

# GBD PROFILE: SLOVENIA

## GLOBAL BURDEN OF DISEASES, INJURIES, AND RISK FACTORS STUDY 2010

The Global Burden of Disease Study 2010 (GBD 2010) is a collaborative project of nearly 500 researchers in 50 countries led by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. It is the largest systematic scientific effort in history to quantify levels and trends of health loss due to diseases, injuries, and risk factors. GBD serves as a global public good to inform evidence-based policymaking and health systems design.

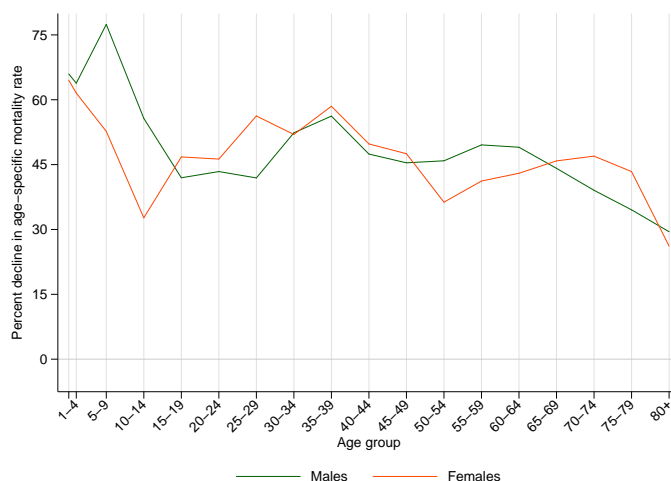
### PROFILE OVERVIEW

- In terms of the number of years of life lost (YLLs) due to premature death in Slovenia, ischemic heart disease, cerebrovascular disease, and trachea, bronchus, and lung cancers were the highest ranking causes in 2010.
- Of the 25 most important causes of burden, as measured by disability-adjusted life years (DALYs), road injury showed the largest decrease, falling by 41% from 1990 to 2010.
- The leading risk factor in Slovenia is dietary risks.

### ALL-CAUSE MORTALITY RATE

- This chart shows the decline in mortality rate at every age range. The higher points on the chart indicate that declines in mortality rates were faster in those age groups between 1990 and 2010.
- The greatest reductions in all-cause mortality rate were experienced by males aged 5-9 years (77%). Females aged 80+ years saw the smallest decrease in mortality rate (26%).

Percent decline in age-specific mortality rate by sex from 1990-2010 in Slovenia



### CAUSES OF PREMATURE DEATH

Years of life lost (YLLs) quantify premature mortality by weighting younger deaths more than older deaths.

