.3 |
| 19 | Khovd | 633 | 73.3 | 190 | 95 | 95 | 22.0 | 22.0 | 22.0 | 158 | 107 | 51 | 18.3 | 24.8 | 11.8 |
| 20 | Khuvsgul | 936 | 71.4 | 236 | 121 | 115 | 18.0 | 18.6 | 17.4 | 206 | 117 | 89 | 15.7 | 18.0 | 13.5 |
| 21 | Khentii | 554 | 74.1 | 168 | 89 | 79 | 22.5 | 23.5 | 21.4 | 122 | 68 | 54 | 16.3 | 18.0 | 14.6 |
| **22** | **Province average** | **12889** | **75.9** | **3877** | **2002** | **1875** | **22.8** | **23.6** | **22.1** | **2600** | **1503** | **1097** | **15.3** | **17.7** | **12.9** |
| 23 | Ulaanbaatar | 9732 | 69.6 | 2196 | 1076 | 1120 | 15.7 | 16.0 | 15.4 | 1404 | 759 | 645 | 10.0 | 11.3 | 8.9 |
| **24** | **National average** | **22621** | **73.0** | **6073** | **3078** | **2995** | **19.6** | **20.2** | **19.0** | **4004** | **2262** | **1742** | **12.9** | **14.9** | **11.0** |

* Source: National Center for Cancer, 2017 report.

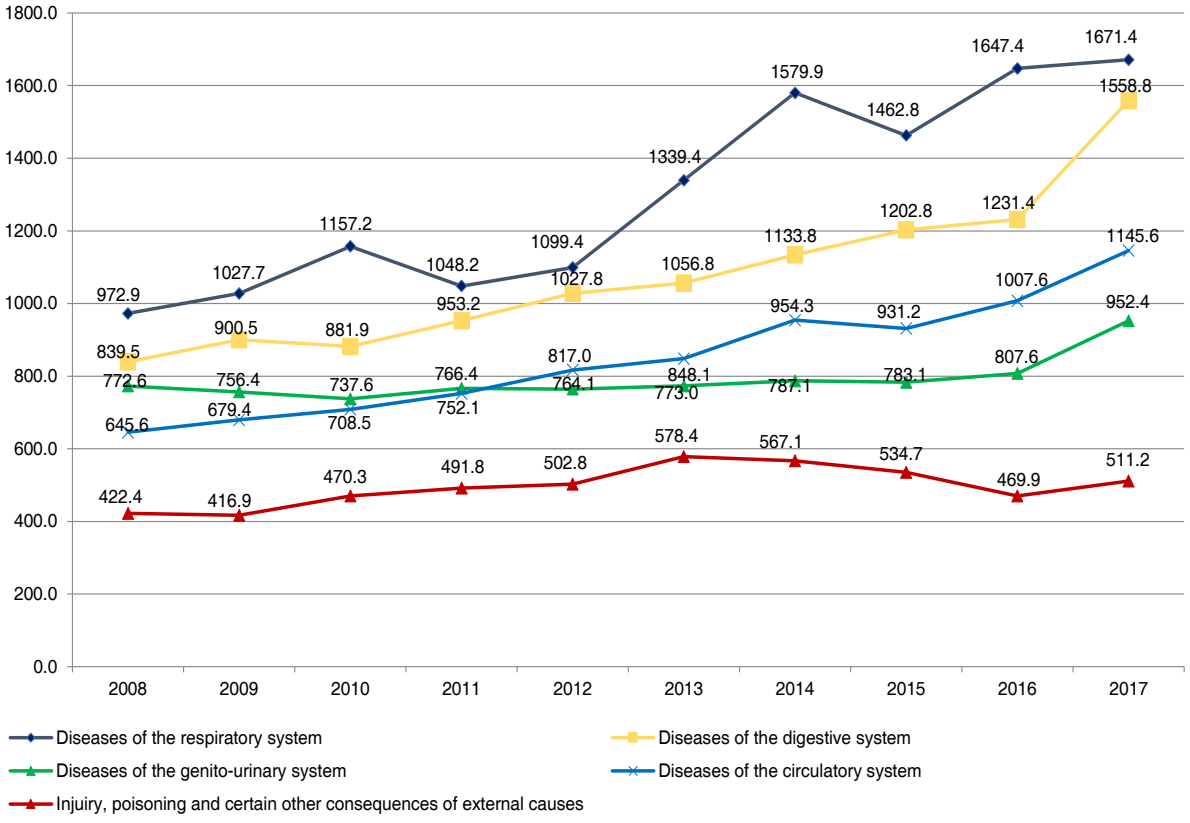
## MAIN FIVE CAUSES OF THE OUTPATIENT MORBIDITY, 2017

| № | Province and city | 10 000 хүн амд | | | | |
|---|---|---|---|---|---|---|
| | | 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 |
| 1 | Arkhangai | 2389.62 | 1697.38 | 1475.12 | 1765.09 | 210.26 |
| 2 | Bayan-Ulgii | 1003.90 | 766.01 | 728.69 | 780.34 | 115.36 |
| 3 | Bayankhongor | 2115.60 | 1730.03 | 1319.77 | 1592.35 | 147.18 |
| 4 | Bulgan | 2188.90 | 2219.10 | 1347.50 | 1705.69 | 179.91 |
| 5 | Govi-Altai | 1415.35 | 1281.13 | 978.15 | 1001.10 | 313.49 |
| 6 | Govisumber | 2129.15 | 678.65 | 612.24 | 549.33 | 604.67 |
| 7 | Darkhan-Uul | 2165.96 | 1615.27 | 708.66 | 1116.75 | 327.85 |
| 8 | Dornogovi | 3471.27 | 2565.17 | 1217.97 | 1372.57 | 476.42 |
| 9 | Dornod | 1408.58 | 2063.72 | 688.08 | 660.99 | 262.72 |
| 10 | Dundgovi | 1423.32 | 1067.27 | 680.10 | 790.44 | 216.33 |
| 11 | Zavkhan | 1551.67 | 2146.67 | 1102.44 | 1111.81 | 204.40 |
| 12 | Orkhon | 1821.63 | 638.19 | 543.37 | 592.60 | 214.01 |
| 13 | Uvurkhangai | 1353.34 | 1595.59 | 1008.82 | 937.30 | 261.77 |
| 14 | Umnugovi | 2907.37 | 2029.60 | 889.67 | 1233.51 | 274.08 |
| 15 | Sukhbaatar | 2167.03 | 1168.97 | 763.38 | 843.15 | 268.80 |
| 16 | Selenge | 1181.83 | 598.20 | 706.17 | 796.68 | 165.05 |
| 17 | Tuv | 2119.34 | 1777.74 | 968.10 | 1467.96 | 148.32 |
| 18 | Uvs | 1864.61 | 1313.20 | 1005.12 | 1240.02 | 206.85 |
| 19 | Khovd | 916.91 | 1561.54 | 812.33 | 1195.10 | 132.96 |
| 20 | Khuvsgul | 1563.43 | 1496.97 | 865.61 | 1390.37 | 164.97 |
| 21 | Khentii | 1706.91 | 1121.59 | 650.82 | 1214.62 | 272.14 |
| **22** | **Province average** | **1796.08** | **1478.84** | **912.22** | **1134.28** | **224.77** |
| 23 | Ulaanbaatar | 1520.05 | 1655.77 | 1001.21 | 1159.32 | 858.87 |
| **24** | **National average** | **1671.41** | **1558.75** | **952.41** | **1145.59** | **511.17** |

## OUTPATIENT AND INPATIENT MORBIDITY, 2017

| № | ICD-10 | Outpatient morbidity | | | Inpatient morbidity | | |
|---|---|---|---|---|---|---|---|
| | | Incidence | Per 10 000 population | Percentage | Incidence | Per 10 000 population | Percentage |
| 1 | Diseases of the respiratory system | 517745 | 1671.41 | 17.9 | 133774 | 431.86 | 15.7 |
| 2 | Diseases of the digestive system | 482849 | 1558.75 | 16.7 | 103199 | 333.15 | 12.1 |
| 3 | Diseases of the genito-urinary system | 295025 | 952.41 | 10.2 | 97990 | 316.34 | 11.5 |
| 4 | Diseases of the circulatory system | 354865 | 1145.59 | 12.2 | 127537 | 411.72 | 14.9 |
| 5 | Injuiry, poisoning and certain other consequences of external causes | 158342 | 511.17 | 5.5 | 33505 | 108.16 | 3.9 |
| 6 | Certain infectious and parasitic diseases | 67432 | 217.69 | 2.3 | 20600 | 66.50 | 2.4 |
| 7 | Diseases of the nervous system | 181225 | 585.04 | 6.3 | 65383 | 211.07 | 7.7 |
| 8 | Diseases of the musculoskeletal system and connective tissue | 119536 | 385.89 | 4.1 | 40570 | 130.97 | 4.8 |
| 9 | Pregnancy, childbirth and the puerperium | 128525 | 414.91 | 4.4 | 122511 | 395.50 | 14.3 |
| 10 | Other | 593907 | 1917.28 | 20.5 | 108769 | 351.13 | 12.7 |
| **11** | **Total** | **2899451** | **9360.1** | **100.0** | **853838** | **2756.40** | **100.0** |

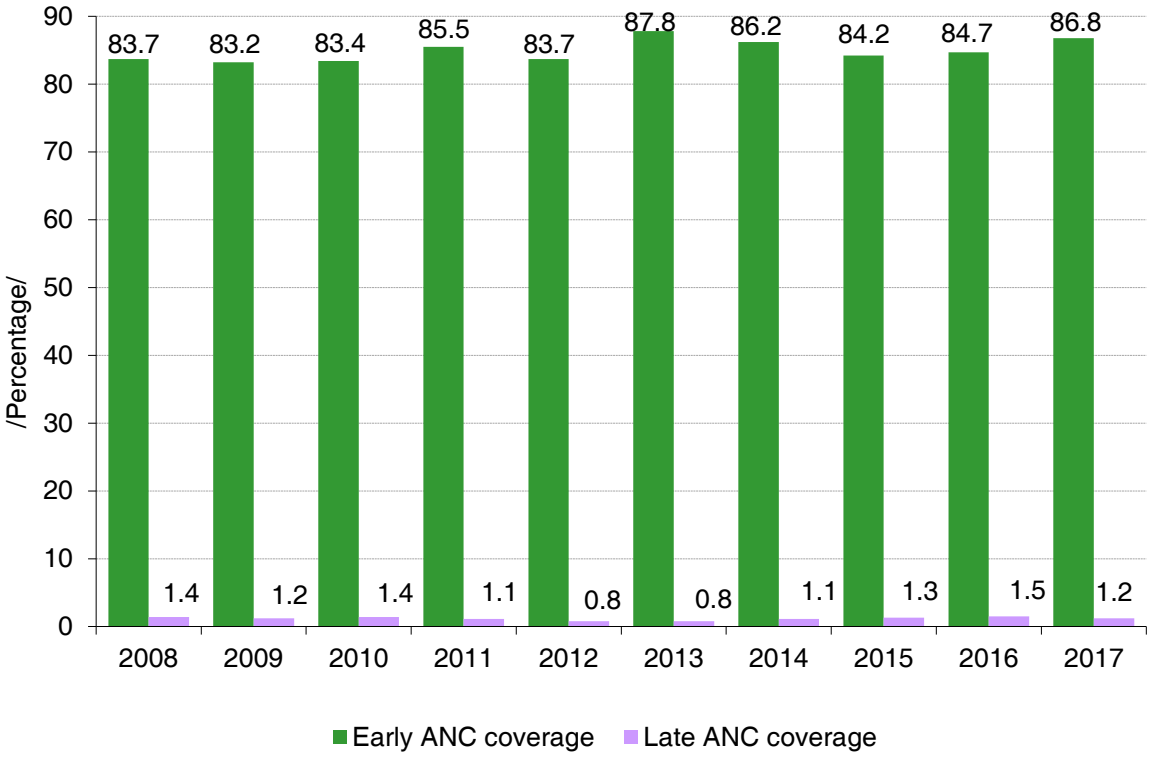
### Main five Causes of Morbidity /per 10 000 population/, 2008-2017



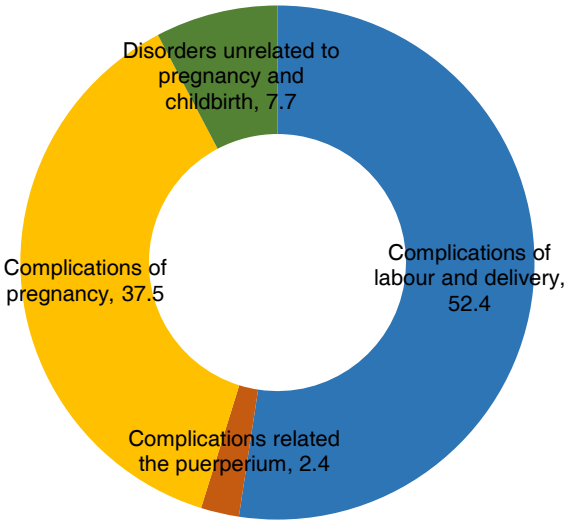
## ANTENATAL HEALTH CARE COVERAGE, 2017

| № | Province and city | ANC coverage | | | Percentage of pregnant women who attented to ANC 6 and more times | Percentage of pregnant women with anemia | Percentage of teenage pregnancy | Percentage of pregnancies above 35 age |
|---|---|---|---|---|---|---|---|---|
| | | Early ANC coverage | 4-6 months | Late ANC coverage | | | | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | Arkhangai | 90.7 | 8.6 | 0.8 | 88.9 | 6.8 | 6.3 | 15.3 |
| 2 | Bayan-Ulgii | 81.9 | 15.8 | 2.3 | 64.6 | 10.6 | 1.4 | 15.8 |
| 3 | Bayankhongor | 81.8 | 16.9 | 1.3 | 71.2 | 2.9 | 6.9 | 13.3 |
| 4 | Bulgan | 87.0 | 11.5 | 1.5 | 80.4 | 0.7 | 4.3 | 20.4 |
| 5 | Govi-Altai | 86.9 | 12.8 | 0.3 | 63.5 | 2.4 | 4.5 | 14.9 |
| 6 | Govisumber | 88.1 | 10.7 | 1.2 | 91.8 | 0.7 | 7.4 | 18.1 |
| 7 | Darkhan-Uul | 82.4 | 16.3 | 1.3 | 83.7 | 6.6 | 5.8 | 16.1 |
| 8 | Dornogovi | 86.4 | 12.2 | 1.4 | 80.7 | 4.9 | 7.1 | 18.1 |
| 9 | Dornod | 90.9 | 8.6 | 0.4 | 86.6 | 5.2 | 3.7 | 19.7 |
| 10 | Dundgovi | 88.5 | 10.8 | 0.6 | 84.5 | 0.2 | 5.8 | 15.7 |
| 11 | Zavkhan | 84.0 | 14.9 | 1.1 | 78.0 | 4.7 | 3.1 | 16.2 |
| 12 | Orkhon | 90.1 | 9.5 | 0.4 | 69.9 | 5.7 | 3.1 | 18.5 |
| 13 | Uvurkhangai | 88.7 | 10.4 | 0.9 | 93.5 | 5.8 | 6.8 | 14.2 |
| 14 | Umnugovi | 87.2 | 11.9 | 0.9 | 95.4 | 1.1 | 5.0 | 14.4 |
| 15 | Sukhbaatar | 85.0 | 14.7 | 0.3 | 94.5 | 2.8 | 3.7 | 19.5 |
| 16 | Selenge | 82.0 | 16.6 | 1.4 | 72.5 | 2.3 | 4.6 | 18.0 |
| 17 | Tuv | 86.1 | 13.1 | 0.8 | 62.3 | 2.4 | 3.7 | 17.0 |
| 18 | Uvs | 93.7 | 5.6 | 0.7 | 76.6 | 4.1 | 2.5 | 18.4 |
| 19 | Khovd | 88.9 | 10.2 | 1.0 | 45.7 | 8.0 | 3.9 | 14.7 |
| 20 | Khuvsgul | 84.4 | 15.0 | 0.6 | 95.0 | 2.9 | 5.3 | 15.1 |
| 21 | Khentii | 89.0 | 10.5 | 0.4 | 77.3 | 2.3 | 7.6 | 17.1 |
| **22** | **Province average** | **86.6** | **12.5** | **1.0** | **77.2** | **4.5** | **4.7** | **16.4** |
| **23** | Ulaanbaatar | 87.1 | 11.6 | 1.3 | 94.3 | 2.5 | 4.2 | 17.3 |
| **24** | **National average** | **86.8** | **12.0** | **1.2** | **85.8** | **3.5** | **4.5** | **16.9** |

## Antenatal Care Coverage /2008-2017/

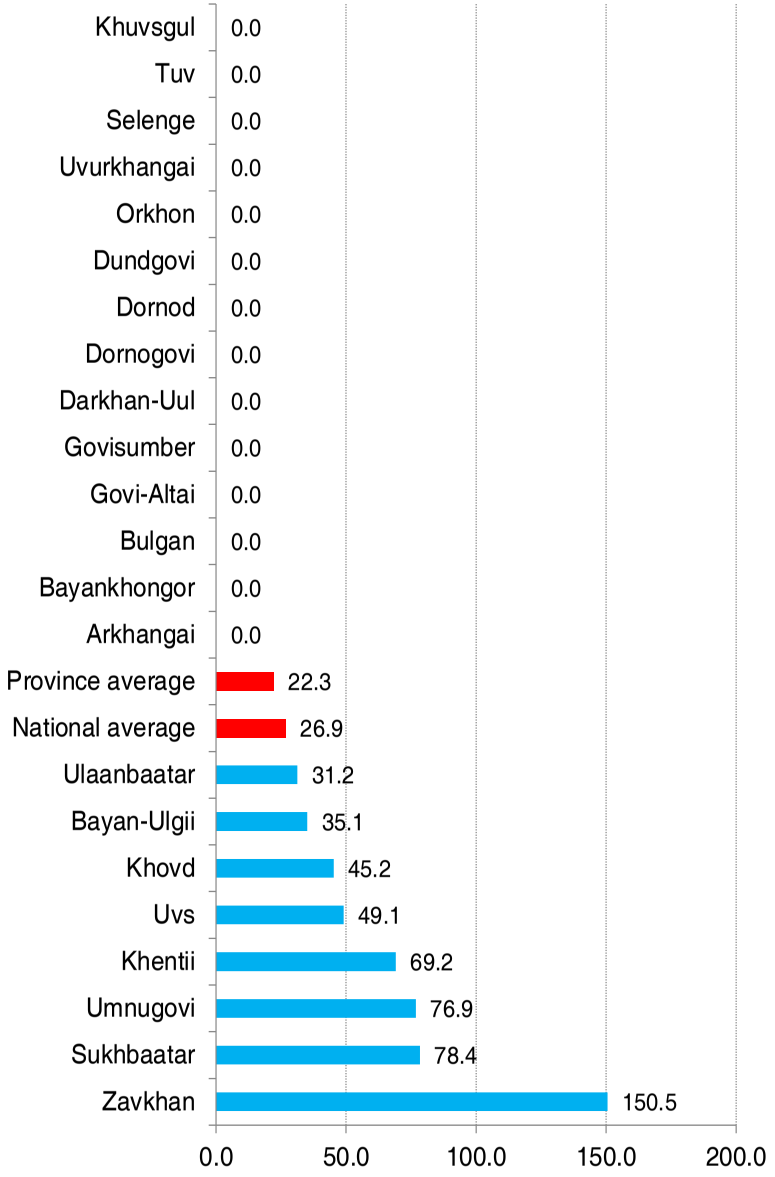



## Complications of Pregnancy, Delivery and Puerperium, 2017

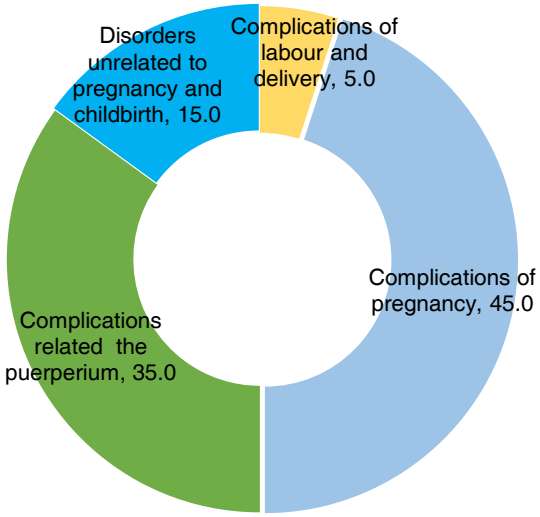


# MATERNAL MORTALITY RATE /PER 100 000 LIVE BIRTHS/, 2017

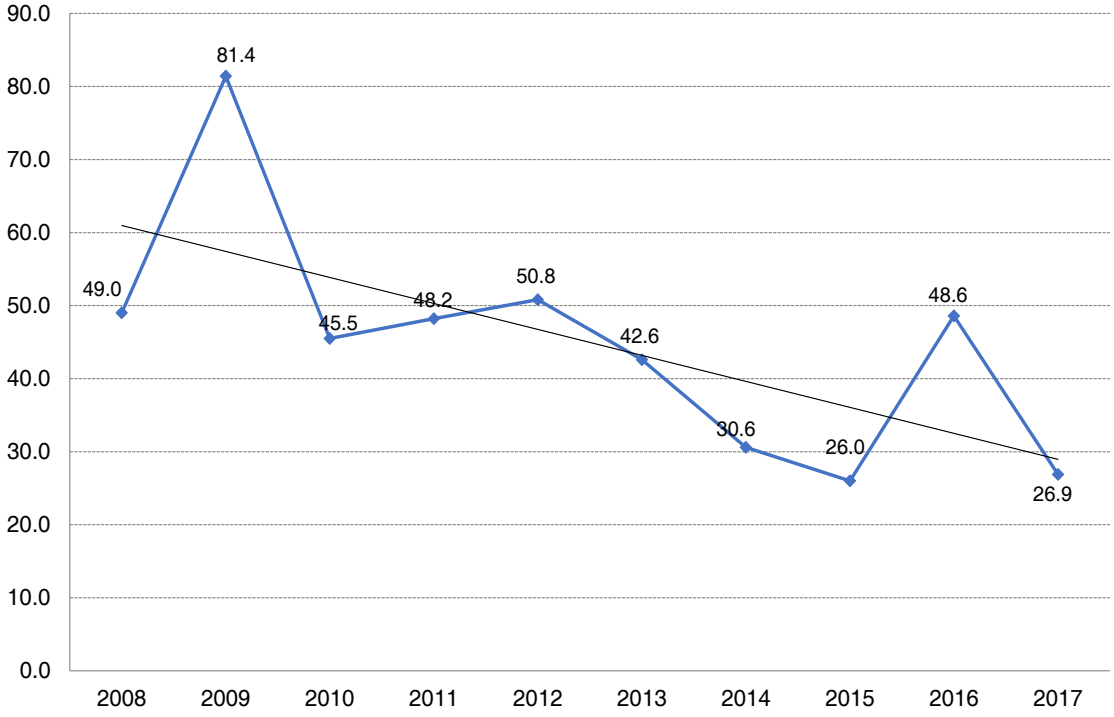
| № | Province and city | Total | per 100 000 live births | | |
|---|---|---|---|---|---|
| | | | Regional Treatment and Diagnostic centers /RTDCs/ | Province and city general hospital | Rural hospitals |
| A | B | 1 | 2 | 3 | 4 |
| 1 | Arkhangai | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | Bayan-Ulgii | 35.1 | 0.0 | 43.3 | 0.0 |
| 3 | Bayankhongor | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | Bulgan | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | Govi-Altai | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | Govisumber | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | Darkhan-Uul | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | Dornogovi | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | Dornod | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | Dundgovi | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | Zavkhan | 150.5 | 0.0 | 128.0 | 182.5 |
| 12 | Orkhon | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | Uvurkhangai | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | Umnugovi | 76.9 | 94.3 | 0.0 | 0.0 |
| 15 | Sukhbaatar | 78.4 | 0.0 | 82.2 | 0.0 |
| 16 | Selenge | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | Tuv | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | Uvs | 49.1 | 0.0 | 0.0 | 362.3 |
| 19 | Khovd | 45.2 | 53.9 | 0.0 | 0.0 |
| 20 | Khuvsgul | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | Khentii | 69.2 | 0.0 | 0.0 | 344.8 |
| **22** | **Province average** | **22.3** | **21.9** | **14.5** | **49.2** |
| **23** | Ulaanbaatar | 31.2 | 0.0 | 0.0 | 0.0 |
| **24** | **National average** | **26.9** | **21.9** | **19.3** | **49.2** |



