

# ATLAS OF CAUSE-SPECIFIC ALL AGES MORTALITY BY DISTRICT IN BELGIUM

2003-2009

## Sciensano

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*This atlas about all ages mortality (2003-2009) is published in the context of the Health Status Report (HSR) project. The HSR project presents a summary of key health status indicators for the Belgian population on the healthybelgium.be platform. You can find on the website more detailed information about overall mortality, overall mortality by cause, premature mortality, and premature mortality by cause. Other information is also available about life expectancy and quality of life, non-communicable and communicable diseases, mental health, determinants of health, and health inequalities here.*

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# 1. Introduction

## 1.1. WHAT DOES THIS ATLAS CONTAIN?

This file contains maps and data tables of the cause-specific all-age (or overall) mortality rates by district for the 2003-2009 period. All-ages mortality refers to deaths occurring at any age.

## 1.2. METHODS

### Data

The cause-specific mortality data using the ICD-10 classification is provided by Statbel. Data from several years are pooled together (2003-2009, 2010-2017) to have a sufficient number of observations in each category. We restrict the results to causes of death where the number of deaths was sufficient to avoid large confidence intervals (potential misclassification might not exceed two color classes in at least 75% of the districts). Age-standardized rates (European population 2013) are used to take into account possible differences in the age structure of the different districts and to ease comparison among districts.

Figures	Cause of death	ICD-10 codes
2.1.	Breast cancer	C50
2.2.	Prostate cancer	C61
2.3.	Colorectal cancer	C18-C20
2.4.	Lung cancer	C33-C34
2.5.	Head, neck and oesophageal cancer	C00-C14 ,C30-C32, C15
2.6.	Ischemic heart disease	I20- I25
2.7.	Diabetes	E10-E14
2.8.	Cerebrovascular diseases and arterial hypertension	I10-I13, I60-I69
2.9.	Chronic liver diseases	K70, K73, K74
2.10.	Chronic obstructive pulmonary diseases	J40-J44
2.11.	Alzheimer's disease and other dementias	G30 + F01,F03
2.12.	Suicide	X60-X84
2.13.	Transport accidents	V01-V99

### Maps

For each specific cause of death, maps plot age-standardized premature mortality rates by district. The maps are designed with 13 colours varying from green – for low rates – to brown – for high rates. The cut-off colour (yellow) varies for each map and represents the reference rate, which is the Belgian mortality rate of the particular cause of death represented. This reference colour has the same meaning across all maps, allowing to easily compare the maps. The midpoint of each adjacent colour is separated by a 10% relative difference, e.g. average sex-specific level = 29.1, range around this average = 27.8-30.5; adjacent upper range = 30.5-33.6, adjacent lower range = 25.2-27.8. The more colours presented on the maps, the larger the differences between districts. For more information concerning the methodology behind the maps, you can consult [this paper](#).

### Tables

Under the maps, tables with the rates represented on the maps are presented. You can find the number of deaths observed, the age-standardized rates, the 95% confidence interval, and the p-value of the z statistic testing for a difference between the district's rate and the mean rate. 'NS' means that the value for this district does not significantly differ from Belgium's mean. Districts are ranked from the lowest to the highest rate. The mean rate for Belgium can be found under the table.

Maps and tables are usually shown for both sexes together, except when geographic patterns differed substantially by sex.

### **1.3. HOW TO READ THESE MAPS?**

We present here an example of how to read a map.

#### **Example: Ischemic heart disease all-ages mortality (2003-2009)**

During the 2003-2009 period, the average Ischemic Heart Disease (IHD) mortality rate was 119.3 per 100,000. The average range (113.7-125.1) is represented in yellow, and can be observed in Dinant, Virton, Brugge, Maaseik, Kortrijk, Leuven, Liège, Brussels, Namur, Hasselt, Eeklo, Dendermonde, Huy, Turnhout and Ieper. During this period, the lowest rate was 96.1 per 100,000, observed in Oudenaarde, and the highest was 148.3 per 100,000, observed in Philippeville.

Higher rates were observed in the province of Hainaut in the districts of Thuin, Mons, Soignies, Charleroi and Philippeville but also in Marche-en-Famenne and Diskmuide. The rates in those districts are displayed in the second nuance of red (137.6-151.4). Lower rates were observed in Oudenaarde, Tournai, Mouscron and Oostende. The rates are included in the 2<sup>nd</sup> level of green (94.0-103.4).

### **1.4. GENERAL OBSERVATIONS**

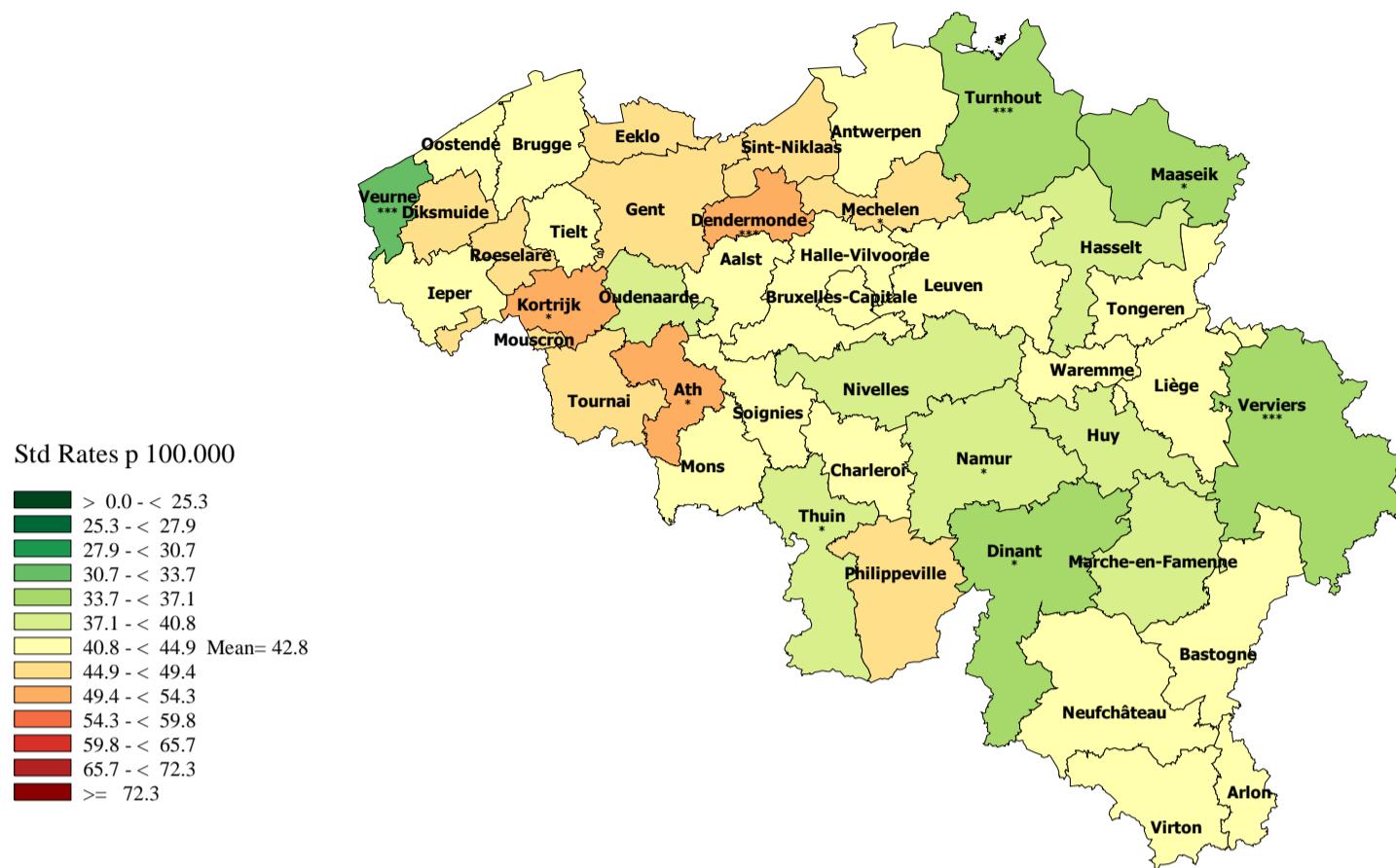
For most causes of death, mortality rates are much higher in men than in women. They are usually also lower in Flanders than in Wallonia, with intermediate rates in Brussels (North-South gradient). However, the rates are not homogenous within regions, and some districts can experience mortality rates that diverge from the regional mean. For some causes of death, we do not observe this typical North-South gradient but rather a West-East gradient (French border to Dutch/German border).

When the rates are lower, the relative difference between rates can get higher. Since maps are designed to show relative differences and will show more contrasts when the relative difference is high, a decrease in mortality rates over time will result in more contrasted maps, i.e. the maps of 2003-2009 are less contrasted than the ones of 2010-2017. In addition, premature mortality maps are more contrasted than the all-ages mortality maps since relative differences are more pronounced when the rates are low.

## 2. Cause-specific all-age mortality maps

### 2.1. BREAST CANCER

**Overall Breast Ca Mortality in Women (all-ages), Belgium 2003-2009**  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 31 - 53 per 100.000

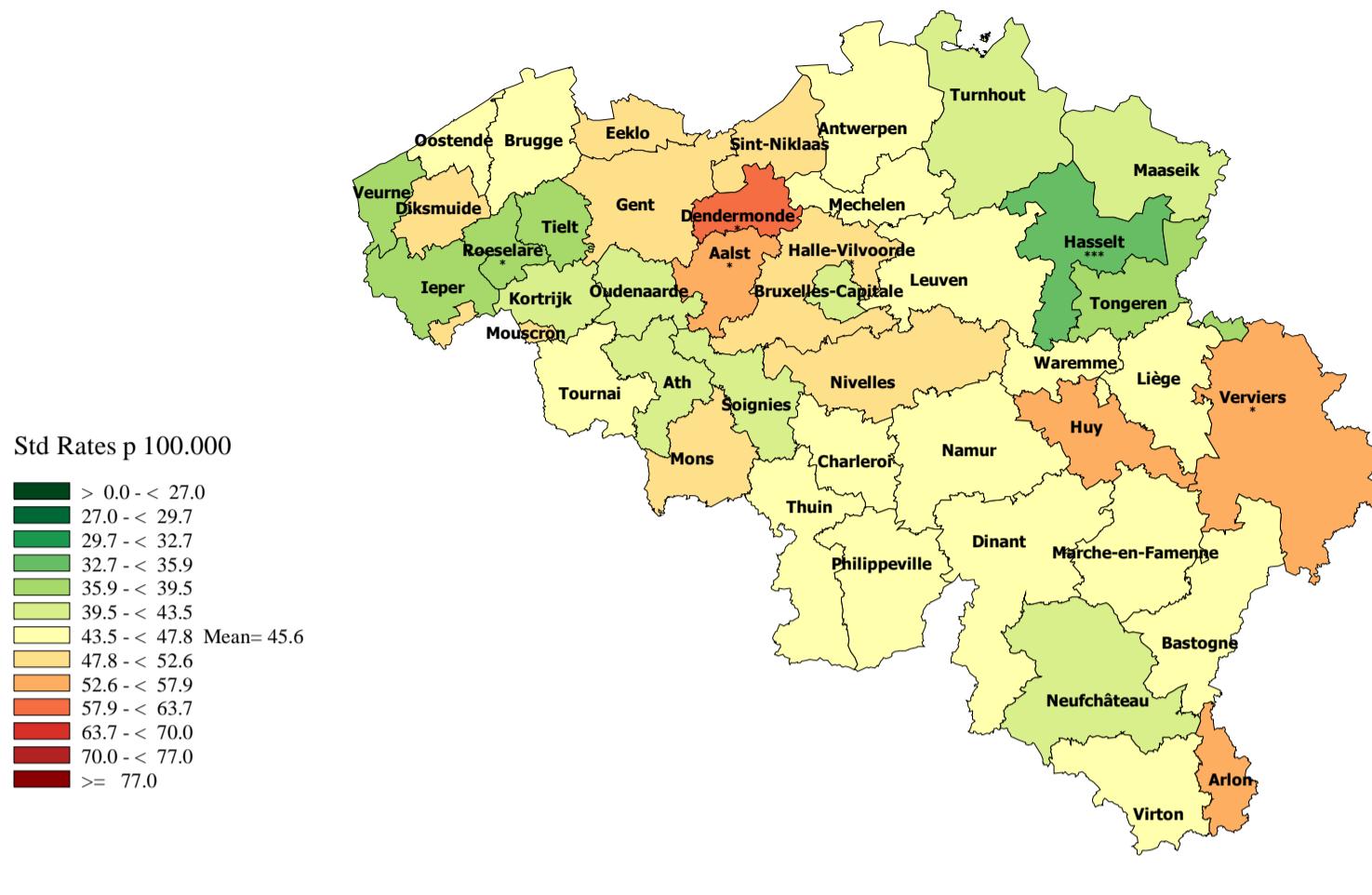
**Ranking of the districts by increasing all ages mortality rate of Breast Cancer, in Women, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	84	Veurne	31.2	[24.4;38.0]	<0.001
2	F	132	Dinant	36.0	[29.8;42.2]	<0.05
3	F	340	Verviers	36.1	[32.2;40.0]	<0.001
4	F	248	Maaseik	36.8	[32.1;41.5]	<0.05
5	F	506	Turnhout	36.9	[33.6;40.1]	<0.001
6	F	67	Marche-en-Famenne	37.4	[28.4;46.5]	ns.
7	F	203	Thuin	37.5	[32.3;42.7]	<0.05
8	F	386	Namur	38.0	[34.1;41.8]	<0.05
9	F	139	Huy	39.2	[32.6;45.8]	ns.
10	F	178	Oudenaarde	39.4	[33.5;45.2]	ns.
11	F	527	Hasselt	40.1	[36.7;43.6]	ns.
12	F	509	Nivelles	40.5	[37.0;44.1]	ns.
13	F	264	Tongeren	41.0	[36.0;46.0]	ns.
14	F	928	Liege	41.0	[38.4;43.7]	ns.
15	F	69	Arlon	41.1	[31.2;51.0]	ns.
16	F	109	Waremme	41.3	[33.4;49.1]	ns.
17	F	705	Leuven	41.8	[38.7;44.9]	ns.
18	F	267	Oostende	41.8	[36.7;46.9]	ns.
19	F	69	Virton	42.1	[31.9;52.2]	ns.
20	F	402	Mons	42.2	[38.0;46.4]	ns.
21	F	165	Ieper	42.8	[36.2;49.4]	ns.
22	F	135	Tielt	42.8	[35.5;50.1]	ns.
23	F	272	Soignies	43.1	[37.9;48.3]	ns.
24	F	471	Brugge	43.3	[39.4;47.2]	ns.
25	F	887	Halle-Vilvoorde	43.4	[40.6;46.3]	ns.
26	F	1534	Antwerpen	43.6	[41.4;45.8]	ns.
27	F	89	Neufchateau	43.8	[34.6;53.1]	ns.
28	F	685	Charleroi	44.3	[40.9;47.6]	ns.
29	F	1537	Brussels	44.3	[42.0;46.6]	ns.
30	F	62	Bastogne	44.6	[33.3;55.8]	ns.
31	F	448	Aalst	44.7	[40.5;48.9]	ns.
32	F	361	Sint Niklaas	45.2	[40.5;49.9]	ns.
33	F	844	Gent	46.0	[42.9;49.1]	ns.
34	F	241	Roeselare	46.2	[40.3;52.1]	ns.
35	F	251	Tournai	46.5	[40.6;52.4]	ns.
36	F	140	Eeklo	46.7	[38.9;54.5]	ns.
37	F	106	Philippeville	46.9	[37.9;55.9]	ns.
38	F	543	Mechelen	46.9	[42.9;50.9]	<0.05
39	F	129	Mouscron	47.3	[39.0;55.7]	ns.
40	F	83	Diksmuide	47.6	[37.2;58.0]	ns.
41	F	510	Kortrijk	49.5	[45.2;53.9]	<0.01
42	F	158	Ath	51.8	[43.6;60.0]	<0.05
43	F	356	Dendermonde	53.3	[47.7;58.8]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 42.8