Ranks for top 25 causes of YLLs 1990-2010, Slovenia

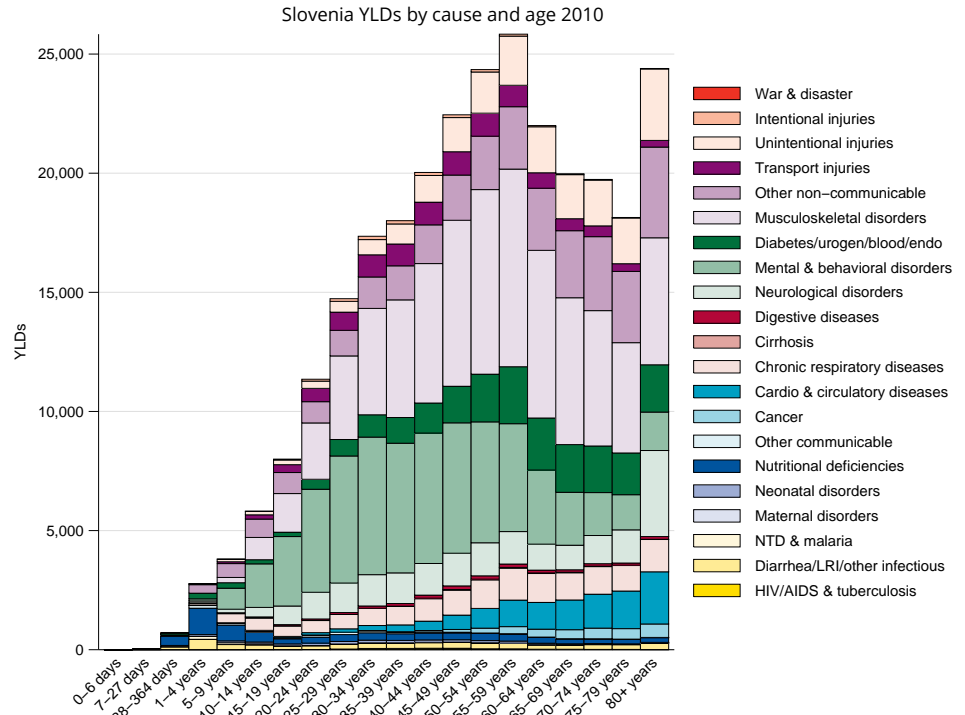
# YLLs in thousands (% of total)	Rank and disorder 1990	Rank and disorder 2010	# YLLs in thousands (% of total)	% change
61 (15.4%)	1 Ischemic heart disease	1 Ischemic heart disease	42 (13.9%)	-32
47 (11.9%)	2 Stroke	2 Stroke	29 (9.5%)	-40
27 (6.7%)	3 Self-harm	3 Lung cancer	21 (6.8%)	0
22 (5.6%)	4 Road injury	4 Self-harm	17 (5.5%)	-41
22 (5.6%)	5 Cirrhosis	5 Cirrhosis	15 (4.9%)	-32
21 (5.4%)	6 Lung cancer	6 Colorectal cancer	13 (4.3%)	27
10 (2.6%)	7 Colorectal cancer	7 Road injury	9 (2.9%)	-62
10 (2.6%)	8 Stomach cancer	8 Breast cancer	8 (2.5%)	-15
10 (2.4%)	9 Lower respiratory infections	9 Falls	7 (2.4%)	-2
9 (2.2%)	10 Breast cancer	10 Lower respiratory infections	7 (2.4%)	-26
8 (2.1%)	11 Hypertensive heart disease	11 Hypertensive heart disease	7 (2.3%)	-14
8 (2.0%)	12 COPD	12 Other cardio & circulatory	7 (2.3%)	-11
8 (1.9%)	13 Other cardio & circulatory	13 COPD	7 (2.2%)	-18
8 (1.9%)	14 Falls	14 Stomach cancer	6 (2.1%)	-38
8 (1.9%)	15 Congenital anomalies	15 Pancreatic cancer	6 (1.8%)	38
7 (1.7%)	16 Cardiomyopathy	16 Cardiomyopathy	5 (1.7%)	-22
5 (1.3%)	17 Preterm birth complications	17 Diabetes	5 (1.6%)	5
5 (1.2%)	18 Diabetes	18 Prostate cancer	4 (1.4%)	60
4 (1.0%)	19 Pancreatic cancer	19 Alcohol use disorders	4 (1.2%)	3
4 (0.9%)	20 Alcohol use disorders	20 Brain cancer	3 (1.1%)	10
3 (0.8%)	21 Leukemia	21 Liver cancer	3 (1.1%)	54
3 (0.8%)	22 Rheumatic heart disease	22 Leukemia	3 (1.1%)	-2
3 (0.8%)	23 Brain cancer	23 Ovarian cancer	3 (0.9%)	2
3 (0.7%)	24 Ovarian cancer	24 Kidney cancers	3 (0.9%)	51
3 (0.7%)	25 Chronic kidney disease	25 Congenital anomalies	3 (0.9%)	-66
	26 Prostate cancer	31 Preterm birth complications		
	31 Liver cancer	33 Rheumatic heart disease		
	39 Kidney cancers	34 Chronic kidney disease		

This chart shows the change in the top 25 causes of YLLs due to premature mortality from 1990 to 2010. Solid lines indicate a cause has moved up in rank or stayed the same. Broken lines indicate a cause has moved down in rank. The causes are color coded by blue for non-communicable diseases, green for injuries, and red for communicable, maternal, neonatal, and nutritional causes of death.

## YEARS LIVED WITH DISABILITY (YLDs)

Years lived with disability (YLDs) are estimated by weighting the prevalence of different conditions based on severity. The top five leading causes of YLDs in Slovenia are low back pain, major depressive disorder, falls, other musculoskeletal disorders, and neck pain.

