

**Health Statistic Indicators  
for the Barents Euro-Arctic  
Region**



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for the Barents  
Euro-Arctic Region**

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for the Barents Euro-Arctic Region'*

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# Preface

In 1996, collaboration began between NOMESCO and the Working Group on Health of the Barents Euro-Arctic Region. A health Statistics Working Group was established with a view to develop some health statistics indicators for the Barents Region.

A draft of the tables was discussed for the first time at a meeting on February 17-18 1997 in Rovaniemi, and the results from the data collection were discussed at a meeting on November 25 1997 in Rovaniemi, where a number of corrections for the collected data were agreed.

Representatives from the Barents region, both from the Nordic countries and from Russia participated in both meetings.

This publication presents the results from the data collection.

It should be pointed out that the differences in administrative organization and varying traditions regarding processing and registration imply certain reservations as to comparability between the Barents regions of the Nordic countries and those of Russia.

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# Profile of the Region

The Barents region covers a total area of 1.23 million square kilometres and has a current population of 4.39 million people. The majority of the population, i.e. 3.45 million inhabitants, live in the Russian territories.

The Murmansk Oblast, formerly known as the Kola region, the Arkhangelsk Oblast and the Republic of Karelia are located in north-western Russia. The Arctic Circle runs through these areas, thus leaving almost the entire Murmansk Oblast and one third of the Arkhangelsk Oblast above the Circle. The Nenets Autonomous Okrug (area) is a part of Arkhangelsk Oblast, but has since 1996 been an independent member in the co-operation of the Barents Euro-Arctic Region. Lake Onega in the east and Lake Ladoga in the south-west are partly included in the territory of the Republic of Karelia.

The Norwegian provinces in the Barents Region are, from north to South, Finnmark, Troms and Nordland. Norway's largest county, Finnmark, has the lowest population in Norway.

The Finnish provinces in the Barents region are Lapland and Oulu, and Lapland is the northernmost and largest county in Finland, comprising 29 per cent of Finland's total area.

The Swedish provinces in the Barents region are Norrbotten and Västerbotten county, where Norrbotten is Sweden's largest and most northern county.

## *Chapter 1*

# Organization

In both Finland, Norway, Sweden and the Russian part of the region, the organization of the health service is affected by the fact that this is a very sparsely populated area with long distances, for which reason the health service provided differs significantly from the health service provided in the more densely populated areas of the countries.

Both in Finland, Norway and Sweden, almost the entire primary health care treatment is provided by the health centres, where patients may come to receive treatment and from where the physicians employed may go on home visits within the district. Almost all health centres in these areas have a small number of beds for less specialised treatment.

Specialised treatment including hospitalization takes place at either local or central hospitals.

In the Russian part of the region, the districts have health centres and local hospitals where a large part of the health care treatment is provided. In addition, there are district physicians and felchers, of which the latter provide the basic primary health care treatment.

The more specialized treatment is provided by hospitals in the urban areas, where the large majority of the population lives.

Both in the regions belonging to the Nordic countries and in the Russian regions, there are nursing and old age homes, whereas the hospitals in the Russian part of the region to a larger extent provide care for elderly long-term patients.

Dental treatment and the like is provided as in the other parts of the countries.



## *Chapter 2*

# Population and Vital Statistics

Whereas the make-up of the population in the Finnish, Norwegian and Swedish parts of the region have certain common traits, the population in the Russian parts of the area differs substantially.

In the Norwegian, Swedish and Finnish regions, women live significantly longer than men. *Generally* there are fewer people in the younger age groups than in the older. In the Norwegian and Swedish regions, it is particularly the age group between 10 and 20 years which is the smallest, whereas in the Finnish regions, it is the age group between 20 and 29 years which is the smallest.

Both in the Murmansk, Karelia and Archangelsk districts, there are marked differences between men and women in the oldest age groups, but it is a common trait that there are considerably fewer men and woman in the oldest age groups as compared to the regions within the Nordic countries. It is also a common trait that there has been a dramatic drop in the very youngest age groups.