## 2.2. PROSTATE CANCER

### Overall Prostate Ca Mortality in Men (all-ages), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



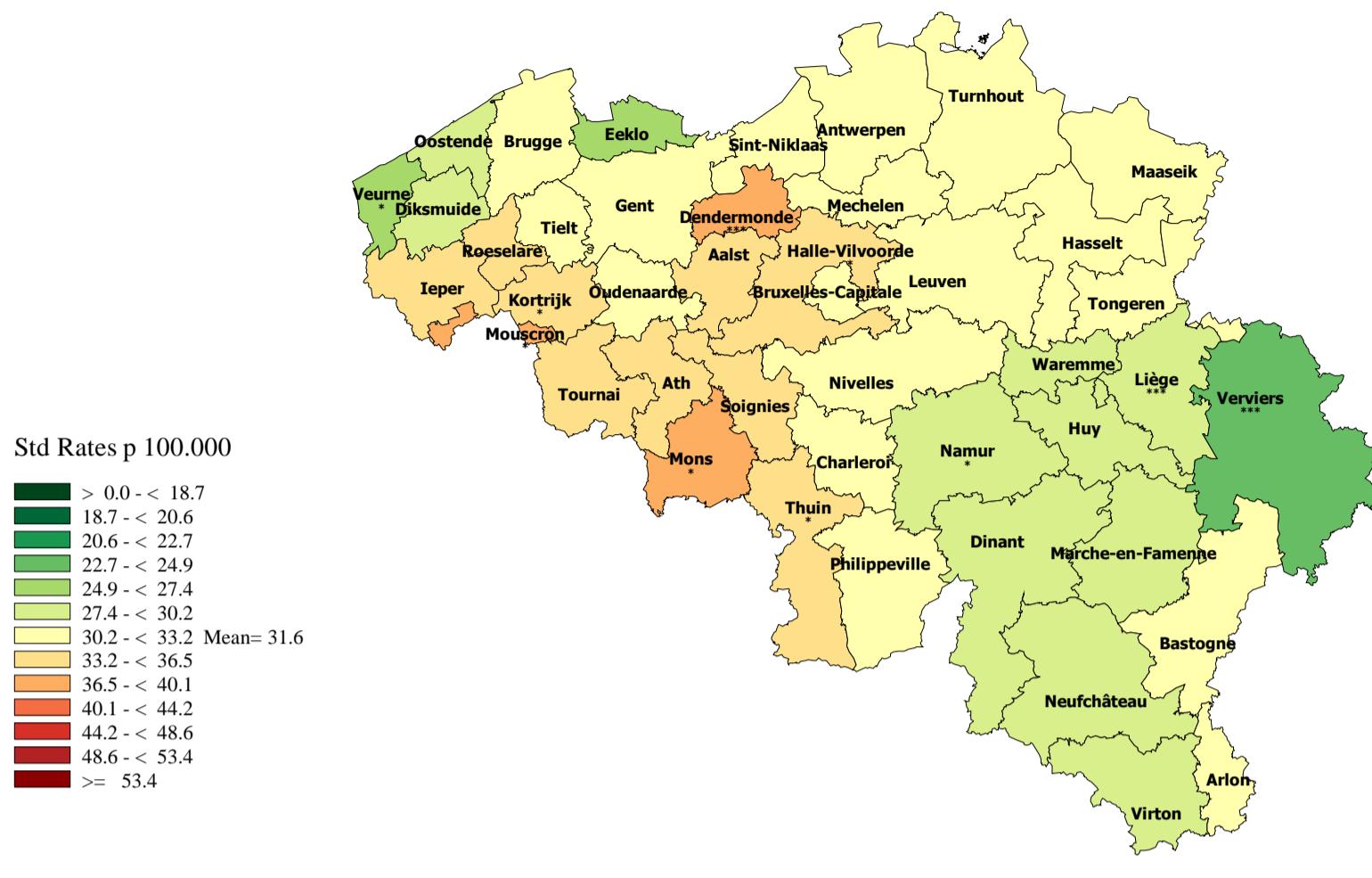
**Ranking of the districts by increasing all ages mortality rate of Prostate Cancer, in Men, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	M	243	Hasselt	34.6	[29.1;40.1]	<0.001
2	M	71	Veurne	37.2	[27.6;46.7]	ns.
3	M	79	Tielt	37.7	[28.8;46.5]	ns.
4	M	125	Roeselare	37.7	[30.2;45.2]	<0.05
5	M	146	Tongeren	38.5	[31.1;46.0]	ns.
6	M	95	Ieper	38.7	[30.2;47.2]	ns.
7	M	155	Maaseik	40.4	[32.3;48.4]	ns.
8	M	153	Soignies	41.1	[33.9;48.3]	ns.
9	M	253	Kortrijk	41.3	[35.5;47.0]	ns.
10	M	126	Oudenaarde	41.6	[34.0;49.2]	ns.
11	M	52	Neufchateau	41.9	[29.6;54.1]	ns.
12	M	350	Turnhout	42.4	[37.1;47.6]	ns.
13	M	820	Brussels	42.5	[39.4;45.6]	ns.
14	M	77	Ath	42.7	[32.2;53.1]	ns.
15	M	974	Antwerpen	43.8	[40.8;46.8]	ns.
16	M	375	Charleroi	43.9	[38.8;48.9]	ns.
17	M	318	Mechelen	44.2	[38.9;49.6]	ns.
18	M	52	Marche-en-Famenne	44.7	[31.2;58.2]	ns.
19	M	318	Brugge	44.8	[39.4;50.2]	ns.
20	M	51	Philippeville	44.9	[30.4;59.4]	ns.
21	M	91	Dinant	45.6	[34.8;56.4]	ns.
22	M	466	Leuven	45.7	[41.0;50.4]	ns.
23	M	56	Waremme	45.8	[31.2;60.4]	ns.
24	M	139	Thuin	46.0	[37.2;54.8]	ns.
25	M	246	Namur	46.3	[39.8;52.9]	ns.
26	M	584	Liege	46.7	[42.3;51.0]	ns.
27	M	48	Virton	47.0	[31.3;62.7]	ns.
28	M	140	Tournai	47.0	[38.5;55.5]	ns.
29	M	188	Oostende	47.2	[39.7;54.7]	ns.
30	M	36	Bastogne	47.3	[27.8;66.8]	ns.
31	M	551	Gent	49.3	[44.8;53.8]	ns.
32	M	64	Diksmuide	50.3	[37.2;63.5]	ns.
33	M	243	Sint Niklaas	50.8	[43.6;57.9]	ns.
34	M	601	Halle-Vilvoorde	51.0	[46.2;55.7]	<0.05
35	M	70	Mouscron	51.2	[37.4;64.9]	ns.
36	M	103	Eeklo	51.8	[41.2;62.5]	ns.
37	M	342	Nivelles	52.1	[45.7;58.5]	ns.
38	M	251	Mons	52.4	[45.0;59.8]	ns.
39	M	295	Aalst	52.8	[45.9;59.6]	<0.05
40	M	267	Verviers	53.5	[45.9;61.1]	<0.05
41	M	50	Arlon	53.5	[36.0;71.0]	ns.
42	M	112	Huy	56.5	[44.7;68.4]	ns.
43	M	229	Dendermonde	59.9	[51.0;68.8]	<0.01

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 45.6

## 2.3. COLORECTAL CANCER

### Overall Colorectal Ca Mortality in both genders (all-ages), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 24 - 40 per 100.000

#### Ranking of the districts by increasing all ages mortality rate of Colorectal Cancer, in Both genders, 2003-2009

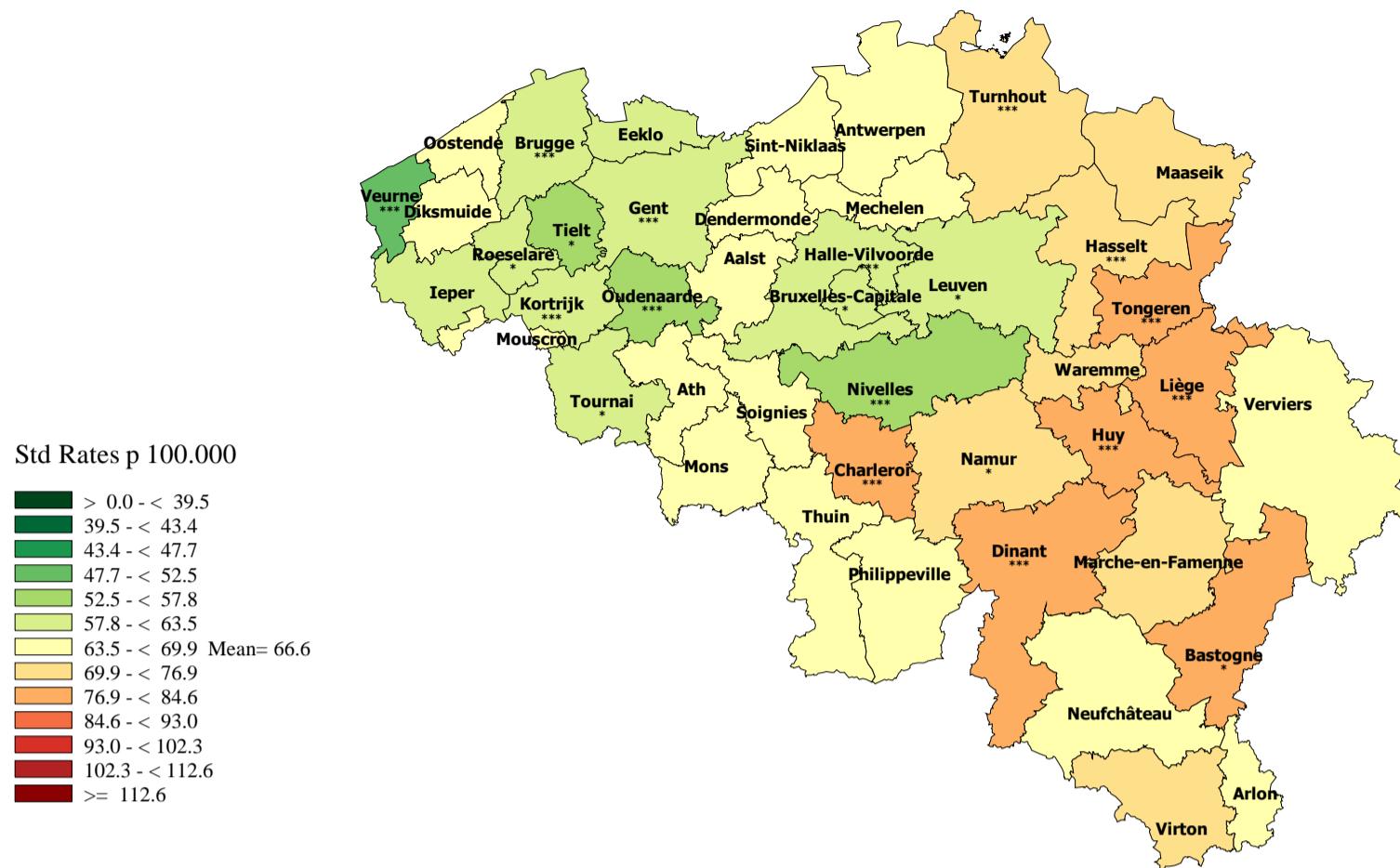
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	394	Verviers	24.4	[22.0;26.9]	<0.001
2	Both	129	Veurne	26.0	[21.5;30.5]	<0.05
3	Both	146	Eeklo	27.2	[22.7;31.6]	ns.
4	Both	94	Diksmuide	28.1	[22.3;33.8]	ns.
5	Both	1090	Liege	28.6	[26.8;30.3]	<0.001
6	Both	486	Namur	28.8	[26.2;31.4]	<0.05
7	Both	123	Waregem	29.2	[23.9;34.4]	ns.
8	Both	188	Dinant	29.3	[25.0;33.5]	ns.
9	Both	174	Huy	29.3	[24.8;33.7]	ns.
10	Both	105	Neufchateau	29.6	[23.8;35.3]	ns.
11	Both	88	Virton	29.6	[23.4;35.9]	ns.
12	Both	339	Oostende	29.7	[26.5;32.9]	ns.
13	Both	91	Marche-en-Famenne	29.7	[23.4;35.9]	ns.
14	Both	701	Turnhout	30.5	[28.2;32.9]	ns.
15	Both	676	Hasselt	30.5	[28.1;32.9]	ns.
16	Both	90	Arlon	30.7	[24.1;37.2]	ns.
17	Both	632	Mechelen	30.7	[28.3;33.1]	ns.
18	Both	1815	Brussels	30.8	[29.4;32.2]	ns.
19	Both	72	Bastogne	30.9	[23.5;38.2]	ns.
20	Both	350	Maaseik	30.9	[27.4;34.4]	ns.
21	Both	340	Tongeren	31.1	[27.7;34.6]	ns.
22	Both	909	Leuven	31.3	[29.2;33.4]	ns.
23	Both	120	Philippeville	31.3	[25.6;37.1]	ns.
24	Both	659	Nivelles	31.4	[28.9;33.8]	ns.
25	Both	606	Brugge	31.4	[28.9;33.9]	ns.
26	Both	1964	Antwerpen	31.6	[30.1;33.0]	ns.
27	Both	1024	Gent	31.9	[29.9;33.9]	ns.
28	Both	252	Oudenaarde	32.4	[28.4;36.5]	ns.
29	Both	445	Sint Niklaas	32.5	[29.4;35.6]	ns.
30	Both	838	Charleroi	32.7	[30.5;35.0]	ns.
31	Both	190	Tielt	33.0	[28.3;37.8]	ns.
32	Both	169	Ath	33.5	[28.3;38.6]	ns.
33	Both	360	Soignies	33.5	[30.0;37.0]	ns.
34	Both	304	Tournai	33.6	[29.8;37.4]	ns.
35	Both	593	Aalst	33.6	[30.9;36.4]	ns.
36	Both	316	Roeselare	33.7	[29.9;37.4]	ns.
37	Both	243	Ieper	34.2	[29.8;38.5]	ns.
38	Both	1215	Halle-Vilvoorde	34.5	[32.5;36.5]	<0.01
39	Both	641	Kortrijk	35.2	[32.4;37.9]	<0.05
40	Both	329	Thuin	36.4	[32.4;40.4]	<0.05
41	Both	565	Mons	36.5	[33.4;39.6]	<0.01
42	Both	180	Mouscron	39.0	[33.2;44.8]	<0.05
43	Both	459	Dendermonde	39.7	[36.0;43.4]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 31.6

## 2.4. LUNG CANCER

### Overall Lung Ca Mortality in both genders (all-ages), Belgium 2003-2009

Age-Adjusted Mortality Rates (Std: Eu pop 2013)