The size of the colored portion in each bar represents the number of YLDs attributable to each cause. The height of each bar shows which age groups had the most YLDs in 2010. The causes are aggregated. For example, musculoskeletal disorders include low back pain and neck pain.

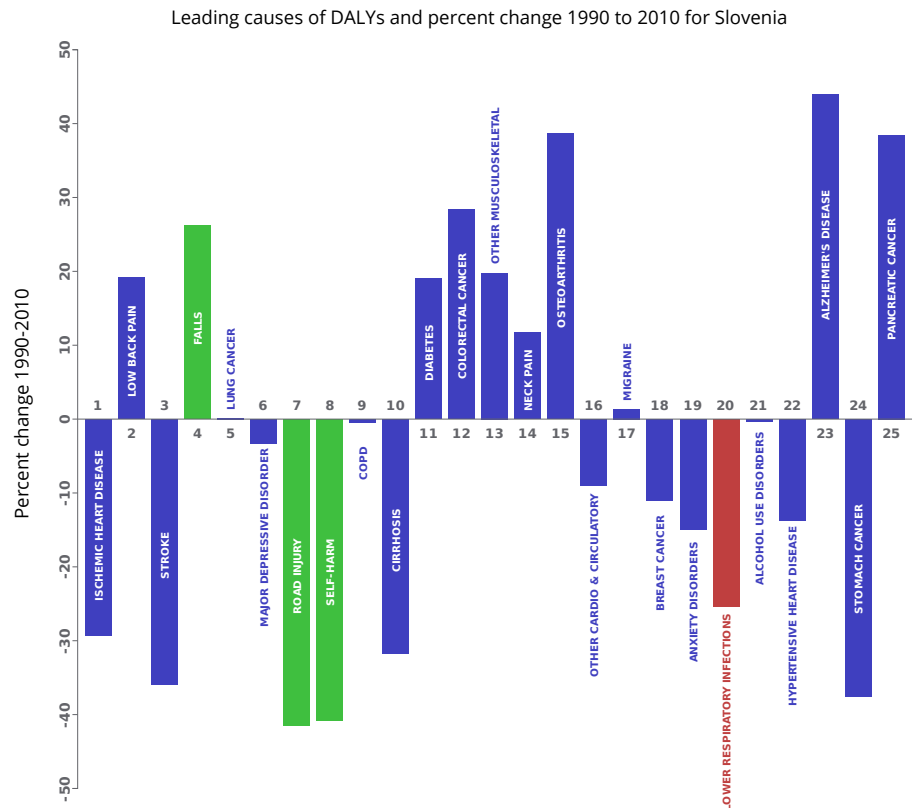


## DISABILITY-ADJUSTED LIFE YEARS (DALYs)

Disability-adjusted life years (DALYs) quantify both premature mortality (YLLs) and disability (YLDs) within a population. In Slovenia, the top three causes of DALYs in 2010 were ischemic heart disease, low back pain, and cerebrovascular disease.

The top 25 causes of DALYs are ranked from left to right in order of the number of DALYs they contributed in 2010. Bars going up show the percent by which DALYs have increased since 1990. Bars going down show the percent by which DALYs have decreased. Globally, non-communicable diseases and injuries are generally on the rise, while communicable, maternal, neonatal, and nutritional causes of DALYs are generally on the decline.

- Communicable, maternal, neonatal, and nutritional
- Non-communicable
- Injuries