As a main trend, one may contend that the men in regions belonging to the Nordic countries can expect to live 12 to 15 years longer than their Russian counterparts, whereas the women in the Nordic countries can expect to live around 10 years longer than their Russian counterparts. In addition, the life expectancy for both men and women in all of Norway, Sweden and Finland is slightly higher than for the areas within the Barents Region. Whereas women in the fertile age give birth to between 1.6 and 2 children in the regions belonging to the Nordic countries, this figure is as low as 1.1 to 1.3 child for the Russian regions. Even more dramatic differences are found for the abortion rates which are 151.1 per 1,000 live births in the Finnish region as compared to 1,904.1 in Karelia. There are similar marked differences regarding infant mortality.

In all, the area is characterized by the population being either stagnating or dropping, with the most marked drop (negative growth) in the Russian regions.



The very marked differences in the make-up and structure of the population have a crucial impact on the morbidity and mortality patterns seen in the areas and which will be discussed in the following chapters.

Table 2.1 Population trends

	Norwegian Barents Region <sup>1)</sup>	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1996	1996	1996	1996	1996	1995
Live births per 1,000 inhabitants	14.4	10.2	13.5	8.3	8.3	8.7
Deaths per 1,000 inhabitants	10.1	10.5	8.5	10.3	14.3	14.4
Natural increase per 1,000 inhabi- tants	4.3	-0.3	4.5	-2.0	-6.0	-5.7
Net migration per 1,000 inhabitants	-8.0	-4.1	-4.5	-12.9	0.0	..
Population incre- ase per 1,000 in- habitants	-3.7	-4.3	0.0	-14.9	-6.0	..
Life expectancy for 0 year-olds	..	..	76.7	66.0	61.2	63.4
– Males	73.3	75.6	72.7	59.9	54.7	57.1
– Females	80.2	80.7	80.9	72.4	69.2	71.0

1 Life expectancy = average 1991-1995

POPULATION AND VITAL STATISTICS

Table 2.2 Fertility, births, infant mortality, and abortions<sup>1)</sup>

	Norwegian Barents Region 1994	Swedish Barents Region 1995	Finnish Barents Region 1991-95	Murmansk Oblast 1996	Republic of Karelia 1995	Arkhangelsk Oblast 1995
Total fertility rate <sup>2)</sup>	1,990	1,602	2,009	1,147	1,162	1,282
Stillbirths per 1,000 births <sup>3)</sup>	4.9	3.5	2.8	4.9	6.8	7.0
Perinatal deaths per 1,000 births <sup>4)</sup>	6.8	5.4	5.4	10.4	13.0	13.3
Infant deaths per 1,000 live births <sup>5)</sup>	7.0	4.3	5.0	17.3	13.2	15.9
Total abortion rate <sup>6)</sup>	569.0	508.1	295.5	1,704.3	2,458.0	73.4
Abortions per 1,000 live births <sup>7)</sup>	279.0	313.5	151.1	1,613.2	1,904.1	1,622.2

1 Computed by year of death.

2 The total number of liveborn children per 1,000 females surviving the whole child-bearing period, calculated from the age specific fertility rates of the year of observation.

