

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

2010-2017

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# CONTENTS

<b>1. Introduction</b> .....	<b>4</b>
1.1. What does this atlas contain? .....	4
1.2. Methods .....	4
1.3. How to read these maps? .....	5
1.4. General observations .....	5
<b>2. Cause-specific all-age mortality maps</b> .....	<b>6</b>
2.1. Breast cancer .....	6
2.2. Prostate Cancer .....	7
2.3. Colorectal cancer .....	8
2.4. Lung cancer .....	9
2.5. Head, neck and Oesophageal cancer .....	12
2.6. Ischemic heart diseases .....	13
2.7. Diabetes .....	14
2.8. Cerebrovascular Diseases and HTA .....	15
2.9. Chronic liver diseases .....	16
2.10. Chronic obstructive pulmonary diseases .....	17
2.11. Dementia & Alzheimer .....	20
2.12. Suicide .....	21
2.13. Transport Accident .....	22

# 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 2010-2017 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.

<u>Figures</u>	<u>Cause of death</u>	<u>ICD-10 codes</u>
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 (2010-2017)

In the period 2010-2017, the average Ischemic Heart Disease (IHD) mortality rate was 75.9 per 100,000. The average range (72.3-79.9) is represented in yellow and can be observed in Sint-Niklaas, Ieper, Tongeren, Dendermonde, Roeselare, and Brussels. During this period, the lowest rates was 63.4 per 100,000, observed in Gent, and the highest was 112.9 per 100,000, observed in Mons.

Higher rates were observed in the province of Hainaut; the rate in Mons is in the highest range observed on this maps (105.9-116.5) and Ath, Thuin, and Charleroi are in the previous category (96.3-105.9, third category above the average category). Lower rates were observed in Gent and Kortrijk situated in the second category under the average category (59.8 to 65.8).

### 1.4. GENERAL OBSERVATIONS

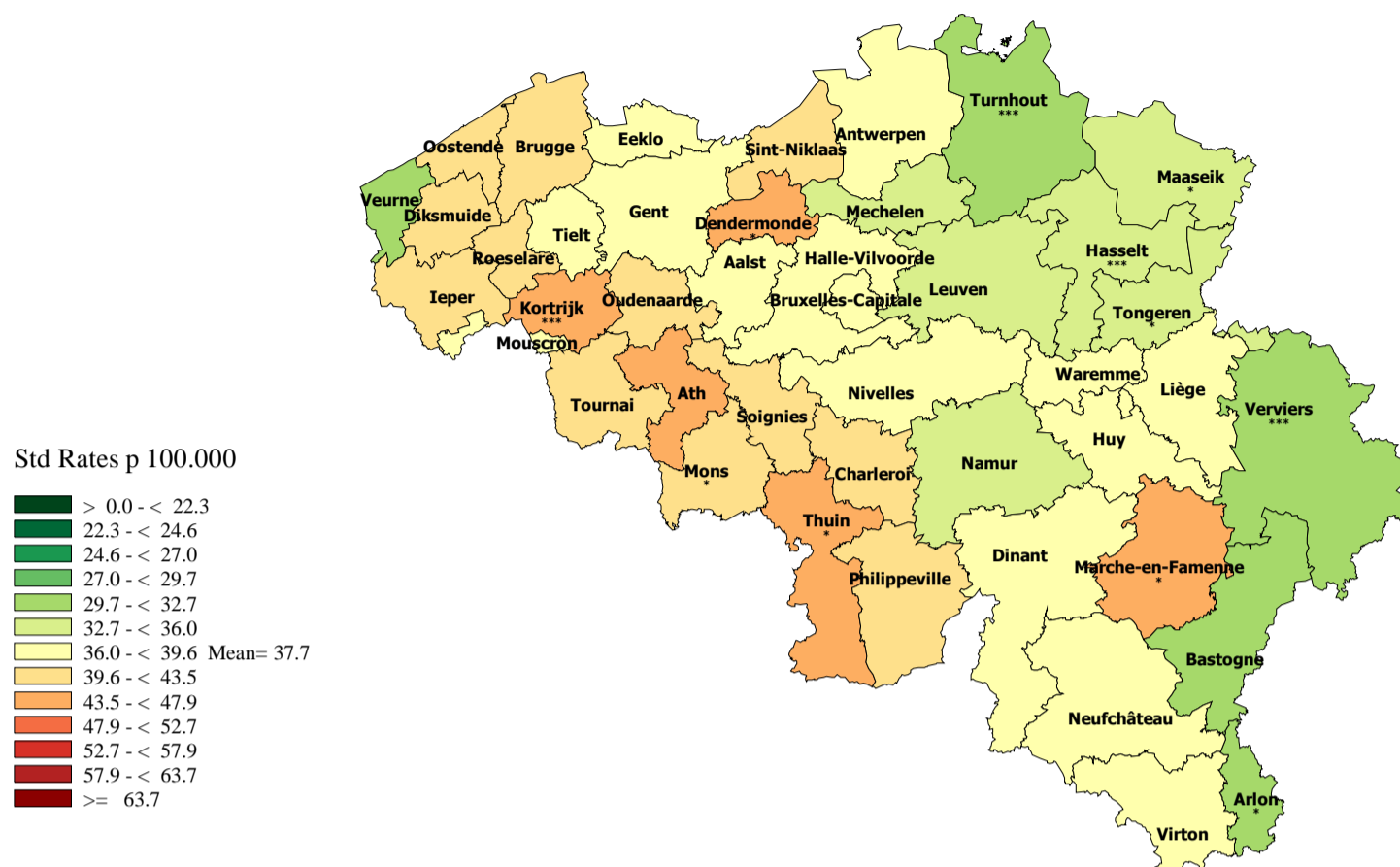
For most causes of death, mortality rates are much higher in men than in women. They are usually also lower in Flanders than in Wallonia, with intermediate rates in Brussels (North-South gradient). However, the rates are not homogenous within regions, and some districts can experience mortality rates 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 2010-2017 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 30 - 47 per 100.000