## MATERNAL MORTALITY BY CAUSES, 2017



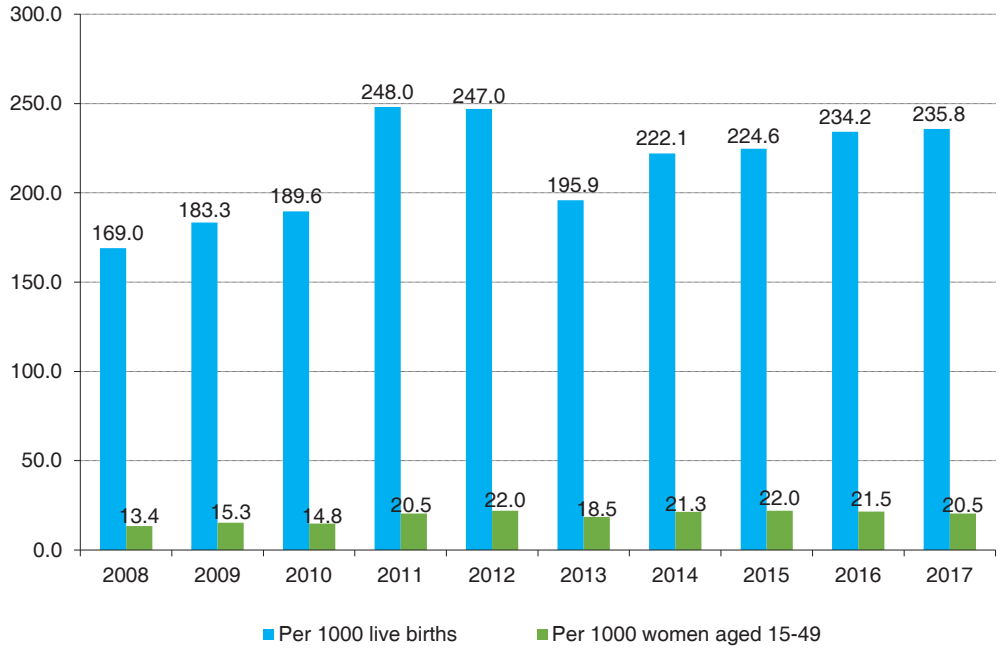

## MATERNAL MORTALITY RATE, PER 100 000 LIVE BIRTHS /2008-2017/



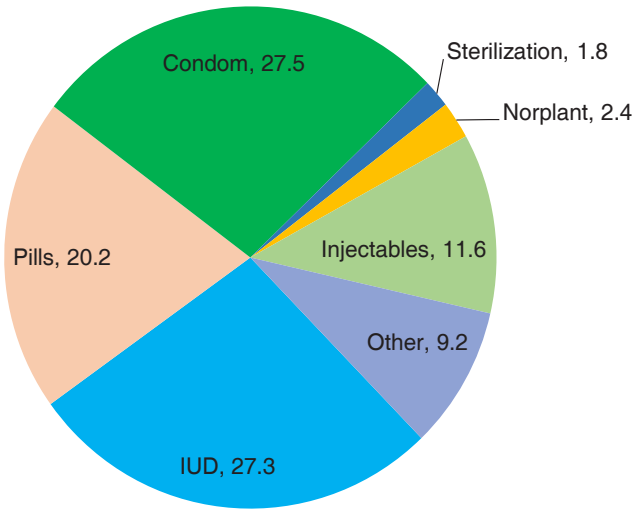
## CONTRACEPTIVE PREVALENCE RATE /CPR/, 2017

| № | Province, city | Percent of women in the RAG using contraceptives | Out of them | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Pills | Injectables | Norplant | Condom | IUD | Sterilization |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | Arkhangai | 44.6 | 20.7 | 8.9 | 4.0 | 20.2 | 38.6 | 3.0 |
| 2 | Bayan-Ulgii | 43.3 | 22.4 | 18.2 | 0.7 | 18.4 | 37.8 | 0.4 |
| 3 | Bayankhongor | 57.3 | 10.3 | 9.8 | 1.7 | 8.0 | 63.4 | 4.7 |
| 4 | Bulgan | 34.8 | 16.1 | 14.9 | 2.4 | 16.5 | 41.0 | 2.3 |
| 5 | Govi-Altai | 49.6 | 17.2 | 19.4 | 3.1 | 9.6 | 46.7 | 1.9 |
| 6 | Govisumber | 49.1 | 45.5 | 22.5 | 3.6 | 9.1 | 12.7 | 1.2 |
| 7 | Darkhan-Uul | 61.6 | 35.9 | 17.1 | 1.8 | 20.3 | 20.5 | 0.4 |
| 8 | Dornogovi | 57.7 | 28.7 | 11.6 | 4.0 | 21.5 | 22.8 | 2.2 |
| 9 | Dornod | 63.4 | 17.5 | 12.1 | 2.9 | 12.1 | 39.7 | 3.8 |
| 10 | Dundgovi | 48.7 | 19.3 | 16.6 | 3.1 | 23.2 | 32.7 | 1.8 |
| 11 | Zavkhan | 61.5 | 20.6 | 18.0 | 1.2 | 20.3 | 31.0 | 1.2 |
| 12 | Orkhon | 55.2 | 19.2 | 14.0 | 1.2 | 36.1 | 27.6 | 1.6 |
| 13 | Uvurkhangai | 51.4 | 22.4 | 17.6 | 1.9 | 13.9 | 36.2 | 3.8 |
| 14 | Umnugovi | 68.0 | 30.6 | 19.3 | 3.1 | 19.7 | 23.1 | 3.7 |
| 15 | Sukhbaatar | 55.8 | 8.5 | 15.4 | 1.6 | 4.3 | 62.5 | 7.6 |
| 16 | Selenge | 61.5 | 21.8 | 12.7 | 5.2 | 32.5 | 24.6 | 2.2 |
| 17 | Tuv | 50.0 | 25.9 | 14.0 | 0.8 | 22.6 | 36.1 | 0.1 |
| 18 | Uvs | 35.4 | 22.8 | 19.0 | 4.5 | 18.0 | 20.1 | 2.5 |
| 19 | Khovd | 36.9 | 22.5 | 20.7 | 2.5 | 18.4 | 26.9 | 4.8 |
| 20 | Khuvsgul | 57.5 | 15.0 | 15.4 | 2.0 | 15.6 | 41.9 | 4.9 |
| 21 | Khentii | 29.9 | 22.7 | 14.4 | 1.0 | 13.5 | 40.0 | 3.0 |
| **22** | **Province average** | **51.6** | **21.5** | **15.3** | **2.4** | **18.8** | **35.0** | **2.8** |
| **23** | Ulaanbaatar | 54.9 | 18.9 | 7.8 | 2.4 | 36.7 | 19.4 | 0.8 |
| **24** | **National average** | **53.2** | **20.2** | **11.6** | **2.4** | **27.5** | **27.3** | **1.8** |

## Abortion /2008-2017/




## Contraceptive Methods, 2017



# ABORTION, 2017

| № | Province, city | Abortion | | Total | Abortion by age | | | | Late abortion | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Per 1 000 women aged 15-49 | Per 1 000 live births | | Under 20 age | | avobe 35 age | | Abs number | % |
| | | | | | Abs number | % | Abs. number | % | | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Arkhangai | 9.3 | 123.0 | 234 | 5 | 2.1 | 81 | 34.6 | 26 | 13.7 |
| 2 | Bayan-Ulgii | 12.8 | 120.0 | 342 | 2 | 0.6 | 134 | 39.2 | 1 | 0.4 |
| 3 | Bayankhongor | 17.3 | 205.9 | 412 | 46 | 11.2 | 101 | 24.5 | 24 | 12.0 |
| 4 | Bulgan | 1.6 | 29.9 | 25 | 2 | 8.0 | 6 | 24.0 | 16 | 19.2 |
| 5 | Govi-Altai | 2.7 | 34.4 | 42 | 8 | 19.0 | 13 | 31.0 | 10 | 8.2 |
| 6 | Govisumber | 8.3 | 90.9 | 38 | 0 | 0.0 | 16 | 42.1 | 0 | 0.0 |
| 7 | Darkhan-Uul | 14.7 | 177.9 | 402 | 12 | 3.0 | 138 | 34.3 | 7 | 3.1 |
| 8 | Dornogovi | 22.1 | 304.9 | 404 | 40 | 9.9 | 88 | 21.8 | 9 | 6.8 |
| 9 | Dornod | 15.6 | 164.4 | 318 | 18 | 5.7 | 109 | 34.3 | 27 | 14.0 |
| 10 | Dundgovi | 4.7 | 64.7 | 57 | 15 | 26.3 | 12 | 21.1 | 4 | 4.5 |
| 11 | Zavkhan | 2.9 | 41.4 | 55 | 1 | 1.8 | 18 | 32.7 | 2 | 1.5 |
| 12 | Orkhon | 22.7 | 242.7 | 626 | 38 | 6.1 | 150 | 24.0 | 14 | 5.4 |
| 13 | Uvurkhangai | 6.6 | 83.6 | 203 | 25 | 12.3 | 60 | 29.6 | 13 | 5.4 |
| 14 | Umnugovi | 34.5 | 469.6 | 611 | 37 | 6.1 | 155 | 25.4 | 21 | 16.1 |
| 15 | Sukhbaatar | 4.7 | 59.6 | 76 | 10 | 13.2 | 24 | 31.6 | 0 | 0.0 |
| 16 | Selenge | 0.8 | 13.4 | 23 | 1 | 4.3 | 5 | 21.7 | 1 | 0.6 |
| 17 | Tuv | 2.7 | 51.8 | 62 | 6 | 9.7 | 19 | 30.6 | 18 | 15.0 |
| 18 | Uvs | 28.6 | 299.6 | 610 | 29 | 4.8 | 189 | 31.0 | 22 | 10.8 |
| 19 | Khovd | 3.3 | 33.9 | 75 | 5 | 6.7 | 32 | 42.7 | 6 | 2.7 |
| 20 | Khuvsgul | 1.3 | 15.9 | 44 | 19 | 43.2 | 12 | 27.3 | 26 | 9.4 |
| 21 | Khentii | 10.8 | 145.2 | 210 | 20 | 9.5 | 58 | 27.6 | 13 | 9.0 |
| **22** | **Province average** | **10.8** | **135.5** | **4869** | **339** | **7.0** | **1420** | **29.2** | **260** | **7.2** |
| 23 | Ulaanbaatar | 31.3 | 329.7 | 12661 | 582 | 4.6 | 2913 | 23.0 | 518 | 13.5 |
| **24** | **National average** | **20.5** | **235.8** | **17530** | **921** | **5.3** | **4333** | **24.7** | **778** | **10.5** |

# MATERNAL CARE DURING DELIVERY OR CHILDBIRTH (BY PROVINCE), 2017

| № | Province and city | Delivery by percent | | | | | | Deliveries by nontrained personnel | Percent of deliveries under 20 age | Percent of deliveries avobe 35 age | Percent of newborn infants weighing at below 2500 gr at birth |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Province and city hospital | Private hospital | Rural general hospital | Soum hospital | Feldsher post | At home | | | | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Arkhangai | 76.9 | 0.0 | 0.0 | 22.9 | 0.0 | 0.2 | 0.1 | 5.3 | 12.0 | 4.6 |
| 2 | Bayan-Ulgii | 80.7 | 0.0 | 0.0 | 18.9 | 0.0 | 0.4 | 0.0 | 1.0 | 14.2 | 5.1 |
| 3 | Bayankhongor | 88.4 | 0.0 | 0.0 | 11.1 | 0.0 | 0.5 | 0.2 | 7.1 | 12.3 | 5.0 |
| 4 | Bulgan | 76.8 | 0.0 | 0.0 | 22.5 | 0.0 | 0.6 | 0.4 | 6.5 | 17.5 | 6.0 |
| 5 | Govi-Altai | 91.0 | 0.0 | 0.0 | 8.8 | 0.0 | 0.2 | 0.0 | 5.0 | 13.2 | 6.1 |
| 6 | Govisumber | 99.3 | 0.0 | 0.0 | 0.5 | 0.0 | 0.2 | 0.2 | 5.8 | 15.6 | 1.9 |
| 7 | Darkhan-Uul | 99.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.6 | 0.1 | 5.1 | 16.4 | 3.5 |
| 8 | Dornogovi | 77.8 | 0.0 | 20.6 | 1.4 | 0.0 | 0.2 | 0.2 | 6.1 | 14.8 | 3.8 |
| 9 | Dornod | 96.3 | 0.0 | 0.0 | 3.0 | 0.0 | 0.7 | 0.1 | 6.1 | 15.4 | 3.3 |
| 10 | Dundgovi | 89.1 | 0.0 | 0.0 | 10.5 | 0.0 | 0.5 | 0.2 | 6.3 | 12.5 | 4.1 |
| 11 | Zavkhan | 58.4 | 0.0 | 24.5 | 16.9 | 0.0 | 0.3 | 0.2 | 4.3 | 15.7 | 5.4 |
| 12 | Orkhon | 99.7 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | 4.1 | 16.1 | 3.0 |
| 13 | Uvurkhangai | 73.0 | 0.2 | 11.5 | 15.2 | 0.0 | 0.0 | 0.0 | 7.8 | 12.4 | 3.8 |
| 14 | Umnugovi | 81.0 | 0.0 | 0.0 | 18.5 | 0.0 | 0.5 | 0.1 | 6.2 | 12.2 | 5.0 |
| 15 | Sukhbaatar | 95.0 | 0.0 | 0.0 | 4.4 | 0.0 | 0.6 | 0.0 | 6.3 | 15.9 | 2.6 |
| 16 | Selenge | 53.1 | 0.0 | 35.7 | 11.0 | 0.0 | 0.2 | 0.0 | 6.6 | 15.4 | 3.0 |
| 17 | Tuv | 74.9 | 0.0 | 0.0 | 24.7 | 0.0 | 0.4 | 0.3 | 5.1 | 19.8 | 4.0 |
| 18 | Uvs | 86.1 | 0.0 | 0.0 | 13.5 | 0.0 | 0.5 | 0.2 | 2.9 | 14.7 | 4.0 |
| 19 | Khovd | 83.6 | 0.0 | 7.6 | 8.6 | 0.0 | 0.3 | 0.1 | 3.3 | 14.5 | 3.9 |
| 20 | Khuvsgul | 77.5 | 0.0 | 0.0 | 22.0 | 0.0 | 0.5 | 0.2 | 6.6 | 13.4 | 3.5 |
| 21 | Khentii | 79.8 | 0.0 | 9.9 | 10.1 | 0.0 | 0.3 | 0.0 | 7.5 | 16.6 | 4.3 |
| **22** | **Province average** | **82.7** | **0.0** | **5.0** | **11.9** | **0.0** | **0.4** | **0.1** | **5.3** | **14.6** | **4.1** |
| 23 | Ulaanbaatar | 95.1 | 4.5 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 4.4 | 17.4 | 5.1 |
| **24** | **National average** | **89.1** | **2.3** | **2.4** | **5.8** | **0.0** | **0.4** | **0.2** | **4.8** | **16.0** | **4.6** |

## IMMUNIZATION COVERAGE FOR INFANTS, 2017

| № | Province and city | Covered percentage | | | |
|---|---|---|---|---|---|
| | | Penta vaccine | POL 3 | Hepatitis A | DT |
| A | B | 1 | 2 | 3 | 4 |
| 1 | Arkhangai | 98.1% | 99.4% | 99.6% | 98.3% |
| 2 | Bayan-Ulgii | 99.8% | 99.8% | 99.0% | 99.8% |
| 3 | Bayankhongor | 99.1% | 98.0% | 98.0% | 87.8% |
| 4 | Bulgan | 99.6% | 93.7% | 93.9% | 96.2% |
| 5 | Govi-Altai | 99.8% | 99.5% | 99.5% | 99.3% |
| 6 | Govisumber | 98.4% | 99.5% | 99.5% | 99.1% |
| 7 | Darkhan-Uul | 99.7% | 99.6% | 99.4% | 98.3% |
| 8 | Dornogovi | 99.7% | 99.7% | 99.7% | 96.5% |
| 9 | Dornod | 99.9% | 99.8% | 99.8% | 96.5% |
| 10 | Dundgovi | 98.6% | 99.3% | 99.6% | 99.8% |
| 11 | Zavkhan | 99.7% | 99.5% | 99.5% | 100.0% |
| 12 | Orkhon | 98.8% | 98.3% | 98.4% | 87.9% |
| 13 | Uvurkhangai | 99.8% | 99.9% | 99.6% | 96.7% |
| 14 | Umnugovi | 98.9% | 99.6% | 99.6% | 96.5% |
| 15 | Sukhbaatar | 99.4% | 97.8% | 98.4% | 87.9% |
| 16 | Selenge | 99.7% | 99.4% | 99.3% | 97.0% |
| 17 | Tuv | 99.8% | 99.5% | 99.5% | 73.5% |
| 18 | Uvs | 99.4% | 99.4% | 99.4% | 95.5% |
| 19 | Khovd | 99.8% | 99.7% | 99.8% | 96.7% |
| 20 | Khuvsgul | 99.6% | 99.8% | 99.8% | 97.3% |
| 21 | Khentii | 98.3% | 97.3% | 97.3% | 100.0% |
| **22** | **Province average** | **99.4%** | **99.1%** | **99.1%** | **94.7%** |
| 23 | Ulaanbaatar | 99.8% | 96.9% | 97.4% | 92.6% |
| **24** | **National average** | **99.6%** | **98.1%** | **98.3%** | **93.9%** |

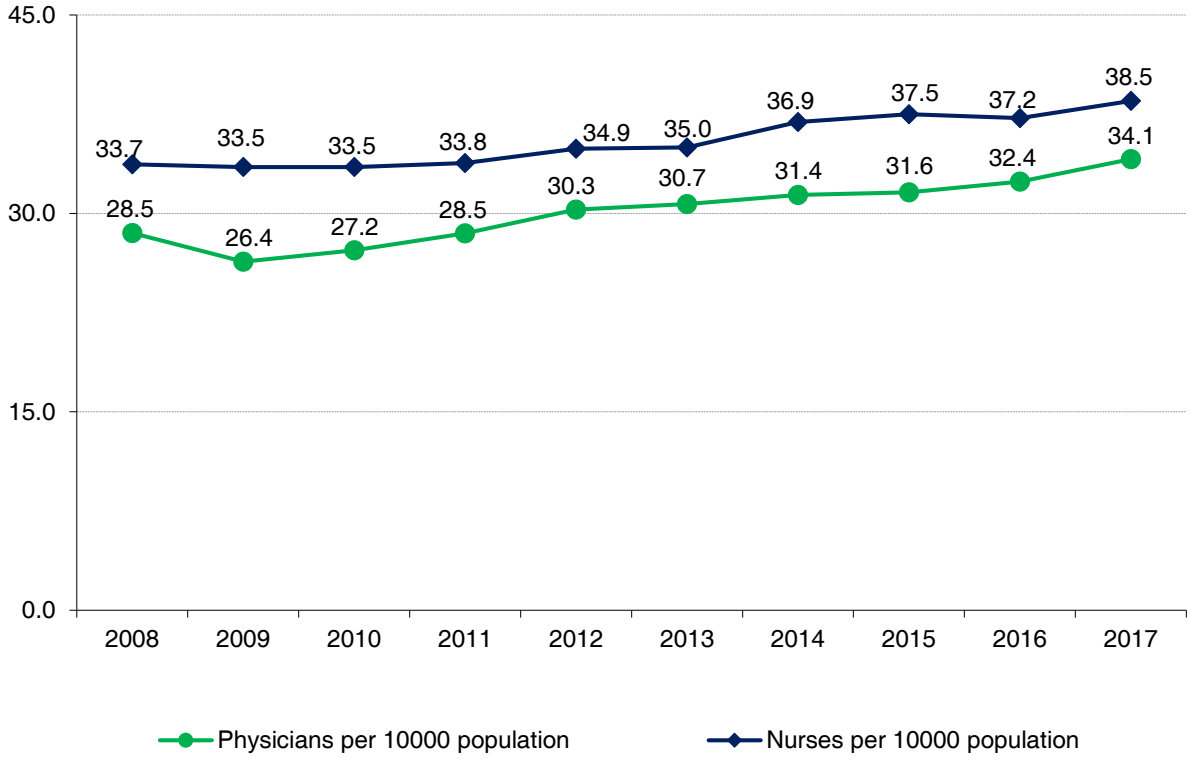
# HEALTH HUMAN RESOURCE, 2017

| Health care providers | | № | Health managers | Public health specialists | Statisticians | Pharmacists | Bio-medical expert | Total physicians | Human doctors | Traditional medical practitioners | Dentist | Total nurses | Diplom | Bakalavr | attendant | Medical professional and technical education, all other employees | Midwife | Bags feldshers | Other feldshers | Microscopist | Technician | Midlevel pharmacist | Other midlevel personnels | Information technology specialist | Medical Equipment Engineer | Other top deals | Other workers | All workers | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | Total | Female |
| A | | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| Primary health clinics | Total | 1 | 62 | 131 | 2 | 25 | 0 | 2043 | 1846 | 160 | 37 | 2755 | 1800 | 895 | 60 | 2432 | 371 | 956 | 585 | 261 | 3 | 167 | 89 | 0 | 0 | 237 | 2907 | 10592 | 8533 |
| | Feldsher's posts with beds | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 13 | 9 |
| | Physician's post with beds | 3 | 0 | 0 | 0 | 1 | 0 | 10 | 8 | 2 | 0 | 28 | 26 | 2 | 0 | 12 | 2 | 4 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 37 | 88 | 67 |
| | Family hospitals | 4 | 56 | 98 | 1 | 0 | 0 | 985 | 924 | 60 | 1 | 909 | 595 | 312 | 2 | 95 | 13 | 16 | 57 | 4 | 0 | 0 | 5 | 0 | 0 | 112 | 483 | 2738 | 2414 |
| | Village hospitals | 5 | 2 | 1 | 0 | 1 | 0 | 58 | 51 | 3 | 4 | 98 | 64 | 33 | 1 | 67 | 15 | 7 | 22 | 11 | 0 | 12 | 0 | 0 | 0 | 21 | 130 | 378 | 285 |
| | Soum health center | 6 | 3 | 28 | 1 | 19 | 0 | 755 | 669 | 76 | 10 | 1438 | 935 | 458 | 45 | 1893 | 282 | 780 | 416 | 208 | 2 | 134 | 71 | 0 | 0 | 61 | 1853 | 6050 | 4745 |
| | Intersoum hospitals | 7 | 1 | 4 | 0 | 4 | 0 | 235 | 194 | 19 | 22 | 278 | 178 | 88 | 12 | 361 | 59 | 145 | 85 | 38 | 1 | 20 | 13 | 0 | 0 | 43 | 399 | 1325 | 1013 |
| Secondary level hospitals | Total | 8 | 117 | 125 | 26 | 69 | 2 | 2098 | 1921 | 73 | 104 | 2870 | 1734 | 1078 | 58 | 1094 | 240 | 12 | 272 | 315 | 87 | 67 | 101 | 49 | 38 | 336 | 2063 | 8861 | 7520 |
| | District hospitals | 9 | 72 | 91 | 9 | 29 | 0 | 840 | 758 | 37 | 45 | 943 | 528 | 389 | 26 | 323 | 43 | 0 | 65 | 101 | 29 | 21 | 64 | 23 | 16 | 168 | 646 | 3151 | 2722 |
| | Rural general hospitals | 10 | 7 | 7 | 4 | 7 | 0 | 145 | 130 | 9 | 6 | 172 | 109 | 62 | 1 | 112 | 33 | 12 | 30 | 19 | 7 | 6 | 5 | 2 | 1 | 22 | 172 | 647 | 549 |
| | Province general hospitals | 11 | 38 | 27 | 13 | 33 | 2 | 1113 | 1033 | 27 | 53 | 1755 | 1097 | 627 | 31 | 659 | 164 | 0 | 177 | 195 | 51 | 40 | 32 | 24 | 21 | 146 | 1245 | 5063 | 4249 |
| Tertiary hospitals | Total | 12 | 65 | 107 | 22 | 101 | 27 | 1682 | 1597 | 42 | 43 | 2657 | 1228 | 1305 | 124 | 749 | 151 | 0 | 77 | 210 | 175 | 38 | 98 | 49 | 49 | 325 | 2042 | 7853 | 6525 |
| | Regional Treatment and Diagnostic centers | 13 | 13 | 11 | 6 | 17 | 1 | 457 | 427 | 10 | 20 | 714 | 413 | 280 | 21 | 260 | 86 | 0 | 39 | 73 | 32 | 12 | 18 | 11 | 9 | 45 | 419 | 1957 | 1671 |
| | Specialized Centers and Hospitals | 14 | 52 | 96 | 16 | 84 | 26 | 1225 | 1170 | 32 | 23 | 1943 | 815 | 1025 | 103 | 489 | 65 | 0 | 38 | 137 | 143 | 26 | 80 | 38 | 40 | 280 | 1623 | 5896 | 4854 |
| Maternity hospitals | | 15 | 11 | 15 | 3 | 9 | 0 | 192 | 190 | 2 | 0 | 207 | 81 | 96 | 30 | 203 | 149 | 0 | 16 | 18 | 2 | 3 | 15 | 5 | 4 | 45 | 220 | 911 | 806 |
| Rail sector hospitals | | 16 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 2 | 2 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 10 |
| Private hospitals with beds | | 17 | 129 | 33 | 18 | 58 | 20 | 1347 | 1093 | 207 | 47 | 1420 | 745 | 650 | 25 | 399 | 39 | 0 | 65 | 115 | 80 | 33 | 67 | 29 | 25 | 481 | 1288 | 5229 | 4239 |
| Private hospitals for outpatients | | 18 | 186 | 21 | 1 | 14 | 43 | 1951 | 902 | 153 | 896 | 902 | 478 | 340 | 84 | 461 | 4 | 0 | 34 | 98 | 233 | 6 | 86 | 12 | 23 | 270 | 597 | 4480 | 3783 |
| Ministry of health | | 19 | 14 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 8 | 0 | 96 | 80 |
| Research institutions | | 20 | 10 | 42 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 9 | 12 | 98 | 73 |
| Health Department | | 21 | 45 | 284 | 18 | 16 | 1 | 24 | 21 | 1 | 2 | 9 | 2 | 7 | 0 | 67 | 0 | 0 | 57 | 2 | 0 | 3 | 5 | 22 | 4 | 154 | 154 | 780 | 569 |
| Centre for Health Development | | 22 | 9 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 12 | 7 | 70 | 51 |
| National Center for Zoonotic diseases centers | | 23 | 14 | 3 | 1 | 0 | 6 | 49 | 49 | 0 | 0 | 7 | 4 | 2 | 1 | 80 | 0 | 1 | 17 | 50 | 0 | 0 | 12 | 3 | 1 | 82 | 106 | 351 | 209 |
| National Center for Blood Transfusion Research, provincial blood centers in the district | | 24 | 4 | 1 | 1 | 0 | 1 | 10 | 10 | 0 | 0 | 21 | 11 | 10 | 0 | 8 | 0 | 0 | 0 | 5 | 1 | 0 | 2 | 2 | 1 | 10 | 10 | 68 | 51 |
| Emergency center and the districts in the industry | | 25 | 4 | 1 | 1 | 1 | 0 | 160 | 160 | 0 | 0 | 25 | 20 | 5 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 1 | 1 | 31 | 164 | 397 | 173 |
| Resort | | 26 | 60 | 10 | 3 | 3 | 2 | 304 | 163 | 132 | 9 | 326 | 212 | 105 | 9 | 81 | 1 | 0 | 52 | 4 | 3 | 1 | 20 | 6 | 6 | 185 | 796 | 1779 | 1342 |
| Medical Supply Organization | | 27 | 26 | 0 | 0 | 107 | 0 | 16 | 14 | 0 | 2 | 0 | 0 | 0 | 0 | 115 | 0 | 0 | 1 | 0 | 0 | 109 | 5 | 1 | 1 | 38 | 103 | 407 | 311 |
| Drug factory | | 28 | 9 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 3 | 13 | 54 | 95 | 64 |
| Private pharmacies | | 29 | 88 | 1 | 0 | 1473 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1524 | 0 | 0 | 0 | 0 | 0 | 1521 | 3 | 2 | 2 | 179 | 1137 | 4409 | 4013 |
| Other | | 30 | 18 | 10 | 1 | 3 | 0 | 72 | 24 | 25 | 23 | 93 | 49 | 43 | 1 | 42 | 0 | 0 | 13 | 5 | 8 | 6 | 10 | 2 | 1 | 26 | 116 | 383 | 307 |
| All health-care workers | | 31 | 871 | 889 | 97 | 1891 | 125 | 9956 | 7998 | 795 | 1163 | 11294 | 6366 | 4536 | 392 | 7271 | 955 | 969 | 1192 | 1083 | 592 | 1967 | 513 | 191 | 164 | 2441 | 11778 | 46871 | 38659 |
| State Medical University, College | | 32 | 28 | 16 | 1 | 26 | 26 | 96 | 75 | 12 | 9 | 66 | 14 | 51 | 1 | 20 | 3 | 0 | 5 | 2 | 6 | 1 | 3 | 3 | 1 | 546 | 143 | 971 | 719 |
| Private medical schools, colleges | | 33 | 45 | 2 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 4 | 2 | 2 | 0 | 7 | 0 | 0 | 1 | 5 | 0 | 1 | 0 | 5 | 0 | 342 | 87 | 495 | 344 |
| Other medical / border guards and the prison hospital, defense, law enforcement officials Hospital, Railway Hospital | | 34 | 64 | 23 | 8 | 18 | 1 | 432 | 386 | 27 | 19 | 541 | 277 | 263 | 1 | 187 | 0 | 0 | 84 | 38 | 15 | 13 | 37 | 4 | 7 | 85 | 398 | 1760 | 1379 |
| Other (schools, parks, mines, factories, offices, etc.) | | 35 | 0 | 10 | 0 | 3 | 0 | 89 | 79 | 6 | 4 | 34 | 24 | 10 | 0 | 285 | 5 | 0 | 275 | 1 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 422 | 380 |
| All other sectors of health care workers | | 36 | 137 | 51 | 9 | 47 | 27 | 620 | 542 | 46 | 32 | 645 | 317 | 326 | 2 | 499 | 8 | 0 | 365 | 46 | 21 | 15 | 44 | 12 | 8 | 974 | 628 | 3648 | 2822 |
| **Total** | | **49** | **1008** | **940** | **106** | **1938** | **152** | **10576** | **8540** | **841** | **1195** | **11939** | **6683** | **4862** | **394** | **7770** | **963** | **969** | **1557** | **1129** | **613** | **1982** | **557** | **203** | **172** | **3415** | **12406** | **50519** | **41481** |