3 Stillbirth: A foetus born after 28 weeks of gestation and showing no evidence of life.

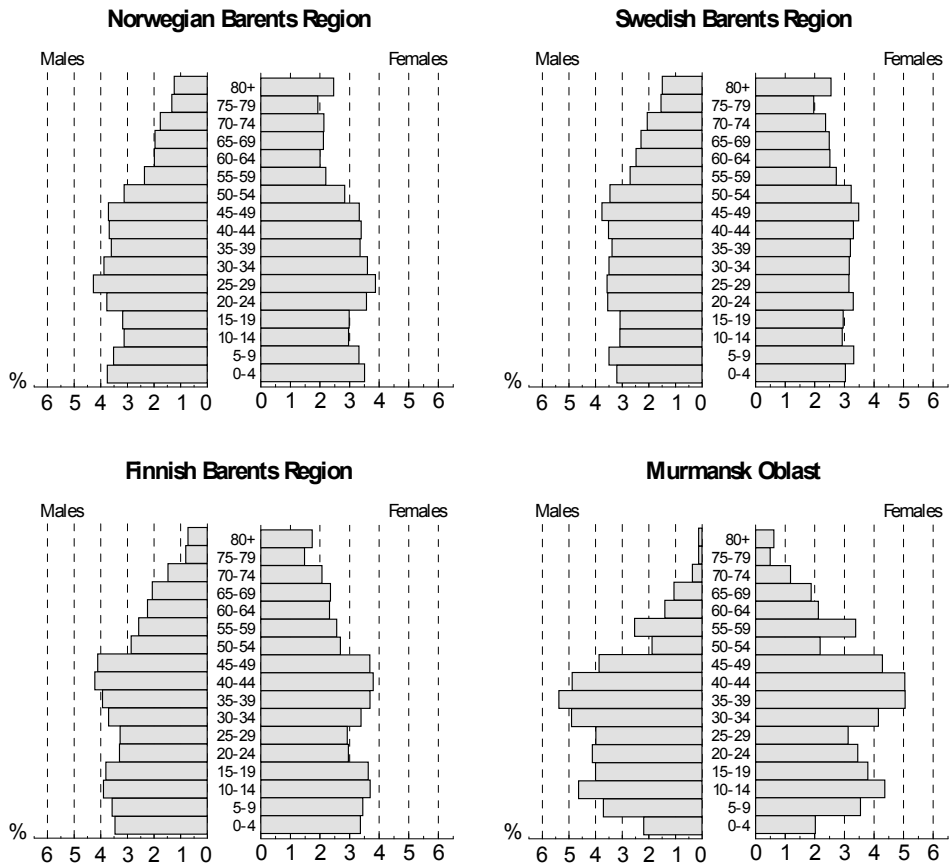
4 Perinatal deaths: Late fetal deaths and live born dying during the first week of life.

5 Infant deaths: Live born dying during the first year of life.

6 The number of legal abortions performed on 1,000 females given their survival up to the age of 50, calculated from the age specific abortion rates of the year of observation.

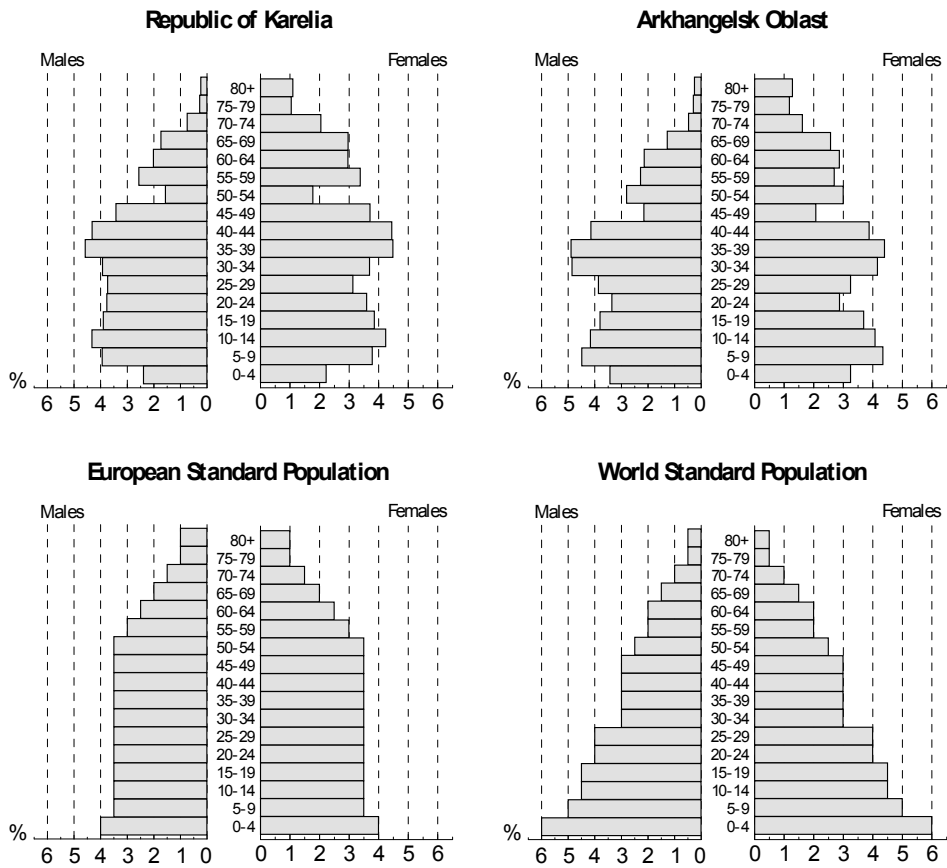
7 The number of legal abortions performed on 1,000 females surviving up to 50 years, calculated from the age specific abortion rates of the current period.