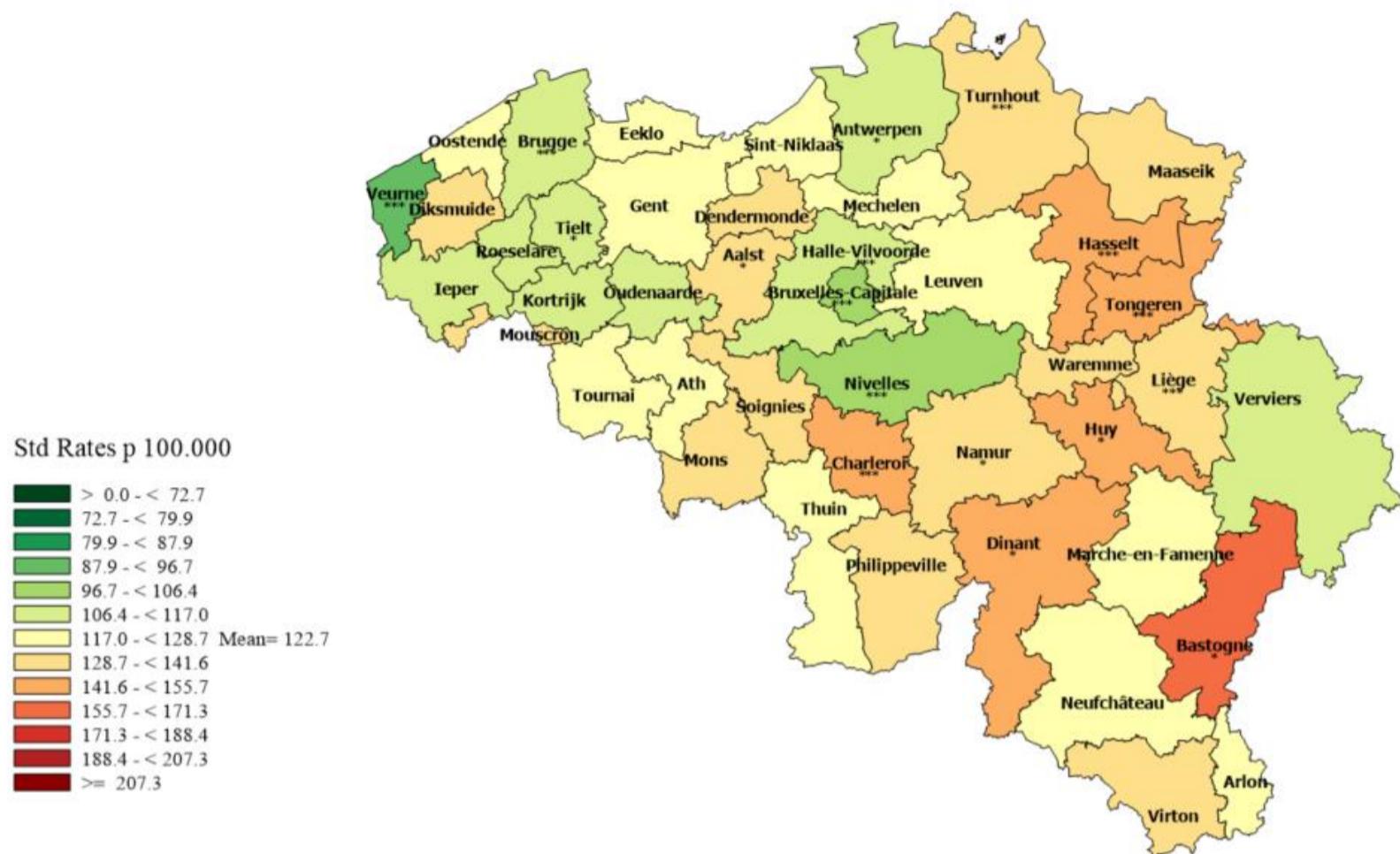
Change from one colour level to another corresponds to a 10% relative change  
Range: 50 - 81 per 100.000

### Ranking of the districts by increasing all ages mortality rate of Lung Cancer, in Both genders, 2003-2009

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	252	Veurne	50.2	[44.0;56.4]	<0.001
2	Both	335	Tielt	57.0	[50.8;63.1]	<0.01
3	Both	454	Oudenaarde	57.0	[51.7;62.3]	<0.001
4	Both	1252	Nivelles	57.2	[54.0;60.3]	<0.001
5	Both	1153	Brugge	57.8	[54.5;61.2]	<0.001
6	Both	2183	Halle-Vilvoorde	58.5	[56.0;61.0]	<0.001
7	Both	569	Roeselare	58.8	[53.9;63.6]	<0.01
8	Both	1105	Kortrijk	59.1	[55.6;62.6]	<0.001
9	Both	559	Tournai	59.4	[54.4;64.3]	<0.01
10	Both	434	Ieper	61.0	[55.2;66.8]	ns.
11	Both	344	Eeklo	61.5	[55.0;68.0]	ns.
12	Both	2033	Gent	61.9	[59.2;64.6]	<0.001
13	Both	1892	Leuven	62.0	[59.2;64.8]	<0.01
14	Both	3575	Brussels	63.2	[61.1;65.3]	<0.01
15	Both	615	Thuin	64.6	[59.4;69.7]	ns.
16	Both	294	Mouscron	64.6	[57.2;72.1]	ns.
17	Both	237	Neufchateau	65.1	[56.8;73.5]	ns.
18	Both	1375	Mechelen	65.7	[62.2;69.2]	ns.
19	Both	806	Dendermonde	65.8	[61.2;70.3]	ns.
20	Both	203	Arlon	65.9	[56.7;75.0]	ns.
21	Both	1033	Mons	66.3	[62.2;70.4]	ns.
22	Both	1192	Aalst	66.4	[62.6;70.3]	ns.
23	Both	966	Sint Niklaas	66.5	[62.3;70.8]	ns.
24	Both	736	Spignies	66.9	[62.0;71.8]	ns.
25	Both	227	Diksmuide	67.4	[58.5;76.2]	ns.
26	Both	352	Ath	67.6	[60.5;74.8]	ns.
27	Both	792	Oostende	67.7	[62.9;72.4]	ns.
28	Both	4310	Antwerpen	67.8	[65.7;69.8]	ns.
29	Both	273	Philippeville	68.1	[60.0;76.3]	ns.
30	Both	1143	Verviers	68.2	[64.2;72.2]	ns.
31	Both	208	Virton	70.3	[60.6;79.9]	ns.
32	Both	225	Marche-en-Famenne	70.7	[61.3;80.1]	ns.
33	Both	907	Maaseik	71.3	[66.5;76.1]	ns.
34	Both	1262	Namur	71.4	[67.4;75.4]	<0.05
35	Both	320	Waregem	72.0	[64.0;80.0]	ns.
36	Both	1896	Turnhout	74.7	[71.3;78.1]	<0.001
37	Both	1805	Hasselt	75.3	[71.8;78.9]	<0.001
38	Both	2046	Charleroi	77.2	[73.8;80.6]	<0.001
39	Both	928	Tongeren	77.9	[72.8;83.0]	<0.001
40	Both	493	Huy	78.4	[71.4;85.4]	<0.01
41	Both	523	Dinant	79.6	[72.8;86.5]	<0.001
42	Both	189	Bastogne	80.3	[68.6;92.0]	<0.05
43	Both	3147	Liege	80.9	[78.0;83.8]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 66.6

**Overall Lung Ca Mortality in Men (all-ages), Belgium 2003-2009**  
 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



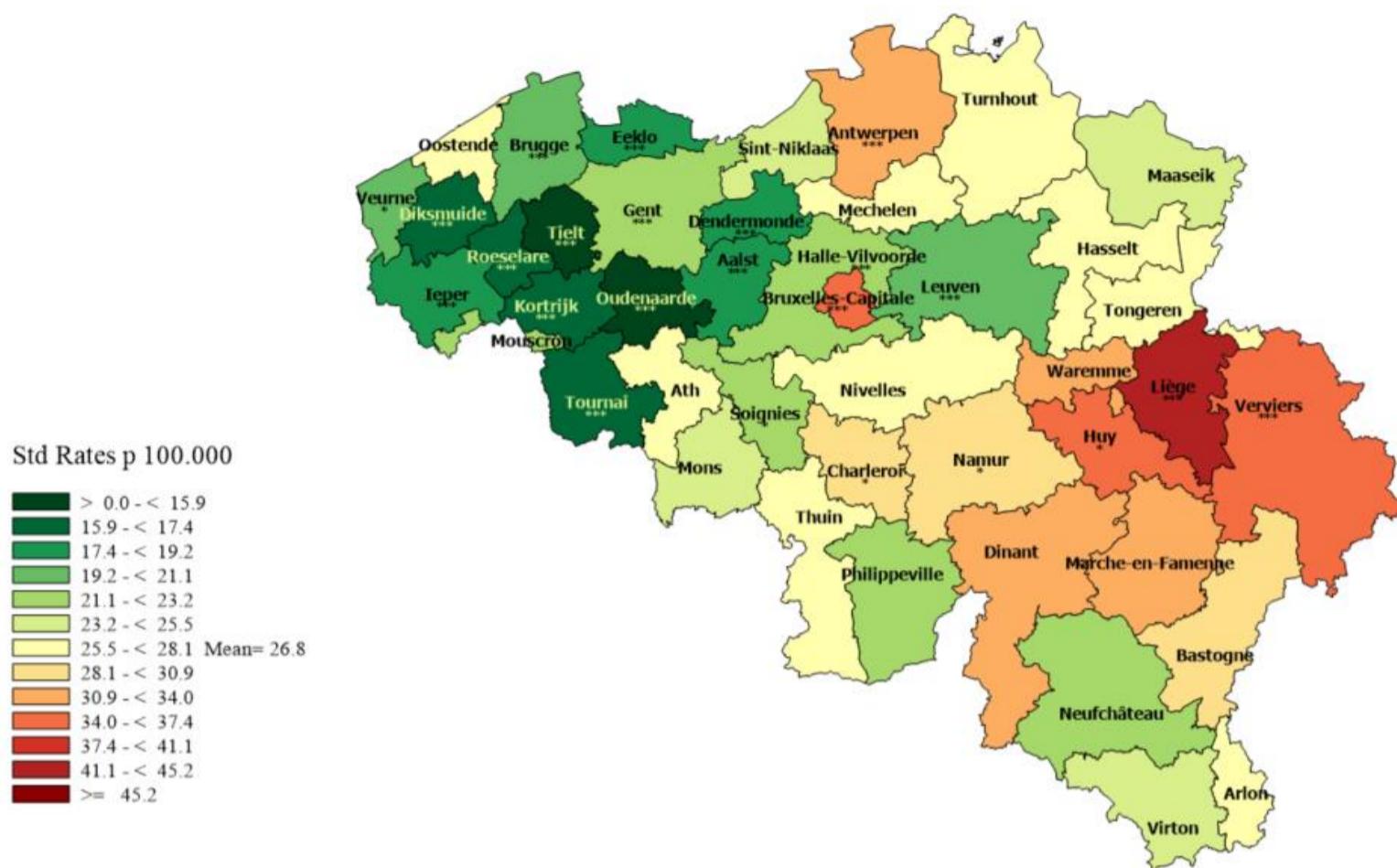
Change from one colour level to another corresponds to a 10% relative change  
 Range: 91 - 157 per 100.000

**Ranking of the districts by increasing all ages mortality rate of Lung Cancer, in Men, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	M	198	Veurne	91.4	[78.1; 105]	<0.001
2	M	930	Nivelles	101.0	[94.2; 108]	<0.001
3	M	2401	Brussels	105.3	[101; 110]	<0.001
4	M	1730	Halle-Vilvoorde	108.0	[103; 113]	<0.001
5	M	288	Tielt	108.5	[95.8; 121]	<0.05
6	M	935	Brugge	109.5	[102; 117]	<0.001
7	M	386	Oudenaarde	112.4	[101; 124]	ns.
8	M	483	Roeselare	113.8	[103; 124]	ns.
9	M	929	Kortrijk	115.2	[108; 123]	ns.
10	M	3147	Antwerpen	115.6	[111; 120]	<0.01
11	M	359	Ieper	116.1	[104; 128]	ns.
12	M	821	Verviers	116.2	[108; 125]	ns.
13	M	1630	Gent	117.3	[111; 123]	ns.
14	M	1074	Mechelen	119.2	[112; 127]	ns.
15	M	157	Arlon	120.0	[101; 139]	ns.
16	M	293	Eeklo	120.0	[106; 134]	ns.
17	M	1564	Leuven	120.9	[115; 127]	ns.
18	M	465	Tournai	121.0	[110; 132]	ns.
19	M	194	Neufchateau	121.1	[104; 138]	ns.
20	M	477	Thuin	121.3	[110; 133]	ns.
21	M	167	Marche-en-Famenne	124.9	[104; 146]	ns.
22	M	627	Oostende	125.4	[115; 136]	ns.
23	M	773	Sint Niklaas	125.6	[116; 135]	ns.
24	M	272	Ath	125.9	[110; 141]	ns.
25	M	225	Philippeville	130.5	[113; 148]	ns.
26	M	198	Diksmuide	130.7	[112; 149]	ns.
27	M	817	Mons	130.9	[121; 140]	ns.
28	M	238	Mouscron	131.0	[113; 149]	ns.
29	M	684	Dendermonde	131.0	[121; 141]	ns.
30	M	597	Soignies	131.4	[120; 143]	ns.
31	M	169	Virton	131.5	[111; 152]	ns.
32	M	741	Maaseik	133.1	[122; 144]	ns.
33	M	1005	Aalst	134.1	[125; 143]	<0.05
34	M	958	Namur	134.6	[126; 144]	<0.05
35	M	242	Waregem	137.4	[119; 156]	ns.
36	M	1532	Turnhout	137.5	[130; 145]	<0.001
37	M	2232	Liege	140.1	[134; 146]	<0.001
38	M	374	Huy	142.4	[127; 158]	<0.05
39	M	1442	Hasselt	142.4	[134; 151]	<0.001
40	M	406	Dinant	146.1	[131; 161]	<0.01
41	M	751	Tongeren	147.1	[136; 159]	<0.001
42	M	1592	Charleroi	149.2	[141; 157]	<0.001
43	M	151	Bastogne	157.3	[129; 186]	<0.05

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
 Age-standardized rate in Belgium = 122.7

**Overall Lung Ca Mortality in Women (all-ages), Belgium 2003-2009**  
 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
 Range: 15 - 42 per 100.000