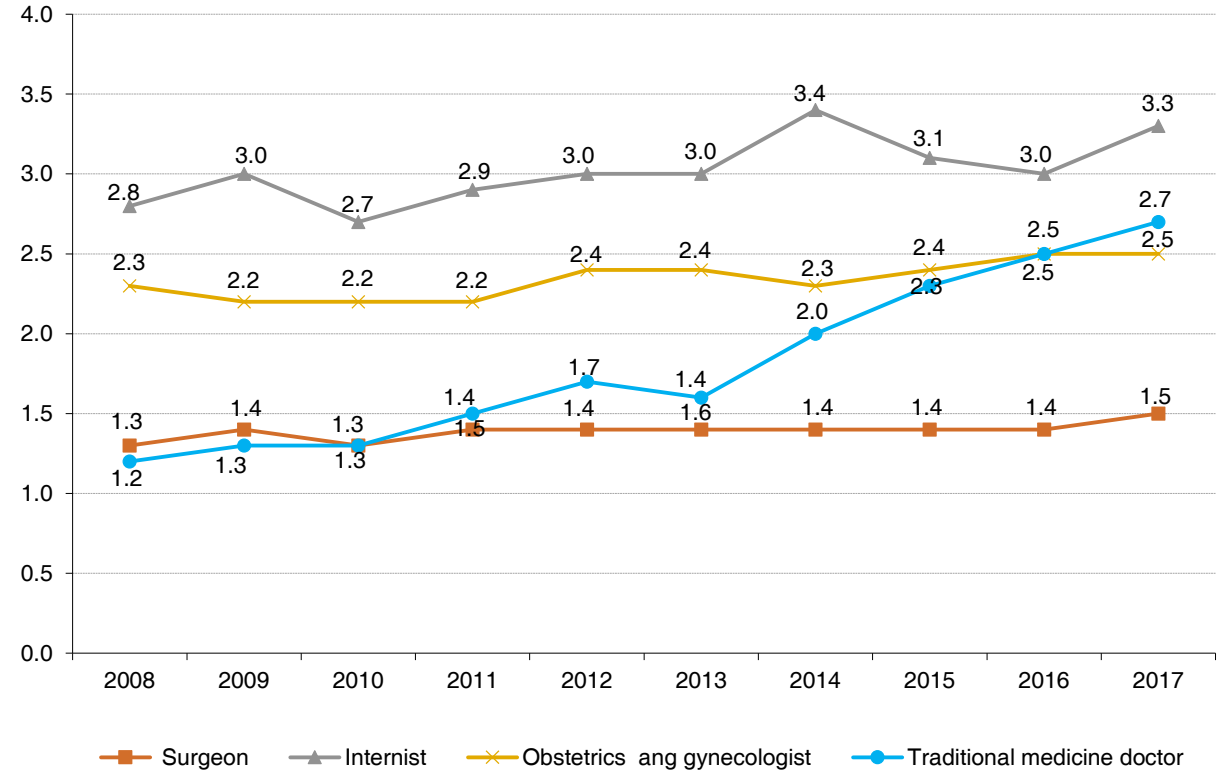
# PHYSICIANS, BY SPECIALTIES, PER 10 000 POPULATION, 2017

| № | Province and city | Human doctor | General Practitioners | Basic and specialized | Out of them | | | | | | | | | | | | | | | | | | | | | | | | | | Traditional medicine doctor | Dentist | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Internist | Pediatric | Out: Infants | Surgeon | Traumatologist | Resuscitation | Anaestesiologist | Neurologist | Obstetrics and gynecologist | Oncologist | Psychiatrist and neurologist | Ophtalmologist | Otorinolaryngologist | Plactic surgeon | Dermatologist | Infectionist | Tuberculosis | Venerologist | Rehabilitation | Facilitation | Elderly | Pathogenist | X-ray diagnostic | Doctor laboratory | Other | | | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | **31** |
| 1 | Arkhangai | 15.4 | 3.7 | 11.7 | 2.7 | 2.3 | 0.1 | 1.0 | 0.2 | 0.0 | 0.2 | 0.5 | 1.5 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.5 | 0.3 | 1.7 | 1.2 | **18.3** |
| 2 | Bayan-Ulgii | 18.0 | 7.3 | 10.7 | 1.9 | 1.1 | 0.2 | 1.5 | 0.3 | 0.0 | 0.5 | 0.4 | 1.7 | 0.1 | 0.1 | 0.2 | 0.5 | 0.2 | 0.0 | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 1.0 | 1.0 | 1.2 | **20.2** |
| 3 | Bayankhongor | 17.7 | 6.5 | 11.2 | 1.7 | 2.0 | 0.2 | 0.8 | 0.5 | 0.0 | 0.7 | 0.6 | 1.7 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 2.7 | 1.3 | **21.7** |
| 4 | Bulgan | 16.6 | 7.6 | 8.9 | 1.1 | 1.0 | 0.2 | 0.5 | 0.2 | 0.0 | 0.5 | 0.6 | 1.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.8 | 0.3 | 0.2 | 0.0 | 0.0 | 0.2 | 0.2 | 0.5 | 0.3 | 1.0 | 2.3 | 1.0 | **19.8** |
| 5 | Govi-Altai | 29.1 | 11.9 | 17.2 | 2.5 | 3.0 | 0.5 | 1.4 | 0.5 | 0.2 | 0.7 | 0.7 | 1.9 | 0.2 | 0.2 | 0.5 | 0.4 | 0.5 | 0.0 | 1.4 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.4 | 0.7 | 0.7 | 0.7 | 1.4 | 2.3 | **32.8** |
| 6 | Govisumber | 29.7 | 9.9 | 19.8 | 1.7 | 1.7 | 0.6 | 1.2 | 0.0 | 0.0 | 0.6 | 1.2 | 1.7 | 0.6 | 0.0 | 0.6 | 0.6 | 0.6 | 0.0 | 1.2 | 0.6 | 0.0 | 0.6 | 0.0 | 0.6 | 0.6 | 1.2 | 1.2 | 4.1 | 1.7 | 1.7 | **33.2** |
| 7 | Darkhan-Uul | 21.5 | 6.9 | 14.6 | 2.7 | 1.6 | 0.3 | 0.8 | 0.5 | 0.0 | 0.6 | 0.6 | 1.5 | 0.1 | 0.6 | 0.5 | 0.3 | 0.3 | 0.0 | 1.7 | 0.5 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.5 | 1.0 | 0.6 | 1.6 | 4.1 | **27.2** |
| 8 | Dornogovi | 29.4 | 8.6 | 20.8 | 3.3 | 2.5 | 0.1 | 1.2 | 0.7 | 0.1 | 0.9 | 0.9 | 2.7 | 0.1 | 0.3 | 0.4 | 0.9 | 0.4 | 0.0 | 1.3 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 1.3 | 1.0 | 2.2 | 1.8 | 1.8 | **32.9** |
| 9 | Dornod | 21.5 | 6.9 | 14.6 | 2.2 | 1.9 | 0.1 | 1.0 | 0.4 | 0.4 | 0.4 | 0.4 | 1.8 | 0.1 | 0.4 | 0.5 | 0.4 | 0.4 | 0.0 | 1.3 | 0.6 | 0.3 | 0.4 | 0.0 | 0.1 | 0.3 | 1.1 | 0.5 | 0.8 | 0.5 | 1.3 | **23.3** |
| 10 | Dundgovi | 28.5 | 16.5 | 12.0 | 1.3 | 1.7 | 0.2 | 0.7 | 0.2 | 0.0 | 0.7 | 0.7 | 1.7 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 1.1 | 0.4 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | 1.1 | 0.4 | 0.7 | 0.7 | 1.5 | **30.7** |
| 11 | Zavkhan | 21.3 | 8.5 | 12.7 | 1.7 | 2.7 | 0.4 | 0.6 | 0.3 | 0.3 | 0.8 | 1.0 | 1.5 | 0.3 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 1.0 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.6 | 0.4 | 0.3 | 2.8 | 1.3 | **25.3** |
| 12 | Orkhon | 27.2 | 6.7 | 20.5 | 2.8 | 2.6 | 0.8 | 1.2 | 1.2 | 0.5 | 1.2 | 1.3 | 2.1 | 0.2 | 0.4 | 0.7 | 0.5 | 0.2 | 0.1 | 0.6 | 0.2 | 0.1 | 0.5 | 0.1 | 0.1 | 0.2 | 1.5 | 1.1 | 1.8 | 1.7 | 3.0 | **31.9** |
| 13 | Uvurkhangai | 17.2 | 5.1 | 12.1 | 1.7 | 1.8 | 0.3 | 1.0 | 0.4 | 0.1 | 0.3 | 0.7 | 1.7 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.9 | 0.2 | 0.2 | 0.0 | 0.2 | 0.1 | 0.1 | 0.9 | 0.4 | 0.5 | 3.6 | 1.7 | **22.5** |
| 14 | Umnugovi | 24.3 | 9.4 | 14.8 | 2.2 | 3.1 | 0.2 | 1.4 | 0.5 | 0.0 | 1.1 | 0.6 | 2.0 | 0.2 | 0.2 | 0.5 | 0.3 | 0.2 | 0.0 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.8 | 0.6 | 0.3 | 2.5 | 2.5 | **29.2** |
| 15 | Sukhbaatar | 23.1 | 8.7 | 14.3 | 2.0 | 2.5 | 0.2 | 0.8 | 0.5 | 0.0 | 0.8 | 0.5 | 2.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.0 | 1.2 | 0.3 | 0.2 | 0.3 | 0.0 | 0.2 | 0.2 | 0.8 | 0.5 | 0.5 | 0.7 | 1.5 | **25.2** |
| 16 | Selenge | 19.1 | 8.0 | 11.1 | 1.7 | 1.9 | 0.3 | 0.9 | 0.3 | 0.3 | 0.4 | 0.5 | 1.6 | 0.0 | 0.2 | 0.2 | 0.5 | 0.2 | 0.0 | 0.7 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.5 | 0.8 | 2.0 | 1.7 | **22.8** |
| 17 | Tuv | 19.9 | 9.1 | 10.8 | 1.5 | 1.7 | 0.2 | 0.7 | 0.4 | 0.1 | 0.2 | 0.7 | 1.5 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.0 | 1.0 | 0.6 | 0.3 | 0.5 | 0.0 | 0.1 | 0.1 | 0.4 | 0.4 | 0.0 | 2.9 | 0.5 | **23.3** |
| 18 | Uvs | 17.8 | 7.8 | 10.0 | 1.5 | 1.7 | 0.2 | 1.0 | 0.4 | 0.0 | 0.5 | 0.4 | 1.5 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.6 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.4 | 0.0 | 1.3 | 1.5 | **20.6** |
| 19 | Khovd | 23.3 | 8.5 | 14.8 | 2.5 | 2.7 | 0.2 | 1.3 | 0.5 | 0.8 | 0.0 | 0.7 | 2.1 | 0.2 | 0.3 | 0.3 | 0.5 | 0.1 | 0.0 | 0.5 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.3 | 0.6 | 0.5 | 0.6 | 1.7 | 1.7 | **26.8** |
| 20 | Khuvsgul | 15.6 | 4.7 | 11.0 | 1.8 | 3.0 | 0.2 | 0.7 | 0.2 | 0.1 | 0.3 | 0.5 | 1.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.0 | 0.8 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.6 | 0.2 | 0.5 | 2.1 | 1.2 | **19.0** |
| 21 | Khentii | 21.4 | 7.5 | 13.9 | 1.3 | 2.8 | 0.4 | 1.1 | 0.5 | 0.0 | 1.1 | 0.7 | 1.6 | 0.0 | 0.3 | 0.3 | 0.5 | 0.3 | 0.0 | 1.6 | 0.4 | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 | 0.8 | 0.3 | 1.9 | 0.8 | **24.1** |
| **22** | **Province average** | **20.8** | **7.5** | **13.3** | **2.0** | **2.2** | **0.3** | **1.0** | **0.4** | **0.1** | **0.6** | **0.6** | **1.7** | **0.2** | **0.2** | **0.3** | **0.3** | **0.2** | **0.0** | **0.9** | **0.3** | **0.2** | **0.2** | **0.1** | **0.1** | **0.2** | **0.7** | **0.5** | **0.7** | **1.9** | **1.7** | **24.4** |
| 23 | Ulaanbaatar | 35.7 | 6.4 | 29.3 | 4.9 | 2.7 | 0.6 | 2.2 | 1.2 | 0.4 | 1.4 | 1.6 | 3.5 | 0.2 | 0.7 | 0.9 | 0.8 | 0.6 | 0.1 | 1.2 | 0.3 | 0.4 | 0.8 | 0.2 | 0.1 | 0.4 | 2.4 | 1.7 | 1.3 | 3.7 | 6.5 | 46.0 |
| **24** | **National average** | **27.6** | **7.0** | **20.6** | **3.3** | **2.4** | **0.4** | **1.5** | **0.8** | **0.3** | **0.9** | **1.1** | **2.5** | **0.2** | **0.5** | **0.6** | **0.5** | **0.4** | **0.1** | **1.1** | **0.3** | **0.3** | **0.5** | **0.1** | **0.1** | **0.3** | **1.4** | **1.1** | **0.9** | **2.7** | **3.9** | **34.1** |

## Health Facilities, /2008-2017/




## Physicians, by specialities, per 10 000 population /2008-2017/



# NURSES, BY SPECIALTIES, PER 10 000 POPULATION, 2017

| № | Province and city | Total nurses | General Practitioners | Basic and specialized | Out of them | | | | | | | | | | | | | | | | | | | | | | | Traditional medicine nurses | Dentist | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Internist | Pediatric | Out: Infants | Surgeon | Traumatologist | Resuscitation | Anaestesiologist | Neurologist | Obstetrics and gynecologist | Oncologist | Psychiatrist and neurologist | Ophtalmologist | Otorinolaryngologist | Plactic surgeon | Dermatologist | Infectionist | Tuberculosis | Venerologist | Rehabilitation | Facilitation | Elderly | Other | | | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 1 | Arkhangai | 27.3 | 17.4 | 9.9 | 1.2 | 2.3 | 0.6 | 2.1 | 0.0 | 0.2 | 0.5 | 0.6 | 0.4 | 0.0 | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 1.3 | 0.6 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 1.3 | 0.4 | **29.0** |
| 2 | Bayan-Ulgii | 30.4 | 20.6 | 9.8 | 0.0 | 2.2 | 1.6 | 1.8 | 0.1 | 0.3 | 0.6 | 0.2 | 0.1 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.5 | 0.2 | 0.1 | 3.0 | 0.9 | 0.2 | **31.5** |
| 3 | Bayankhongor | 31.6 | 21.8 | 9.9 | 0.0 | 2.1 | 0.8 | 1.5 | 0.2 | 0.0 | 1.7 | 0.2 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 0.2 | 0.1 | 0.3 | 0.5 | 0.0 | 1.9 | 2.0 | 0.3 | **34.0** |
| 4 | Bulgan | 29.9 | 15.1 | 14.8 | 2.3 | 2.6 | 0.6 | 1.6 | 0.0 | 0.0 | 1.0 | 1.1 | 2.3 | 0.2 | 0.6 | 0.2 | 0.2 | 0.2 | 0.0 | 2.1 | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.5 | 1.5 | 0.2 | **31.5** |
| 5 | Govi-Altai | 42.2 | 22.3 | 20.0 | 1.9 | 1.9 | 1.4 | 1.8 | 0.7 | 0.9 | 1.6 | 0.7 | 2.1 | 0.2 | 0.9 | 0.2 | 0.2 | 0.0 | 0.0 | 3.0 | 1.1 | 0.2 | 0.7 | 0.2 | 0.2 | 3.0 | 1.9 | 0.4 | **44.5** |
| 6 | Govisumber | 37.9 | 21.6 | 16.3 | 2.3 | 4.7 | 2.3 | 1.2 | 0.0 | 0.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 2.9 | 0.0 | 0.6 | 0.6 | 0.0 | 0.0 | 2.9 | 0.6 | 0.6 | **39.0** |
| 7 | Darkhan-Uul | 32.5 | 12.1 | 20.4 | 1.2 | 3.2 | 0.8 | 1.2 | 1.1 | 0.0 | 1.5 | 0.5 | 1.2 | 0.0 | 1.8 | 0.3 | 0.2 | 0.0 | 0.0 | 4.1 | 1.5 | 0.1 | 1.0 | 0.2 | 0.5 | 2.6 | 1.1 | 2.0 | **35.6** |
| 8 | Dornogovi | 36.5 | 21.7 | 14.8 | 0.1 | 3.1 | 1.2 | 1.8 | 0.4 | 0.0 | 2.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 1.3 | 0.4 | 0.3 | 1.9 | 0.3 | 0.0 | 3.1 | 0.6 | 0.6 | **37.7** |
| 9 | Dornod | 34.5 | 17.4 | 17.0 | 2.9 | 1.9 | 0.6 | 1.4 | 0.5 | 1.0 | 0.4 | 0.8 | 0.5 | 0.1 | 1.5 | 0.8 | 0.4 | 0.6 | 0.0 | 2.7 | 1.1 | 0.0 | 1.4 | 0.0 | 0.0 | 0.1 | 0.6 | 0.1 | **35.2** |
| 10 | Dundgovi | 31.6 | 19.8 | 11.8 | 1.7 | 3.3 | 0.9 | 1.7 | 0.2 | 0.0 | 1.3 | 0.9 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 1.5 | 0.2 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | **32.4** |
| 11 | Zavkhan | 35.5 | 19.3 | 16.2 | 0.3 | 4.2 | 1.4 | 3.2 | 0.4 | 1.1 | 1.3 | 0.0 | 0.3 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.7 | 0.3 | 0.3 | 0.7 | 0.7 | 0.1 | 2.1 | 2.0 | 0.6 | **38.1** |
| 12 | Orkhon | 39.7 | 22.4 | 17.3 | 0.6 | 1.8 | 1.3 | 2.1 | 1.2 | 2.3 | 1.9 | 0.9 | 2.8 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.4 | 0.0 | 0.1 | 0.9 | 0.0 | 0.0 | 2.1 | 1.2 | 0.4 | **41.3** |
| 13 | Uvurkhangai | 26.6 | 16.2 | 10.4 | 0.6 | 1.8 | 0.8 | 1.1 | 0.5 | 0.5 | 1.3 | 0.0 | 0.5 | 0.0 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.5 | 0.1 | 0.0 | 0.2 | 0.3 | 0.1 | 2.3 | 1.6 | 0.3 | **28.6** |
| 14 | Umnugovi | 26.6 | 15.5 | 11.1 | 0.9 | 3.4 | 1.1 | 1.5 | 0.3 | 0.3 | 1.1 | 0.3 | 0.0 | 0.0 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.6 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 1.4 | 0.2 | 0.3 | **27.1** |
| 15 | Sukhbaatar | 35.1 | 20.8 | 14.3 | 0.5 | 3.5 | 0.8 | 1.2 | 0.2 | 0.2 | 0.8 | 0.5 | 0.0 | 0.0 | 0.7 | 0.2 | 0.2 | 0.2 | 0.0 | 1.2 | 0.2 | 0.2 | 2.0 | 0.0 | 0.2 | 3.1 | 0.2 | 0.2 | **35.4** |
| 16 | Selenge | 28.8 | 20.1 | 8.7 | 0.1 | 2.3 | 0.9 | 1.7 | 0.1 | 0.1 | 1.3 | 0.0 | 0.4 | 0.3 | 0.2 | 0.3 | 0.4 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.7 | 0.0 | 0.1 | 0.6 | 1.5 | 0.4 | **30.6** |
| 17 | Tuv | 30.1 | 18.8 | 11.3 | 1.4 | 1.6 | 0.5 | 1.2 | 0.0 | 0.4 | 0.3 | 0.9 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 1.4 | 0.7 | 0.1 | 1.3 | 0.0 | 0.0 | 2.0 | 1.1 | 0.3 | **31.5** |
| 18 | Uvs | 30.5 | 19.6 | 10.9 | 0.2 | 2.8 | 0.9 | 1.6 | 0.7 | 0.5 | 0.7 | 0.1 | 1.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | 1.0 | 0.6 | 0.4 | 0.5 | 0.0 | 0.1 | 0.1 | 0.9 | 0.2 | **31.6** |
| 19 | Khovd | 32.9 | 15.9 | 17.0 | 1.2 | 3.5 | 1.7 | 2.9 | 0.5 | 0.8 | 0.8 | 0.7 | 1.4 | 0.5 | 0.8 | 0.1 | 0.2 | 0.3 | 0.2 | 0.9 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 2.0 | 1.3 | 0.5 | **34.6** |
| 20 | Khuvsgul | 27.0 | 10.8 | 16.3 | 1.7 | 3.7 | 0.8 | 1.4 | 0.0 | 0.8 | 1.0 | 0.7 | 0.5 | 0.1 | 0.5 | 0.1 | 0.1 | 0.3 | 0.0 | 0.8 | 0.5 | 0.0 | 1.4 | 0.1 | 0.1 | 3.1 | 0.8 | 0.3 | **28.2** |
| 21 | Khentii | 29.5 | 19.5 | 10.0 | 0.8 | 1.9 | 0.9 | 1.7 | 0.1 | 0.5 | 0.7 | 0.7 | 0.5 | 0.1 | 0.1 | 0.1 | 0.7 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.7 | 0.1 | 0.1 | 0.8 | 1.2 | 0.3 | **31.0** |
| **22** | **Province average** | **31.6** | **18.1** | **13.5** | **1.0** | **2.6** | **1.0** | **1.7** | **0.4** | **0.5** | **1.1** | **0.5** | **0.8** | **0.1** | **0.5** | **0.2** | **0.2** | **0.1** | **0.0** | **1.2** | **0.4** | **0.1** | **0.8** | **0.1** | **0.1** | **1.8** | **1.1** | **0.4** | **33.1** |
| 23 | Ulaanbaatar | 39.8 | 12.1 | 27.8 | 4.8 | 3.7 | 1.1 | 3.2 | 0.4 | 1.6 | 2.5 | 1.1 | 2.2 | 0.5 | 0.8 | 0.5 | 0.5 | 0.5 | 0.0 | 1.5 | 0.5 | 0.2 | 1.9 | 0.2 | 0.1 | 2.0 | 1.9 | 3.4 | **45.1** |
| **24** | **National average** | **35.3** | **15.3** | **20.0** | **2.7** | **3.1** | **1.0** | **2.4** | **0.4** | **1.0** | **1.7** | **0.7** | **1.4** | **0.3** | **0.6** | **0.3** | **0.3** | **0.3** | **0.0** | **1.3** | **0.4** | **0.2** | **1.3** | **0.2** | **0.1** | **1.9** | **1.5** | **1.8** | **38.5** |