Figure 2.1 Mean population by sex and age 1996



POPULATION AND VITAL STATISTICS

Figure 2.1 continued



### *Chapter 3*

# Diseases

As mentioned in Chapter 2, the substantial differences in the make-up of the population has a significant impact on the various patterns of disease found in the region.

The figures for cancer in Tables 3.1 and 3.2 have been standardized according to WSP (World Standard Population).

For men, a number of marked differences are found, however, with the Finnish region often being positioned in the middle.

For men, prostate cancer and cancer of the bladder are most widespread in the Norwegian and Finnish regions, whereas cancer of the stomach is most widespread in the Russian regions. The same applies to cancer of the respiratory organs, which is also very high for the Finnish region. As regards cancer of the mouth and oesophagus, this is most prevalent in the Murmansk and Archangelsk regions.

Skin cancer is most prevalent in the Nordic regions, whereas leukaemia displays a somewhat more varied pattern.

For women, breast cancer is most frequent in the Swedish region and least so in the Finnish region. Cancer of the stomach seems most prevalent in the Russian part of the region, but the pattern is otherwise very varied from disease to disease and from region to region.

As regards other diseases (cf. Table 3.3), there are very marked differences between the regions belonging to the Nordic countries and the Russian ones, both regarding tuberculosis, hepatitis and venereal diseases.

Table 3.1 Age-standardized rates (WSP) for new cases of cancer per 1,000,000 inhabitants. Males

	Norwegian Barents Region 1994	Swedish Barents Region 1995	Finnish Barents Region 1991-95	Murmansk Oblast 1996	Republic of Karelia 1996	Arkhangelsk Oblast 1995
Total [140-204]	2,575	2,275	2,711	2,579	3,034	2,724
Mouth and pharynx [140-148]	20	56	50	182	45	120
Prostate [177]	397	612	49	62	96	72
Bladder [181.0]	258	136	142	85	134	103
Stomach [151]	135	102	126	370	456	450
Colon [153]	173	147	124	141	316	120
Respiratory organs [162-163]	363	200	598	697	830	807
Malignant melanoma of the skin [190]	81	68	61	30	23	20
Lymphatic leukaemia (0-14 year-olds) [204]	21	18	0	15	12	11
Leukaemia, total [204-207]	36	97	0	74	119	100

Numbers in brackets refer to ICD-7.



DISEASES

Table 3.2 Age-standardized rates (WSP) for new cases of cancer per 1,000,000 inhabitants. Females

	Norwegian Barents Region 1994	Swedish Barents Region 1995	Finnish Barents Region 1991-95	Murmansk Oblast 1996	Republic of Karelia 1996	Arkhangelsk Oblast 1995
Total [140-204]	2,127	2,307	2,154	1,694	1,770	2,405
Breast [170]	490	714	44	363	340	346
Cervix uteri [171]	131	74	36	67	95	108
Corpus uteri [172]	114	125	123	134	106	127
Ovary [175]	87	110	144	84	100	110
Thyreoidea	62	58	88	33	110	82
Stomach [151]	81	60	95	167	173	
Colon [153]	236	143	111	160	199	200
Respiratory or- gans [162-163]	128	81	85	38	45	80
Malignant mela- noma of the skin [190]	75	56	71	35	49	37
Lymphatic leuka- emia (0-14 year- olds) [204]	44	46	-	25	17	6
Leukaemia, total [204-207]	57	75	-	64	73	109

Numbers in brackets refer to ICD-7.