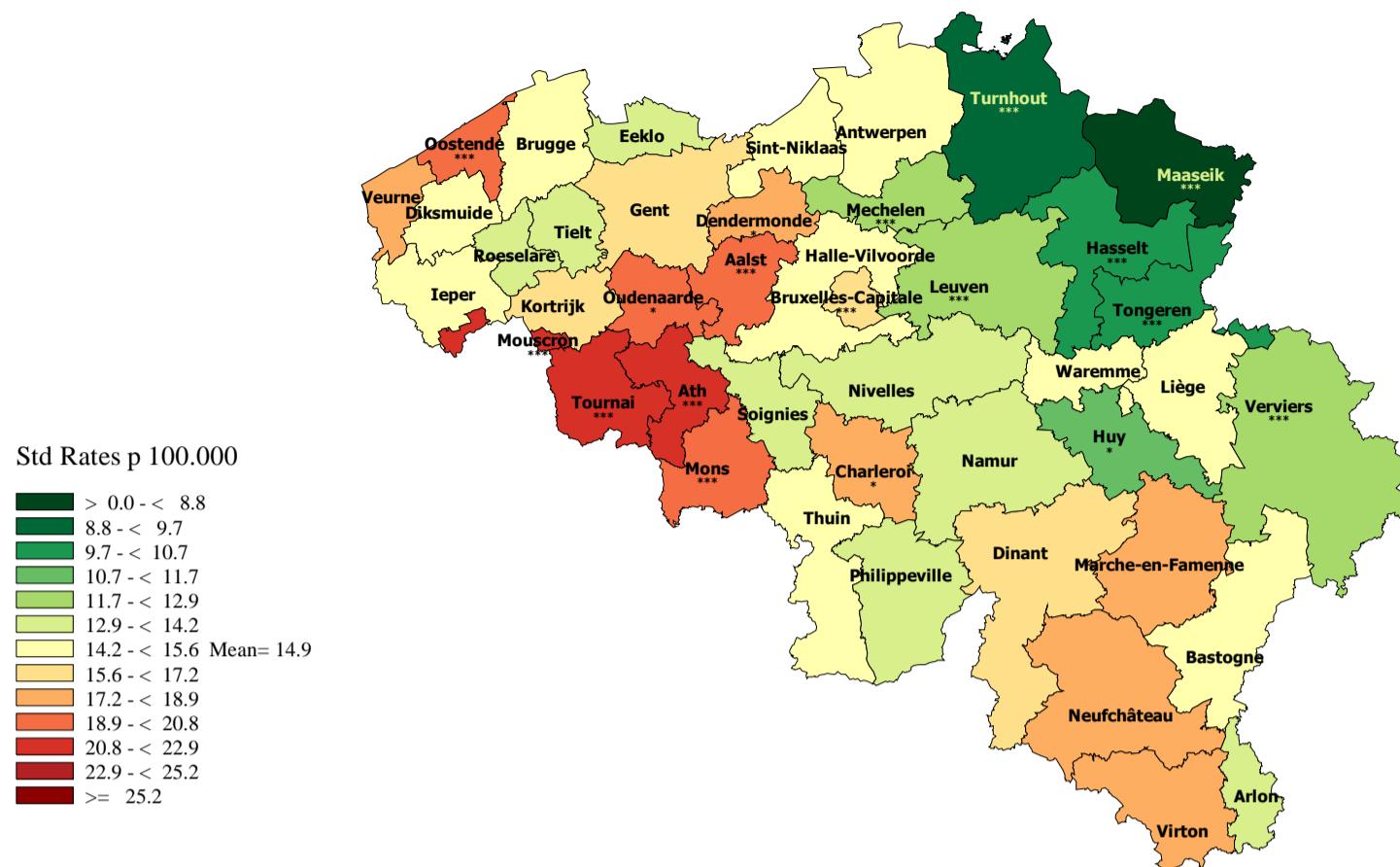
**Ranking of the districts by increasing all ages mortality rate of Lung Cancer, in Women, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	47	Tielt	14.6	[10.4;18.8]	<0.001
2	F	68	Oudenaarde	15.3	[11.6;19.0]	<0.001
3	F	29	Diksmuide	16.2	[10.2;22.2]	<0.001
4	F	86	Roeselare	16.4	[12.9;19.9]	<0.001
5	F	176	Kortrijk	16.8	[14.3;19.3]	<0.001
6	F	94	Tournai	17.3	[13.7;20.9]	<0.001
7	F	51	Eeklo	17.5	[12.7;22.3]	<0.001
8	F	122	Dendermonde	17.8	[14.6;21.0]	<0.001
9	F	75	Ieper	18.5	[14.2;22.7]	<0.001
10	F	187	Aalst	19.0	[16.2;21.7]	<0.001
11	F	54	Veurne	19.4	[14.2;24.7]	<0.01
12	F	328	Leuven	19.6	[17.4;21.7]	<0.001
13	F	218	Brugge	19.7	[17.1;22.4]	<0.001
14	F	56	Mouscron	21.4	[15.7;27.1]	ns.
15	F	43	Neufchâteau	21.7	[15.1;28.3]	ns.
16	F	139	Soignies	21.8	[18.1;25.4]	<0.01
17	F	453	Halle-Vilvoorde	22.0	[20.0;24.1]	<0.001
18	F	403	Gent	22.2	[20.0;24.3]	<0.001
19	F	48	Philippeville	22.2	[15.9;28.5]	ns.
20	F	216	Mons	23.7	[20.5;26.9]	ns.
21	F	166	Maaseik	23.8	[20.1;27.5]	ns.
22	F	193	Sint Niklaas	24.4	[20.9;27.8]	ns.
23	F	39	Virton	25.3	[17.3;33.3]	ns.
24	F	138	Thuin	25.5	[21.2;29.9]	ns.
25	F	322	Nivelles	25.8	[23.0;28.7]	ns.
26	F	165	Oostende	26.3	[22.3;30.4]	ns.
27	F	364	Turnhout	26.4	[23.7;29.2]	ns.
28	F	301	Mechelen	26.5	[23.5;29.5]	ns.
29	F	177	Tongeren	26.6	[22.7;30.5]	ns.
30	F	46	Arlon	26.9	[19.0;34.8]	ns.
31	F	363	Hasselt	27.5	[24.6;30.3]	ns.
32	F	80	Ath	27.8	[21.6;33.9]	ns.
33	F	38	Bastogne	28.9	[19.5;38.2]	ns.
34	F	454	Charleroi	29.7	[26.9;32.5]	<0.05
35	F	304	Namur	30.3	[26.8;33.7]	<0.05
36	F	78	Waregem	30.9	[24.0;37.9]	ns.
37	F	117	Dinant	32.5	[26.5;38.4]	ns.
38	F	1163	Antwerpen	33.2	[31.3;35.1]	<0.001
39	F	58	Marche-en-Famenne	33.4	[24.7;42.1]	ns.
40	F	119	Huy	34.4	[28.2;40.7]	<0.05
41	F	322	Verviers	34.5	[30.7;38.3]	<0.001
42	F	1174	Brussels	35.4	[33.3;37.5]	<0.001
43	F	915	Liege	41.8	[39.1;44.5]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
 Age-standardized rate in Belgium = 26.8

## 2.5. HEAD, NECK AND OESOPHAGEAL CANCER

Overall Head\_and\_neck and oesophageal Ca Mortality in both genders (all-ages), Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 9 - 23 per 100.000

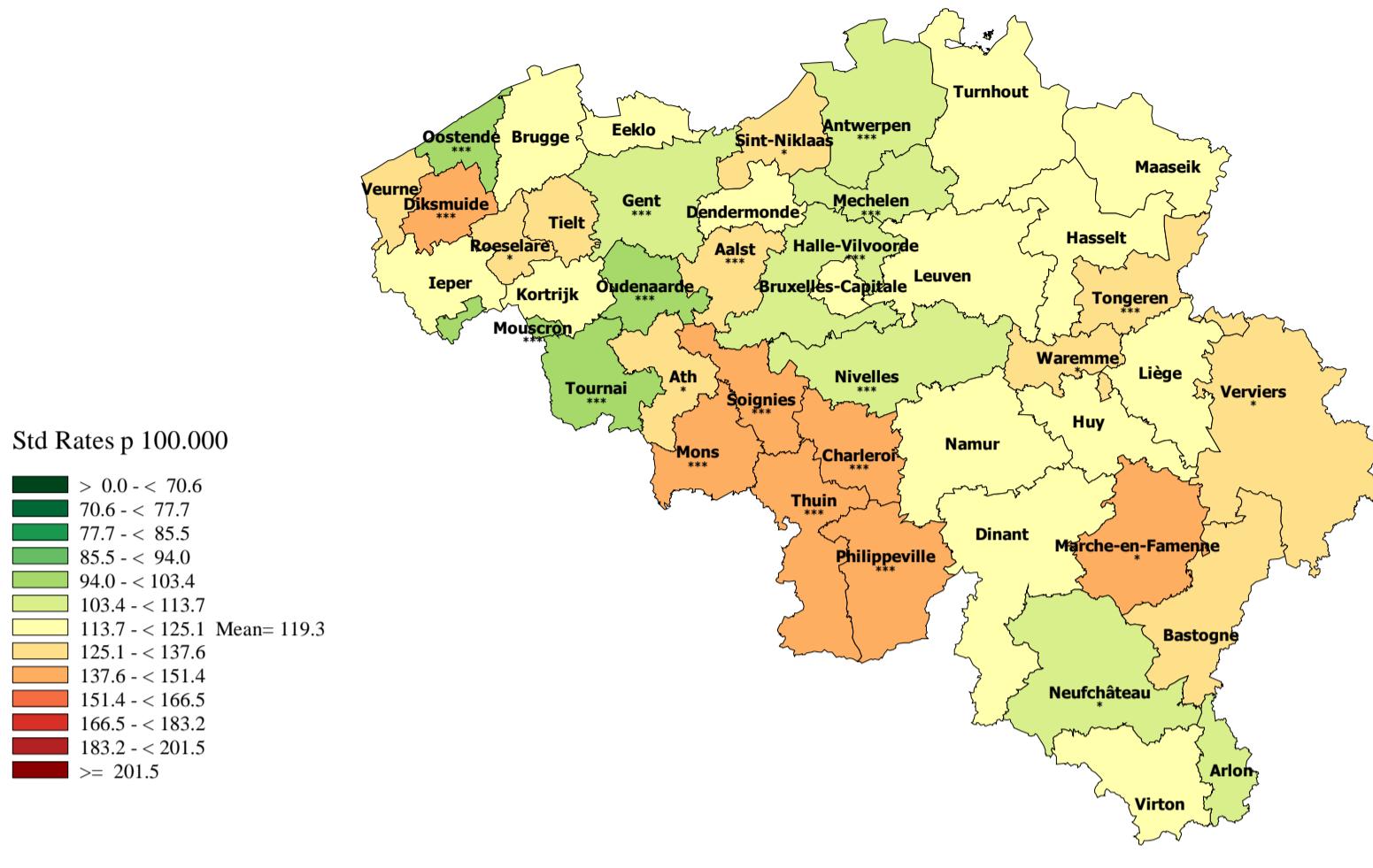
Ranking of the districts by increasing all ages mortality rate of Head and neck & Oesophageal Cancer, in Both genders, 2003-2009

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	117	Maaseik	8.6	[ 7.0;10.2]	<0.001
2	Both	229	Turnhout	8.9	[ 7.7;10.1]	<0.001
3	Both	121	Tongeren	9.9	[ 8.1;11.7]	<0.001
4	Both	249	Hasselt	10.4	[ 9.1;11.7]	<0.001
5	Both	64	Huy	10.7	[ 8.1;13.4]	<0.01
6	Both	203	Verviers	12.1	[10.4;13.8]	<0.01
7	Both	255	Mechelen	12.2	[10.7;13.7]	<0.001
8	Both	382	Leuven	12.5	[11.2;13.8]	<0.001
9	Both	55	Philippeville	13.2	[ 9.7;16.8]	ns.
10	Both	75	Eeklo	13.3	[10.3;16.3]	ns.
11	Both	45	Arlon	13.8	[ 9.7;17.8]	ns.
12	Both	310	Nivelles	13.8	[12.3;15.4]	ns.
13	Both	83	Tielt	14.1	[11.1;17.1]	ns.
14	Both	133	Roeselare	14.1	[11.7;16.6]	ns.
15	Both	257	Namur	14.2	[12.4;15.9]	ns.
16	Both	154	Soignies	14.2	[11.9;16.5]	ns.
17	Both	909	Antwerpen	14.4	[13.5;15.3]	ns.
18	Both	560	Liege	14.5	[13.2;15.7]	ns.
19	Both	549	Halle-Vilvoorde	14.7	[13.4;15.9]	ns.
20	Both	65	Waremme	14.9	[11.3;18.6]	ns.
21	Both	300	Brugge	15.0	[13.3;16.7]	ns.
22	Both	49	Diksmuide	15.2	[10.9;19.4]	ns.
23	Both	109	Ieper	15.4	[12.5;18.3]	ns.
24	Both	37	Bastogne	15.5	[10.3;20.7]	ns.
25	Both	224	Sint Niklaas	15.5	[13.5;17.6]	ns.
26	Both	151	Thuin	15.6	[13.1;18.1]	ns.
27	Both	294	Kortrijk	16.0	[14.1;17.8]	ns.
28	Both	529	Gent	16.2	[14.8;17.6]	ns.
29	Both	106	Dinant	16.3	[13.1;19.4]	ns.
30	Both	947	Brussels	16.9	[15.8;17.9]	<0.001
31	Both	464	Charleroi	17.5	[15.9;19.1]	<0.01
32	Both	55	Marche-en-Famenne	17.6	[12.9;22.3]	ns.
33	Both	65	Neufchateau	18.0	[13.6;22.4]	ns.
34	Both	89	Veurne	18.5	[14.6;22.3]	ns.
35	Both	54	Virton	18.5	[13.5;23.5]	ns.
36	Both	233	Dendermonde	18.8	[16.4;21.2]	<0.01
37	Both	152	Oudenaarde	19.4	[16.3;22.5]	<0.01
38	Both	313	Mons	19.5	[17.3;21.7]	<0.001
39	Both	224	Oostende	19.6	[17.0;22.2]	<0.001
40	Both	366	Aalst	20.3	[18.2;22.4]	<0.001
41	Both	115	Ath	21.8	[17.8;25.8]	<0.001
42	Both	208	Tournai	22.4	[19.4;25.5]	<0.001
43	Both	107	Mouscron	22.7	[18.4;27.1]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 14.9

## 2.6. ISCHEMIC HEART DISEASES

### Overall Isch\_Heart\_Disease Mortality in both genders (all-ages), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



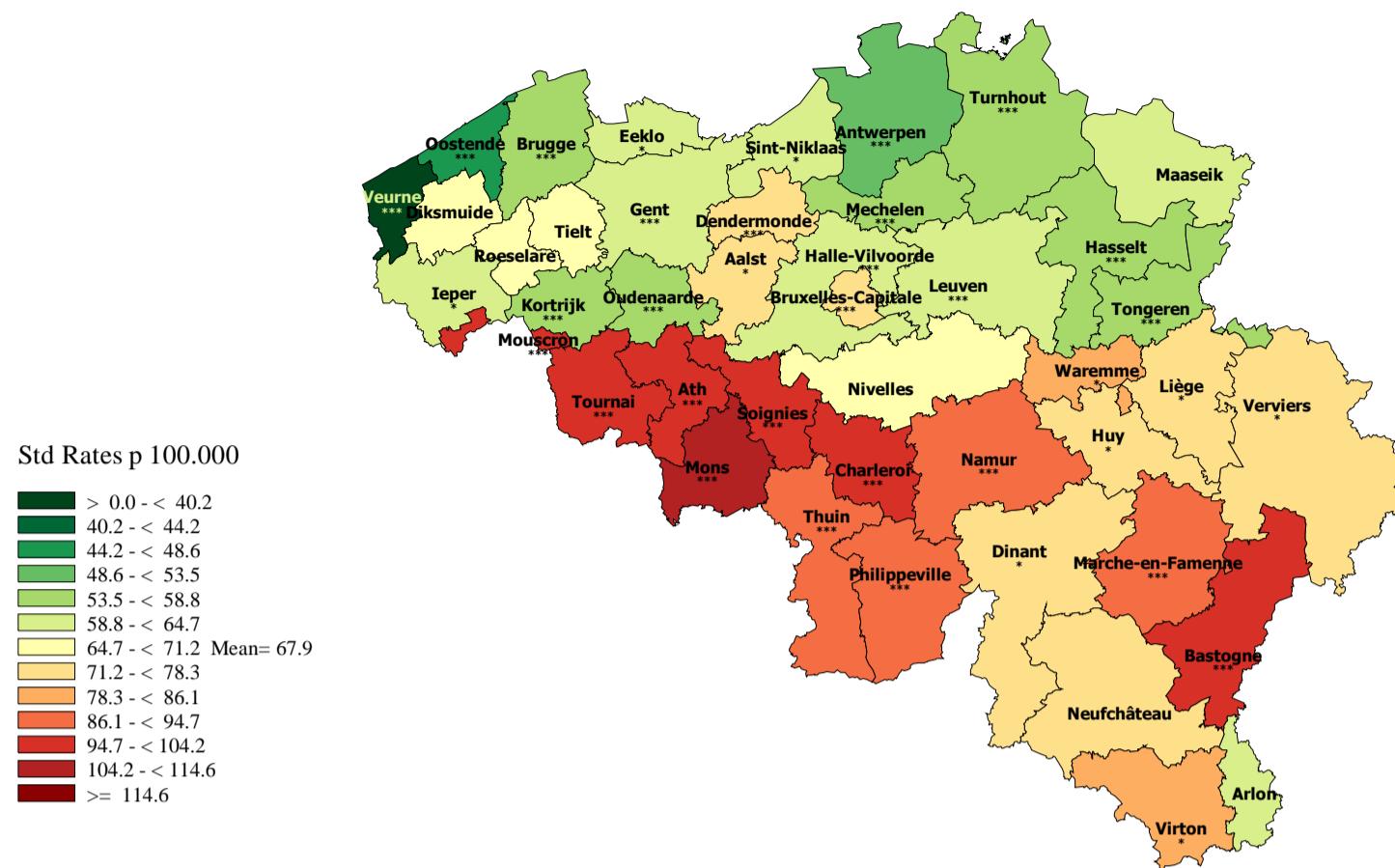
**Ranking of the districts by increasing all ages mortality rate of Ischemic Heart Disease, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	762	Oudenaarde	96.1	[89.2; 103]	<0.001
2	Both	909	Tournai	99.2	[92.6; 106]	<0.001
3	Both	459	Mouscron	101.0	[91.6; 110]	<0.001
4	Both	1142	Oostende	101.3	[95.3; 107]	<0.001
5	Both	366	Neufchateau	105.2	[94.2; 116]	<0.05
6	Both	3334	Gent	105.6	[102; 109]	<0.001
7	Both	6594	Antwerpen	107.9	[105; 111]	<0.001
8	Both	2166	Mechelen	108.0	[103; 113]	<0.001
9	Both	3736	Halle-Vilvoorde	109.5	[106; 113]	<0.001
10	Both	2231	Nivelles	109.6	[105; 114]	<0.001
11	Both	314	Arlon	111.6	[98.7; 124]	ns.
12	Both	712	Dinant	114.9	[106; 124]	ns.
13	Both	345	Virton	115.1	[103; 127]	ns.
14	Both	2193	Brugge	116.1	[111; 121]	ns.
15	Both	1221	Maaseik	116.4	[109; 124]	ns.
16	Both	2049	Kortrijk	116.7	[112; 122]	ns.
17	Both	3392	Leuven	118.0	[114; 122]	ns.
18	Both	4507	Liege	118.4	[115; 122]	ns.
19	Both	7057	Brussels	119.4	[117; 122]	ns.
20	Both	2013	Namur	120.7	[115; 126]	ns.
21	Both	2486	Hasselt	120.9	[116; 126]	ns.
22	Both	644	Eeklo	121.1	[112; 131]	ns.
23	Both	1381	Dendermonde	123.5	[117; 130]	ns.
24	Both	747	Huy	124.1	[115; 133]	ns.
25	Both	2730	Turnhout	124.6	[120; 130]	<0.05
26	Both	882	Ieper	124.6	[116; 133]	ns.
27	Both	719	Tielt	125.6	[116; 135]	ns.
28	Both	2020	Verviers	127.9	[122; 134]	<0.01
29	Both	608	Veurne	128.9	[118; 139]	ns.
30	Both	1723	Sint Niklaas	129.2	[123; 135]	<0.01
31	Both	2191	Aalst	131.1	[125; 137]	<0.001
32	Both	1189	Roeselare	131.6	[124; 139]	<0.01
33	Both	296	Bastogne	132.1	[116; 148]	ns.
34	Both	1354	Tongeren	132.6	[125; 140]	<0.001
35	Both	567	Waregem	132.9	[122; 144]	<0.05
36	Both	686	Ath	135.3	[125; 146]	<0.01
37	Both	1475	Soignies	140.6	[133; 148]	<0.001
38	Both	423	Marche-en-Famenne	141.3	[127; 155]	<0.01
39	Both	3593	Charleroi	142.5	[138; 147]	<0.001
40	Both	2169	Mons	145.0	[139; 151]	<0.001
41	Both	475	Diksmuide	146.8	[133; 160]	<0.001
42	Both	1339	Thuin	148.1	[140; 156]	<0.001
43	Both	549	Philippeville	148.3	[135; 161]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 119.3