# AVERAGE LENGTH OF STAY IN HOSPITAL, BY BED SPECIALITIES, 2017

| № | Province and city | By type of bed | | | | | | | | | | | | | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Internal medicine | Surgery | Obstetrics | Gyneacology | Peadiatrics | Infectious diseases | Dermatology | Tuberculosis | Neurology | Psychiatry and narcology | Traumatology | Nephrology | Urology, | Reanimation | Ophtalmology | Otolaryngology | Dental | Stomatolgy | Oncology | Traditional medicine | Venerology | Unspecialized | Other | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 1 | Arkhangai | 7.5 | 5.7 | 3.6 | 7.3 | 6.7 | 8.0 | 0.0 | 20.8 | 8.5 | 10.5 | 7.1 | 0.0 | 0.0 | 0.0 | 7.7 | 8.2 | 0.0 | 5.3 | 8.7 | 9.0 | 0.0 | 0.0 | 0.0 | **6.9** |
| 2 | Bayan-Ulgii | 7.4 | 6.0 | 4.9 | 5.4 | 5.9 | 10.8 | 8.2 | 42.9 | 8.1 | 9.8 | 7.2 | 0.0 | 0.0 | 0.0 | 7.7 | 7.8 | 0.0 | 7.5 | 7.5 | 8.0 | 0.0 | 7.3 | 8.4 | **7.0** |
| 3 | Bayankhongor | 7.3 | 6.4 | 5.2 | 5.1 | 6.8 | 7.7 | 7.6 | 36.4 | 8.3 | 8.0 | 7.4 | 0.0 | 0.0 | 0.0 | 7.6 | 5.5 | 0.0 | 5.0 | 3.2 | 7.1 | 0.0 | 8.2 | 7.0 | **6.9** |
| 4 | Bulgan | 7.1 | 4.9 | 6.9 | 7.1 | 6.6 | 9.0 | 9.0 | 27.7 | 8.0 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 | 4.9 | 0.0 | 5.3 | 6.9 | 7.8 | 0.0 | 0.0 | 0.0 | **7.1** |
| 5 | Govi-Altai | 8.1 | 5.4 | 4.2 | 6.8 | 7.7 | 6.8 | 8.7 | 65.4 | 8.4 | 8.9 | 8.7 | 0.0 | 0.0 | 0.0 | 4.9 | 7.5 | 0.0 | 5.6 | 11.7 | 6.9 | 0.0 | 7.0 | 0.0 | **7.4** |
| 6 | Govisumber | 8.1 | 6.7 | 4.6 | 5.9 | 6.2 | 9.2 | 7.7 | 0.0 | 8.1 | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 7.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6 | 9.3 | **7.0** |
| 7 | Darkhan-Uul | 7.3 | 4.8 | 4.0 | 6.5 | 6.0 | 8.7 | 7.8 | 28.0 | 9.2 | 10.4 | 8.6 | 0.0 | 0.0 | 0.0 | 4.9 | 5.8 | 0.0 | 7.0 | 6.8 | 8.1 | 0.0 | 6.5 | 0.0 | **7.1** |
| 8 | Dornogovi | 8.0 | 6.0 | 3.9 | 3.9 | 6.5 | 9.3 | 0.0 | 34.8 | 8.6 | 7.7 | 6.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.8 | 0.0 | 8.3 | 5.5 | **7.1** |
| 9 | Dornod | 7.9 | 5.8 | 4.2 | 5.9 | 6.2 | 8.3 | 10.0 | 48.3 | 8.9 | 10.2 | 7.0 | 0.0 | 0.0 | 0.0 | 8.3 | 7.0 | 0.0 | 0.0 | 7.9 | 9.0 | 0.0 | 10.1 | 0.0 | **7.5** |
| 10 | Dundgovi | 7.9 | 6.1 | 4.7 | 5.5 | 6.6 | 8.1 | 8.3 | 24.0 | 8.7 | 8.2 | 6.4 | 0.0 | 0.0 | 0.0 | 6.6 | 5.6 | 0.0 | 6.4 | 8.3 | 7.9 | 0.0 | 9.2 | 0.0 | **7.2** |
| 11 | Zavkhan | 8.2 | 5.3 | 5.4 | 7.5 | 6.7 | 8.6 | 9.1 | 31.2 | 9.2 | 9.3 | 7.6 | 0.0 | 0.0 | 0.0 | 7.4 | 5.6 | 0.0 | 8.4 | 9.5 | 8.7 | 0.0 | 0.0 | 0.0 | **7.8** |
| 12 | Orkhon | 7.4 | 5.2 | 4.6 | 6.8 | 6.3 | 9.3 | 0.0 | 20.3 | 8.8 | 8.9 | 8.6 | 0.0 | 0.0 | 0.0 | 2.6 | 6.4 | 0.0 | 0.0 | 0.0 | 8.4 | 0.0 | 8.7 | 7.5 | **7.3** |
| 13 | Uvurkhangai | 7.6 | 6.7 | 3.0 | 8.8 | 6.9 | 9.2 | 8.3 | 31.7 | 9.2 | 10.0 | 10.3 | 0.0 | 0.0 | 0.0 | 6.3 | 6.8 | 0.0 | 7.1 | 7.3 | 8.5 | 0.0 | 8.8 | 0.0 | **7.3** |
| 14 | Umnugovi | 7.9 | 5.9 | 3.7 | 4.0 | 6.1 | 6.5 | 9.0 | 33.6 | 9.2 | 5.7 | 6.8 | 0.0 | 0.0 | 0.0 | 4.5 | 6.1 | 0.0 | 5.6 | 0.0 | 9.4 | 0.0 | 9.1 | 5.9 | **6.7** |
| 15 | Sukhbaatar | 9.8 | 6.4 | 4.0 | 6.4 | 7.9 | 8.9 | 52.2 | 36.9 | 12.9 | 9.2 | 6.9 | 0.0 | 0.0 | 0.0 | 7.3 | 6.5 | 0.0 | 6.2 | 8.0 | 9.1 | 0.0 | 0.0 | 0.0 | **8.0** |
| 16 | Selenge | 8.2 | 6.0 | 4.1 | 6.5 | 7.2 | 8.3 | 9.5 | 41.5 | 8.6 | 9.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.8 | 7.3 | 0.0 | 6.0 | 8.1 | 8.9 | 0.0 | 8.7 | 9.1 | **7.7** |
| 17 | Tuv | 7.3 | 7.1 | 4.9 | 6.1 | 6.5 | 9.2 | 8.7 | 32.2 | 8.5 | 0.0 | 9.3 | 0.0 | 0.0 | 0.0 | 6.9 | 7.1 | 0.0 | 6.1 | 8.1 | 8.7 | 0.0 | 0.0 | 6.5 | **7.4** |
| 18 | Uvs | 7.5 | 5.9 | 3.6 | 6.3 | 6.6 | 8.4 | 9.4 | 11.8 | 8.3 | 10.7 | 6.5 | 0.0 | 0.0 | 0.0 | 5.9 | 5.5 | 0.0 | 6.3 | 8.2 | 7.8 | 0.0 | 0.0 | 0.0 | **6.5** |
| 19 | Khovd | 9.2 | 6.3 | 3.9 | 5.9 | 7.0 | 6.3 | 9.0 | 11.5 | 8.9 | 10.9 | 7.6 | 0.0 | 0.0 | 0.0 | 3.9 | 7.3 | 0.0 | 6.0 | 0.0 | 8.5 | 0.0 | 7.3 | 9.2 | **7.6** |
| 20 | Khuvsgul | 7.5 | 4.8 | 2.7 | 6.2 | 6.2 | 7.4 | 7.9 | 30.5 | 8.2 | 11.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6 | 0.0 | 7.2 | 0.0 | **6.6** |
| 21 | Khentii | 7.9 | 6.5 | 5.1 | 8.4 | 7.0 | 9.3 | 8.6 | 22.6 | 8.8 | 0.0 | 7.0 | 0.0 | 0.0 | 0.0 | 8.7 | 8.4 | 0.0 | 0.0 | 8.0 | 9.7 | 0.0 | 7.7 | 9.2 | **7.6** |
| **22** | **Province average** | **7.8** | **5.8** | **4.2** | **6.1** | **6.6** | **8.3** | **9.0** | **28.7** | **8.7** | **9.6** | **7.9** | **0.0** | **0.0** | **0.0** | **6.9** | **6.8** | **0.0** | **6.6** | **7.9** | **8.4** | **0.0** | **8.1** | **5.6** | **7.2** |
| 23 | Ulaanbaatar | 7.6 | 6.1 | 3.6 | 6.6 | 6.2 | 7.7 | 8.9 | 28.7 | 7.9 | 26.9 | 8.9 | 9.1 | 6.2 | 0.0 | 4.1 | 6.0 | 0.0 | 5.0 | 7.0 | 8.0 | 0.0 | 7.1 | 8.1 | 7.1 |
| **24** | **National average** | **7.7** | **6.0** | **3.8** | **6.3** | **6.4** | **8.0** | **9.0** | **28.7** | **8.3** | **19.3** | **8.6** | **9.1** | **6.2** | **0.0** | **4.8** | **6.3** | **0.0** | **5.4** | **7.2** | **8.2** | **0.0** | **7.5** | **6.8** | **7.2** |

# UTILIZATION OF HOSPITAL BEDS, 2017

| № | Province and city | Total | | | | Province, city general hospitals | | | | Rural general hospitals | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 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 |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | Arkhangai | 268.6 | 81.4 | 6.9 | 38.8 | 290.6 | 88.0 | 7.3 | 39.8 | 237.4 | 71.9 | 6.4 | 37.3 |
| 2 | Bayan-Ulgii | 247.1 | 74.9 | 7.0 | 35.4 | 260.6 | 79.0 | 7.3 | 35.6 | 221.3 | 67.1 | 6.3 | 35.0 |
| 3 | Bayankhongor | 253.5 | 76.8 | 6.9 | 36.6 | 281.9 | 85.4 | 7.0 | 40.3 | 198.7 | 60.2 | 6.7 | 29.6 |
| 4 | Bulgan | 226.0 | 68.5 | 7.1 | 31.9 | 251.2 | 76.1 | 7.5 | 33.3 | 192.5 | 58.3 | 6.4 | 29.9 |
| 5 | Govi-Altai | 237.0 | 71.8 | 7.4 | 32.2 | 275.4 | 83.5 | 7.4 | 37.2 | 189.7 | 57.5 | 7.3 | 25.9 |
| 6 | Govisumber | 273.0 | 82.7 | 7.0 | 39.0 | 282.8 | 85.7 | 7.1 | 39.9 | 232.5 | 70.5 | 6.6 | 35.5 |
| 7 | Darkhan-Uul | 286.4 | 86.8 | 7.1 | 40.6 | 291.0 | 88.2 | 7.0 | 41.4 | 237.2 | 71.9 | 7.4 | 31.8 |
| 8 | Dornogovi | 246.4 | 74.7 | 7.1 | 34.7 | 253.8 | 76.9 | 7.2 | 35.5 | 232.9 | 70.6 | 7.0 | 33.2 |
| 9 | Dornod | 261.5 | 79.2 | 7.5 | 34.7 | 263.2 | 79.8 | 7.7 | 34.2 | 254.6 | 77.2 | 6.9 | 36.9 |
| 10 | Dundgovi | 264.4 | 80.1 | 7.2 | 36.9 | 316.5 | 95.9 | 7.4 | 42.9 | 181.3 | 55.0 | 6.6 | 27.3 |
| 11 | Zavkhan | 215.5 | 65.3 | 7.8 | 27.8 | 232.3 | 70.4 | 8.2 | 28.3 | 194.5 | 58.9 | 7.2 | 27.2 |
| 12 | Orkhon | 259.7 | 78.7 | 7.3 | 35.6 | 260.4 | 78.9 | 7.3 | 35.7 | 216.7 | 65.7 | 7.4 | 29.2 |
| 13 | Uvurkhangai | 213.9 | 64.8 | 7.3 | 29.2 | 256.5 | 77.7 | 7.8 | 32.8 | 172.3 | 52.2 | 6.7 | 25.6 |
| 14 | Umnugovi | 138.1 | 41.9 | 6.7 | 20.7 | 132.0 | 40.0 | 6.7 | 19.6 | 151.4 | 45.9 | 6.5 | 23.1 |
| 15 | Sukhbaatar | 259.6 | 78.7 | 8.0 | 32.5 | 310.1 | 94.0 | 8.1 | 38.1 | 189.0 | 57.3 | 7.7 | 24.7 |
| 16 | Selenge | 247.3 | 74.9 | 7.7 | 32.0 | 261.0 | 79.1 | 8.2 | 31.9 | 235.7 | 71.4 | 7.3 | 32.2 |
| 17 | Tuv | 229.6 | 69.6 | 7.4 | 31.0 | 254.8 | 77.2 | 8.1 | 31.6 | 204.6 | 62.0 | 6.7 | 30.4 |
| 18 | Uvs | 255.5 | 77.4 | 6.5 | 39.4 | 259.4 | 78.6 | 6.4 | 40.8 | 250.0 | 75.8 | 6.7 | 37.2 |
| 19 | Khovd | 290.7 | 88.1 | 7.6 | 38.0 | 296.3 | 89.8 | 7.3 | 40.5 | 280.2 | 84.9 | 8.4 | 33.3 |
| 20 | Khuvsgul | 237.9 | 72.1 | 6.6 | 35.9 | 277.9 | 84.2 | 6.8 | 40.8 | 175.9 | 53.3 | 6.2 | 28.2 |
| 21 | Khentii | 254.1 | 77.0 | 7.6 | 33.3 | 241.0 | 73.0 | 8.1 | 29.9 | 273.6 | 82.9 | 7.1 | 38.4 |
| **22** | **Province average** | **243.6** | **73.8** | **7.2** | **33.8** | **261.6** | **79.3** | **7.3** | **35.6** | **211.2** | **64.0** | **6.9** | **30.6** |
| 23 | Ulaanbaatar | 269.7 | 81.7 | 7.1 | 37.7 | 269.8 | 81.7 | 7.2 | 37.7 | 256.0 | 77.6 | 6.7 | 38.0 |
| **24** | **National average** | **257.0** | **77.9** | **7.2** | **35.8** | **266.7** | **80.8** | **7.2** | **36.9** | **212.0** | **64.2** | **6.9** | **30.7** |

# NUMBER OF HOSPITAL BEDS, BY SPECIALITIES, PER 10 000 POPULATION, 2017

| № | Province and city | By type | | | | | | | | | | | | | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Internal medicine | Surgery | Obstetric | Gyneacology | Peadiatrics | Infectious | Dermatology | Tuberculosis | Neurology | Psychiatry and narcology | Traumatology | Nephrology | Urology | Reanimation | Ophtalmology | Otolaryngology | Dental | Stamatology | Oncology | Traditional medicine | Venerology STIs | Unspecialized | Other | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 1 | Arkhangai | 22.6 | 3.1 | 6.9 | 3.0 | 9.2 | 3.4 | 0.0 | 0.7 | 2.9 | 0.6 | 1.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | 0.6 | 0.0 | 0.0 | 0.0 | **55.0** |
| 2 | Bayan-Ulgii | 27.6 | 4.6 | 7.8 | 3.1 | 8.9 | 2.0 | 1.0 | 1.0 | 5.5 | 1.5 | 1.0 | 0.0 | 0.0 | 0.8 | 1.0 | 1.8 | 0.0 | 1.1 | 0.7 | 1.6 | 0.0 | 0.9 | 5.5 | **77.1** |
| 3 | Bayankhongor | 19.2 | 2.2 | 6.4 | 3.6 | 10.9 | 3.5 | 1.2 | 0.9 | 5.2 | 1.5 | 1.2 | 0.0 | 0.0 | 0.6 | 1.3 | 0.1 | 0.0 | 0.1 | 0.2 | 2.7 | 0.0 | 0.9 | 1.7 | **63.4** |
| 4 | Bulgan | 20.9 | 4.2 | 5.5 | 3.2 | 9.3 | 4.5 | 0.8 | 1.1 | 4.7 | 0.6 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.2 | 0.0 | 0.2 | 0.3 | 4.2 | 0.0 | 0.0 | 0.0 | **60.4** |
| 5 | Govi-Altai | 27.2 | 6.0 | 7.5 | 3.9 | 12.1 | 7.4 | 1.1 | 0.7 | 4.9 | 0.4 | 1.8 | 0.0 | 0.0 | 0.7 | 0.4 | 0.4 | 0.0 | 0.4 | 0.4 | 3.5 | 0.0 | 0.4 | 0.0 | **78.7** |
| 6 | Govisumber | 21.6 | 5.8 | 4.7 | 5.8 | 12.2 | 4.7 | 2.3 | 0.0 | 4.7 | 0.0 | 2.9 | 0.0 | 0.0 | 0.6 | 0.0 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 2.9 | **72.2** |
| 7 | Darkhan-Uul | 20.8 | 3.7 | 4.0 | 3.8 | 10.5 | 2.2 | 2.6 | 2.6 | 5.2 | 2.2 | 3.4 | 0.0 | 0.0 | 0.8 | 0.5 | 1.8 | 0.0 | 0.4 | 0.2 | 7.6 | 0.0 | 1.5 | 0.0 | **73.6** |
| 8 | Dornogovi | 18.5 | 5.9 | 5.3 | 3.1 | 11.0 | 3.9 | 0.0 | 1.6 | 7.4 | 1.8 | 0.3 | 0.0 | 0.0 | 1.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 5.2 | 0.0 | 0.4 | 2.8 | **68.8** |
| 9 | Dornod | 20.1 | 2.8 | 7.9 | 2.5 | 9.0 | 3.9 | 1.3 | 3.8 | 4.1 | 2.3 | 1.9 | 0.0 | 0.0 | 1.0 | 1.3 | 0.4 | 0.0 | 0.0 | 0.8 | 3.2 | 0.0 | 1.1 | 2.5 | **69.9** |
| 10 | Dundgovi | 23.7 | 2.4 | 7.8 | 1.5 | 12.8 | 4.8 | 0.7 | 1.1 | 2.2 | 0.4 | 1.5 | 0.0 | 0.0 | 1.1 | 0.2 | 0.4 | 0.0 | 0.2 | 0.2 | 3.5 | 0.0 | 0.9 | 0.0 | **65.5** |
| 11 | Zavkhan | 31.2 | 4.3 | 8.3 | 2.5 | 12.5 | 5.5 | 1.1 | 1.1 | 7.7 | 1.5 | 0.7 | 0.0 | 0.0 | 0.7 | 0.1 | 0.1 | 0.0 | 0.1 | 1.0 | 3.6 | 0.0 | 0.0 | 0.0 | **82.1** |
| 12 | Orkhon | 15.5 | 2.8 | 7.8 | 1.7 | 5.8 | 3.9 | 0.0 | 2.9 | 4.4 | 4.4 | 3.4 | 0.0 | 0.0 | 1.6 | 0.1 | 1.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 2.7 | 2.9 | **63.4** |
| 13 | Uvurkhangai | 24.9 | 4.8 | 6.4 | 5.5 | 13.9 | 5.0 | 0.9 | 0.9 | 1.5 | 1.0 | 2.1 | 0.0 | 0.0 | 0.3 | 0.4 | 0.4 | 0.0 | 0.4 | 0.3 | 3.3 | 0.0 | 0.7 | 0.0 | **72.7** |
| 14 | Umnugovi | 24.3 | 5.9 | 9.1 | 6.2 | 16.2 | 4.0 | 1.4 | 1.9 | 7.7 | 3.4 | 1.7 | 0.0 | 0.0 | 0.8 | 0.3 | 0.5 | 0.0 | 0.2 | 0.0 | 8.2 | 0.0 | 2.3 | 8.5 | **102.5** |
| 15 | Sukhbaatar | 25.2 | 2.3 | 5.1 | 3.8 | 10.7 | 4.1 | 1.3 | 2.0 | 5.3 | 0.8 | 1.6 | 0.0 | 0.0 | 0.5 | 0.3 | 0.3 | 0.0 | 0.2 | 0.3 | 2.0 | 0.0 | 0.3 | 0.5 | **66.7** |
| 16 | Selenge | 22.1 | 3.1 | 5.6 | 4.8 | 11.4 | 3.9 | 0.4 | 2.9 | 2.7 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.0 | 0.1 | 0.5 | 3.9 | 0.0 | 0.5 | 2.2 | **65.7** |
| 17 | Tuv | 15.3 | 2.0 | 5.9 | 2.2 | 9.3 | 5.1 | 1.1 | 1.3 | 5.1 | 0.4 | 0.6 | 0.0 | 0.0 | 0.4 | 0.3 | 0.3 | 0.0 | 0.2 | 0.6 | 2.1 | 0.0 | 0.0 | 1.4 | **53.8** |
| 18 | Uvs | 24.5 | 3.3 | 7.7 | 3.0 | 11.0 | 3.9 | 1.2 | 1.3 | 2.3 | 1.2 | 1.0 | 0.0 | 0.0 | 0.5 | 1.5 | 0.2 | 0.0 | 0.1 | 0.7 | 1.0 | 0.0 | 0.0 | 2.7 | **67.2** |
| 19 | Khovd | 19.0 | 4.1 | 6.1 | 4.1 | 10.9 | 3.8 | 1.5 | 0.9 | 4.7 | 1.4 | 0.7 | 0.0 | 0.0 | 0.5 | 0.2 | 0.8 | 0.0 | 0.2 | 0.0 | 3.4 | 0.0 | 0.6 | 3.9 | **66.8** |
| 20 | Khuvsgul | 22.5 | 4.1 | 5.9 | 2.3 | 11.4 | 3.6 | 1.1 | 0.8 | 3.8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.6 | 0.0 | **59.7** |
| 21 | Khentii | 13.6 | 5.7 | 6.7 | 2.5 | 11.2 | 4.1 | 1.1 | 1.3 | 3.2 | 1.9 | 1.2 | 0.0 | 0.0 | 0.3 | 0.5 | 1.9 | 0.0 | 0.0 | 0.4 | 4.3 | 0.0 | 1.1 | 1.9 | **63.0** |
| **22** | **Province average** | **21.8** | **3.8** | **6.6** | **3.4** | **10.8** | **4.0** | **1.0** | **1.5** | **4.4** | **1.5** | **1.3** | **0.0** | **0.0** | **0.6** | **0.4** | **0.6** | **0.0** | **0.2** | **0.3** | **3.3** | **0.0** | **0.8** | **1.8** | **68.1** |
| 23 | Ulaanbaatar | 26.3 | 7.2 | 5.1 | 4.3 | 9.0 | 2.6 | 1.9 | 1.9 | 6.8 | 3.7 | 4.7 | 1.0 | 0.5 | 1.7 | 1.2 | 1.0 | 0.0 | 0.3 | 0.9 | 5.9 | 0.0 | 0.9 | 1.3 | 88.1 |
| **24** | **National average** | **23.8** | **5.3** | **5.9** | **3.8** | **10.0** | **3.4** | **1.4** | **1.7** | **5.5** | **2.5** | **2.8** | **0.5** | **0.2** | **1.1** | **0.8** | **0.8** | **0.0** | **0.3** | **0.6** | **4.5** | **0.0** | **0.8** | **1.6** | **77.1** |

## HEALTH ORGANIZATION BY LOCATION , 2017

| Province/city | № | Family hospitals | Village hospitals | Soum health center | Intersoum hospitals | District hospitals | Rural general hospitals | Province general hospitals | Regional Treatment and Diagnostic centers | Specialized Centers and Hospitals | Maternity hospitals | Rail sector hospitals | Private hospitals with beds | Private hospitals for outpatients | Ministry of health | Research institutions | Health department | Centre for Health Development | National Center for Zoonotic diseases centers | National Center for Blood Transfusion Research, provincial blood centers in the district | Emergency center and the districts in the industry | State Medical University, College | Private medical schools, colleges | Resort | **Medical Supply Organization** | **Drug factory** | **Private pharmacies** | **Other medical / border guards and the prison hospital, defense, law enforcement officials Hospital, Railway Hospital** | **Total** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | **24** | **25** | **26** | **27** | **28** |
| Arkhangai | 1 | 5 | 0 | 17 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | 7 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 41 | 0 | **89** |
| Bayan-Ulgii | 2 | 4 | 2 | 9 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 8 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 22 | 1 | **62** |
| Bayankhongor | 3 | 5 | 1 | 16 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | 19 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 36 | 0 | **97** |
| Bulgan | 4 | 2 | 1 | 13 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 26 | 0 | **55** |
| Govi-Altai | 5 | 3 | 2 | 14 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 12 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 13 | 1 | **59** |
| Govisumber | 6 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9 | 0 | **22** |
| Darkhan-Uul | 7 | 5 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 12 | 45 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 53 | 0 | **124** |
| Dornogovi | 8 | 5 | 0 | 12 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 5 | 18 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 0 | 19 | 5 | **76** |
| Dornod | 9 | 3 | 0 | 10 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 17 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 14 | 1 | **56** |
| Dundgovi | 10 | 2 | 0 | 13 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 12 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 10 | 1 | **46** |
| Zavkhan | 11 | 4 | 0 | 19 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 20 | 0 | **70** |
| Orkhon | 12 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 12 | 50 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 56 | 1 | **139** |
| Uvurkhangai | 13 | 4 | 0 | 16 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 6 | 21 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 49 | 3 | **111** |
| Umnugovi | 14 | 4 | 0 | 11 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 18 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 38 | 3 | **90** |
| Sukhbaatar | 15 | 3 | 0 | 11 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 14 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 10 | 2 | **48** |
| Selenge | 16 | 7 | 6 | 14 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 6 | 14 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 34 | 2 | **95** |
| Tuv | 17 | 1 | 0 | 26 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 12 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 17 | 0 | **76** |
| Uvs | 18 | 4 | 0 | 15 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 10 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 22 | 2 | **67** |
| Khovd | 19 | 6 | 0 | 14 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 6 | 13 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 21 | 3 | **73** |
| Khuvsgul | 20 | 5 | 0 | 20 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 11 | 35 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 39 | 5 | **129** |
| Khentii | 21 | 4 | 2 | 17 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 25 | 1 | 83 |
| **Province average** | **22** | **85** | **14** | **273** | **39** | **0** | **6** | **16** | **5** | **0** | **0** | **2** | **106** | **364** | **0** | **0** | **21** | **0** | **13** | **0** | **0** | **3** | **0** | **49** | **66** | **0** | **574** | **31** | **1667** |
| Ulaanbaatar | 23 | 133 | 5 | 0 | 0 | 12 | 0 | 0 | 0 | 13 | 3 | 0 | 134 | 862 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 4 | 65 | 333 | 46 | 703 | 14 | 2338 |
| **National average** | **24** | **218** | **19** | **273** | **39** | **12** | **6** | **16** | **5** | **13** | **3** | **2** | **240** | **1226** | **1** | **1** | **22** | **1** | **14** | **1** | **4** | **4** | **4** | **114** | **399** | **46** | **1277** | **45** | **4005** |

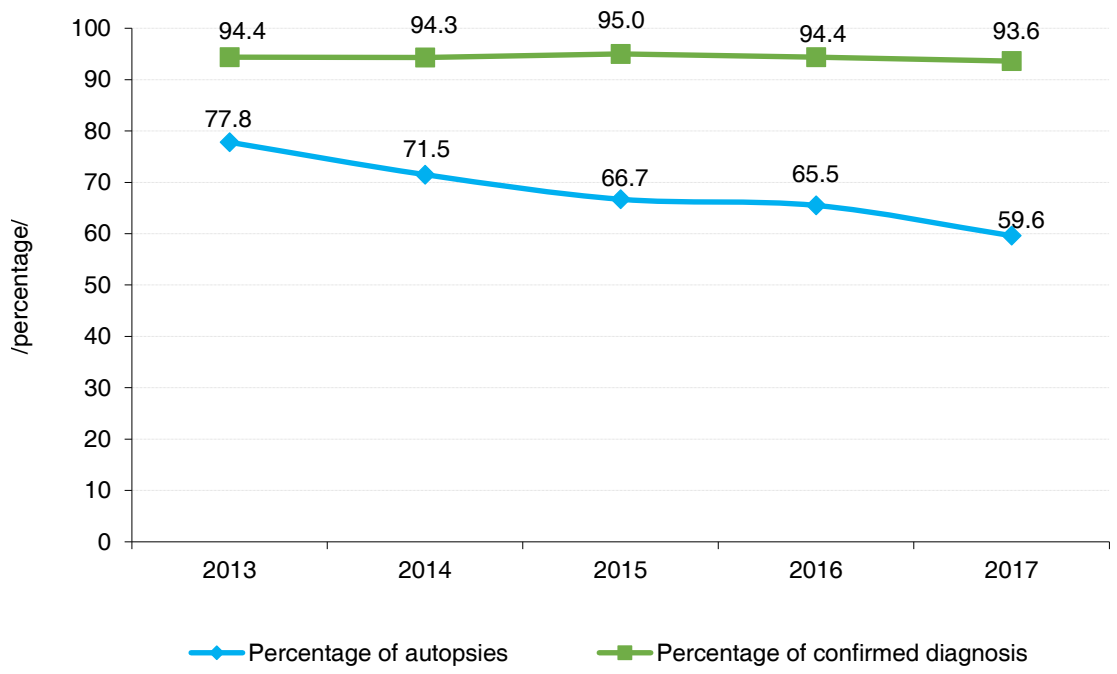
## PATHOLOGIC ANATOMY DIFFERENCE IN DIAGNOSIS, 2017

| № | Province and city | No.of deaths | The number of autopsies | Percentage of autopsies | No.of difference in main diagnosis | Percentage of difference in main diagnosis |
|---|---|---|---|---|---|---|
| A | B | 1 | 2 | 3 | 4 | 5 |
| 1 | Arkhangai | 25 | 17 | 80.0% | 1 | 5.9% |
| 2 | Bayan-Ulgii | 72 | 1 | 1.4% | 0 | 0.0% |
| 3 | Bayankhongor | 60 | 42 | 75.0% | 2 | 4.8% |
| 4 | Bulgan | 20 | 10 | 50.0% | 0 | 0.0% |
| 5 | Govi-Altai | 34 | 23 | 76.5% | 2 | 8.7% |
| 6 | Govisumber | 11 | 5 | 90.9% | 0 | 0.0% |
| 7 | Darkhan-Uul | 97 | 52 | 64.9% | 4 | 7.7% |
| 8 | Dornogovi | 39 | 29 | 89.7% | 0 | 0.0% |
| 9 | Dornod | 88 | 56 | 69.3% | 1 | 1.8% |
| 10 | Dundgovi | 22 | 6 | 31.8% | 1 | 16.7% |
| 11 | Zavkhan | 34 | 8 | 23.5% | 1 | 12.5% |
| 12 | Orkhon | 96 | 58 | 67.7% | 4 | 6.9% |
| 13 | Uvurkhangai | 62 | 36 | 71.0% | 3 | 8.3% |
| 14 | Umnugovi | 62 | 31 | 64.5% | 3 | 9.7% |
| 15 | Sukhbaatar | 35 | 26 | 80.0% | 2 | 7.7% |
| 16 | Selenge | 16 | 8 | 62.5% | 1 | 12.5% |
| 17 | Tuv | 38 | 23 | 60.5% | 5 | 21.7% |
| 18 | Uvs | 32 | 27 | 87.5% | 4 | 14.8% |
| 19 | Khovd | 54 | 23 | 51.9% | 3 | 13.0% |
| 20 | Khuvsgul | 106 | 69 | 77.4% | 10 | 14.5% |
| 21 | Khentii | 32 | 11 | 50.0% | 1 | 9.1% |
| **22** | **Province average** | **1035** | **561** | **62.8%** | **48** | **8.6%** |
| 23 | Ulaanbaatar | 2454 | 1382 | 58.3% | 76 | 5.5% |
| **24** | **National average** | **3489** | **1943** | **59.6%** | **124** | **6.4%** |