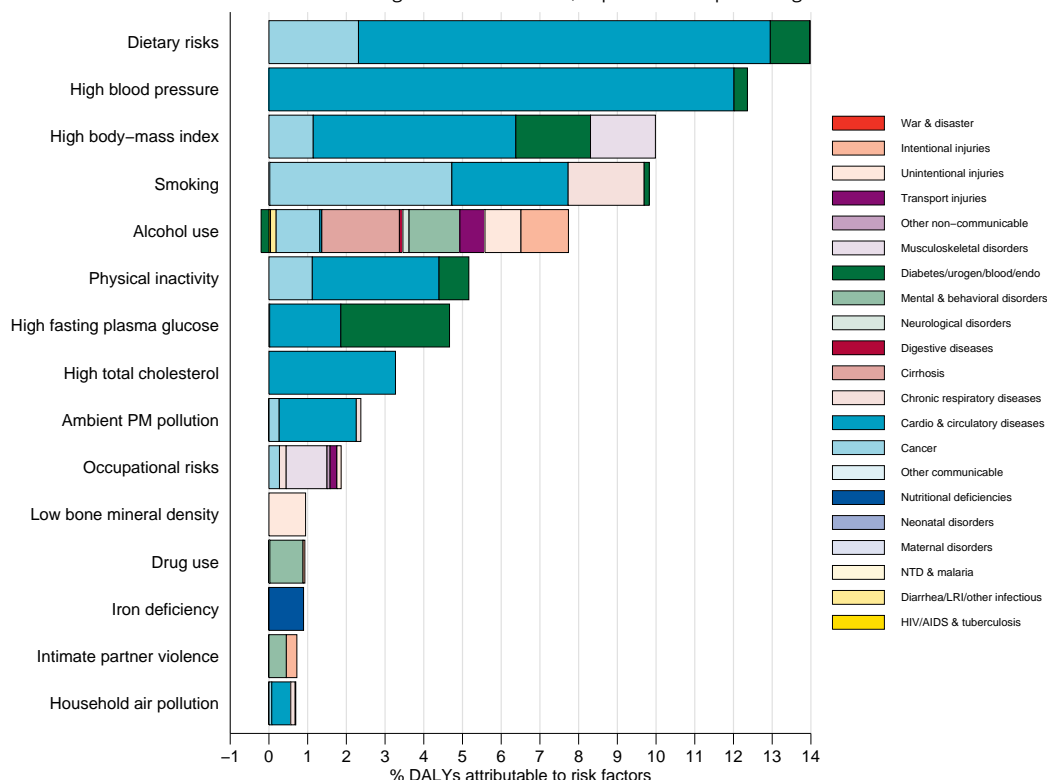


## RISK FACTORS

Overall, the three risk factors that account for the most disease burden in Slovenia are dietary risks, high blood pressure, and high body-mass index. The leading risk factors for children under 5 and adults aged 15-49 years were iron deficiency and alcohol use, respectively, in 2010.

The graph shows the top 15 risk factors for Slovenia. The colored portion of each bar represents the specific diseases attributable to that risk factor while bar size represents the percentage of DALYs linked to specific risk factors.

Burden of disease attributable to 15 leading risk factors in 2010, expressed as a percentage of Slovenia DALYs



## COUNTRY BENCHMARKING OF BURDEN OF DISEASE

Understanding the relative performance of Slovenia against other comparator countries provides key insight into public health successes and areas where Slovenia might be falling behind. The table identifies Slovenia's rank across 14 other comparator countries, selected and ordered by income per capita, for five metrics of interest, with 1 indicating the best rank and 15 indicating the worst rank.

- Age-standardized rates are used to make meaningful comparisons across time by adjusting for changes in population size and age structure.
- Life expectancy incorporates mortality, and health-adjusted life expectancy further incorporates years lived in less than ideal health.
- In 2010, Slovenia ranked 8th for age-standardized YLD rate and 9th for life expectancy.