## 2.7. DIABETES

### Overall Diabetes\_in\_multiple\_causes Mortality in both genders (all-ages), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 38 - 107 per 100.000

### Ranking of the districts by increasing mortality rate of Diabetes (analysed in multiple causes<sup>\$</sup>), in Both genders, 2003-2009

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	181	Veurne	37.9	[32.3;43.5]	<0.001
2	Both	499	Oostende	44.3	[40.4;48.3]	<0.001
3	Both	3001	Antwerpen	48.7	[47.0;50.5]	<0.001
4	Both	1077	Hasselt	54.0	[50.5;57.4]	<0.001
5	Both	1046	Brugge	55.7	[52.3;59.1]	<0.001
6	Both	989	Kortrijk	55.9	[52.4;59.5]	<0.001
7	Both	1189	Turnhout	56.3	[52.9;59.6]	<0.001
8	Both	1142	Mechelen	57.1	[53.7;60.5]	<0.001
9	Both	454	Oudenaarde	57.5	[52.1;62.8]	<0.001
10	Both	569	Tongeren	58.4	[53.3;63.5]	<0.001
11	Both	1677	Leuven	58.9	[56.0;61.8]	<0.001
12	Both	320	Eeklo	59.9	[53.3;66.6]	<0.05
13	Both	1882	Gent	60.0	[57.3;62.8]	<0.001
14	Both	432	Ieper	60.6	[54.8;66.4]	<0.05
15	Both	2113	Halle-Vilvoorde	62.0	[59.3;64.7]	<0.001
16	Both	832	Sint Niklaas	63.3	[58.9;67.7]	<0.05
17	Both	633	Maaseik	63.4	[58.0;68.8]	ns.
18	Both	191	Arlon	64.6	[55.2;74.1]	ns.
19	Both	581	Roeselare	65.4	[60.0;70.8]	ns.
20	Both	391	Tielt	67.8	[60.9;74.6]	ns.
21	Both	1397	Nivelles	68.4	[64.7;72.0]	ns.
22	Both	227	Diksmuide	69.3	[60.1;78.4]	ns.
23	Both	2716	Liege	71.2	[68.4;73.9]	<0.05
24	Both	255	Neufchateau	73.1	[63.9;82.3]	ns.
25	Both	1234	Aalst	73.8	[69.6;78.1]	<0.01
26	Both	1176	Verviers	74.5	[70.1;78.9]	<0.01
27	Both	4372	Brussels	74.7	[72.4;76.9]	<0.001
28	Both	470	Dinant	77.1	[69.9;84.2]	<0.05
29	Both	467	Huy	77.7	[70.5;84.9]	<0.01
30	Both	854	Dendermonde	78.0	[72.6;83.4]	<0.001
31	Both	349	Waregem	81.4	[72.6;90.1]	<0.01
32	Both	254	Virton	84.6	[74.0;95.1]	<0.01
33	Both	1481	Namur	86.5	[82.0;91.0]	<0.001
34	Both	266	Marche-en-Famenne	91.4	[80.0;103]	<0.001
35	Both	855	Thuin	93.0	[86.7;99.4]	<0.001
36	Both	351	Philippeville	94.4	[84.2;105]	<0.001
37	Both	873	Tournai	95.2	[88.8;102]	<0.001
38	Both	212	Bastogne	96.4	[82.9;110]	<0.001
39	Both	495	Ath	97.9	[89.1;107]	<0.001
40	Both	1070	Soignies	100.9	[94.7;107]	<0.001
41	Both	467	Mouscron	101.4	[92.1;111]	<0.001
42	Both	2581	Charleroi	101.8	[97.8;106]	<0.001
43	Both	1622	Mons	107.1	[102;112]	<0.001

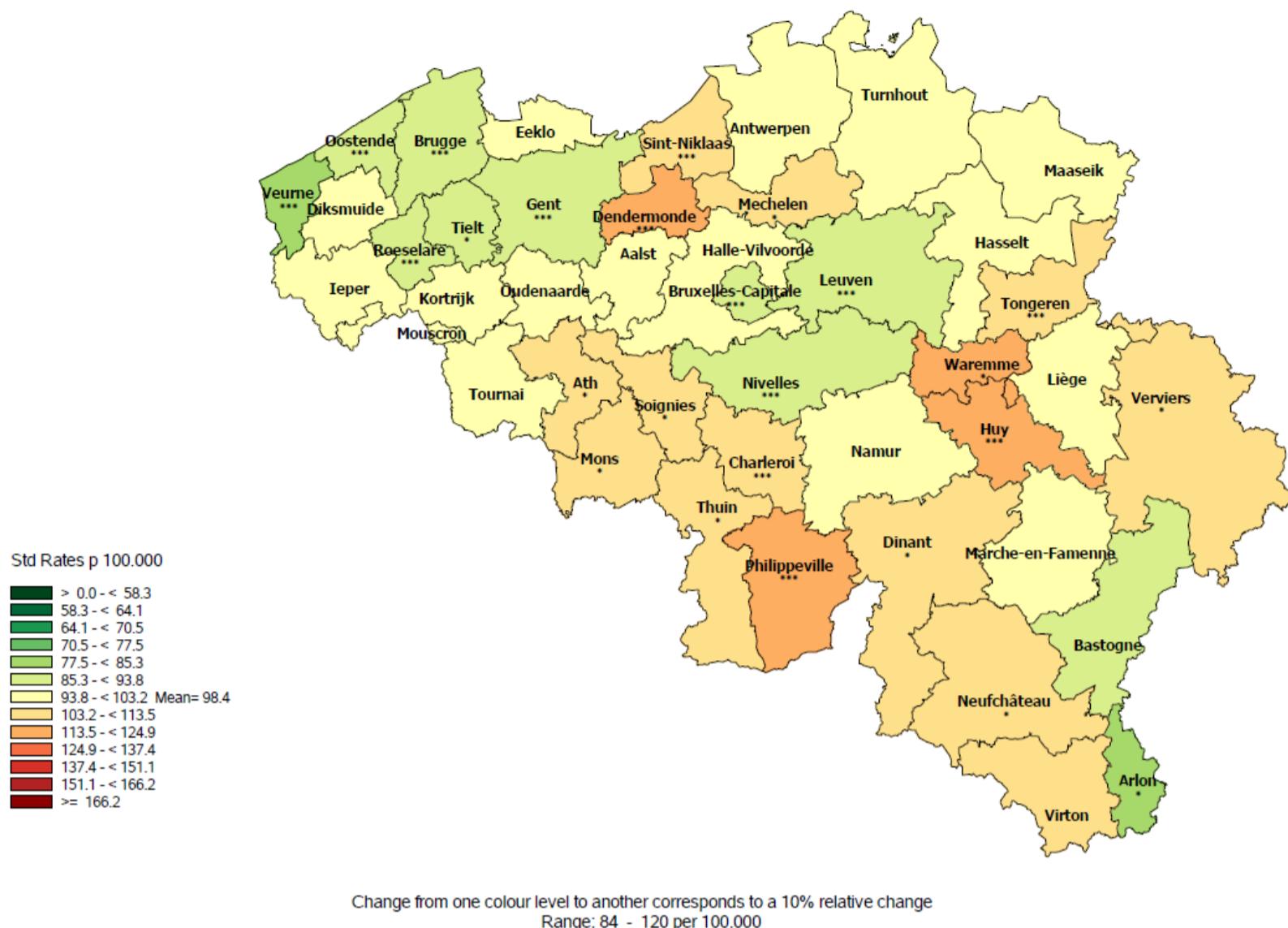
<sup>\$</sup> For this analyse, diabetes was looked for not only in the underlying, but also the immediate or intermediate causes of death

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate

Age-standardized rate in Belgium = 67.9

## 2.8. CEREBROVASCULAR DISEASES AND HTA

Cerebrovasc\_Dis & HTA overall Mortality in both genders, Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



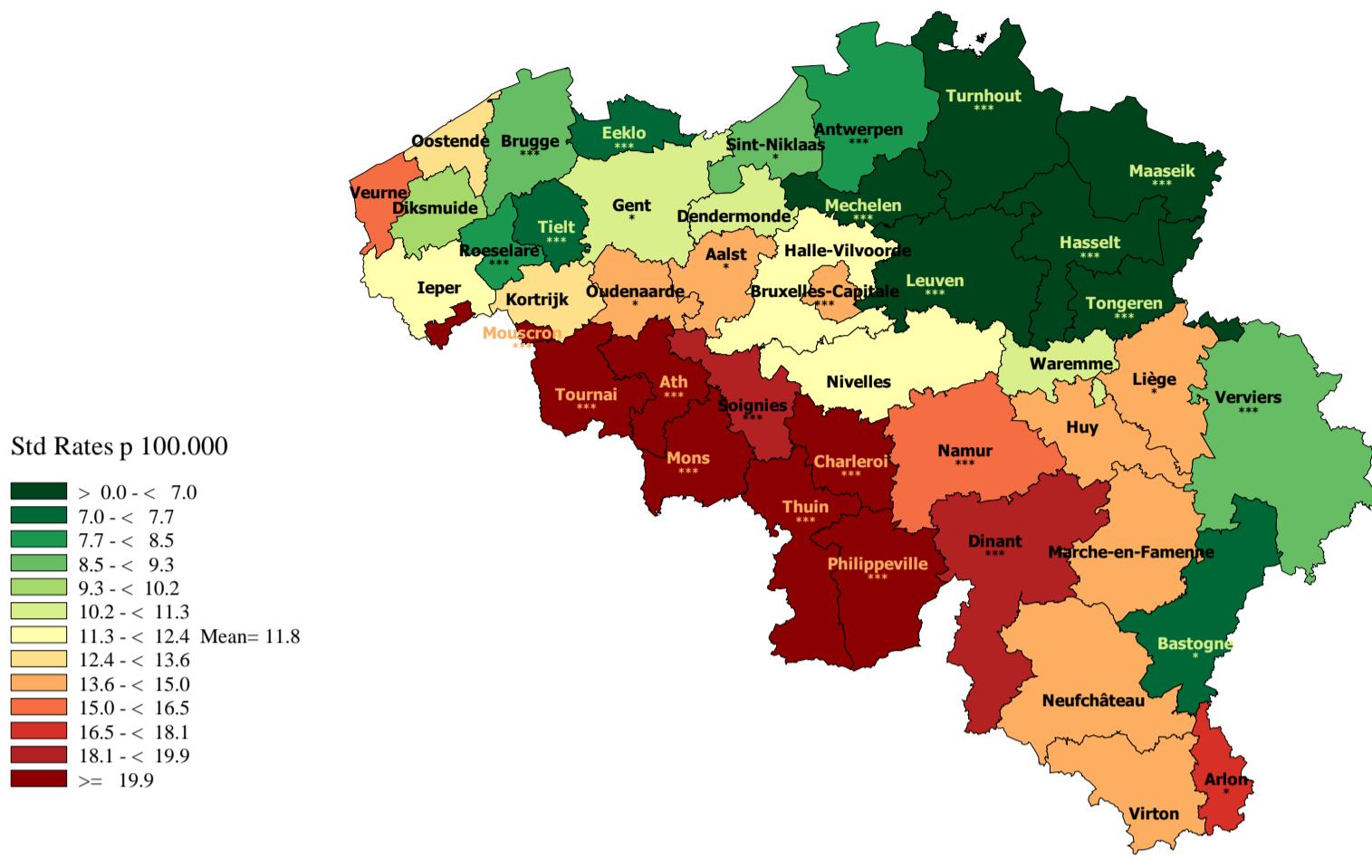
**Ranking of the districts by increasing all ages mortality rate of Cerebrovascular Diseases and HTA, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	397	Veurne	83.8	[75.4;92.2]	<0.001
2	Both	220	Arlon	84.8	[72.9;96.6]	<0.05
3	Both	1559	Brugge	85.3	[81.0;89.6]	<0.001
4	Both	765	Roeselare	86.6	[80.3;92.9]	<0.001
5	Both	189	Bastogne	87.5	[74.4; 101]	ns.
6	Both	982	Oostende	88.8	[83.1;94.5]	<0.01
7	Both	499	Tielt	89.8	[81.8;97.8]	<0.05
8	Both	1778	Nivelles	90.0	[85.8;94.3]	<0.001
9	Both	2834	Gent	91.4	[88.0;94.8]	<0.001
10	Both	2533	Leuven	92.1	[88.4;95.8]	<0.01
11	Both	5537	Brussels	92.4	[90.0;94.9]	<0.001
12	Both	740	Oudenaarde	94.0	[87.1; 101]	ns.
13	Both	311	Diksmuide	94.2	[83.5; 105]	ns.
14	Both	1602	Kortrijk	95.1	[90.3;99.9]	ns.
15	Both	1556	Namur	95.6	[90.7; 101]	ns.
16	Both	432	Mouscron	95.8	[86.6; 105]	ns.
17	Both	668	Ieper	96.0	[88.6; 103]	ns.
18	Both	3134	Halle-Vilvoorde	96.0	[92.5;99.5]	ns.
19	Both	504	Eeklo	96.2	[87.7; 105]	ns.
20	Both	1539	Aalst	96.4	[91.4; 101]	ns.
21	Both	3551	Liege	97.8	[94.4; 101]	ns.
22	Both	904	Tournai	98.3	[91.7; 105]	ns.
23	Both	2039	Turnhout	100.0	[95.5; 105]	ns.
24	Both	911	Maaseik	100.2	[93.1; 107]	ns.
25	Both	1950	Hasselt	100.8	[96.0; 106]	ns.
26	Both	291	Marche-en-Famenne	100.8	[88.8; 113]	ns.
27	Both	6152	Antwerpen	102.3	[99.7; 105]	<0.01
28	Both	306	Virton	104.0	[92.1; 116]	ns.
29	Both	1528	Mons	104.4	[99.0; 110]	<0.05
30	Both	2058	Mechelen	104.7	[100; 109]	<0.01
31	Both	1551	Verviers	105.1	[99.7; 111]	<0.05
32	Both	940	Thuin	106.4	[99.4; 113]	<0.05
33	Both	1128	Soignies	109.1	[103; 116]	<0.01
34	Both	2684	Charleroi	109.2	[105; 114]	<0.001
35	Both	1045	Tongeren	111.4	[104; 119]	<0.001
36	Both	382	Neufchateau	112.2	[101; 124]	<0.05
37	Both	668	Dinant	112.7	[104; 122]	<0.01
38	Both	1454	Sint Niklaas	113.2	[107; 119]	<0.001
39	Both	549	Ath	113.3	[104; 123]	<0.01
40	Both	462	Waregem	114.0	[103; 125]	<0.01
41	Both	653	Huy	115.6	[106; 125]	<0.001
42	Both	1227	Dendermonde	115.7	[109; 122]	<0.001
43	Both	423	Philippeville	119.5	[108; 131]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 98.4