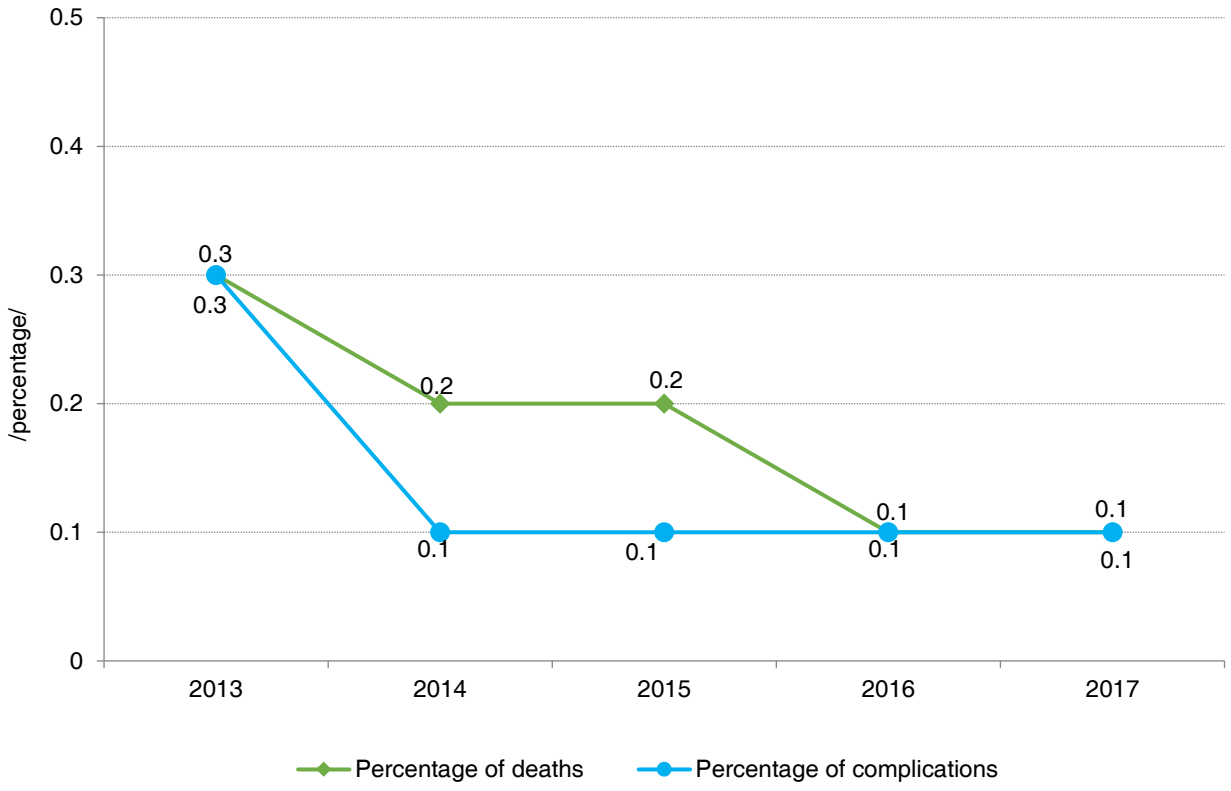
## POST OPERATIONAL COMPLICATIONS AND DEATHS, 2017

| № | Province and city | Number of surgery | Percentage of complications | Percentage of deaths |
|---|---|---|---|---|
| A | B | 1 | 2 | 3 |
| 1 | Arkhangai | 1214 | 0.0 | 0.0 |
| 2 | Bayan-Ulgii | 2388 | 0.2 | 0.0 |
| 3 | Bayankhongor | 2146 | 0.0 | 0.0 |
| 4 | Bulgan | 551 | 0.0 | 0.4 |
| 5 | Govi-Altai | 1787 | 0.2 | 0.0 |
| 6 | Govisumber | 402 | 0.5 | 0.0 |
| 7 | Darkhan-Uul | 3114 | 0.0 | 0.0 |
| 8 | Dornogovi | 1617 | 0.0 | 0.0 |
| 9 | Dornod | 1768 | 0.2 | 0.1 |
| 10 | Dundgovi | 898 | 0.1 | 0.1 |
| 11 | Zavkhan | 1026 | 0.1 | 0.0 |
| 12 | Orkhon | 2880 | 0.4 | 0.1 |
| 13 | Uvurkhangai | 2458 | 0.3 | 0.2 |
| 14 | Umnugovi | 1901 | 0.1 | 0.1 |
| 15 | Sukhbaatar | 867 | 0.0 | 0.0 |
| 16 | Selenge | 2323 | 0.0 | 0.0 |
| 17 | Tuv | 1065 | 0.0 | 0.0 |
| 18 | Uvs | 2103 | 0.1 | 0.0 |
| 19 | Khovd | 1824 | 0.0 | 0.0 |
| 20 | Khuvsgul | 2224 | 0.1 | 0.2 |
| 21 | Khentii | 1320 | 0.3 | 0.2 |
| **22** | **Province average** | **35876** | **0.1** | **0.1** |
| 23 | Ulaanbaatar | 171648 | 0.1 | 0.1 |
| **24** | **National average** | **207524** | **0.1** | **0.1** |

## Pathologic Anatomy, Confirmed Diagnosis Percentage, /2013-2017/




## Indicators of Surgery Operations, / 2013-2017/



# INPATIENT MORBIDITY PER 10 000 POPULATION, 2017

| № | Province and city | Total | Certain infectious and parasitic diseases | Out of them | | | | | | Neoplasms | Out of them | | | | | | Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism | Endocrine, nutritional and metabolic diseases | Out of them | Mental and behavioural disorders | Diseases of the nervous system and sense organs | Diseases of the eye and adnexa | Diseases of the ear and mastoid process | Diseases of the circulatory system |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tuberculosis | Viral hepatitis | Brucellosis | Congenital syphilis | Gonococcal infection | Trichomoniasis | | Malignant neoplasm of liver | Malignant neoplasm of oesophagus | Malignant neoplasm of stomach | Malignant neoplasm of lung | Malignant neoplasm of cervix uteri | Malignant neoplasm of breast | | | Insulin-dependent diabetes mellitus | | | | | |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 1 | Arkhangai | 2128.3 | 67.1 | 11.1 | 4.1 | 18.9 | 0.1 | 0.0 | 0.0 | 25.7 | 9.8 | 1.0 | 3.3 | 2.0 | 0.5 | 0.4 | 7.9 | 40.0 | 13.7 | 22.8 | 151.4 | 7.7 | 8.8 | 399.2 |
| 2 | Bayan-Ulgii | 2724.3 | 21.5 | 5.0 | 3.3 | 2.3 | 0.0 | 0.0 | 0.0 | 56.0 | 9.9 | 6.2 | 7.2 | 1.7 | 0.4 | 1.9 | 25.4 | 51.9 | 13.8 | 35.3 | 267.8 | 17.9 | 18.1 | 458.3 |
| 3 | Bayankhongor | 2308.3 | 40.4 | 7.2 | 3.9 | 6.6 | 0.3 | 0.2 | 0.0 | 43.5 | 12.3 | 2.4 | 6.6 | 3.2 | 2.3 | 0.2 | 9.4 | 31.6 | 10.0 | 10.3 | 169.8 | 58.8 | 5.0 | 427.1 |
| 4 | Bulgan | 1919.0 | 37.3 | 8.0 | 3.6 | 8.1 | 0.0 | 0.2 | 0.2 | 33.4 | 11.2 | 1.3 | 6.7 | 1.9 | 2.6 | 0.6 | 6.2 | 48.7 | 15.1 | 14.5 | 194.2 | 2.6 | 11.7 | 394.4 |
| 5 | Govi-Altai | 2517.4 | 100.6 | 2.8 | 3.5 | 31.9 | 0.0 | 0.0 | 0.0 | 53.3 | 19.8 | 1.4 | 4.9 | 3.7 | 2.1 | 1.2 | 17.9 | 40.0 | 24.4 | 30.1 | 236.2 | 21.7 | 10.3 | 362.7 |
| 6 | Govisumber | 2826.4 | 107.8 | 15.1 | 12.8 | 16.9 | 0.0 | 0.0 | 0.0 | 46.0 | 16.3 | 0.0 | 5.2 | 4.1 | 2.3 | 1.2 | 5.8 | 27.4 | 18.1 | 4.7 | 120.6 | 1.2 | 29.1 | 341.4 |
| 7 | Darkhan-Uul | 2976.8 | 92.2 | 27.6 | 13.3 | 14.7 | 0.0 | 0.0 | 0.0 | 35.0 | 7.8 | 0.5 | 5.7 | 2.4 | 3.2 | 1.4 | 6.9 | 145.2 | 71.3 | 85.7 | 165.2 | 12.8 | 40.3 | 522.9 |
| 8 | Dornogovi | 2381.9 | 38.1 | 10.2 | 2.7 | 12.2 | 0.3 | 0.0 | 0.0 | 30.3 | 11.0 | 1.2 | 3.4 | 2.2 | 0.1 | 1.0 | 7.4 | 28.0 | 18.7 | 13.4 | 358.9 | 7.3 | 3.9 | 276.0 |
| 9 | Dornod | 2416.5 | 95.8 | 18.1 | 3.3 | 45.3 | 0.0 | 0.0 | 0.4 | 43.4 | 16.8 | 0.3 | 4.7 | 1.4 | 3.1 | 0.6 | 8.9 | 50.9 | 23.1 | 71.2 | 139.0 | 53.5 | 12.7 | 358.7 |
| 10 | Dundgovi | 2403.5 | 30.0 | 8.5 | 2.2 | 6.7 | 0.0 | 0.0 | 0.0 | 19.8 | 8.1 | 0.2 | 1.3 | 2.2 | 0.7 | 1.5 | 10.7 | 30.3 | 18.5 | 11.5 | 143.0 | 13.1 | 8.3 | 383.3 |
| 11 | Zavkhan | 2279.4 | 82.0 | 3.8 | 12.2 | 36.7 | 0.0 | 0.0 | 0.0 | 37.2 | 12.2 | 1.1 | 3.9 | 2.8 | 0.6 | 0.3 | 9.0 | 22.9 | 12.7 | 15.8 | 320.1 | 1.4 | 5.5 | 352.6 |
| 12 | Orkhon | 2248.2 | 93.1 | 11.1 | 7.2 | 28.6 | 0.3 | 0.0 | 0.0 | 35.3 | 12.0 | 1.3 | 4.0 | 1.8 | 0.4 | 0.8 | 7.3 | 41.8 | 32.2 | 93.1 | 114.5 | 4.3 | 14.9 | 387.3 |
| 13 | Uvurkhangai | 2111.6 | 48.2 | 7.3 | 7.1 | 11.9 | 0.1 | 0.0 | 0.0 | 50.9 | 12.9 | 2.9 | 4.4 | 2.5 | 1.0 | 0.2 | 7.5 | 27.1 | 8.7 | 27.0 | 98.4 | 9.7 | 10.1 | 313.9 |
| 14 | Umnugovi | 2105.9 | 27.5 | 2.2 | 4.2 | 5.4 | 0.0 | 0.0 | 0.0 | 21.7 | 8.2 | 0.6 | 2.0 | 1.5 | 0.3 | 0.5 | 7.3 | 35.6 | 15.9 | 41.8 | 177.4 | 7.9 | 3.4 | 269.6 |
| 15 | Sukhbaatar | 2168.3 | 86.9 | 15.5 | 3.0 | 48.9 | 0.0 | 0.0 | 0.0 | 39.4 | 16.0 | 1.3 | 2.1 | 3.5 | 0.5 | 1.8 | 12.2 | 33.3 | 15.7 | 58.5 | 209.0 | 10.9 | 5.6 | 301.4 |
| 16 | Selenge | 2105.7 | 41.0 | 18.8 | 1.0 | 5.5 | 0.1 | 0.1 | 0.0 | 24.5 | 8.4 | 0.8 | 3.2 | 0.6 | 0.8 | 0.7 | 6.2 | 38.2 | 28.5 | 32.5 | 128.7 | 3.5 | 27.0 | 364.1 |
| 17 | Tuv | 1663.9 | 60.5 | 19.2 | 17.7 | 10.8 | 0.0 | 0.0 | 0.0 | 31.8 | 10.7 | 0.5 | 2.2 | 3.7 | 1.3 | 0.2 | 4.7 | 25.3 | 17.1 | 20.2 | 132.3 | 4.3 | 4.3 | 297.8 |
| 18 | Uvs | 2635.7 | 72.3 | 23.3 | 4.5 | 23.2 | 0.0 | 0.2 | 0.0 | 51.6 | 14.6 | 4.4 | 12.3 | 2.1 | 1.0 | 2.2 | 7.7 | 20.6 | 12.7 | 30.5 | 223.3 | 31.3 | 8.9 | 474.3 |
| 19 | Khovd | 2647.7 | 38.8 | 13.6 | 4.5 | 3.2 | 0.1 | 0.0 | 0.1 | 51.5 | 14.6 | 2.5 | 8.9 | 2.2 | 1.0 | 0.7 | 9.8 | 30.7 | 15.1 | 53.2 | 187.6 | 17.5 | 23.5 | 430.0 |
| 20 | Khuvsgul | 2139.7 | 53.8 | 7.8 | 2.7 | 14.6 | 0.1 | 0.0 | 0.0 | 27.4 | 8.4 | 1.4 | 3.7 | 1.1 | 1.6 | 1.1 | 11.1 | 38.2 | 11.3 | 33.6 | 169.1 | 0.2 | 8.8 | 411.5 |
| 21 | Khentii | 2085.5 | 99.0 | 20.5 | 5.9 | 51.7 | 0.0 | 0.0 | 0.1 | 34.6 | 15.1 | 0.5 | 2.4 | 2.5 | 1.6 | 0.8 | 5.9 | 22.5 | 6.5 | 25.1 | 205.6 | 14.2 | 31.9 | 257.0 |
| **22** | **Province average** | **2302.3** | **61.5** | **12.4** | **5.7** | **18.3** | **0.1** | **0.0** | **0.0** | **37.6** | **11.7** | **1.7** | **4.8** | **2.2** | **1.3** | **0.9** | **9.4** | **41.3** | **19.7** | **37.5** | **182.5** | **14.4** | **14.0** | **377.5** |
| 23 | Ulaanbaatar | 3307.7 | 72.6 | 15.4 | 3.3 | 4.5 | 0.2 | 0.0 | 0.0 | 129.5 | 23.5 | 2.6 | 16.1 | 5.7 | 5.1 | 12.3 | 14.0 | 71.9 | 43.9 | 66.7 | 245.8 | 46.1 | 18.0 | 453.3 |
| **24** | **National average** | **2756.4** | **66.5** | **13.8** | **4.6** | **12.1** | **0.1** | **0.0** | **0.0** | **79.1** | **17.1** | **2.1** | **9.9** | **3.8** | **3.0** | **6.0** | **11.5** | **55.2** | **30.6** | **50.7** | **211.1** | **28.7** | **15.8** | **411.7** |

## INPATIENT MORBIDITY PER 1 0000 POPULATION, 2017 /CONTINUE/

| № | Province and city | Out of them | | | | Diseases of the respiratory system | Out of them | | | | | Diseases of the digestive system | Out of them | | | Diseases of the skin and subcutaneous tissue | Diseases of the musculoskeletal system and connective tissue | Diseases of the genito-urinary system | Out of them | | Pregnancy, childbirth and the puerperium | Certain conditions originating in the perinatal period | Conginatal malformations, deformations and chromosomal abnormalities | Symptoms, signs and abnormal clinical and laboratory findins, not elsewhere classified | Injuiry, poisoning and certain other consequences of external causes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Acute rheumatic fever and chronic rheumatic heart diseases | Hypertensive diseases | Ischaemic heart diseases | Cerebrovascular diseases | | Influenza | Pneumonia | Acute upper respiratory infections | Asthma | Chronic obstructive pulmonary disease | | Gastric ulcer | Chronic hepatitis, elsewhere classified | Alcoholic liver disease | | | | Acute and chronic renal failure | Acute and chronic pyelonephritis | | | | | |
| A | B | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
| 1 | Arkhangai | 31.8 | 180.9 | 105.8 | 10.3 | 268.5 | 2.3 | 155.4 | 5.7 | 6.0 | 18.1 | 236.3 | 8.6 | 13.5 | 0.0 | 37.8 | 53.8 | 401.8 | 1.8 | 306.2 | 320.4 | 11.3 | 3.2 | 0.0 | 64.6 |
| 2 | Bayan-Ulgii | 8.7 | 278.2 | 49.2 | 13.7 | 394.4 | 36.3 | 145.6 | 0.7 | 7.5 | 51.7 | 351.1 | 5.5 | 4.7 | 3.0 | 48.2 | 142.4 | 343.5 | 6.4 | 231.6 | 428.4 | 3.3 | 9.8 | 0.0 | 51.2 |
| 3 | Bayankhongor | 32.8 | 176.0 | 75.6 | 9.4 | 338.6 | 5.8 | 179.7 | 11.6 | 22.7 | 16.7 | 236.7 | 10.3 | 16.3 | 0.5 | 66.3 | 102.6 | 322.9 | 2.1 | 222.9 | 368.2 | 19.4 | 8.2 | 0.0 | 49.7 |
| 4 | Bulgan | 26.0 | 114.3 | 129.4 | 10.6 | 312.9 | 2.6 | 175.0 | 5.4 | 8.3 | 27.6 | 170.5 | 4.9 | 11.0 | 0.3 | 52.6 | 68.8 | 297.8 | 1.1 | 200.4 | 216.9 | 9.4 | 2.3 | 0.0 | 44.8 |
| 5 | Govi-Altai | 25.2 | 102.7 | 129.5 | 8.6 | 244.6 | 18.2 | 65.5 | 11.6 | 14.0 | 31.9 | 411.3 | 12.8 | 34.3 | 0.2 | 116.9 | 103.2 | 320.5 | 0.9 | 190.1 | 317.0 | 34.0 | 9.6 | 0.7 | 86.7 |
| 6 | Govisumber | 32.6 | 67.6 | 143.3 | 9.9 | 830.7 | 16.3 | 550.5 | 0.0 | 7.6 | 46.6 | 307.6 | 9.3 | 0.0 | 0.0 | 110.7 | 122.3 | 278.4 | 0.6 | 201.6 | 400.8 | 30.3 | 1.7 | 0.0 | 60.0 |
| 7 | Darkhan-Uul | 23.1 | 235.1 | 101.5 | 19.8 | 464.1 | 4.4 | 249.6 | 7.5 | 15.3 | 27.6 | 302.8 | 17.2 | 3.7 | 0.3 | 113.4 | 157.8 | 350.7 | 1.6 | 209.2 | 330.7 | 14.9 | 4.8 | 0.0 | 131.5 |
| 8 | Dornogovi | 24.3 | 60.1 | 101.2 | 6.1 | 445.9 | 3.1 | 297.9 | 0.4 | 9.6 | 45.1 | 258.2 | 6.5 | 43.9 | 0.1 | 37.4 | 229.5 | 179.2 | 2.8 | 108.6 | 349.3 | 18.5 | 6.5 | 0.0 | 94.2 |
| 9 | Dornod | 28.1 | 120.7 | 134.8 | 6.1 | 333.9 | 5.6 | 139.6 | 2.4 | 13.6 | 30.9 | 279.5 | 7.8 | 18.2 | 0.1 | 92.2 | 149.8 | 261.6 | 0.5 | 174.8 | 356.4 | 2.8 | 4.5 | 0.0 | 101.7 |
| 10 | Dundgovi | 27.6 | 128.6 | 113.4 | 5.0 | 505.3 | 33.7 | 335.4 | 8.3 | 11.5 | 25.7 | 292.9 | 5.0 | 33.1 | 0.4 | 53.5 | 166.7 | 311.4 | 0.9 | 227.4 | 337.5 | 16.8 | 7.0 | 0.0 | 62.5 |
| 11 | Zavkhan | 6.2 | 130.0 | 126.1 | 16.5 | 270.0 | 8.5 | 99.8 | 5.5 | 9.4 | 22.5 | 247.1 | 9.9 | 14.3 | 0.0 | 73.9 | 138.1 | 332.5 | 1.8 | 269.2 | 283.0 | 25.0 | 3.2 | 0.0 | 60.2 |
| 12 | Orkhon | 13.3 | 150.1 | 137.9 | 9.8 | 291.8 | 2.7 | 81.5 | 2.2 | 7.0 | 37.9 | 251.0 | 6.6 | 20.8 | 0.4 | 25.0 | 142.3 | 263.2 | 1.2 | 217.2 | 320.0 | 43.6 | 7.3 | 0.0 | 112.3 |
| 13 | Uvurkhangai | 29.3 | 137.8 | 69.1 | 9.9 | 391.1 | 3.9 | 214.6 | 2.4 | 7.0 | 27.8 | 240.9 | 7.5 | 16.1 | 0.3 | 66.2 | 59.5 | 375.1 | 8.4 | 253.3 | 268.8 | 18.7 | 4.1 | 0.2 | 94.3 |
| 14 | Umnugovi | 24.7 | 94.8 | 83.8 | 4.9 | 362.1 | 10.1 | 219.0 | 3.2 | 12.5 | 24.1 | 239.0 | 4.2 | 19.3 | 0.6 | 65.6 | 117.1 | 188.2 | 2.8 | 113.8 | 438.5 | 9.6 | 3.2 | 0.0 | 90.5 |
| 15 | Sukhbaatar | 17.1 | 101.0 | 66.7 | 7.3 | 368.0 | 3.6 | 234.4 | 6.1 | 14.0 | 27.2 | 210.0 | 5.1 | 27.5 | 0.3 | 75.2 | 118.7 | 209.6 | 2.3 | 142.6 | 305.1 | 4.4 | 8.7 | 0.8 | 110.7 |
| 16 | Selenge | 21.8 | 143.6 | 112.7 | 7.4 | 447.4 | 9.7 | 243.8 | 4.0 | 16.9 | 28.6 | 184.7 | 6.3 | 7.1 | 0.3 | 44.7 | 75.5 | 381.4 | 1.9 | 284.8 | 254.6 | 17.1 | 2.2 | 0.0 | 32.3 |
| 17 | Tuv | 16.8 | 81.6 | 85.1 | 9.6 | 348.0 | 15.2 | 212.7 | 3.6 | 10.7 | 21.0 | 131.8 | 6.5 | 4.8 | 0.0 | 47.9 | 67.9 | 234.5 | 0.7 | 183.0 | 204.8 | 6.9 | 3.3 | 0.3 | 37.2 |
| 18 | Uvs | 67.2 | 151.0 | 162.8 | 10.2 | 387.1 | 1.0 | 272.5 | 3.0 | 14.6 | 20.2 | 278.8 | 4.5 | 26.2 | 0.0 | 72.0 | 68.9 | 365.0 | 0.9 | 290.0 | 444.4 | 15.0 | 7.4 | 0.2 | 76.1 |
| 19 | Khovd | 35.4 | 139.1 | 127.5 | 13.4 | 482.1 | 14.0 | 317.5 | 2.5 | 14.2 | 22.4 | 296.3 | 11.1 | 4.1 | 0.5 | 90.8 | 198.4 | 299.6 | 6.4 | 213.7 | 346.5 | 9.6 | 6.1 | 0.0 | 75.5 |
| 20 | Khuvsgul | 22.1 | 158.4 | 174.1 | 12.4 | 328.8 | 1.8 | 230.5 | 1.8 | 8.4 | 14.4 | 255.2 | 6.1 | 37.6 | 0.1 | 39.8 | 52.0 | 302.6 | 0.9 | 245.5 | 315.0 | 19.5 | 4.2 | 0.0 | 68.9 |
| 21 | Khentii | 21.8 | 89.2 | 69.1 | 9.8 | 412.8 | 18.2 | 137.7 | 7.0 | 12.8 | 48.9 | 224.6 | 7.6 | 11.0 | 0.4 | 60.8 | 125.8 | 199.7 | 0.8 | 122.6 | 274.4 | 8.2 | 6.0 | 0.0 | 77.4 |
| **22** | **Province average** | **25.1** | **144.2** | **108.9** | **10.4** | **374.3** | **9.4** | **203.3** | **4.4** | **11.6** | **28.3** | **253.5** | **7.8** | **17.3** | **0.4** | **62.8** | **112.3** | **303.7** | **2.4** | **216.9** | **323.2** | **15.8** | **5.4** | **0.1** | **75.6** |
| 23 | Ulaanbaatar | 15.4 | 190.3 | 100.2 | 15.5 | 501.8 | 1.2 | 223.0 | 5.6 | 10.8 | 50.6 | 429.9 | 16.4 | 51.9 | 2.2 | 87.2 | 153.6 | 331.6 | 8.3 | 178.5 | 483.2 | 34.2 | 19.9 | 0.6 | 147.7 |
| **24** | **National average** | **20.7** | **165.0** | **105.0** | **12.7** | **431.9** | **5.7** | **212.2** | **4.9** | **11.2** | **38.4** | **333.2** | **11.7** | **32.9** | **1.2** | **73.8** | **131.0** | **316.3** | **5.1** | **199.6** | **395.5** | **24.1** | **11.9** | **0.3** | **108.2** |