Table 3.3 Diagnosed cases of other diseases per 100,000 inhabitants 1996

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
New cases of tuberculosis	2.6	4.7	9.3	33.0	71.4	56.6
All cases of tuberculosis	3.4	..	..	125.2	186.0	..
Diagnosed cases of acute hepatitis B	0.2	1.3	0.8	29.5	16.6	14.1
Diagnosed cases of acute hepatitis C	0.2	24.2	14.8	8.9	6.3	1.9
Diphtheria	–	–	0.0	10.3	27.4	5.7
AIDS	–	0.4	0.0	0.6	1.4	0.0
Gonorrhoea	5.6	1.3	4.1	265.6	294.8	226.5
Syphilis	0.2	0.2	3.1	206.5	240.1	161.8

## *Chapter 4*

# Treatment

Tables 4.1 and 4.2 give a picture of discharge rates and average length of stay, respectively, at somatic hospital wards in the six regions.

The division into disease groups follows the chapters of ICD-9 (International Classification of Diseases),

Both regarding discharge rates and especially average length of stay, there are marked differences between the Nordic and the Russian regions.

Here it is, however, often more a question of different traditions of treatment than actual differences in the occurrence of diseases.

In many cases, as is seen from Table 4.2, the average length of stay is around two to four times longer in the Russian regions than in the Nordic.

Discharge rates for infections, the nervous system, the respiratory system and complications in connection with pregnancy, etc., are much more prevalent in the Russian regions than in the Nordic, whereas neoplasm, symptoms and ill-defined conditions are more prevalent in the Nordic regions.

Other disease groups display a rather more varied pattern.

Table 4.1 Discharges from somatic hospital wards by main diagnostic groups, per 1,000 inhabitants

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1995	1996	1996	1996	1996	1995
Infectious and parasitic diseases	2.8	5.2	5.9	10.2	12.7	14.5
Neoplasms	17.9	18.6	20	9.3	7.7	9.0
Endocrine, nutritional and metabolic diseases, and immunity disorders	2.7	5.6	4.6	4.0	2.9	2.6
Diseases of the blood and blood-forming organs	1.6	1.6	1.6	1.1	1.3	1.4
Mental disorders	..	11.0	3.3	0.5	2.3	11.2
Diseases of the nervous system and sense organs	7.8	7.2	21	10.7	10.8	13.6
Diseases of the circulatory system	24.4	33.4	32.5	20.3	25.8	25.4
Diseases of the respiratory system	12.7	14.0	19.2	22.7	21.4	30.2
Diseases of the digestive system	12.8	16.2	18	20.9	22.2	24.6
Diseases of the genitourinary system	9.7	10.6	12.9	20.0	15.5	21.9
Complications of pregnancy, childbirth, and the puerperium	7.8	12.3	18.5	27.9	32.0	34.1
Diseases of the skin and subcutaneous tissue	1.5	1.5	3.2	6.1	6.6	7.0
Diseases of the musculoskeletal system and connective tissue	10.5	11.0	23	9.8	10.6	9.7
Congenital anomalies	2.5	1.7	2.9	1.4	1.4	1.4
Certain conditions originating in the perinatal period	1.6	1.3	1.3	2.2	2.7	4.4
Symptoms, signs and ill-defined conditions	10.6	20.1	16.5	1.5	1.3	1.5
Injury and poisoning	15.4	18.8	19.3	20.6	19.5	20.7
Total	162.9	190.2	224.1	189.2	196.7	233.5

## TREATMENT

Table 4.2 Average length of stay in somatic hospital wards by main diagnostic groups