## 2.9. CHRONIC LIVER DISEASES

**Overall Chronic Liver Disease Dis** Mortality in both genders (all-ages), Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 4 - 27 per 100.000

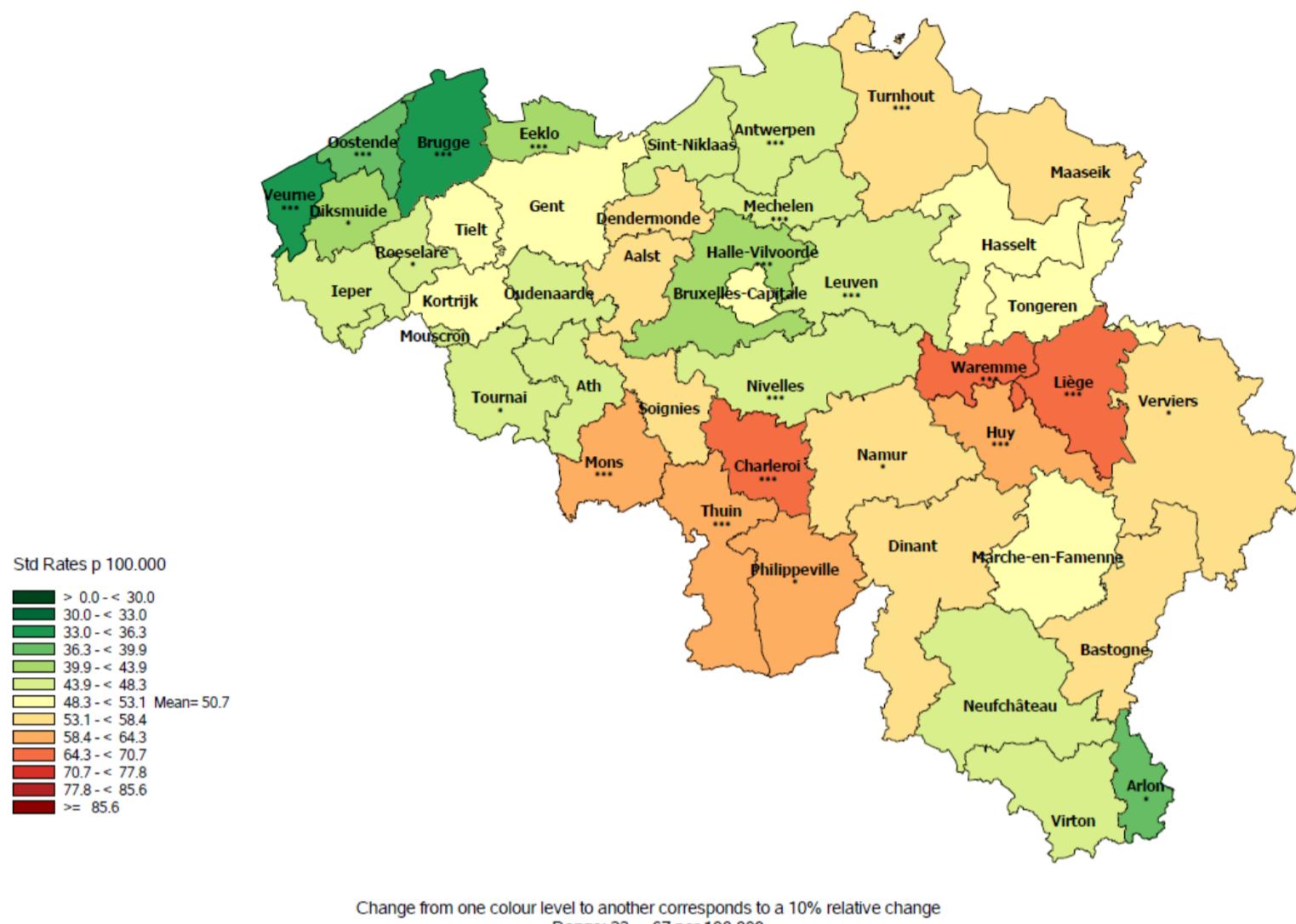
**Ranking of the districts by increasing all ages mortality rate of Chronic Liver Diseases, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	50	Maaseik	3.6	[2.6; 4.7]	<0.001
2	Both	118	Turnhout	4.3	[3.5; 5.0]	<0.001
3	Both	65	Tongeren	5.1	[3.9; 6.4]	<0.001
4	Both	143	Hasselt	5.6	[4.6; 6.5]	<0.001
5	Both	134	Mechelen	6.4	[5.3; 7.4]	<0.001
6	Both	211	Leuven	6.7	[5.8; 7.7]	<0.001
7	Both	18	Bastogne	7.1	[3.8;10.4]	<0.01
8	Both	41	Eeklo	7.4	[5.1; 9.6]	<0.001
9	Both	43	Tielt	7.4	[5.2; 9.6]	<0.001
10	Both	516	Antwerpen	8.1	[7.4; 8.8]	<0.001
11	Both	79	Roeselare	8.2	[6.4;10.0]	<0.001
12	Both	160	Verviers	9.2	[7.8;10.7]	<0.001
13	Both	141	Sint Niklaas	9.3	[7.8;10.8]	<0.01
14	Both	184	Brugge	9.3	[8.0;10.6]	<0.001
15	Both	31	Diksmuide	9.5	[6.1;12.9]	ns.
16	Both	342	Gent	10.3	[9.2;11.3]	<0.01
17	Both	136	Dendermonde	10.5	[8.7;12.3]	ns.
18	Both	49	Waregem	10.6	[7.6;13.6]	ns.
19	Both	430	Halle-Vilvoorde	11.3	[10.2;12.4]	ns.
20	Both	277	Nivelles	11.8	[10.4;13.2]	ns.
21	Both	85	Ieper	11.8	[9.3;14.4]	ns.
22	Both	234	Kortrijk	12.5	[10.9;14.1]	ns.
23	Both	153	Oostende	13.5	[11.4;15.7]	ns.
24	Both	94	Huy	13.7	[10.9;16.6]	ns.
25	Both	541	Liege	13.8	[12.6;14.9]	<0.01
26	Both	257	Aalst	14.0	[12.3;15.8]	<0.05
27	Both	42	Virton	14.0	[9.7;18.3]	ns.
28	Both	48	Marche-en-Famenne	14.4	[10.3;18.6]	ns.
29	Both	853	Brussels	14.7	[13.7;15.6]	<0.001
30	Both	115	Oudenaarde	14.7	[12.0;17.4]	<0.05
31	Both	54	Neufchateau	14.8	[10.8;18.8]	ns.
32	Both	71	Veurne	15.3	[11.7;18.8]	ns.
33	Both	284	Namur	15.3	[13.5;17.1]	<0.001
34	Both	56	Arlon	17.4	[12.8;22.0]	<0.05
35	Both	126	Dinant	18.6	[15.3;21.9]	<0.001
36	Both	230	Soignies	19.9	[17.3;22.5]	<0.001
37	Both	563	Charleroi	20.5	[18.8;22.3]	<0.001
38	Both	191	Tourinai	20.6	[17.7;23.6]	<0.001
39	Both	97	Mouscron	20.6	[16.5;24.8]	<0.001
40	Both	120	Ath	22.5	[18.4;26.5]	<0.001
41	Both	221	Thuin	22.6	[19.6;25.6]	<0.001
42	Both	97	Philippeville	22.9	[18.3;27.5]	<0.001
43	Both	437	Mons	26.8	[24.2;29.3]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 11.8

## 2.10. CHRONIC OBSTRUCTIVE PULMONARY DISEASES

Chronic Obstr Pulm Dis overall Mortality in both genders, Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)

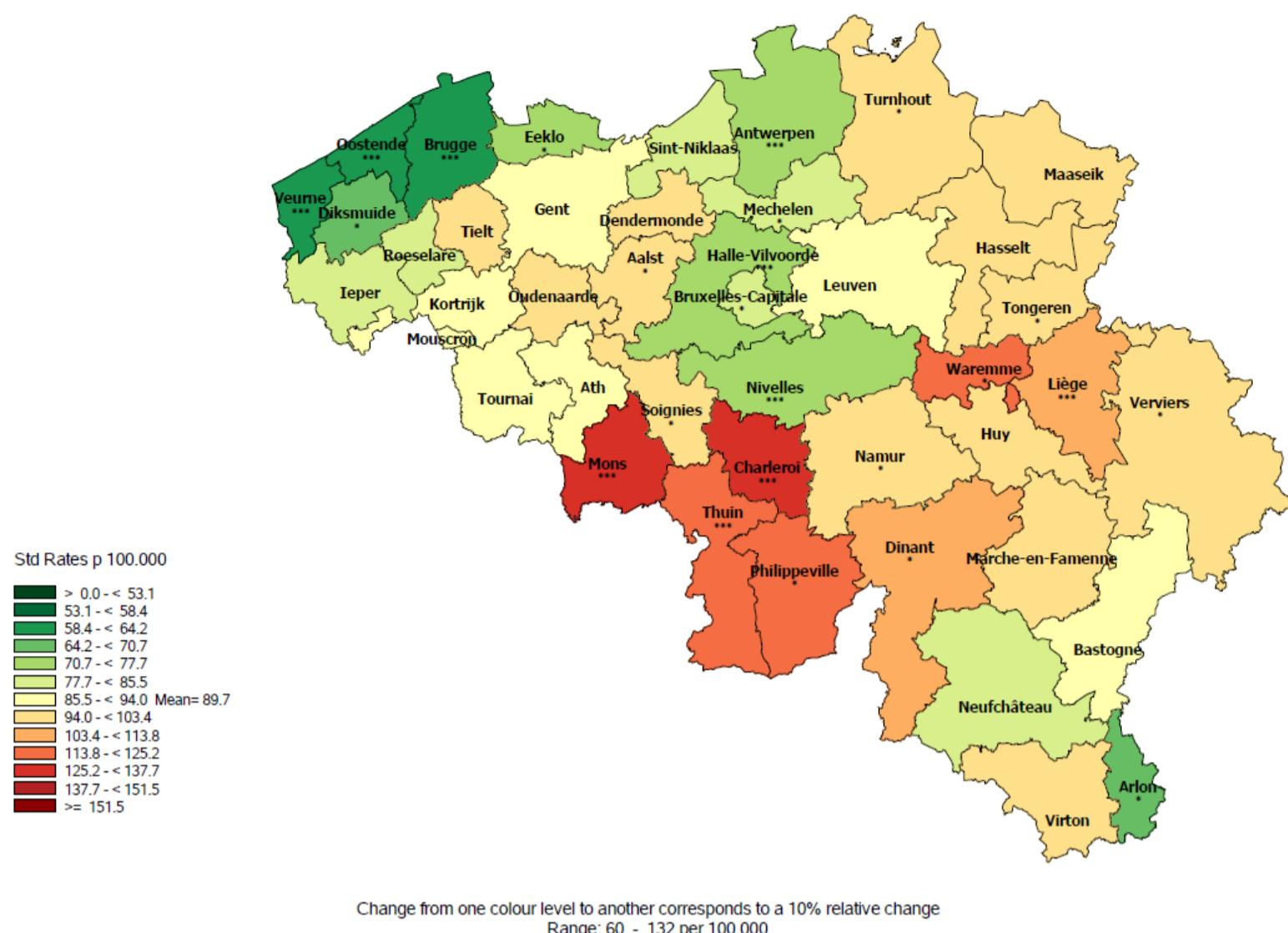


**Ranking of the districts by increasing all ages mortality rate of Chronic obstructive pulmonary diseases, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	160	Veurne	33.2	[27.9;38.4]	<0.001
2	Both	688	Brugge	36.3	[33.5;39.0]	<0.001
3	Both	410	Oostende	37.2	[33.5;40.8]	<0.001
4	Both	112	Arlon	39.4	[31.8;47.0]	<0.01
5	Both	216	Eeklo	40.3	[34.9;45.8]	<0.001
6	Both	137	Diksmuide	41.4	[34.3;48.4]	<0.01
7	Both	1452	Halle-Vilvoorde	42.3	[40.1;44.6]	<0.001
8	Both	406	Tournai	44.3	[39.9;48.7]	<0.01
9	Both	914	Nivelles	44.4	[41.5;47.3]	<0.001
10	Both	912	Mechelen	45.0	[42.0;48.0]	<0.001
11	Both	398	Roeselare	45.1	[40.5;49.6]	<0.05
12	Both	2799	Antwerpen	45.1	[43.4;46.8]	<0.001
13	Both	132	Virton	45.5	[37.6;53.4]	ns.
14	Both	1333	Leuven	46.0	[43.5;48.5]	<0.001
15	Both	369	Oudenaarde	46.4	[41.6;51.2]	ns.
16	Both	231	Ath	46.5	[40.4;52.7]	ns.
17	Both	161	Neufchateau	46.6	[39.2;54.0]	ns.
18	Both	213	Mouscron	47.1	[40.7;53.5]	ns.
19	Both	628	Sint Niklaas	47.7	[43.9;51.6]	ns.
20	Both	336	Ieper	47.9	[42.7;53.2]	ns.
21	Both	851	Kortrijk	49.3	[45.9;52.7]	ns.
22	Both	1589	Gent	50.4	[47.9;53.0]	ns.
23	Both	2986	Brussels	51.0	[49.1;52.8]	ns.
24	Both	1086	Hasselt	51.7	[48.4;54.9]	ns.
25	Both	299	Tielt	52.6	[46.5;58.6]	ns.
26	Both	158	Marche-en-Famenne	52.6	[44.1;61.1]	ns.
27	Both	551	Tongeren	52.8	[48.2;57.5]	ns.
28	Both	889	Aalst	53.6	[50.0;57.3]	ns.
29	Both	125	Bastogne	54.0	[44.4;63.7]	ns.
30	Both	544	Maaseik	54.0	[49.2;58.9]	ns.
31	Both	935	Namur	54.9	[51.3;58.5]	<0.05
32	Both	581	Soignies	55.0	[50.4;59.6]	ns.
33	Both	619	Dendermonde	55.3	[50.8;59.7]	<0.05
34	Both	351	Dinant	56.3	[50.3;62.3]	ns.
35	Both	897	Verviers	56.9	[53.1;60.7]	<0.01
36	Both	1249	Turnhout	57.0	[53.7;60.2]	<0.001
37	Both	924	Mons	61.1	[57.1;65.2]	<0.001
38	Both	573	Thuin	62.3	[57.1;67.6]	<0.001
39	Both	238	Philippeville	62.7	[54.6;70.9]	<0.01
40	Both	378	Huy	63.5	[56.9;70.0]	<0.001
41	Both	2525	Liege	65.6	[63.0;68.2]	<0.001
42	Both	283	Waremme	66.2	[58.4;74.1]	<0.001
43	Both	1691	Charleroi	66.8	[63.6;70.1]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 50.7

**Chronic Obstr Pulm Dis overall Mortality in Men, Belgium 2003-2009**  
 Age-Adjusted Mortality Rates (Std: Eu pop 2013)