Age-standardized death rates, YLL rates, YLD rates, and life expectancy at birth and health-adjusted life expectancy at birth for 1990 and 2010, both sexes combined																				
Country	Age-standardized death rate (per 100,000)				Age-standardized YLL rate (per 100,000)				Age-standardized YLD rate (per 100,000)				Life expectancy at birth				Health-adjusted life expectancy at birth			
	1990		2010		1990		2010		1990		2010		1990		2010		1990		2010	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	LE	Rank	LE	Rank	HALE	Rank	HALE	Rank
Italy	561	4	389	1	12,202	4	7,485	1	11,038	5	10,907	6	77	3	81.5	1	66.7	3	70.2	3
The Bahamas	949	15	541	11	29,297	15	18,258	14	13,220	14	12,791	13	67.4	15	76	12	57.4	15	63.2	14
Spain	557	3	393	2	12,630	5	7,694	3	10,136	2	10,068	2	76.9	5	81.4	2	67.5	1	70.9	1
Bahrain	811	11	512	10	20,581	11	11,478	11	13,517	15	13,353	15	71.4	12	77.6	10	60.1	13	64.8	12
Greece	573	5	465	8	12,011	3	8,806	6	11,040	6	10,809	5	76.9	4	79.6	8	66.5	5	68.7	8
New Zealand	637	7	413	4	14,523	7	8,611	5	11,247	7	11,067	7	75.3	7	80.7	4	64.9	7	69.2	5
Israel	584	6	406	3	12,760	6	7,682	2	10,877	3	10,792	4	76.4	6	81.1	3	66.2	6	69.7	4
<b>Slovenia</b>	<b>760</b>	<b>9</b>	<b>465</b>	<b>9</b>	<b>17,330</b>	<b>8</b>	<b>9,491</b>	<b>9</b>	<b>11,410</b>	<b>8</b>	<b>11,095</b>	<b>8</b>	<b>73.1</b>	<b>8</b>	<b>79.3</b>	<b>9</b>	<b>63.2</b>	<b>9</b>	<b>68.3</b>	<b>9</b>
South Korea	813	12	447	6	18,830	9	8,941	8	10,074	1	9,575	1	72.1	9	79.7	7	63.8	8	70.3	2
Trinidad and Tobago	934	14	883	15	24,788	14	21,845	15	12,458	12	12,885	14	69.1	14	70.6	15	59.5	14	59.4	15
Cyprus	530	1	451	7	11,703	2	8,924	7	11,659	10	11,481	9	78	1	80.2	5	67.1	2	68.8	6
Czech Republic	876	13	548	12	19,311	10	10,997	10	11,015	4	10,759	3	71.6	11	77.5	11	62.4	10	67.2	10
Malta	549	2	438	5	11,476	1	8,404	4	11,535	9	11,615	10	77.2	2	80.1	6	66.6	4	68.7	7
Oman	783	10	596	14	22,087	13	13,868	12	12,455	11	11,963	11	71.3	13	75.9	13	60.7	12	64.8	11
Barbados	744	8	593	13	21,168	12	15,643	13	12,700	13	12,588	12	71.9	10	75.6	14	61.4	11	63.3	13

## COUNTRY BENCHMARKING OF BURDEN OF DISEASE, CONTINUED

This figure shows the rank of Slovenia relative to the same comparator countries for the leading causes of DALYs in 1990 (top) and 2010 (bottom).

- The columns are ordered by the absolute number of DALYs in Slovenia for that particular year, with greatest burden on the left.
- The numbers indicate the rank across countries for each cause in terms of age-standardized DALY rates, with 1 as the best performance and 15 as the worst.