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1995	1996	1996	1996	1996	1995
Infectious and parasitic diseases	6.1	5.1	5.6	21.6	23.4	20.9
Neoplasms	8.2	7.8	5.3	17.2	20.2	23.2
Endocrine, nutritional and metabolic diseases, and immunity disorders	6.7	8.0	6.3	14.4	18.8	21.7
Diseases of the blood and blood-forming organs	5.5	6.2	4.9	17.3	17.8	18.4
Mental disorders	..	43.1	10.3	..	10.4	47.9
Diseases of the nervous system and sense organs	5.2	7.8	4.2	14.8	13.4	15.6
Diseases of the circulatory system	8.4	8.0	6.2	20.0	20.2	21.3
Diseases of the respiratory system	5.4	5.5	4.7	14.5	13.2	14.3
Diseases of the digestive system	5.5	5.4	4.1	15.1	13.9	15.6
Diseases of the genitourinary system	5.5	4.7	3.8	12.9	12.5	14.8
Complications of pregnancy, childbirth, and the puerperium	4.2	3.5	4.1	10.5	7.4	10.0
Diseases of the skin and subcutaneous tissue	10.7	9.1	5.6	14.1	12.7	14.0
Diseases of the musculoskeletal system and connective tissue	7.4	8.0	4.3	20.4	17.8	20.4
Congenital anomalies	5.1	4.9	4.2	10.8	13.3	17.2
Certain conditions originating in the perinatal period	10.0	11.1	11.1	12.9	12.1	12.8

	TREATMENT					
Symptoms, signs and ill-defined conditions	3.7	3.2	2.7	5.1	10.1	8.3
Injury and poisoning	5.9	7.0	4.8	13.3	12.7	13.9
Total	6.2	8.4	4.7	14.8	14.9	17.3

## *Chapter 5*

# Mortality

There are very marked differences in the mortality as measured per 100,000 inhabitants between regions of the Nordic countries, on the one hand, and the Russian ones, on the other. This applies to both sexes.

The most marked differences are found among men, where, for all age groups from 0 to 64 years, there is a substantially higher mortality rate for the Russian regions than for the Nordic ones. For women, the same feature applies, but in a much more modified way.

For men in the age group 15 to 64 years, there is more than twice the mortality rate for the Russian regions as compared with the Nordic regions, whereas mortality among women deriving from cancer is somewhat more even for the whole region.

Mortality from cardiovascular diseases is, in the Russian regions, more prevalent among men, as far up as the age of 79 years, and a similar pattern applies to women.

Regarding suicides, these are much more prevalent among Russian men than Nordic men. Also here, the very high rates for the very young and younger men are noteworthy. Among women, there are also significantly higher rates, whereas it is worth noting that particularly among younger Finnish women, the rates are considerably higher than for the Nordic and Swedish regions.

As regards mortality issuing from accidents, this is 12 times higher in the Russian regions, and just about all age groups have a markedly higher mortality rate as a consequence of accidents.

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There is also a higher mortality rate from accidents among women in the Russian regions, although the rate are considerably lower. For the very oldest women, mortality as a consequence of accidents is, however, higher for the Nordic areas within the Barents region.

Table 5.1 Deaths by sex and age per 100,000 inhabitants

	Norwegian Barents Region 1994	Swedish Barents Region 1996	Finnish Barents Region 1995	Murmansk Oblast 1996	Republic of Karelia 1996	Arkhangelsk Oblast 1994
<i>Males</i>						
0-14 years	60.4	33.0	60.9	118.3	131.1	} 148.6
15-24 »	79.0	68.8	125.8	302.4	299.1	
25-44 »	121.2	121.2	231.4	762.3	980.0	891.8
45-64 »	803.3	627.0	921.9	2,862.0	3,262.0	3,897.8
65-79 »	4,481.5	3,729.4	4,264.7	6,929.9	8,250.6	} 10,171.9
80+ »	15,392.7	15,051.0	14,562.3	15,059.0	18,225.5	
Total	1,057.4	1,089.8	881.1	1,197.6	1,613.8	1,771.4
<i>Females</i>						
0-14 years	68.6	30.7	48.9	104.5	77.0	} 114.4
15-24 »	33.4	24.3	39.6	72.9	95.8	
25-44 »	75.4	59.2	88.2	212.4	235.7	220.8
45-64 »	427.6	370.5	394.7	953.8	1,142.0	1,261.2
65-79 »	2,265.6	2,218.0	2,456.5	4,008.9	4,645.7	} 7,271.7
80+ »	10,833.2	11,435.0	11,683.4	14,886.8	17,553.7	
Total	927.8	1,046.5	814.0	793.1	1,251.7	1,351.3