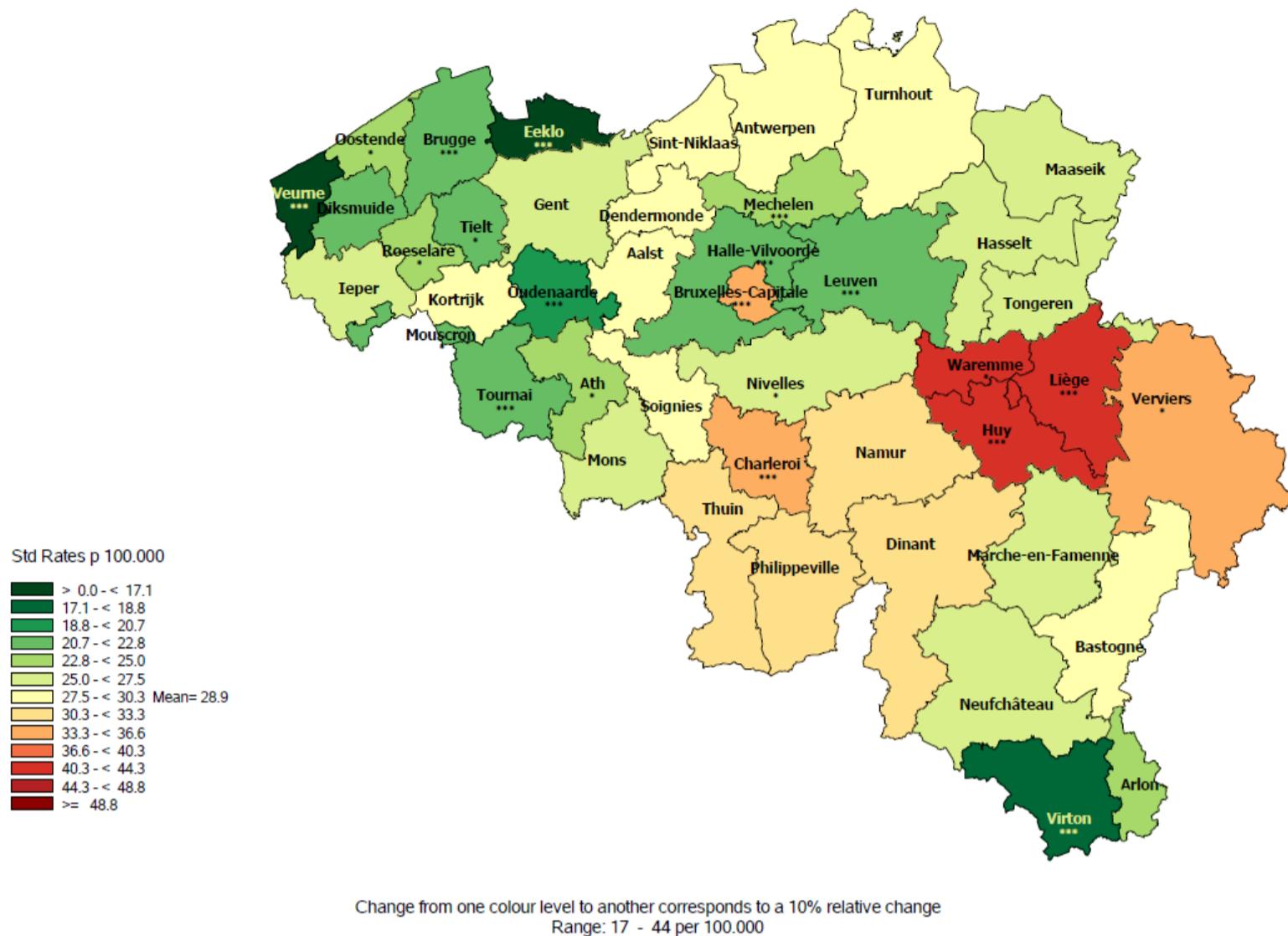


**Ranking of the districts by increasing all ages mortality rate of Chronic obstructive pulmonary diseases, in Men, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	M	249	Oostende	60.1	[51.9;68.4]	<0.001
2	M	112	Veurne	60.4	[47.9;72.9]	<0.001
3	M	431	Brugge	60.8	[54.5;67.2]	<0.001
4	M	74	Arlon	69.1	[51.8;86.4]	<0.05
5	M	92	Diksmuide	69.7	[54.8;84.6]	<0.01
6	M	1658	Antwerpen	71.9	[68.1;75.6]	<0.001
7	M	989	Halle-Vilvoorde	75.7	[70.3;81.1]	<0.001
8	M	163	Eeklo	76.5	[64.0;89.0]	<0.05
9	M	595	Nivelles	77.3	[70.4;84.2]	<0.001
10	M	618	Mechelen	78.9	[72.1;85.6]	<0.01
11	M	271	Roeselare	81.0	[70.2;91.7]	ns.
12	M	222	Ieper	82.2	[70.6;93.8]	ns.
13	M	1687	Brussels	83.3	[79.2;87.5]	<0.01
14	M	400	Sint Niklaas	83.4	[74.0;92.9]	ns.
15	M	109	Neufchateau	84.8	[67.0; 103]	ns.
16	M	950	Leuven	85.5	[79.4;91.6]	ns.
17	M	281	Tournai	86.6	[75.6;97.5]	ns.
18	M	543	Kortrijk	86.9	[78.7;95.1]	ns.
19	M	1058	Gent	91.1	[85.1;97.0]	ns.
20	M	158	Ath	91.1	[75.0; 107]	ns.
21	M	84	Bastogne	93.2	[71.8; 115]	ns.
22	M	144	Mouscron	93.9	[76.6; 111]	ns.
23	M	752	Hasselt	95.0	[86.6; 103]	ns.
24	M	264	Oudenaarde	95.2	[82.8; 108]	ns.
25	M	108	Marche-en-Famenne	97.0	[75.2; 119]	ns.
26	M	222	Huy	97.3	[83.5; 111]	ns.
27	M	98	Virton	97.5	[75.8; 119]	ns.
28	M	613	Aalst	98.8	[90.1; 107]	<0.05
29	M	596	Namur	99.3	[90.3; 108]	<0.05
30	M	414	Dendermonde	99.7	[89.0; 110]	ns.
31	M	220	Tielt	100.1	[86.2; 114]	ns.
32	M	878	Turnhout	102.2	[94.3; 110]	<0.01
33	M	382	Maaseik	102.4	[89.4; 115]	ns.
34	M	561	Verviers	102.8	[92.7; 113]	<0.05
35	M	398	Tongeren	102.9	[90.7; 115]	<0.05
36	M	395	Soignies	103.4	[92.2; 115]	<0.05
37	M	236	Dinant	105.4	[90.3; 120]	<0.05
38	M	1492	Liege	107.8	[102; 114]	<0.001
39	M	174	Waregem	116.2	[95.9; 136]	<0.05
40	M	394	Thuin	118.6	[105; 132]	<0.001
41	M	166	Philippeville	121.4	[99.7; 143]	<0.01
42	M	1119	Charleroi	129.9	[121; 139]	<0.001
43	M	659	Mons	131.8	[120; 143]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
 Age-standardized rate in Belgium = 89.7

**Chronic Obstr Pulm Dis overall Mortality in Women, Belgium 2003-2009**  
 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



**Ranking of the districts by increasing all ages mortality rate of Chronic obstructive pulmonary diseases, in Women, 2003-2009**

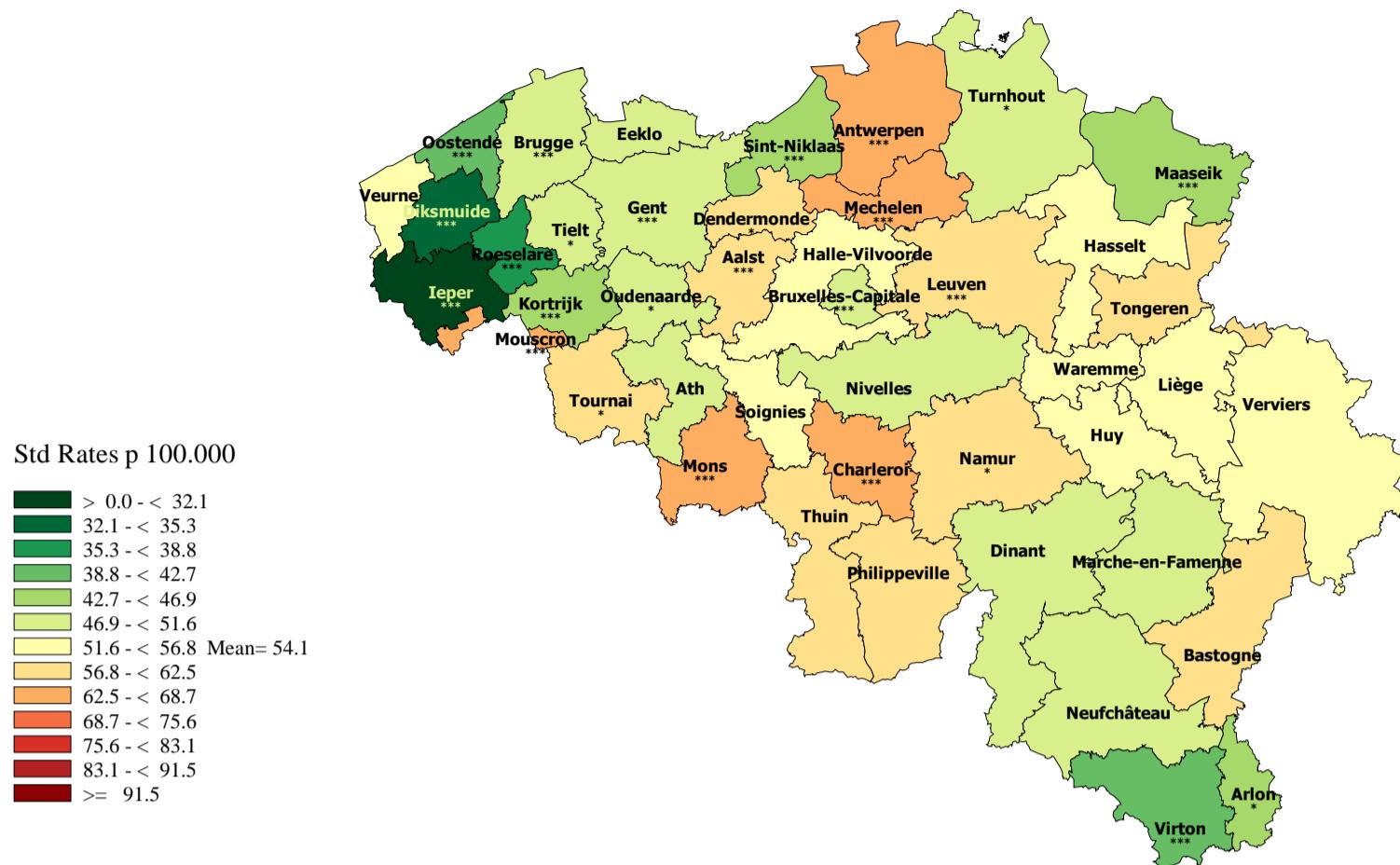
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	53	Eeklo	16.9	[12.3;21.5]	<0.001
2	F	48	Veurne	16.9	[12.1;21.7]	<0.001
3	F	34	Virton	17.9	[11.8;24.0]	<0.001
4	F	105	Oudenaarde	20.6	[16.6;24.6]	<0.001
5	F	125	Tournai	21.3	[17.5;25.1]	<0.001
6	F	45	Diksmuide	22.3	[15.7;28.9]	ns.
7	F	257	Brugge	22.3	[19.6;25.1]	<0.001
8	F	383	Leuven	22.4	[20.1;24.6]	<0.001
9	F	69	Mouscron	22.5	[17.1;27.8]	<0.05
10	F	463	Halle-Vilvoorde	22.6	[20.5;24.7]	<0.001
11	F	79	Tielt	22.7	[17.6;27.7]	<0.05
12	F	73	Ath	22.9	[17.6;28.3]	<0.05
13	F	38	Arlon	23.2	[15.7;30.7]	ns.
14	F	161	Oostende	23.4	[19.7;27.0]	<0.01
15	F	127	Roeselare	23.5	[19.3;27.6]	<0.05
16	F	294	Mechelen	24.2	[21.4;27.0]	<0.01
17	F	319	Nivelles	25.1	[22.3;27.9]	<0.01
18	F	153	Tongeren	25.2	[21.1;29.2]	ns.
19	F	114	Ieper	26.2	[21.3;31.0]	ns.
20	F	52	Neufchateau	26.7	[19.3;34.1]	ns.
21	F	531	Gent	26.9	[24.6;29.2]	ns.
22	F	162	Maaseik	27.3	[22.9;31.6]	ns.
23	F	334	Hasselt	27.3	[24.3;30.3]	ns.
24	F	265	Mons	27.3	[23.9;30.7]	ns.
25	F	50	Marche-en-Famenne	27.4	[19.6;35.1]	ns.
26	F	276	Aalst	27.7	[24.4;31.0]	ns.
27	F	186	Soignies	28.4	[24.2;32.5]	ns.
28	F	228	Sint Niklaas	28.6	[24.8;32.3]	ns.
29	F	308	Kortrijk	28.7	[25.5;32.0]	ns.
30	F	371	Turnhout	29.3	[26.3;32.4]	ns.
31	F	41	Bastogne	29.8	[20.5;39.1]	ns.
32	F	1141	Antwerpen	30.0	[28.2;31.8]	ns.
33	F	205	Dendermonde	30.3	[26.1;34.5]	ns.
34	F	115	Dinant	30.3	[24.7;35.9]	ns.
35	F	72	Philippeville	30.4	[23.2;37.5]	ns.
36	F	179	Thuin	31.5	[26.8;36.2]	ns.
37	F	339	Namur	32.1	[28.7;35.6]	ns.
38	F	1299	Brussels	33.4	[31.5;35.2]	<0.001
39	F	336	Verviers	34.9	[31.2;38.7]	<0.01
40	F	572	Charleroi	36.1	[33.1;39.1]	<0.001
41	F	109	Waregem	42.0	[34.0;50.0]	<0.01
42	F	156	Huy	43.0	[36.1;49.8]	<0.001
43	F	1033	Liege	44.2	[41.4;46.9]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate

Age-standardized rate in Belgium = 28.9

## 2.11. DEMENTIA & ALZEHIMER

### Overall Dementia & Alzheimer Mortality in both genders (all-ages), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



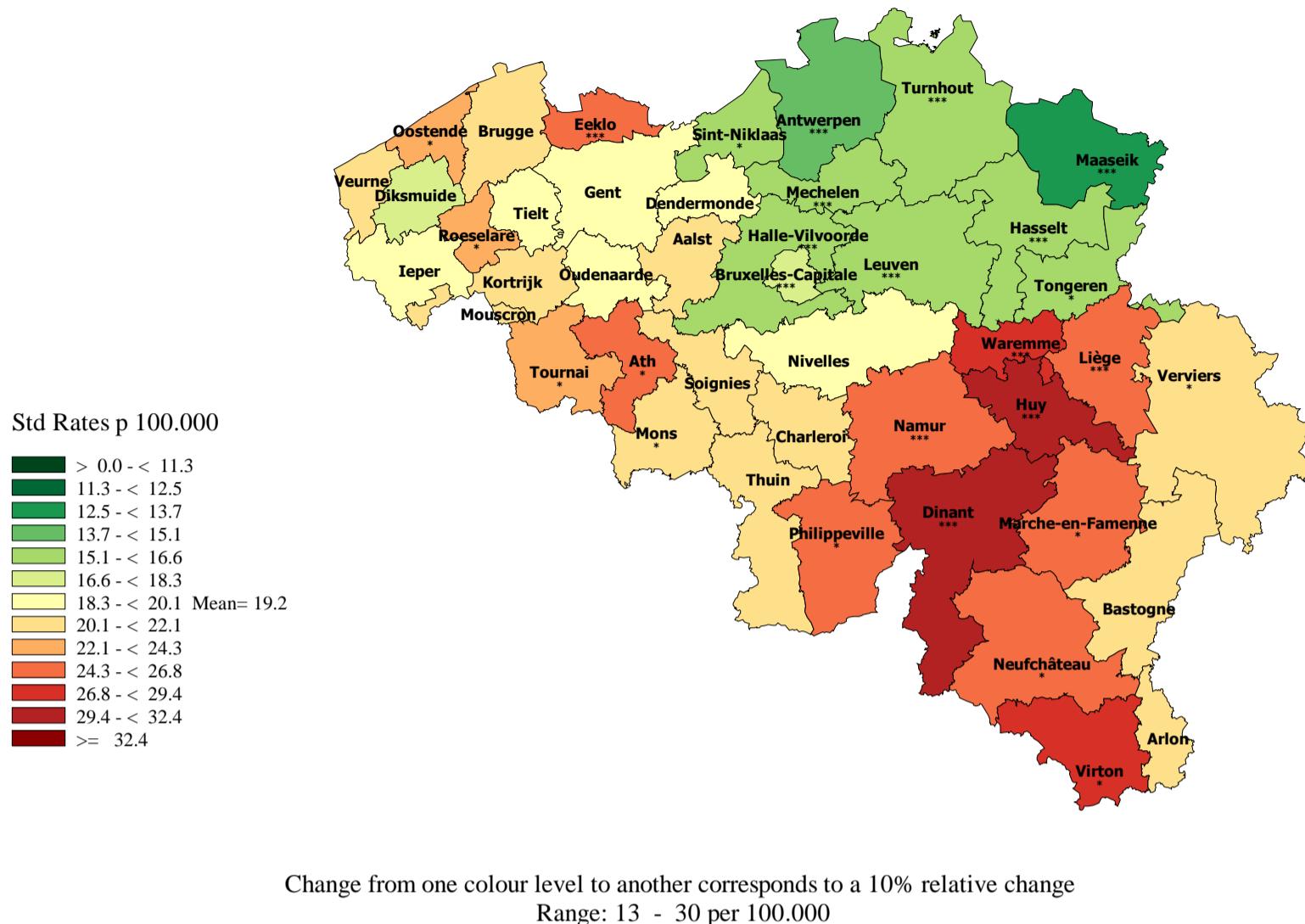
#### Ranking of the districts by increasing all ages mortality rate of Dementia & Alzheimer, in Both genders, 2003-2009