Ranking of leading age-standardized rates of disability-adjusted life years (DALYs) relative to comparator countries in 1990																									
Country	Ischemic heart disease	Stroke	Low back pain	Road injury	Self-harm	Cirrhosis	Major depressive disorder	Lung cancer	Falls	COPD	Diabetes	Colorectal cancer	Stomach cancer	Other musculoskeletal	Neck pain	Lower respiratory infections	Anxiety disorders	Other cardio & circulatory	Breast cancer	Migraine	Hypertensive heart disease	Congenital anomalies	Alcohol use disorders	Osteoarthritis	Cardiomyopathy
Italy	3	5	11	6	7	10	5	13	12	4	5	11	12	11	13	1	3	4	9	15	9	1	3	1	9
The Bahamas	7	10	1	7	5	13	13	5	1	7	12	8	13	7	3	14	14	14	8	5	15	11	15	11	14
Spain	1	4	5	8	8	12	2	10	7	9	9	10	9	14	11	3	2	8	6	13	2	4	6	7	8
Bahrain	15	7	8	14	10	7	15	9	5	14	14	2	3	1	1	11	12	12	5	1	10	14	4	14	11
Greece	5	9	13	9	4	5	8	11	11	3	1	4	6	10	14	2	7	5	4	8	3	10	1	2	1
New Zealand	11	1	7	11	12	1	6	12	10	15	2	14	2	8	8	6	9	1	14	3	1	2	10	3	12
Israel	9	2	12	3	9	4	4	6	8	11	7	12	5	9	10	5	1	7	15	7	5	6	9	4	4
<b>Slovenia</b>	<b>8</b>	<b>11</b>	<b>9</b>	<b>12</b>	<b>15</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>15</b>	<b>12</b>	<b>4</b>	<b>13</b>	<b>14</b>	<b>4</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>7</b>	<b>14</b>	<b>9</b>	<b>15</b>
South Korea	4	15	4	13	11	15	1	8	13	1	10	3	15	15	9	7	6	2	2	14	8	5	13	8	2
Trinidad and Tobago	13	13	2	4	13	9	10	3	3	10	15	6	7	6	4	13	13	11	10	4	14	12	12	12	10
Cyprus	6	6	14	10	3	2	11	4	6	6	3	5	1	12	15	10	11	6	3	10	6	3	7	5	7
Czech Republic	14	14	10	5	14	11	3	15	14	13	6	15	11	3	6	9	10	9	7	12	7	8	5	10	5
Malta	10	3	15	1	2	3	9	7	9	8	8	9	4	13	12	4	5	3	13	9	4	9	8	6	3
Oman	12	12	6	15	1	6	12	1	4	5	11	1	8	2	2	15	4	15	1	2	13	15	2	15	6
Barbados	2	8	3	2	6	8	14	2	2	2	13	7	10	5	5	12	15	13	12	6	11	13	11	13	13
Ranking of leading age-standardized rates of disability-adjusted life years (DALYs) relative to comparator countries in 2010																									
Country	Ischemic heart disease	Low back pain	Stroke	Falls	Lung cancer	Major depressive disorder	Road injury	Self-harm	COPD	Cirrhosis	Diabetes	Colorectal cancer	Other musculoskeletal	Neck pain	Osteoarthritis	Other cardio & circulatory	Migraine	Breast cancer	Anxiety disorders	Lower respiratory infections	Alcohol use disorders	Hypertensive heart disease	Alzheimer's disease	Stomach cancer	Pancreatic cancer
Italy	3	11	4	10	11	7	5	7	4	8	3	8	8	14	1	5	15	11	3	1	1	10	9	13	10
The Bahamas	4	1	8	2	3	11	14	4	1	7	11	3	6	3	13	11	5	4	5	12	14	14	5	5	2
Spain	2	4	3	9	12	3	3	8	5	10	7	10	14	11	7	6	13	5	2	3	5	2	15	8	5
Bahrain	9	7	6	1	5	15	13	10	14	4	14	2	1	1	14	10	1	3	15	11	3	9	1	1	7
Greece	12	13	11	12	14	8	11	2	8	6	1	4	7	15	2	4	10	7	11	9	2	5	6	11	9
New Zealand	8	8	1	7	9	6	7	11	15	1	2	14	5	8	4	2	3	13	13	2	10	1	14	2	4
Israel	5	12	2	8	6	5	2	9	9	5	9	9	13	9	3	8	8	14	1	4	9	3	10	7	12
<b>Slovenia</b>	<b>7</b>	<b>9</b>	<b>9</b>	<b>15</b>	<b>13</b>	<b>4</b>	<b>10</b>	<b>14</b>	<b>12</b>	<b>15</b>	<b>4</b>	<b>13</b>	<b>4</b>	<b>7</b>	<b>10</b>	<b>9</b>	<b>12</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>13</b>	<b>11</b>	<b>3</b>	<b>14</b>	<b>11</b>
South Korea	1	5	13	3	10	1	4	15	2	14	8	6	15	10	8	1	14	1	9	7	15	6	11	15	8
Trinidad and Tobago	15	2	15	6	4	12	12	11	11	15	7	9	5	12	13	6	10	6	13	11	15	8	4	3	
Cyprus	11	14	7	11	7	13	8	3	6	3	10	5	11	12	5	7	9	9	8	5	8	7	13	3	6
Czech Republic	14	10	12	14	15	2	6	13	13	5	15	3	6	9	12	11	6	12	10	6	8	4	12	15	
Malta	10	15	5	13	8	14	1	6	10	2	6	11	10	13	6	3	7	12	14	8	7	4	12	6	13
Oman	13	6	14	5	2	9	15	1	7	12	13	1	2	2	15	14	2	2	10	15	4	13	2	10	1
Barbados	6	3	10	4	1	10	9	5	3	9	12	12	12	4	11	15	4	15	4	14	12	12	7	9	14
Ranking Legend	1 - 3			4 - 7			8 - 11			12 - 15															