Table 5.2 Deaths from malignant neoplasms per 100,000 inhabitants

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1994	1996	1995	1996	1996	1994
<i>Males</i>						
0-14 years	–	1.9	5.5	7.2	4.6	} 5.5
15-24 »	–	5.7	2.2	8.1	11.7	
25-44 »	20.1	10.9	9.9	39.0	43.5	35.5
45-64 »	242.6	179.4	201.9	464.2	570.5	609.7
65-79 »	1,037.7	1,015.3	1,145.2	1,485.0	1,692.2	} 1,504.8
80+ »	2,835.5	2,142.9	2,602.7	971.5	1,763.8	
Total	231.5	231.5	184.5	159.4	233.2	212.3
<i>Females</i>						
0-14 years	2.2	2.1	4.3	4.7	2.4	} 6.8
15-24 »	3.0	3.0	2.3	5.2	3.5	
25-44 »	40.7	20.7	21.8	26.1	37.7	29.9
45-64 »	204.2	189.2	165.6	220.7	245.8	218.1
65-79 »	668.1	654.8	579.9	653.6	674.9	} 611.1
80+ »	1,309.8	1,098.7	1,148.6	714.0	731.4	
Total	200.9	197.7	151.0	117.4	158.2	141.1

ICD-9 no. 140-208

Table 5.3 Deaths from cardiovascular diseases per 100,000 inhabitants

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1994	1996	1995	1996	1996	1995
<i>Males</i>						
0-14 years	2.1	–	–	4.5	–	} 1.1
15-24 »	2.8	5.7	4.3	22.1	–	
25-44 »	19.3	19.1	37.6	212.1	181.5	154.4
45-64 »	363.9	266.7	426.4	1,389.6	1,520.9	1,765.1
65-79 »	2,360.0	1,888.9	2,156.0	4,648.1	5,399.3	} 6,482.2
80+ »	7,467.4	8,278.1	7,334.9	7,494.8	13,522.2	
Total	503.3	540.0	396.2	529.4	729.5	754.3
<i>Females</i>						
0-14 years	2.2	–	–	1.9	–	} 2.2
15-24 »	3.0	–	2.3	9.1	3.5	
25-44 »	9.0	11.9	6.5	59.8	42.5	36.9
45-64 »	123.4	79.5	110.4	474.5	581.9	629.3
65-79 »	1,112.4	1,044.9	1,273.1	3,260.1	3,522.4	} 5,305.9
80+ »	5,748.6	6,539.6	6,487.8	8,309.3	13,030.3	
Total	442.4	500.3	396.9	465.2	817.0	852.4

ICD-9 no. 390-459

MORTALITY

Table 5.4 Deaths from suicide per 100,000 inhabitants

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1994	1996	1995	1996	1996	1994
<i>Males</i>						
0-14 years	4,2	–	2,9	2,7	1,2	} 2.2
15-24 »	36,7	20,0	69,4	81,4	75,2	
25-44 »	24,8	42,2	84,1	86,3	148,7	151,7
45-64 »	19,9	36,8	50,5	97,5	182,6	185,5
65-79 »	46,0	32,2	36,4	108,7	112,5	} 168.0
80+ »	–	12,8	43,0	69,4	267,2	
Total	22,9	27,7	51,7	70,5	108,3	123,4
<i>Females</i>						
0-14 years	2,2	2,1	–	–	–	} 1.1
15-24 »	6,1	3,0	16,3	14,3	13,9	
25-44 »	7,5	8,9	16,3	16,8	23,2	19,5
45-64 »	6,4	9,5	11,0	14,2	27,2	31,7
65-79 »	13,6	13,3	7,9	34,4	21,8	} 46.3
80+ »	–	–	9,0	15,2	67,5	
Total	6,5	7,3	10,4	13,8	18,9	21,5