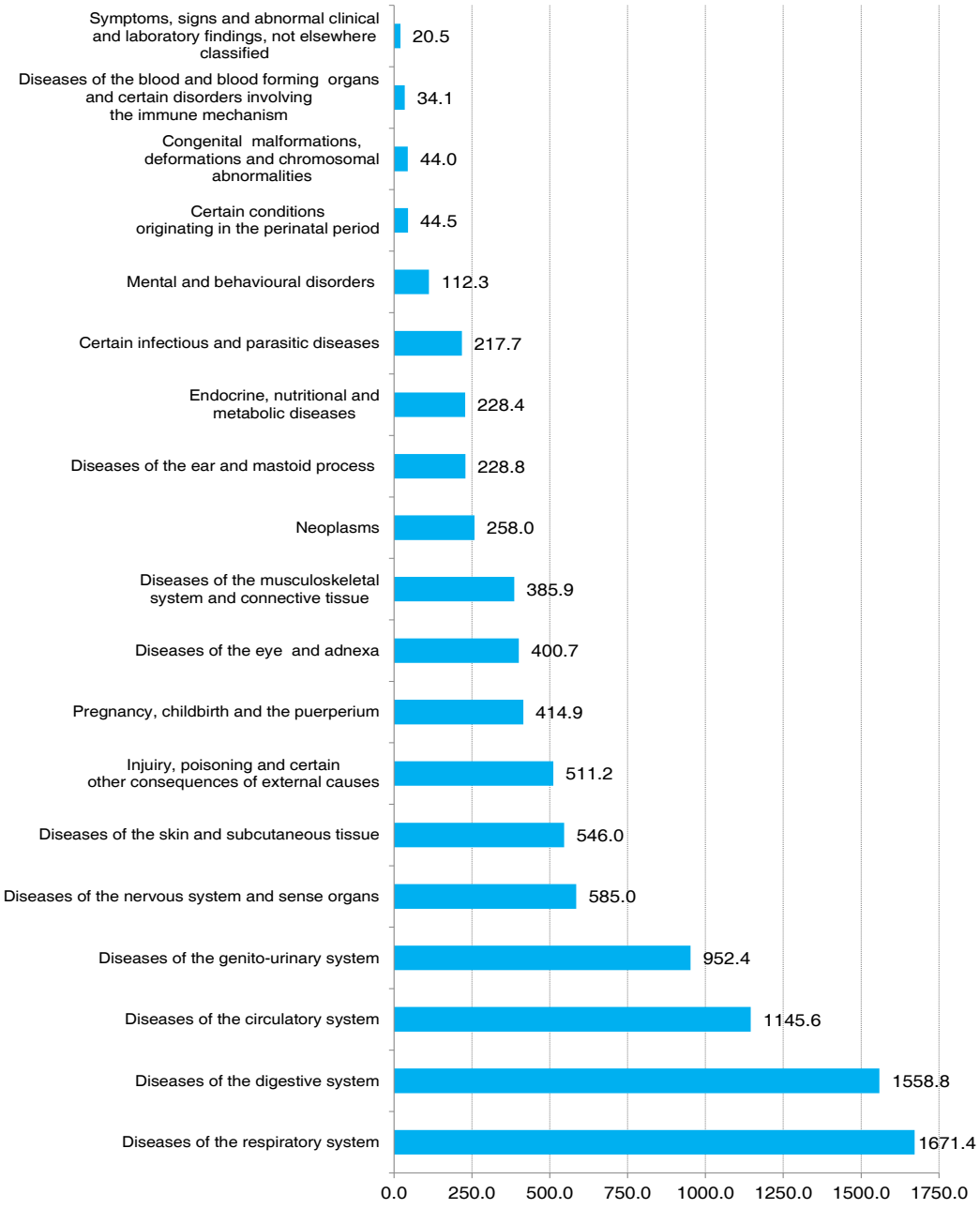
# OUTPATIENT MORBIDITY (PER 10 000 POPULATION), 2017

| № | Province and city | Total | Certain infectious and parasitic diseases | Out of them | | | | | | Neoplasms | Out of them | | | | | | Diseases of blood and blood formingorgans and certain disorders involving the immune mechanisms | Endocrine, nutritional and metabolic diseases | Out of them | Mental and behavioural disorders | Diseases of the nervous system and sense organs | Diseases of the eye and adnexa | Diseases of the ear and mastoid process | Diseases of the circulatory system | Out of them | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tuberculosis | Viral hepatitis | Brucellosis | Congenital syphilis | Gonococcal infection | Trichomoniasis | | Malignant neoplasm of liver | Malignant neoplasm of oesophagus | Malignant neoplasm of stomach | Malignant neoplasm of lung | Malignant neoplasm of cervix uteri | Malignant neoplasm of breast | | | Insulin-dependent diabetes mellitus | | | | | | Acute rheumatic fever and chronic rheumatic heart diseases | Hypertensive diseases | Ischaemic heart diseases | Cerebrovascular diseases |
| A | B | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 1 | Arkhangai | 10178.0 | 119.0 | 16.6 | 5.2 | 30.4 | 9.2 | 1.4 | 10.2 | 67.4 | 21.0 | 2.4 | 7.9 | 4.2 | 2.1 | 2.2 | 63.6 | 305.7 | 80.1 | 109.7 | 537.4 | 190.2 | 220.0 | 1765.1 | 135.0 | 1049.9 | 392.1 | 12.4 |
| 2 | Bayan-Ulgii | 5408.9 | 54.5 | 8.9 | 4.4 | 3.1 | 3.6 | 7.9 | 3.7 | 103.9 | 18.3 | 10.9 | 10.5 | 2.1 | 1.0 | 3.4 | 68.2 | 82.3 | 16.8 | 46.1 | 534.4 | 127.0 | 127.2 | 780.3 | 13.7 | 531.2 | 66.3 | 15.2 |
| 3 | Bayankhongor | 10745.8 | 316.6 | 12.2 | 6.1 | 12.5 | 31.3 | 18.2 | 43.6 | 76.3 | 15.8 | 2.4 | 6.8 | 3.4 | 2.3 | 0.2 | 23.2 | 141.4 | 34.7 | 71.6 | 674.3 | 667.5 | 353.2 | 1592.4 | 137.1 | 845.1 | 205.1 | 13.9 |
| 4 | Bulgan | 10707.1 | 147.4 | 14.8 | 4.2 | 16.1 | 11.9 | 6.5 | 12.2 | 73.2 | 23.7 | 1.9 | 11.0 | 3.7 | 3.2 | 1.3 | 18.8 | 212.2 | 124.2 | 25.7 | 866.2 | 521.0 | 284.3 | 1705.7 | 95.8 | 926.5 | 405.9 | 12.2 |
| 5 | Govi-Altai | 7442.8 | 239.9 | 6.5 | 4.7 | 29.3 | 46.4 | 4.6 | 3.7 | 85.9 | 29.8 | 2.6 | 8.2 | 5.4 | 3.0 | 1.4 | 30.7 | 139.3 | 54.8 | 50.3 | 596.8 | 180.7 | 142.1 | 1001.1 | 82.0 | 425.3 | 322.3 | 11.2 |
| 6 | Govisumber | 6338.5 | 244.1 | 30.9 | 12.8 | 45.4 | 52.4 | 18.1 | 4.1 | 72.2 | 26.2 | 0.0 | 6.4 | 11.7 | 2.3 | 2.9 | 8.7 | 46.6 | 29.7 | 18.1 | 183.5 | 121.2 | 96.1 | 549.3 | 64.7 | 178.8 | 171.8 | 11.1 |
| 7 | Darkhan-Uul | 8945.3 | 186.0 | 46.6 | 15.0 | 23.3 | 10.0 | 6.6 | 6.5 | 72.7 | 15.9 | 1.2 | 9.5 | 3.7 | 4.2 | 2.0 | 40.7 | 203.1 | 99.6 | 95.1 | 318.6 | 502.5 | 281.6 | 1116.7 | 60.0 | 635.2 | 192.5 | 23.7 |
| 8 | Dornogovi | 13795.3 | 140.1 | 24.0 | 4.0 | 15.9 | 14.2 | 18.5 | 10.8 | 84.9 | 23.4 | 2.2 | 8.6 | 4.6 | 0.6 | 1.2 | 39.2 | 178.0 | 107.1 | 87.1 | 1136.4 | 672.3 | 376.7 | 1372.6 | 105.9 | 694.4 | 333.5 | 7.9 |
| 9 | Dornod | 7837.2 | 471.3 | 33.7 | 5.1 | 47.3 | 33.7 | 105.3 | 63.7 | 96.4 | 23.0 | 0.4 | 5.6 | 1.7 | 3.2 | 0.8 | 23.1 | 132.4 | 65.4 | 187.6 | 232.6 | 372.3 | 154.0 | 661.0 | 60.8 | 276.3 | 217.3 | 7.6 |
| 10 | Dundgovi | 5926.6 | 136.9 | 17.0 | 3.9 | 7.0 | 13.7 | 1.5 | 11.8 | 35.3 | 15.7 | 0.4 | 2.6 | 3.0 | 1.3 | 1.5 | 13.7 | 65.3 | 29.2 | 26.3 | 282.7 | 188.3 | 103.2 | 790.4 | 74.2 | 342.1 | 206.5 | 6.5 |
| 11 | Zavkhan | 8723.5 | 145.9 | 8.1 | 13.0 | 34.0 | 13.0 | 13.3 | 3.6 | 49.2 | 15.9 | 1.3 | 4.3 | 3.2 | 0.7 | 0.3 | 24.5 | 89.7 | 34.1 | 71.1 | 754.2 | 511.5 | 128.9 | 1111.8 | 38.1 | 584.8 | 321.5 | 22.8 |
| 12 | Orkhon | 5959.4 | 166.1 | 19.5 | 8.6 | 37.7 | 15.1 | 5.0 | 10.4 | 65.1 | 17.7 | 2.2 | 7.4 | 2.8 | 1.5 | 1.2 | 34.0 | 75.9 | 38.9 | 104.7 | 206.2 | 221.2 | 197.0 | 592.6 | 21.3 | 252.8 | 181.1 | 11.0 |
| 13 | Uvurkhangai | 7804.1 | 145.1 | 13.1 | 7.5 | 12.0 | 21.5 | 7.3 | 9.4 | 117.1 | 21.3 | 3.7 | 6.6 | 4.1 | 1.7 | 0.4 | 26.7 | 149.3 | 62.4 | 99.5 | 564.1 | 260.5 | 193.8 | 937.3 | 92.1 | 504.1 | 143.9 | 12.8 |
| 14 | Umnugovi | 10970.7 | 138.0 | 6.2 | 6.8 | 3.2 | 11.1 | 10.2 | 8.4 | 38.4 | 11.8 | 0.6 | 2.8 | 2.3 | 0.3 | 0.8 | 33.6 | 174.5 | 72.9 | 110.7 | 750.5 | 709.3 | 227.1 | 1233.5 | 115.4 | 706.2 | 273.8 | 6.5 |
| 15 | Sukhbaatar | 7478.1 | 296.5 | 26.4 | 4.3 | 55.7 | 48.3 | 20.9 | 15.0 | 54.6 | 22.7 | 2.5 | 4.1 | 4.1 | 1.0 | 2.0 | 27.0 | 82.9 | 35.1 | 153.1 | 517.7 | 180.0 | 52.1 | 843.1 | 33.9 | 523.4 | 124.8 | 7.7 |
| 16 | Selenge | 5046.2 | 113.0 | 37.0 | 1.0 | 9.3 | 24.2 | 7.5 | 10.9 | 40.1 | 13.0 | 1.9 | 5.5 | 1.8 | 2.1 | 1.0 | 12.3 | 129.4 | 97.8 | 64.9 | 229.2 | 102.7 | 184.9 | 796.7 | 44.7 | 430.3 | 188.2 | 9.0 |
| 17 | Tuv | 9041.8 | 149.1 | 30.5 | 17.8 | 9.7 | 20.6 | 10.5 | 9.3 | 73.5 | 17.4 | 1.1 | 4.2 | 5.7 | 2.1 | 0.4 | 18.3 | 107.4 | 56.0 | 42.9 | 623.9 | 470.3 | 149.0 | 1468.0 | 113.0 | 797.5 | 263.8 | 12.8 |
| 18 | Uvs | 8278.4 | 159.0 | 30.0 | 7.1 | 31.6 | 21.0 | 16.6 | 9.9 | 72.7 | 21.2 | 6.0 | 15.7 | 2.9 | 1.3 | 2.4 | 32.7 | 66.3 | 24.4 | 70.9 | 587.1 | 390.7 | 141.6 | 1240.0 | 154.4 | 563.8 | 345.9 | 12.8 |
| 19 | Khovd | 7297.1 | 98.6 | 18.1 | 5.7 | 7.5 | 14.5 | 3.5 | 8.2 | 73.8 | 22.2 | 4.5 | 12.2 | 3.0 | 2.0 | 0.9 | 17.7 | 166.8 | 68.3 | 67.4 | 490.0 | 216.6 | 253.1 | 1195.1 | 124.6 | 544.5 | 280.5 | 15.3 |
| 20 | Khuvsgul | 8001.1 | 191.1 | 15.3 | 4.0 | 25.2 | 32.7 | 34.0 | 10.1 | 59.4 | 17.4 | 3.1 | 7.8 | 2.0 | 2.4 | 1.7 | 41.6 | 85.9 | 20.2 | 83.2 | 502.0 | 397.8 | 153.9 | 1390.4 | 94.0 | 686.4 | 479.3 | 18.7 |
| 21 | Khentii | 7298.4 | 191.3 | 30.9 | 6.8 | 55.9 | 23.5 | 8.4 | 8.2 | 61.2 | 27.0 | 1.3 | 4.0 | 4.7 | 2.1 | 1.6 | 18.0 | 67.5 | 21.9 | 118.8 | 505.8 | 156.8 | 244.6 | 1214.6 | 44.5 | 802.1 | 223.8 | 13.6 |
| **22** | **Province average** | **8198.5** | **176.9** | **21.4** | **7.0** | **23.0** | **21.0** | **15.6** | **13.2** | **71.6** | **19.4** | **2.8** | **7.4** | **3.4** | **2.0** | **1.4** | **31.3** | **132.3** | **56.3** | **84.4** | **523.9** | **342.7** | **198.4** | **1134.3** | **81.5** | **603.4** | **256.9** | **13.2** |
| 23 | Ulaanbaatar | 10770.4 | 267.2 | 31.5 | 5.6 | 7.0 | 22.5 | 12.7 | 14.4 | 484.3 | 86.8 | 13.6 | 55.8 | 20.9 | 30.5 | 49.5 | 37.5 | 345.0 | 154.8 | 146.2 | 659.3 | 471.1 | 265.6 | 1159.3 | 55.3 | 516.7 | 264.7 | 18.7 |
| **24** | **National average** | **9360.1** | **217.7** | **26.0** | **6.4** | **15.8** | **21.6** | **14.3** | **13.7** | **258.0** | **49.8** | **7.7** | **29.3** | **11.3** | **14.9** | **23.1** | **34.1** | **228.4** | **100.8** | **112.3** | **585.0** | **400.7** | **228.8** | **1145.6** | **69.7** | **564.3** | **260.5** | **15.7** |

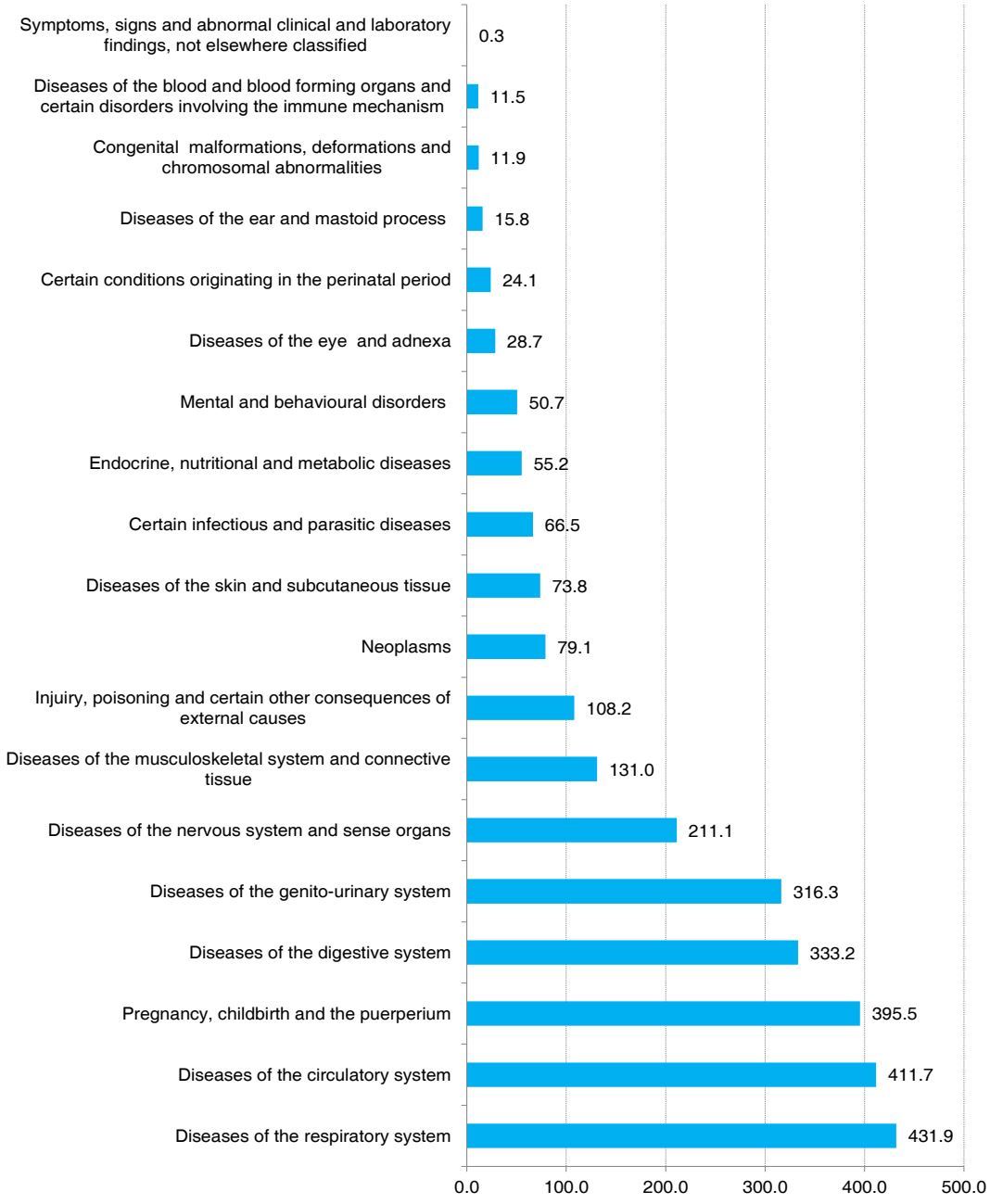
# OUTPATIENT MORBIDITY (PER 10 000 POPULATION), 2017 /CONTINUE/

| № | Province and city | Diseases of the respiratory system | Out of them | | | | | Diseases of the digestive system | Out of them | | | Diseases of the skin and subcutaneous tissue | Diseases of the musculoskeletal system and connective tissue | Diseases of the genito-urinary system | Out of them | | Pregnancy, childbirth and the puerperium | Certain conditions originating in the perinatal period | Conginatal malformations, deformations and chromosomal abnormalities | Symptoms, signs and abnormal clinical and laboratory findins, not elsewhere classified | Injuiry, poisoning and certain other consequences of external causes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Influenza | Pneumonia | Acute upper respiratory infections | Asthma | Chronic obstructive pulmonary disease | | Gastric ulcer | Chronic inflammation of the liver | Alcoholic liver disease | | | | Acute and chronic renal failure | Acute and chronic pyelonephritis | | | | | |
| A | B | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
| 1 | Arkhangai | 2389.6 | 288.7 | 339.4 | 480.5 | 14.0 | 67.9 | 1697.4 | 27.6 | 64.2 | 0.7 | 408.0 | 244.5 | 1475.1 | 5.1 | 1014.1 | 328.8 | 18.5 | 27.7 | 0.0 | 210.3 |
| 2 | Bayan-Ulgii | 1003.9 | 288.3 | 186.7 | 22.8 | 8.4 | 73.4 | 766.0 | 10.2 | 20.8 | 6.1 | 136.4 | 219.0 | 728.7 | 15.1 | 492.4 | 441.2 | 4.3 | 19.7 | 50.4 | 115.4 |
| 3 | Bayankhongor | 2115.6 | 155.2 | 311.2 | 469.5 | 70.2 | 41.8 | 1730.0 | 37.9 | 106.4 | 1.0 | 498.6 | 577.0 | 1319.8 | 8.0 | 883.9 | 371.0 | 19.6 | 50.6 | 0.0 | 147.2 |
| 4 | Bulgan | 2188.9 | 129.9 | 357.2 | 114.0 | 28.6 | 218.9 | 2219.1 | 14.3 | 272.0 | 2.6 | 343.7 | 276.8 | 1347.5 | 23.4 | 888.3 | 240.3 | 25.2 | 31.0 | 0.0 | 179.9 |
| 5 | Govi-Altai | 1415.4 | 266.7 | 99.2 | 213.4 | 33.8 | 60.8 | 1281.1 | 26.6 | 45.6 | 0.9 | 386.6 | 209.8 | 978.1 | 2.6 | 532.2 | 327.9 | 39.4 | 23.7 | 0.7 | 313.5 |
| 6 | Govisumber | 2129.1 | 519.0 | 674.0 | 0.0 | 11.7 | 102.5 | 678.6 | 23.3 | 0.0 | 0.0 | 262.7 | 263.9 | 612.2 | 1.7 | 344.3 | 407.2 | 34.4 | 5.8 | 0.0 | 604.7 |
| 7 | Darkhan-Uul | 2166.0 | 430.2 | 435.6 | 98.5 | 25.2 | 61.6 | 1615.3 | 20.8 | 5.6 | 0.3 | 656.1 | 272.5 | 708.7 | 2.0 | 419.7 | 353.6 | 20.5 | 7.6 | 0.0 | 327.9 |
| 8 | Dornogovi | 3471.3 | 379.5 | 600.0 | 164.7 | 37.8 | 211.0 | 2565.2 | 17.1 | 204.9 | 2.4 | 707.4 | 829.8 | 1218.0 | 8.6 | 591.8 | 371.7 | 42.4 | 26.0 | 0.0 | 476.4 |
| 9 | Dornod | 1408.6 | 275.9 | 191.0 | 207.7 | 20.0 | 64.0 | 2063.7 | 17.4 | 63.8 | 0.1 | 444.2 | 255.0 | 688.1 | 1.3 | 364.3 | 370.7 | 4.1 | 9.5 | 0.0 | 262.7 |
| 10 | Dundgovi | 1423.3 | 211.1 | 492.1 | 154.7 | 25.5 | 119.7 | 1067.3 | 14.4 | 57.7 | 0.7 | 180.9 | 341.9 | 680.1 | 2.4 | 537.1 | 342.1 | 16.8 | 15.2 | 0.7 | 216.3 |
| 11 | Zavkhan | 1551.7 | 182.7 | 153.8 | 371.0 | 17.2 | 60.0 | 2146.7 | 25.7 | 26.6 | 0.7 | 176.6 | 297.2 | 1102.4 | 3.9 | 781.9 | 291.6 | 42.8 | 18.6 | 4.9 | 204.4 |
| 12 | Orkhon | 1821.6 | 375.4 | 126.6 | 99.6 | 15.6 | 114.3 | 638.2 | 10.9 | 30.0 | 0.5 | 470.7 | 214.9 | 543.4 | 3.0 | 395.6 | 325.4 | 49.7 | 18.7 | 0.0 | 214.0 |
| 13 | Uvurkhangai | 1353.3 | 166.9 | 326.6 | 48.3 | 17.9 | 96.1 | 1595.6 | 17.1 | 116.4 | 0.8 | 412.1 | 238.4 | 1008.8 | 16.3 | 573.5 | 379.5 | 21.0 | 40.1 | 0.2 | 261.8 |
| 14 | Umnugovi | 2907.4 | 551.4 | 438.8 | 148.2 | 40.2 | 116.8 | 2029.6 | 20.0 | 173.4 | 1.9 | 523.9 | 423.5 | 889.7 | 9.0 | 465.1 | 458.1 | 30.8 | 18.3 | 0.0 | 274.1 |
| 15 | Sukhbaatar | 2167.0 | 148.3 | 391.9 | 121.8 | 24.4 | 51.4 | 1169.0 | 9.7 | 154.9 | 0.8 | 354.5 | 216.2 | 763.4 | 3.3 | 533.1 | 305.5 | 10.4 | 15.5 | 0.8 | 268.8 |
| 16 | Selenge | 1181.8 | 144.1 | 325.6 | 4.5 | 27.4 | 80.9 | 598.2 | 16.6 | 8.3 | 0.6 | 233.7 | 209.0 | 706.2 | 2.4 | 539.5 | 256.3 | 20.1 | 2.9 | 0.0 | 165.1 |
| 17 | Tuv | 2119.3 | 527.5 | 320.4 | 112.1 | 25.2 | 94.5 | 1777.7 | 21.9 | 94.6 | 0.7 | 382.7 | 306.1 | 968.1 | 6.7 | 604.7 | 207.4 | 7.7 | 21.8 | 0.3 | 148.3 |
| 18 | Uvs | 1864.6 | 149.4 | 463.3 | 386.3 | 31.5 | 49.8 | 1313.2 | 12.6 | 45.4 | 0.0 | 292.4 | 320.0 | 1005.1 | 2.1 | 673.1 | 456.8 | 20.9 | 24.6 | 12.9 | 206.9 |
| 19 | Khovd | 916.9 | 62.9 | 448.0 | 8.5 | 18.0 | 32.9 | 1561.5 | 25.4 | 9.1 | 1.0 | 141.2 | 785.9 | 812.3 | 9.1 | 529.5 | 347.9 | 10.4 | 7.4 | 1.5 | 133.0 |
| 20 | Khuvsgul | 1563.4 | 176.3 | 347.6 | 88.3 | 18.7 | 57.8 | 1497.0 | 15.4 | 220.0 | 0.5 | 301.0 | 164.1 | 865.6 | 2.1 | 628.3 | 477.8 | 25.4 | 36.6 | 0.0 | 165.0 |
| 21 | Khentii | 1706.9 | 342.2 | 206.1 | 85.0 | 35.6 | 144.9 | 1121.6 | 21.9 | 27.5 | 1.3 | 245.4 | 413.3 | 650.8 | 1.5 | 461.3 | 285.1 | 9.6 | 14.8 | 0.0 | 272.1 |
| **22** | **Province average** | **1796.1** | **264.0** | **326.8** | **160.3** | **25.6** | **86.9** | **1478.8** | **19.1** | **84.1** | **1.2** | **363.9** | **327.5** | **912.2** | **6.3** | **591.5** | **351.8** | **21.8** | **21.9** | **4.0** | **224.8** |
| 23 | Ulaanbaatar | 1520.0 | 40.3 | 281.5 | 66.2 | 25.1 | 169.0 | 1655.8 | 38.8 | 101.5 | 3.0 | 767.1 | 456.8 | 1001.2 | 18.6 | 421.0 | 491.5 | 72.1 | 70.9 | 40.6 | 858.9 |
| **24** | **National average** | **1671.4** | **163.0** | **306.3** | **117.8** | **25.3** | **124.0** | **1558.8** | **28.0** | **91.9** | **2.0** | **546.0** | **385.9** | **952.4** | **11.9** | **514.5** | **414.9** | **44.5** | **44.0** | **20.5** | **511.2** |