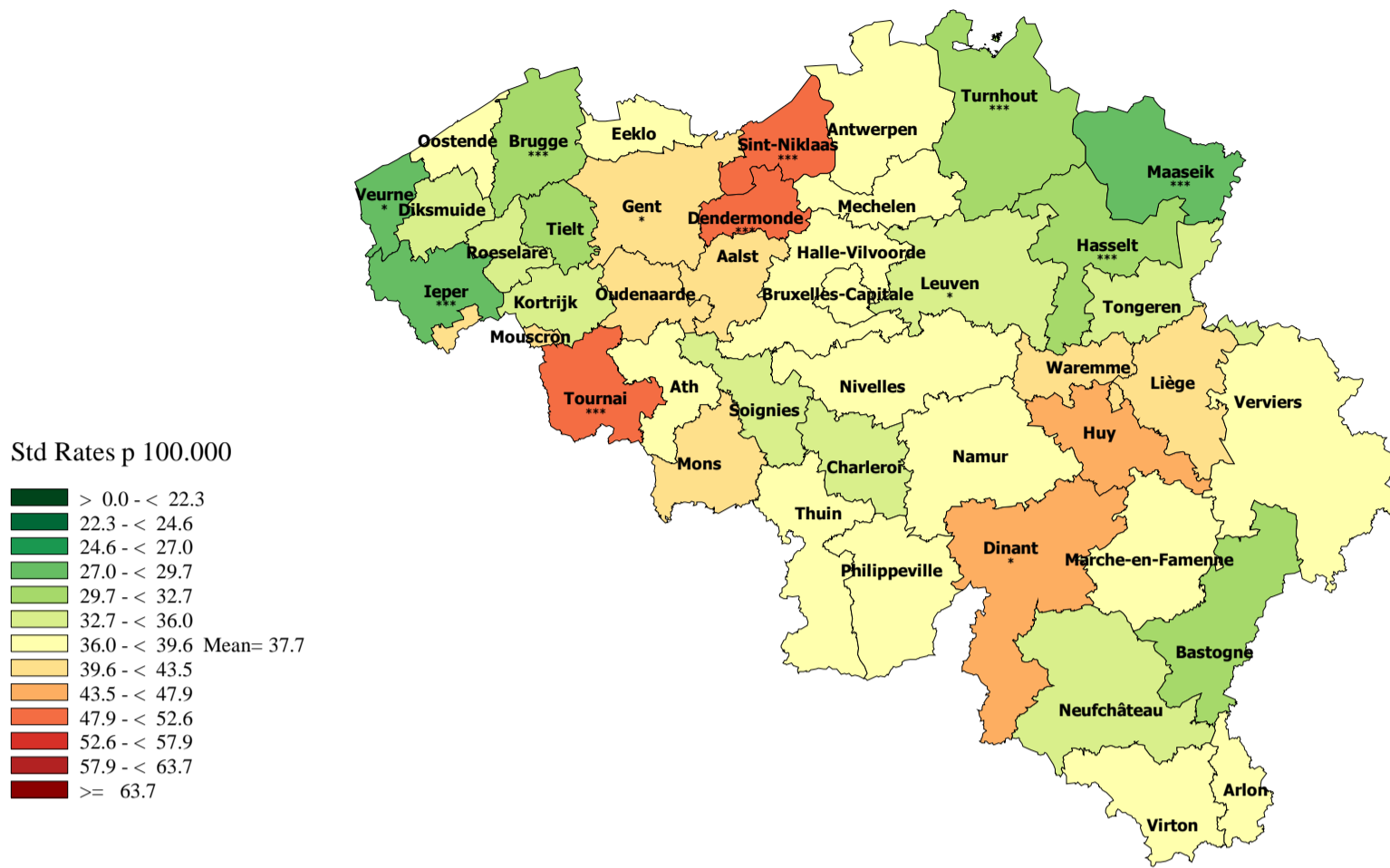
#### Ranking of the districts by increasing all ages mortality rate of Breast Cancer, in Women, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	68	Arlon	30.0	[22.7;37.3]	<0.05
2	F	381	Verviers	31.5	[28.3;34.7]	<0.001
3	F	120	Veurne	32.0	[26.1;37.8]	ns.
4	F	599	Turnhout	32.1	[29.5;34.7]	<0.001
5	F	56	Bastogne	32.3	[23.7;40.8]	ns.
6	F	582	Hasselt	32.9	[30.2;35.6]	<0.001
7	F	311	Maaseik	33.1	[29.3;36.8]	<0.05
8	F	283	Tongeren	33.2	[29.3;37.1]	<0.05
9	F	762	Leuven	35.2	[32.6;37.7]	ns.
10	F	538	Mechelen	35.7	[32.6;38.8]	ns.
11	F	480	Namur	35.9	[32.7;39.2]	ns.
12	F	1010	Liege	36.2	[33.9;38.5]	ns.
13	F	151	Tielt	36.4	[30.4;42.3]	ns.
14	F	123	Waremme	36.4	[29.8;42.9]	ns.
15	F	989	Halle-Vilvoorde	36.9	[34.5;39.2]	ns.
16	F	1624	Antwerpen	36.9	[35.1;38.8]	ns.