ICD-9 no. E950-E959

Table 5.5 Deaths in accidents per 100,000 inhabitants

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1994	1996	1995	1996	1996	1994
<i>Males</i>						
0-14 years	4.2	1.9	11.1	46.6	38.3	} 53.2
15-24 »	33.9	22.9	32.5	232.6	105.3	
25-44 »	23.4	10.9	52.4	369.5	340.9	571.2
45-64 »	37.8	42.9	114.2	539.2	500.7	849.1
65-79 »	113.0	61.2	160.0	374.3	259.2	} 605.0
80+ »	405.1	484.7	215.1	555.2	160.3	
Total	42.4	38.7	66.1	311.8	259.9	502.3
<i>Females</i>						
0-14 years	4.4	2.1	2.9	22.8	15.7	} 35.8
15-24 »	–	12.1	14.0	45.6	36.6	
25-44 »	4.5	3.0	16.3	84.7	65.7	99.1
45-64 »	6.4	17.5	31.7	121.4	128.3	194.9
65-79 »	37.3	61.3	68.5	129.7	102.3	} 182.6
80+ »	309.3	171.9	323.0	121.5	281.3	
Total	22.9	24.1	33.2	79.3	74.3	116.0

ICD-9 no. E800-E949

## *Chapter 6*

# Capacity

The make-up of the health staff varies somewhat between the regions of the Nordic countries, on the one hand, and of Russia, on the other. For this reason, an overall comparison of health staff in relation to number of inhabitants is rather difficult.

The number of physicians and dentists compared to the population is, however, for the whole region, on level with the Nordic countries.

Regarding the hospital capacity, measured as number of beds per 100,000 inhabitants, there are, however, marked differences in the region, with a significantly larger number of somatic beds in the Russian regions.

This is closely in accordance with what was shown earlier, namely, that the Russian regions have a tradition for considerably longer length of stay for each disease, just as the long-term ill are housed in the hospitals to a higher degree than what is the case for the regions within the Nordic countries.

## CAPACITY

Table 6.1 Active health personnel per 100,000 inhabitants

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1995	1996	1996	1996	1996	1995
Physicians	257	283	268	481	..	201
Dentists	71	75	86	34	..	38
Physiotherapists/ physiotherapeutic nurses	38	88	159	64	..	..
Midwives	31	..	75	50	..	..
Public health nur- ses/felchers	9	..	260	203	..	..
Nurses incl. quali- fied auxiliary nur- ses	1,904	954	1,843	682	..	1,002

Table 6.2 Authorized hospital beds by speciality

	Norwegian Barents Region	Swedish Barents Region	Finnish Barents Region	Murmansk Oblast	Republic of Karelia	Arkhangelsk Oblast
	1995	1996	1995	1996	1996	1996
<i>Number</i>						
Medicine	754	1,525	1,639	4,625	9,263	4,247
Surgery	794	752	980	4,083	3,001	2,937
Psychiatry	304	420	764	1,534	2,001	2,214
Other	110	–	2,526	101	1,272	8,774
Total	1,852	2,697	5,910	10,343	2,989	18,172
<i>Beds per 100,000 inhabitants</i>						
Medicine	162	291	251	486	436	298
Surgery	170	143	150	429	255	206
Psychiatry	65	80	117	161	162	155
Other	24	–	387	11	380	614
Total	421	514	905	1,077	1,179	1,273

*Medicine:* Beds in ordinary hospitals and hospitals with specialities.

*Surgery:* Beds in ordinary hospitals and hospitals with specialities.

*Psychiatry:* Beds in ordinary and psychiatric hospitals.

*Ordinary hospitals:* Hospitals which mainly treat patients with somatic diseases.

*Psychiatric hospitals:* Hospitals which only treat patients with psychiatric disorders (excl. of psychiatric nursing homes).

*Other:* Beds in health centres, long-term treatment and similar.

Table 6.3 Beds in nursing and old-age homes

	Norwegian Barents Region 1995	Swedish Barents Region	Finnish Barents Region 1996	Murmansk Oblast 1996	Republic of Karelia 1996	Arkhangelsk Oblast 1996
Total	4,885	..	2,408	745	60	–

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