## Outpatient Morbidity per 10 000 population, 2017

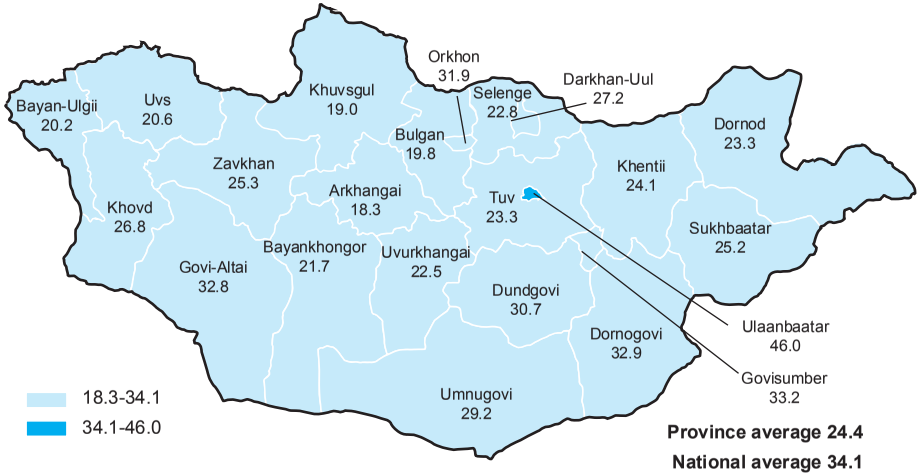


## Inpatient Morbidity per 10 000 population, 2017



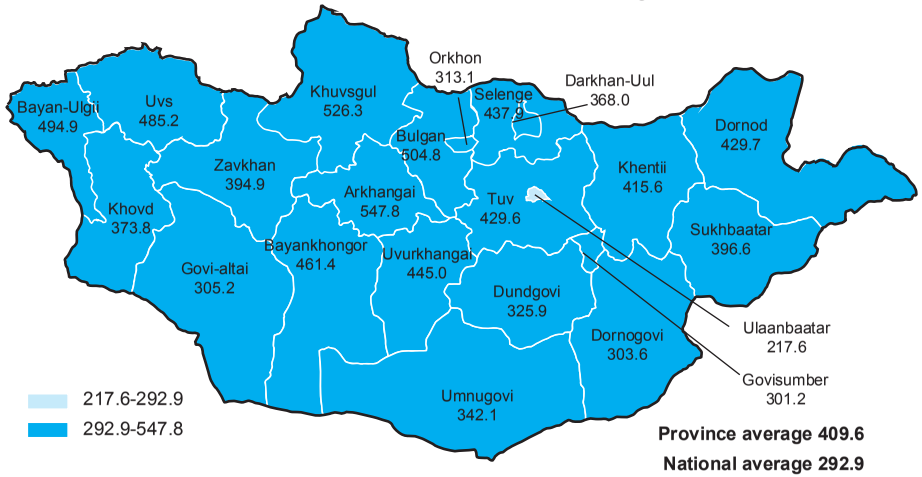
# HUMAN RESOURCES INDICATORS

## Phycisians per 10 000 population



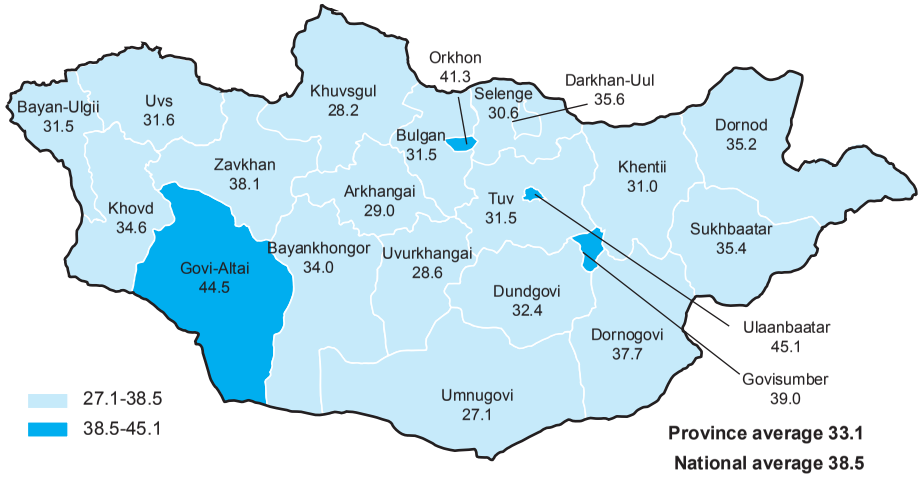

**Province average 24.4**
**National average 34.1**

## Number of persons per physician



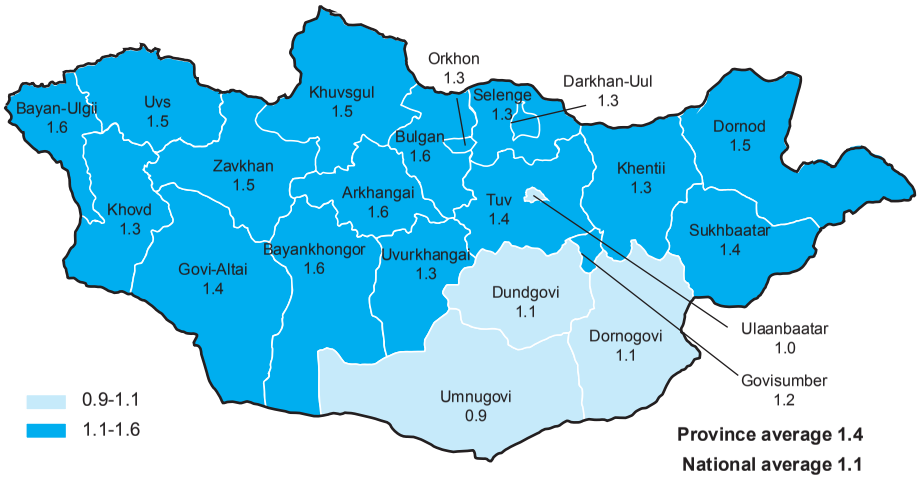

**Province average 409.6**
**National average 292.9**

## Nurses per 10 000 population




**Province average 33.1**
**National average 38.5**

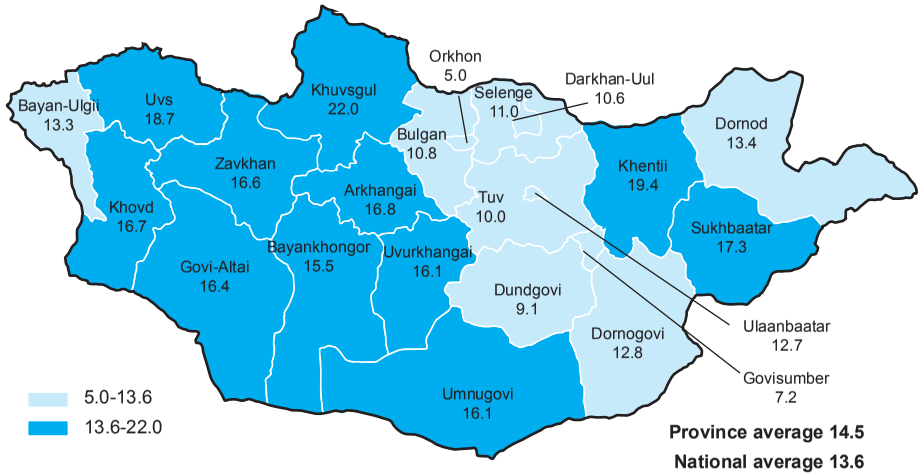
## Doctors nurses ratio



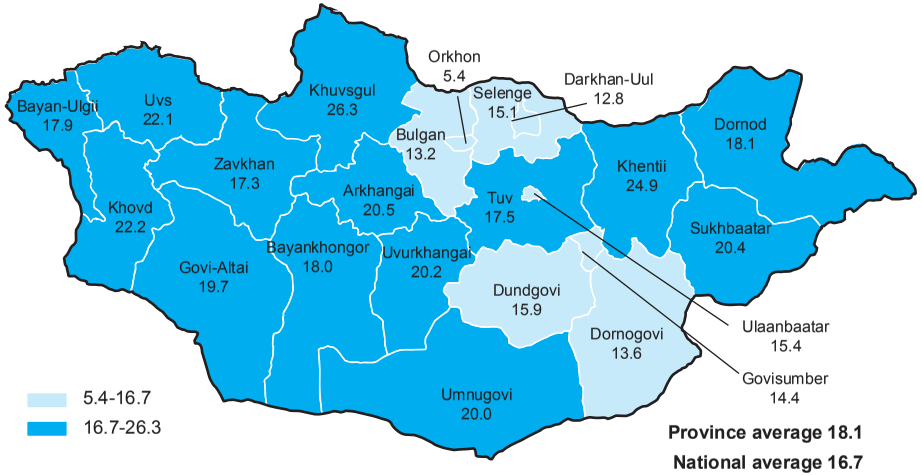

**Province average 1.4**
**National average 1.1**

# QUALITY AND ACCESSIBILITY INDICATORS OF MEDICAL CARE AND SERVICES

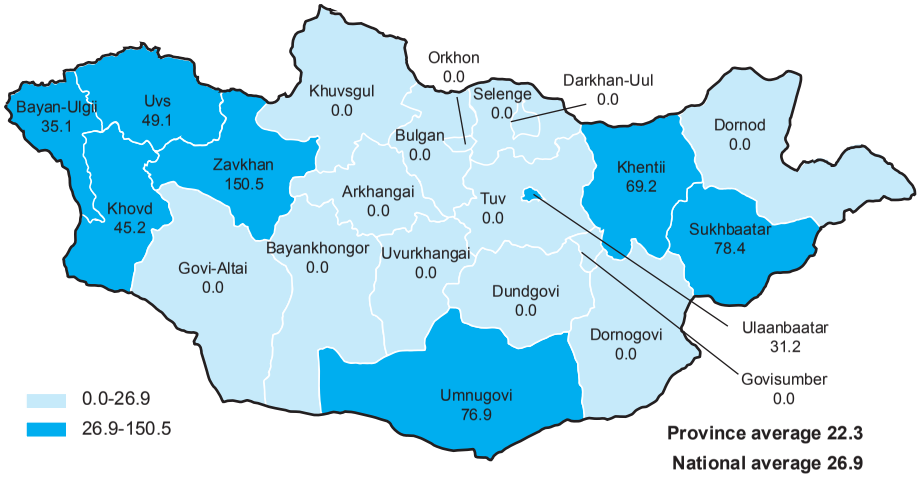
## Infant mortality rate per 1 000 live births



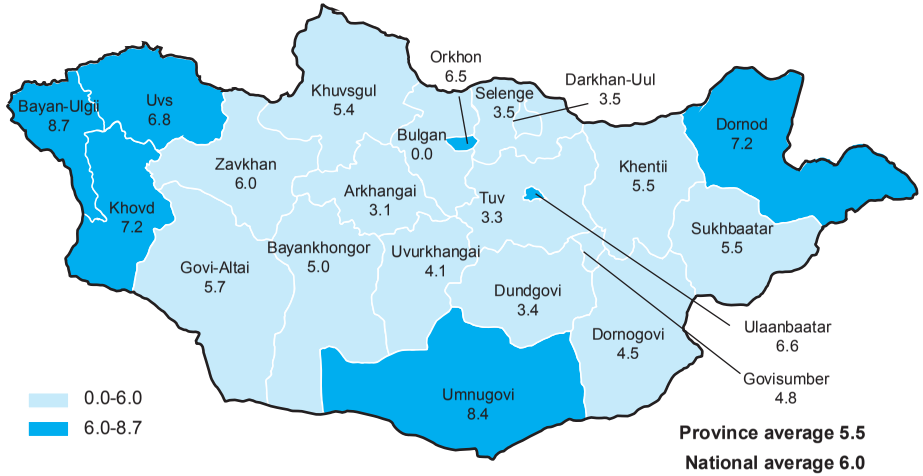

## Under five mortality rate per 1 000 live births




## Maternal mortality per 100 000 live births

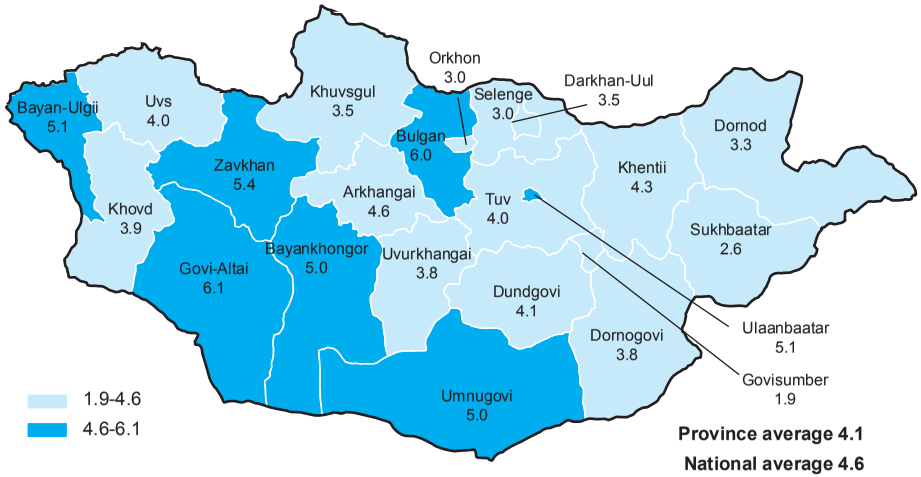



## Still births rate /per 1 000 births/

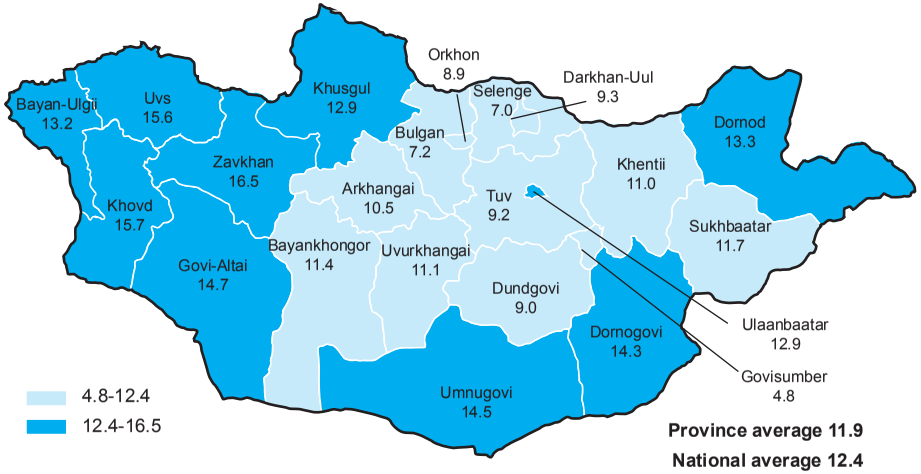


# QUALITY AND ACCESSIBILITY INDICATORS OF MEDICAL CARE AND SERVICES

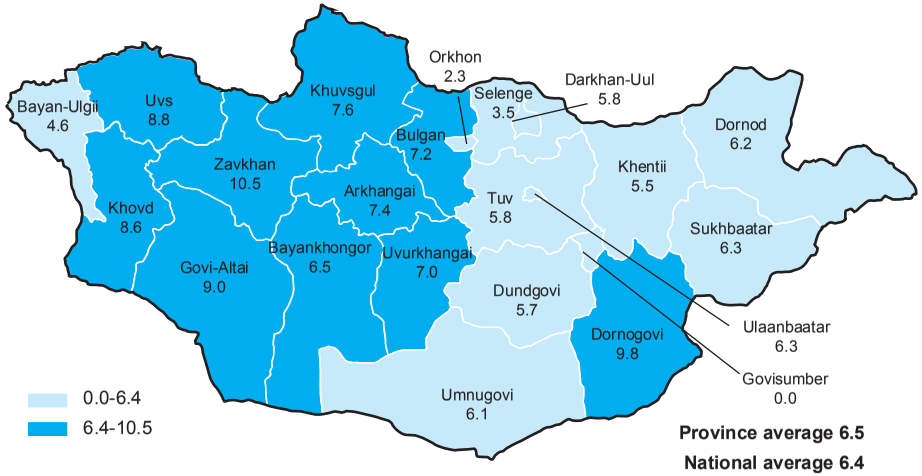
## Percent of newborn infants weighing at least 2500 gr at birth



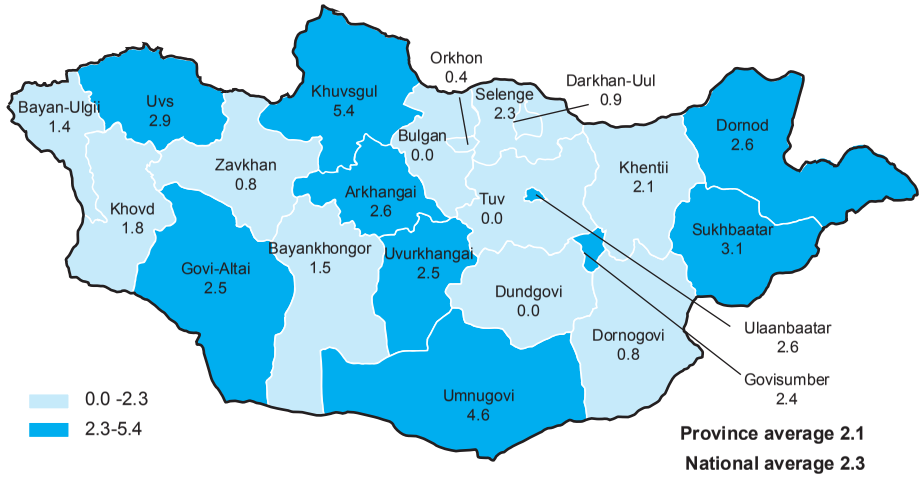

## Perinatal mortality rate /per 1 000 births/




## Early neonatal mortality rate /per 1 000 live births/

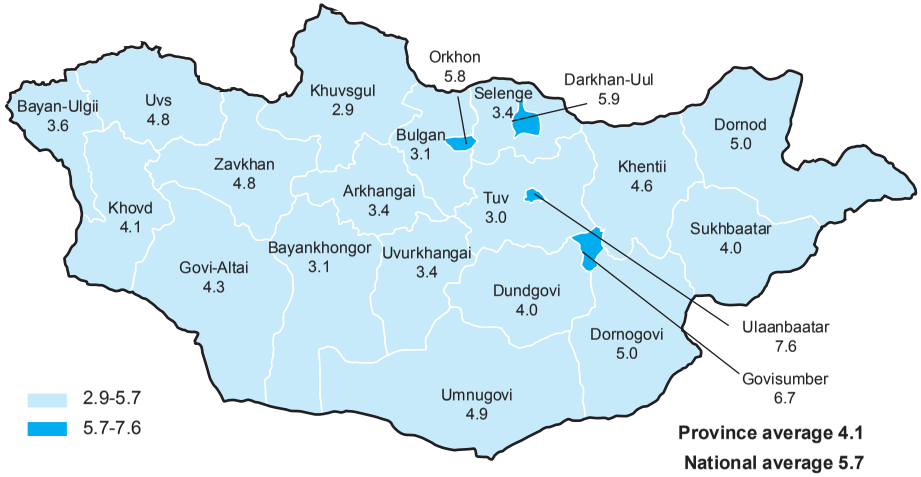



## Post neonatal mortality rate /per 1 000 live births/

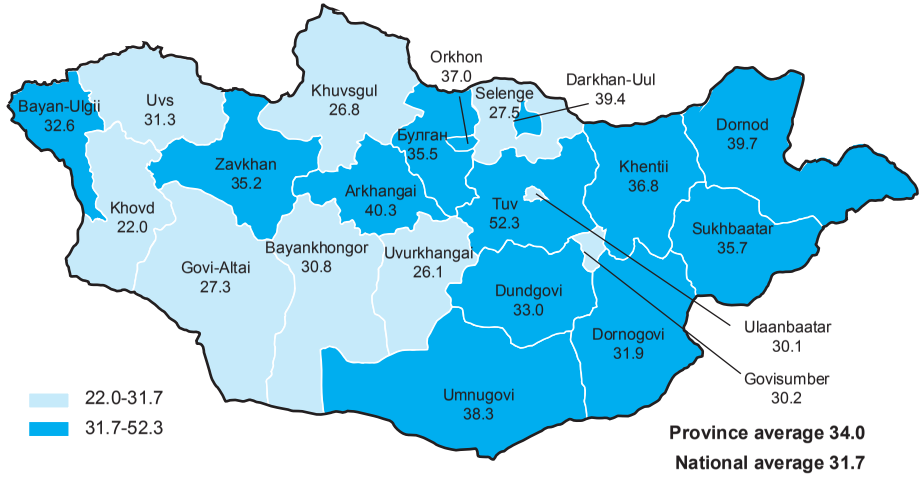


# QUALITY AND ACCESSIBILITY INDICATORS OF MEDICAL CARE AND SERVICES

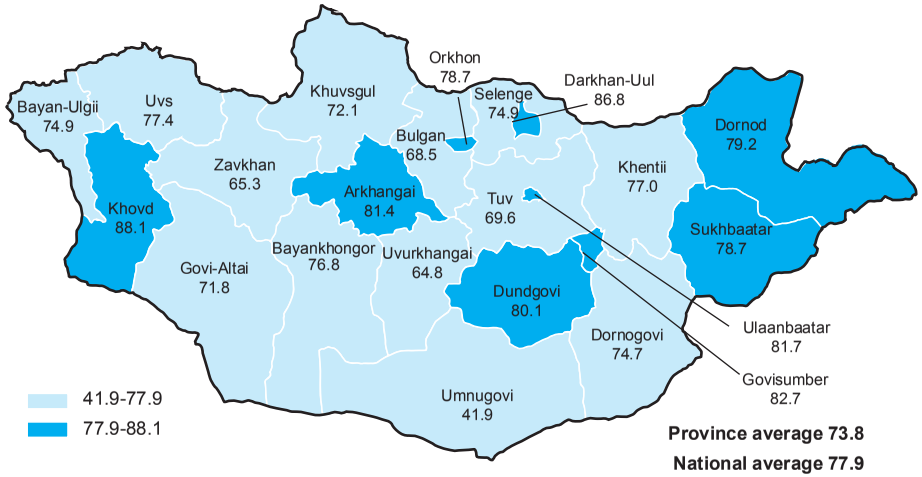
## Average outpatient visits per person per year