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	218	Ieper	32.1	[27.7;36.4]	<0.001
2	Both	107	Diksmuide	34.1	[27.5;40.7]	<0.001
3	Both	311	Roeselare	37.0	[32.7;41.2]	<0.001
4	Both	121	Virton	41.1	[33.7;48.6]	<0.001
5	Both	436	Oostende	41.5	[37.5;45.5]	<0.001
6	Both	113	Arlon	43.2	[34.8;51.7]	<0.05
7	Both	392	Maaseik	44.2	[39.4;48.9]	<0.001
8	Both	744	Kortrijk	45.7	[42.3;49.1]	<0.001
9	Both	587	Sint Niklaas	46.8	[42.9;50.7]	<0.001
10	Both	363	Oudenaarde	47.0	[42.1;51.9]	<0.01
11	Both	261	Tielt	47.0	[41.3;52.8]	<0.05
12	Both	2861	Brussels	47.6	[45.8;49.3]	<0.001
13	Both	851	Brugge	48.4	[45.1;51.7]	<0.001
14	Both	241	Eeklo	48.6	[42.3;54.8]	ns.
15	Both	1451	Gent	48.7	[46.1;51.2]	<0.001
16	Both	947	Turnhout	49.0	[45.7;52.3]	<0.01
17	Both	165	Neufchateau	49.7	[41.9;57.6]	ns.
18	Both	141	Marche-en-Famenne	50.2	[41.6;58.9]	ns.
19	Both	293	Dinant	50.2	[44.3;56.2]	ns.
20	Both	245	Ath	50.5	[44.0;57.1]	ns.
21	Both	978	Nivelles	51.3	[48.0;54.6]	ns.
22	Both	769	Verviers	52.3	[48.4;56.1]	ns.
23	Both	210	Waremme	52.5	[45.2;59.9]	ns.
24	Both	1661	Halle-Vilvoorde	53.0	[50.3;55.6]	ns.
25	Both	913	Hasselt	53.1	[49.4;56.7]	ns.
26	Both	298	Huy	53.2	[46.9;59.4]	ns.
27	Both	541	Soignies	53.6	[48.9;58.2]	ns.
28	Both	1950	Liege	53.7	[51.3;56.2]	ns.
29	Both	238	Veurne	54.5	[47.4;61.6]	ns.
30	Both	513	Tongeren	57.8	[52.5;63.1]	ns.
31	Both	209	Philippeville	58.1	[49.9;66.3]	ns.
32	Both	496	Thuin	58.1	[52.8;63.4]	ns.
33	Both	119	Bastogne	58.2	[47.1;69.3]	ns.
34	Both	1580	Leuven	59.2	[56.2;62.2]	<0.01
35	Both	926	Namur	59.5	[55.5;63.4]	<0.01
36	Both	557	Tournai	61.2	[56.0;66.4]	<0.01
37	Both	942	Aalst	61.5	[57.4;65.6]	<0.001
38	Both	623	Dendermonde	62.2	[57.1;67.2]	<0.01
39	Both	1468	Charleroi	63.0	[59.6;66.4]	<0.001
40	Both	915	Mons	64.1	[59.7;68.4]	<0.001
41	Both	1225	Mechelen	65.6	[61.8;69.4]	<0.001
42	Both	3891	Antwerpen	67.2	[65.0;69.3]	<0.001
43	Both	304	Mouscron	68.7	[60.8;76.6]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 54.1

## 2.12. SUICIDE

### Overall Suicide Mortality in both genders (all-ages), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



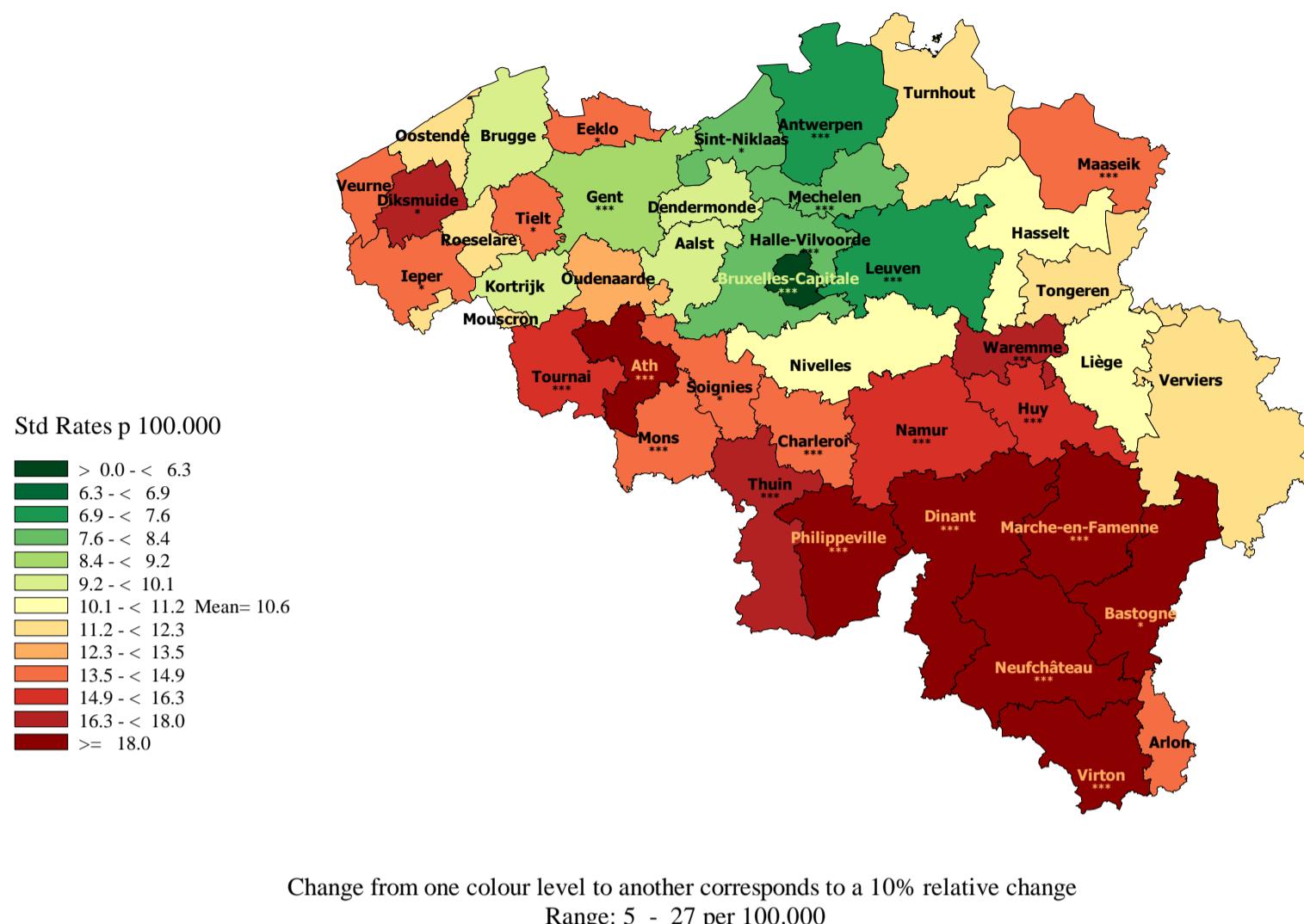
#### Ranking of the districts by increasing all ages mortality rate of Suicide, in Both genders, 2003-2009

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	211	Maaseik	13.3	[11.5;15.2]	<0.001
2	Both	985	Antwerpen	14.9	[14.0;15.8]	<0.001
3	Both	426	Hasselt	15.2	[13.8;16.7]	<0.001
4	Both	340	Mechelen	15.4	[13.7;17.0]	<0.001
5	Both	515	Leuven	15.5	[14.2;16.9]	<0.001
6	Both	218	Tongeren	16.0	[13.8;18.1]	<0.01
7	Both	484	Turnhout	16.3	[14.9;17.8]	<0.001
8	Both	646	Halle-Vilvoorde	16.4	[15.1;17.6]	<0.001
9	Both	264	Sint Niklaas	16.6	[14.6;18.6]	<0.05
10	Both	1146	Brussels	17.2	[16.1;18.2]	<0.001
11	Both	59	Diksmuide	17.7	[13.2;22.2]	ns.
12	Both	133	Ieper	18.4	[15.2;21.5]	ns.
13	Both	456	Nivelles	18.4	[16.7;20.1]	ns.
14	Both	681	Gent	19.2	[17.7;20.6]	ns.
15	Both	265	Dendermonde	19.6	[17.3;22.0]	ns.
16	Both	122	Tielt	20.0	[16.4;23.5]	ns.
17	Both	163	Oudenaarde	20.1	[17.0;23.2]	ns.
18	Both	76	Arlon	20.2	[15.5;24.8]	ns.
19	Both	245	Soignies	20.3	[17.7;22.8]	ns.
20	Both	397	Kortrijk	20.5	[18.5;22.5]	ns.
21	Both	388	Aalst	20.5	[18.5;22.6]	ns.
22	Both	405	Brugge	20.7	[18.7;22.7]	ns.
23	Both	599	Charleroi	20.8	[19.1;22.5]	ns.
24	Both	60	Bastogne	21.2	[15.7;26.6]	ns.
25	Both	395	Verviers	21.4	[19.3;23.6]	<0.05
26	Both	369	Mons	21.5	[19.3;23.7]	<0.05
27	Both	217	Thuin	21.6	[18.7;24.5]	ns.
28	Both	95	Veurne	21.6	[17.2;26.0]	ns.
29	Both	107	Mouscron	22.0	[17.8;26.2]	ns.
30	Both	221	Roeselare	22.3	[19.3;25.2]	<0.05
31	Both	220	Tournai	22.6	[19.6;25.6]	<0.05
32	Both	247	Oostende	23.1	[20.2;26.0]	<0.01
33	Both	96	Neufchâteau	24.7	[19.7;29.6]	<0.05
34	Both	492	Namur	24.7	[22.5;26.9]	<0.001
35	Both	89	Marche-en-Famenne	25.4	[20.1;30.7]	<0.05
36	Both	1049	Liege	25.7	[24.1;27.2]	<0.001
37	Both	147	Ath	26.1	[21.8;30.3]	<0.01
38	Both	148	Eeklo	26.2	[21.9;30.4]	<0.01
39	Both	111	Philippeville	26.5	[21.5;31.5]	<0.01
40	Both	132	Waremme	27.1	[22.4;31.8]	<0.001
41	Both	92	Virton	27.2	[21.6;32.8]	<0.01
42	Both	212	Dinant	30.2	[26.1;34.3]	<0.001
43	Both	212	Huy	30.2	[26.1;34.4]	<0.001

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 19.2

## 2.13. TRANSPORT ACCIDENT

### Overall Transport Acc Mortality in both genders (all-ages), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



**Ranking of the districts by increasing all-ages mortality rate of Transport Accident, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	343	Brussels	4.9	[4.4; 5.5]	<0.001
2	Both	246	Leuven	7.4	[6.5; 8.4]	<0.001
3	Both	504	Antwerpen	7.5	[6.8; 8.1]	<0.001
4	Both	300	Halle-Vilvoorde	7.6	[6.8; 8.5]	<0.001
5	Both	178	Mechelen	8.1	[6.9; 9.3]	<0.001
6	Both	132	Sint Niklaas	8.3	[6.9; 9.7]	<0.01
7	Both	309	Gent	8.6	[7.6; 9.5]	<0.001
8	Both	184	Kortrijk	9.3	[8.0; 10.6]	ns.
9	Both	174	Aalst	9.3	[7.9; 10.7]	ns.
10	Both	126	Dendermonde	9.6	[7.9; 11.3]	ns.
11	Both	195	Brugge	10.1	[8.7; 11.5]	ns.
12	Both	290	Hasselt	10.3	[9.1; 11.5]	ns.
13	Both	271	Nivelles	10.7	[9.4; 12.0]	ns.
14	Both	458	Liege	11.0	[10.0; 12.0]	ns.
15	Both	324	Turnhout	11.2	[10.0; 12.5]	ns.
16	Both	216	Verviers	11.2	[9.7; 12.7]	ns.
17	Both	118	Oostende	11.3	[9.2; 13.3]	ns.
18	Both	57	Mouscron	11.7	[8.7; 14.8]	ns.
19	Both	165	Tongeren	11.9	[10.1; 13.7]	ns.
20	Both	121	Roeselare	12.0	[9.9; 14.1]	ns.
21	Both	103	Oudenaarde	12.6	[10.2; 15.0]	ns.
22	Both	56	Veurne	13.6	[10.0; 17.3]	ns.
23	Both	54	Arlon	13.9	[10.1; 17.7]	ns.
24	Both	213	Maaseik	14.0	[12.0; 15.9]	<0.001
25	Both	78	Eeklo	14.0	[10.9; 17.1]	<0.05
26	Both	415	Charleroi	14.1	[12.7; 15.4]	<0.001
27	Both	89	Tielt	14.1	[11.1; 17.0]	<0.05
28	Both	249	Mons	14.2	[12.4; 16.0]	<0.001
29	Both	109	Ieper	14.8	[12.0; 17.5]	<0.01
30	Both	152	Tournai	15.2	[12.8; 17.7]	<0.001
31	Both	318	Namur	15.5	[13.8; 17.2]	<0.001
32	Both	113	Huy	15.9	[12.9; 18.8]	<0.001
33	Both	84	Waregem	16.5	[13.0; 20.1]	<0.01
34	Both	57	Diksmuide	16.7	[12.4; 21.1]	<0.01
35	Both	175	Thuin	17.0	[14.5; 19.5]	<0.001
36	Both	55	Bastogne	18.2	[13.3; 23.1]	<0.01
37	Both	68	Virton	19.4	[14.7; 24.0]	<0.001
38	Both	125	Ath	22.0	[18.1; 25.9]	<0.001
39	Both	96	Neufchateau	23.2	[18.5; 27.8]	<0.001
40	Both	168	Dinant	23.4	[19.8; 26.9]	<0.001
41	Both	109	Philippeville	24.8	[20.1; 29.4]	<0.001
42	Both	100	Marche-en-Famenne	27.0	[21.6; 32.3]	<0.001
43	Both	54	Arlon	13.9	[10.1; 17.7]	ns.

\* p value of the z statistic testing for a the difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 10.6