## Percentage of preventive medical check-up

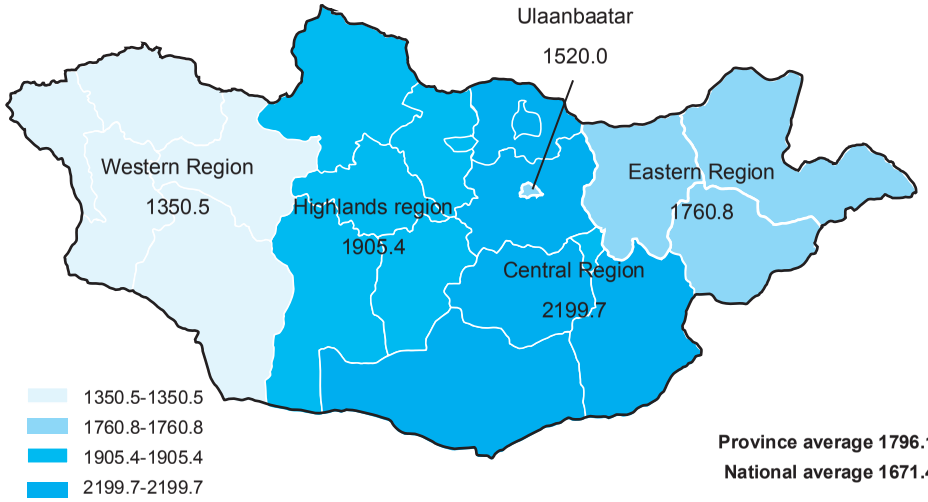



## Percentage of bed fund



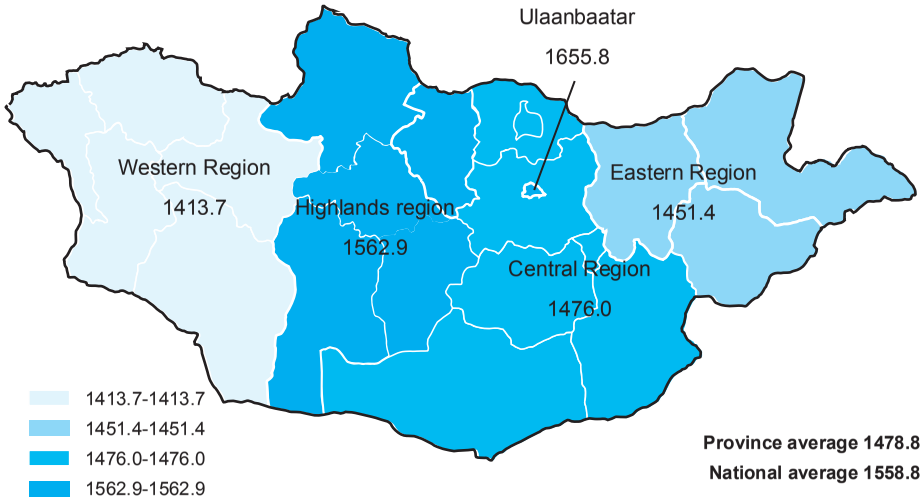
# LEADING CAUSES OF THE MORBIDITY, PER 10 000 POPULATION

## Diseases of the respiratory system



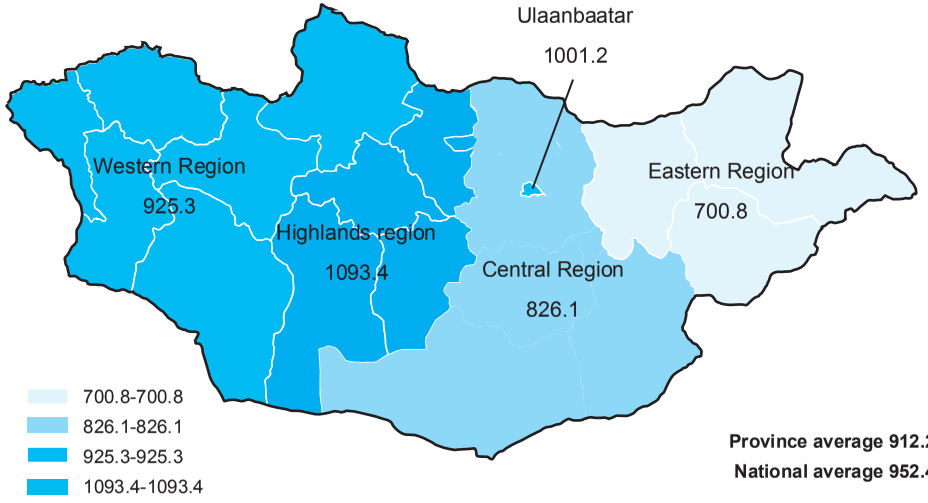

**Province average 1796.1**
**National average 1671.4**

## Diseases of the digestive system



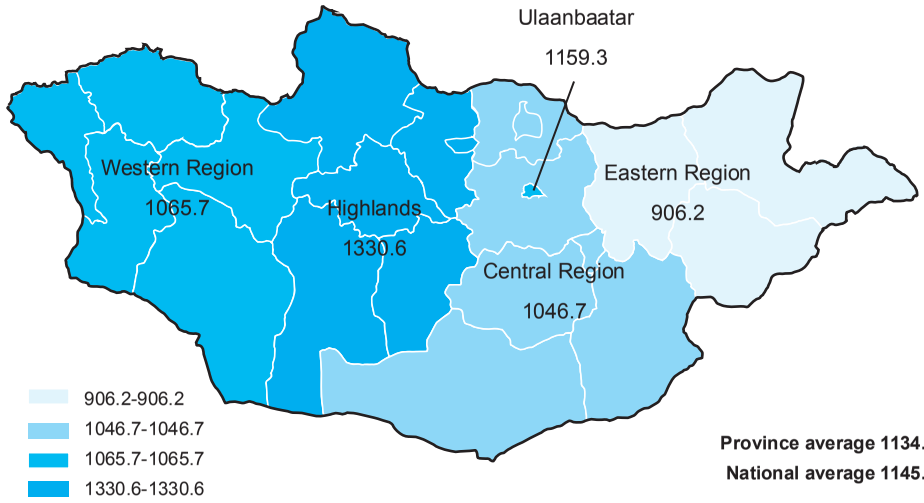

**Province average 1478.8**
**National average 1558.8**

## Diseases of the genito-urinary system




**Province average 912.2**
**National average 952.4**

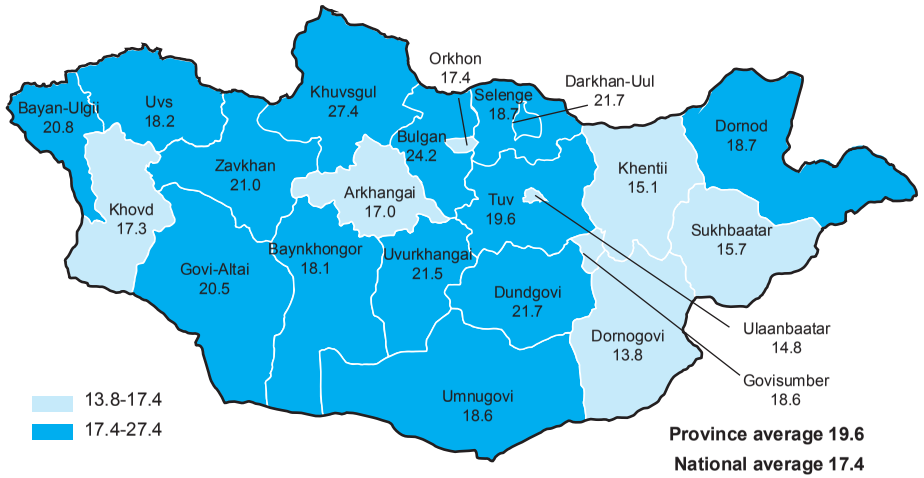
## Diseases of the circulatory system



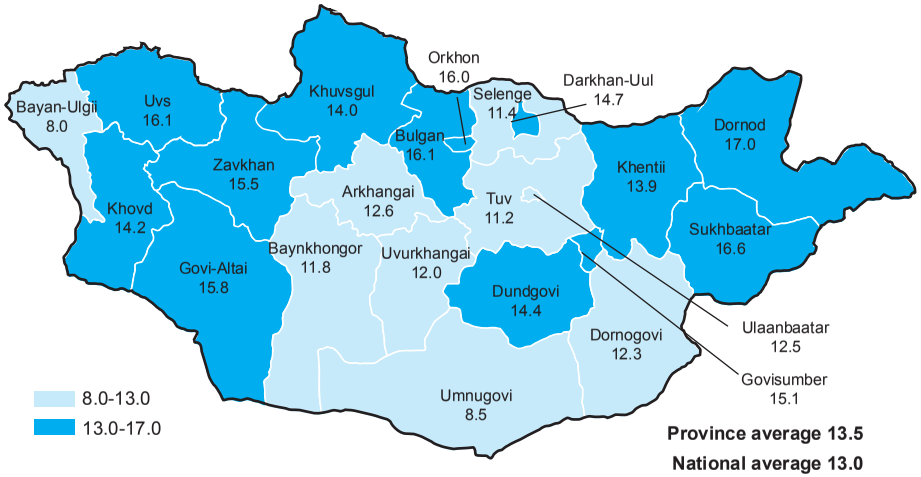

**Province average 1134.3**
**National average 1145.6**

# LEADING CAUSES OF THE MORTALITY, PER 10 000 POPULATION

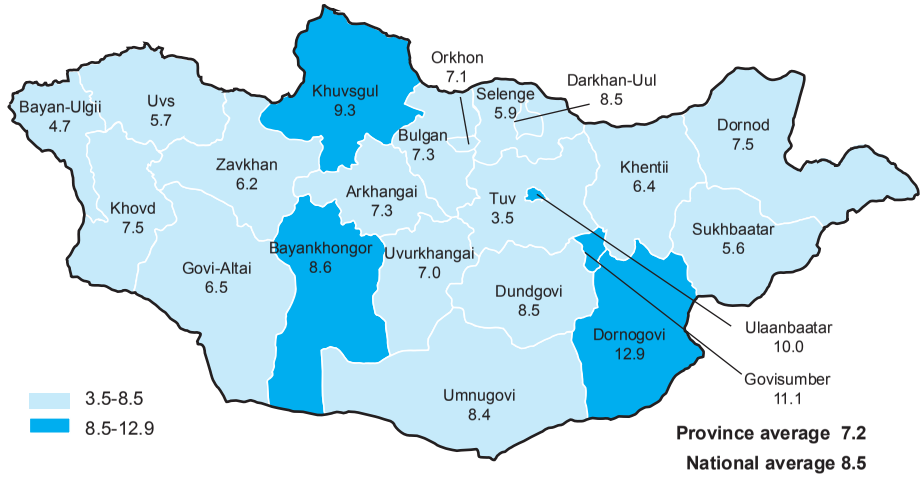
## Deaths of the circulatory system



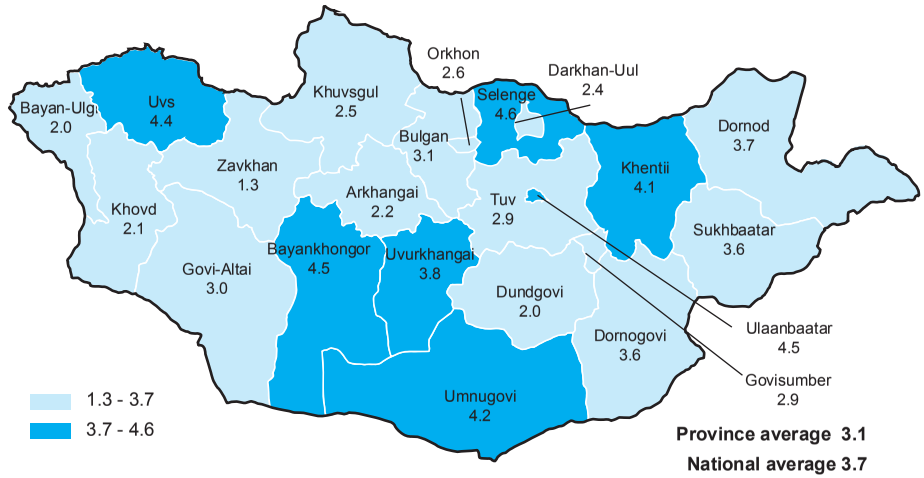

## Deaths of the Neoplasm




## Deaths injury-poisoning and certain other consequences of external causes

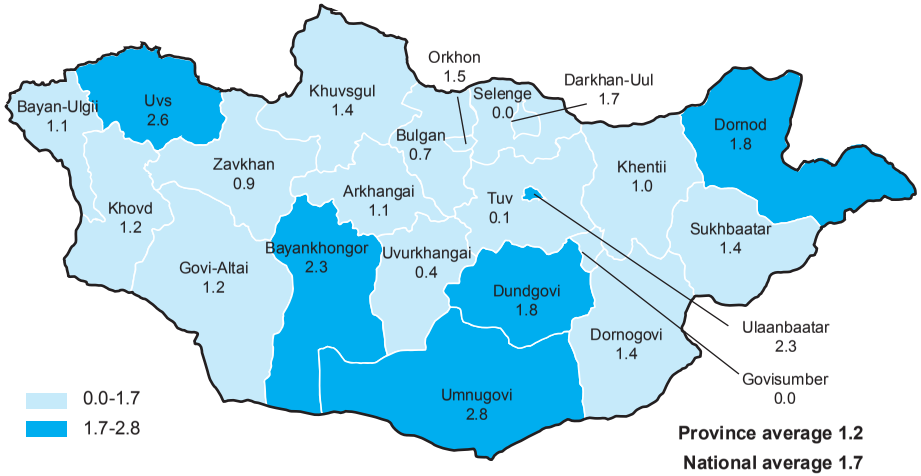



## Deaths of the digestive system

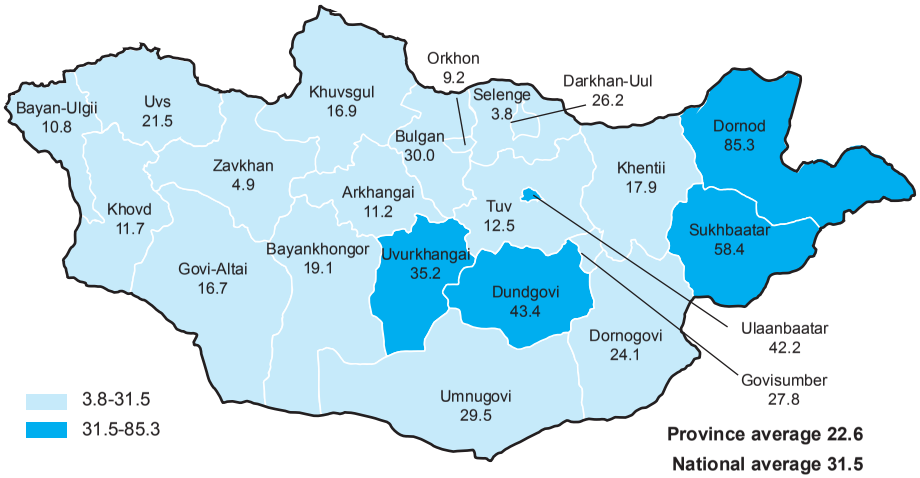


# SELECTED REGISTERED INFECTIOUS DISEASES, PER 10 000 POPULATION

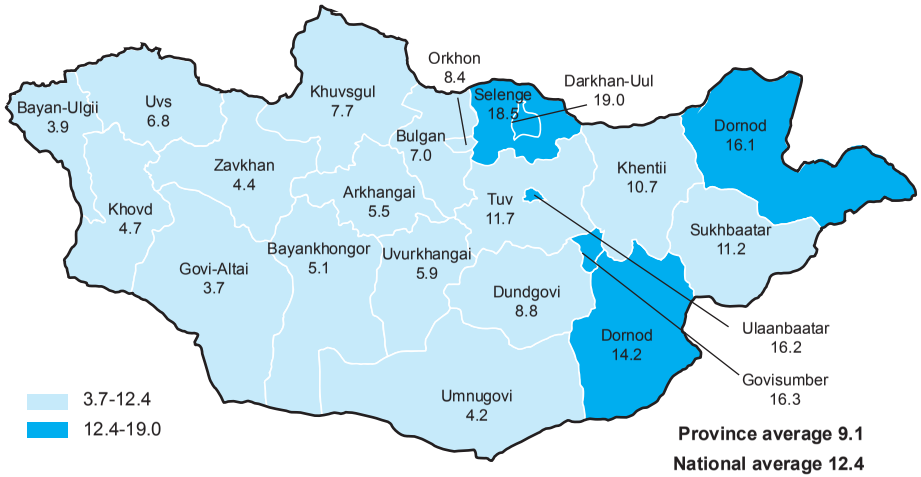
## Incidence of Viral hepatitis



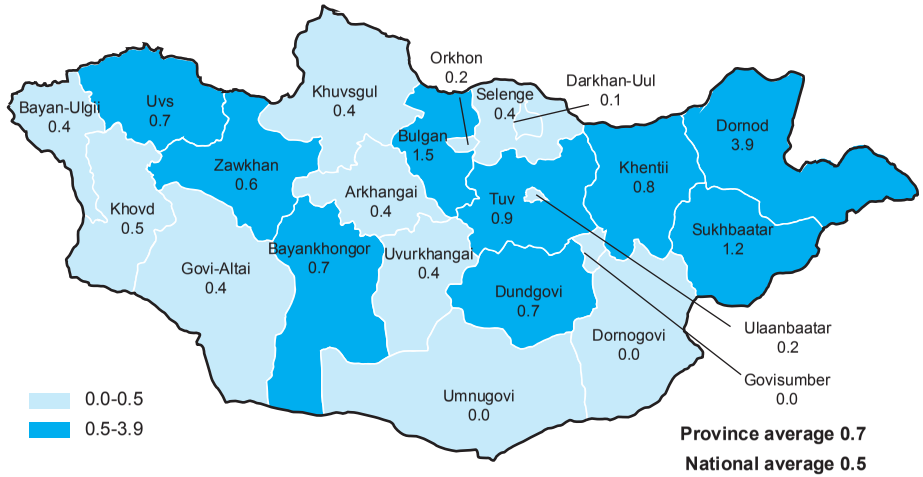

## Incidence of Varicella




## Incidence of Tuberculosis

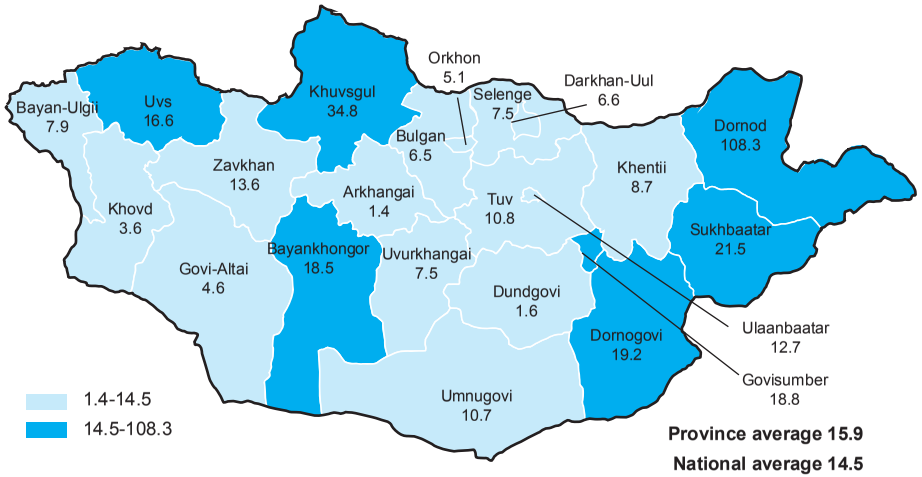



## Incidence of Brucellosis

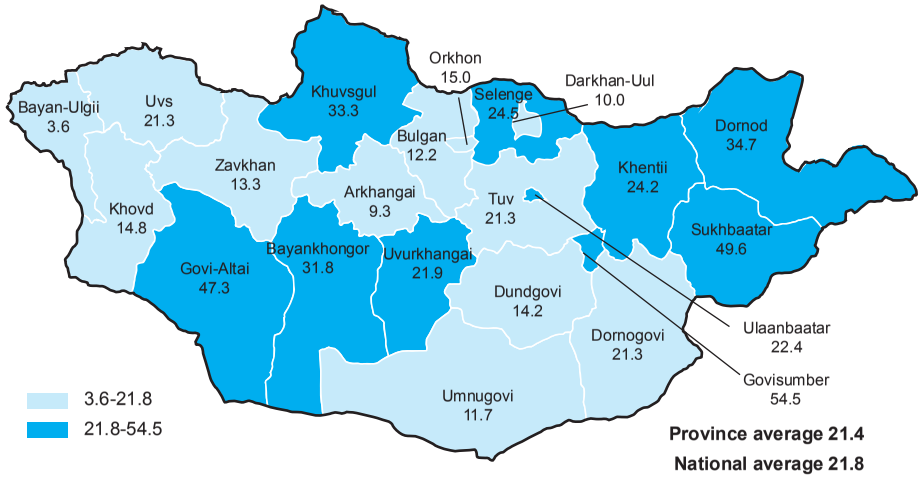


# SEXUAL TRANSMITTED INFECTIOUS DISEASES, PER 10 000 POPULATION

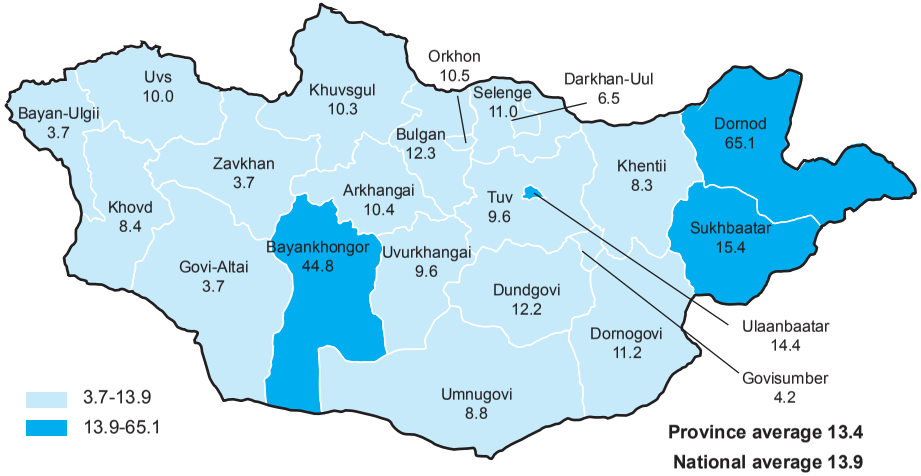
## Incidence of Gonococcal infection




## Incidence of Syphilis

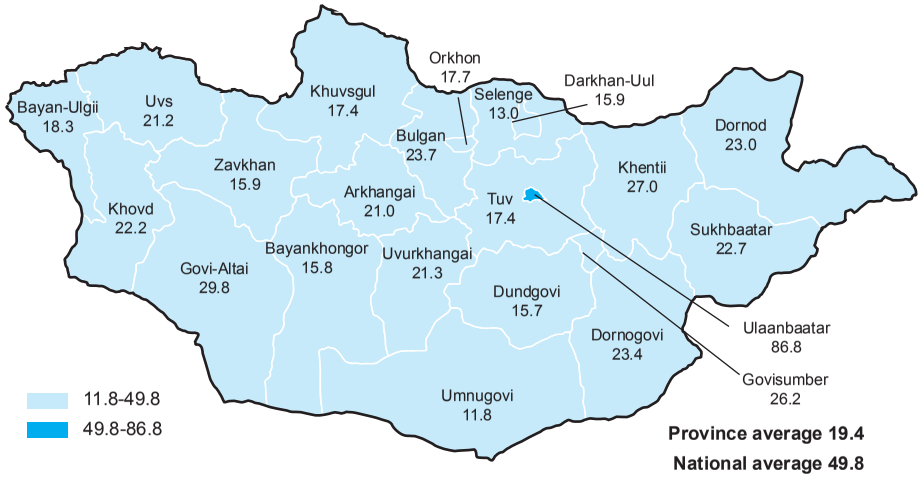



## Incidence of Trichomoniasis

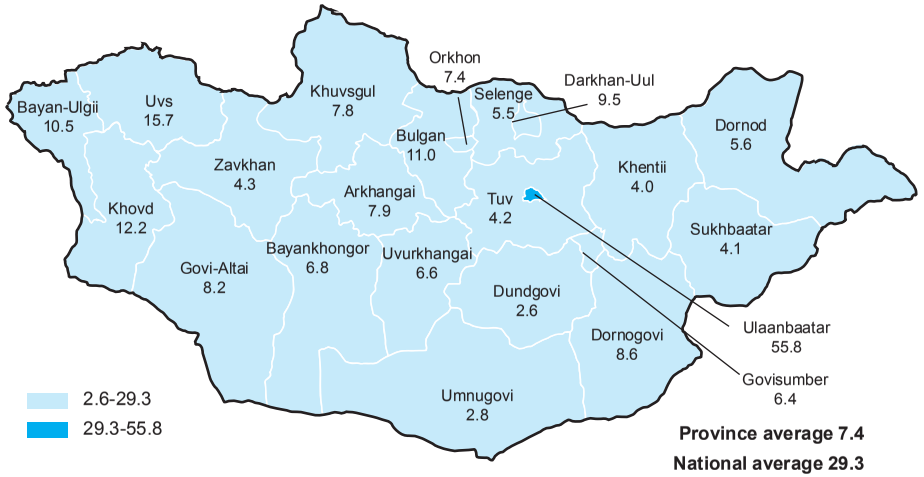


# INCIDENCE OF MALIGNANT NEOPLASMS, PER 10 000 POPULATION

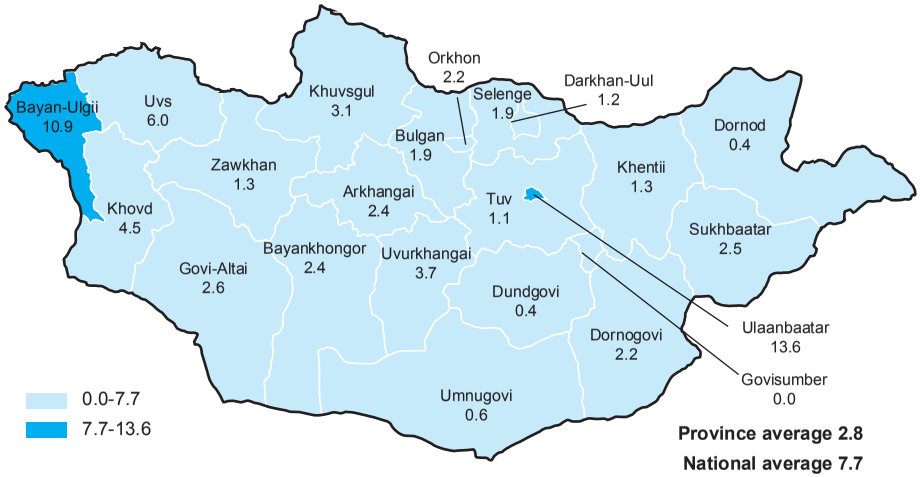
## Incidence of Liver cancer



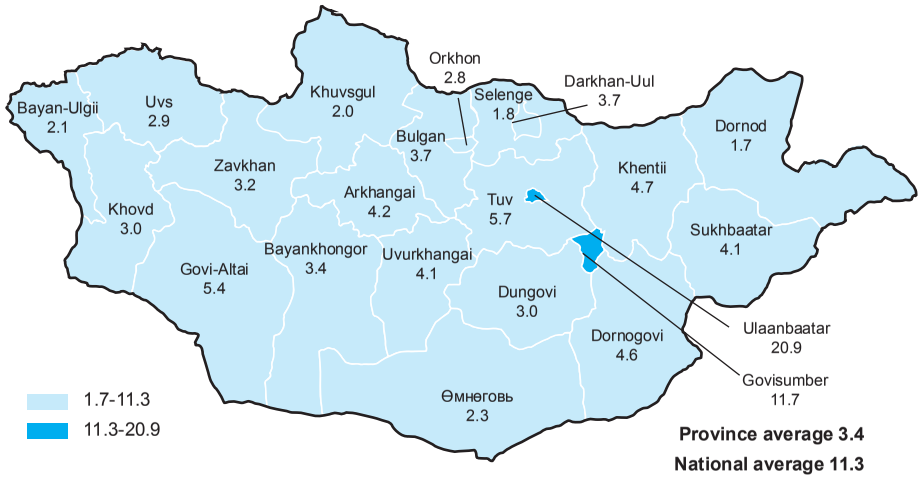

## Incidence of Stomach cancer




## Incidence of Oesophagus cancer

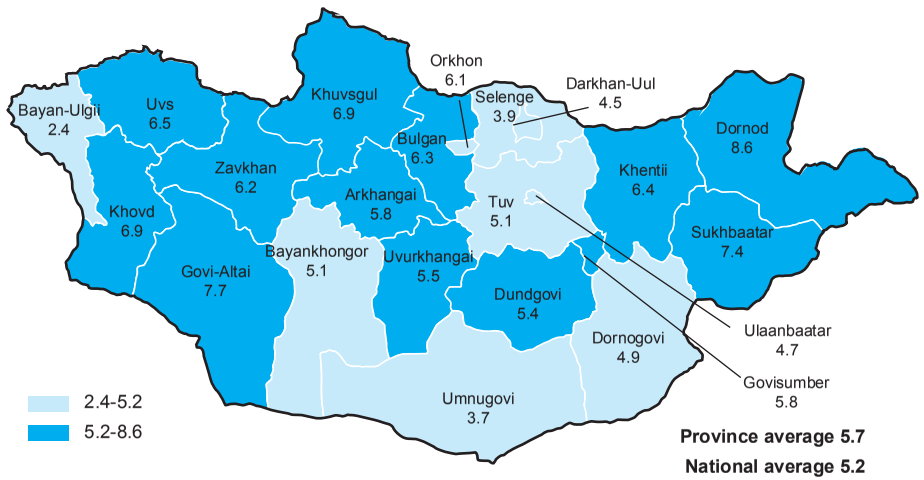



## Incidence of Lung cancer

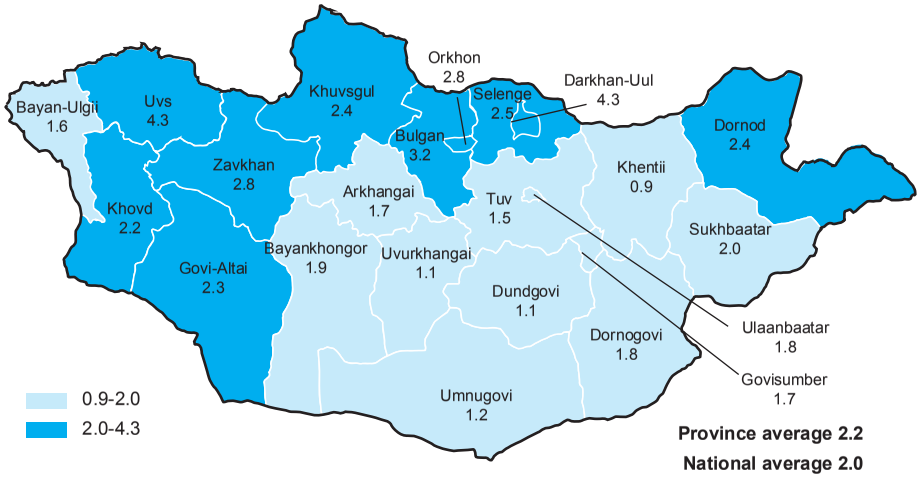


# DEATHS OF MALIGNANT NEOPLASMS, PER 10 000 POPUALTION

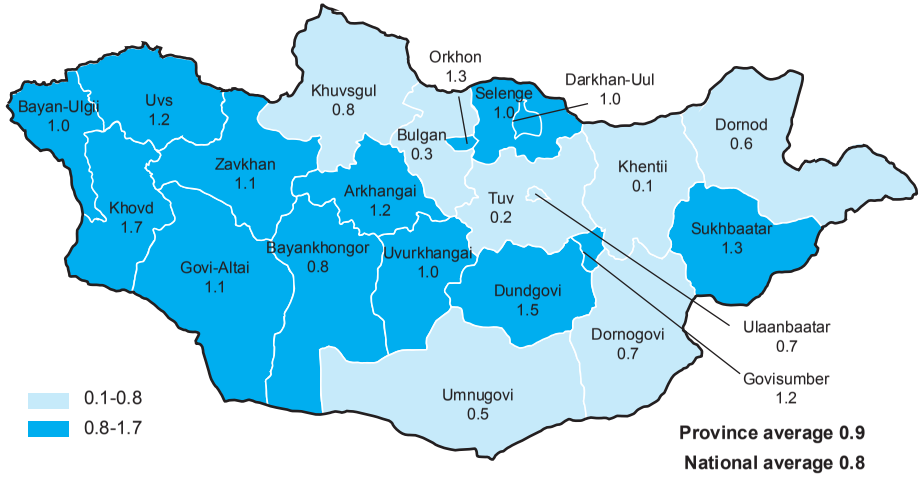
## Deaths of Liver cancer




## Deaths of Stomach cancer




## Deaths of Oesophagus cancer




## Deaths of Lung cancer