17	F	146	Eeklo	37.0	[30.9;43.1]	ns.
18	F	170	Huy	37.1	[31.5;42.8]	ns.
19	F	179	Dinant	37.1	[31.6;42.7]	ns.
20	F	624	Nivelles	37.2	[34.2;40.2]	ns.
21	F	95	Neufchateau	37.6	[29.9;45.4]	ns.
22	F	501	Aalst	38.4	[35.0;41.9]	ns.
23	F	137	Mouscron	38.7	[32.0;45.4]	ns.
24	F	1603	Brussels	38.8	[36.9;40.8]	ns.
25	F	915	Gent	39.0	[36.4;41.6]	ns.
26	F	85	Virton	39.4	[30.8;47.9]	ns.
27	F	740	Charleroi	39.8	[36.9;42.8]	ns.
28	F	88	Diksmuide	39.9	[31.4;48.5]	ns.
29	F	271	Tournai	40.0	[35.1;44.9]	ns.
30	F	194	Ieper	40.3	[34.5;46.1]	ns.
31	F	345	Oostende	40.4	[36.0;44.8]	ns.
32	F	115	Philippeville	40.6	[33.1;48.1]	ns.
33	F	584	Brugge	40.7	[37.3;44.0]	ns.
34	F	324	Soignies	40.9	[36.3;45.4]	ns.
35	F	426	Sint Niklaas	40.9	[36.9;44.8]	ns.
36	F	234	Oudenaarde	41.8	[36.3;47.3]	ns.
37	F	282	Roeselare	42.4	[37.4;47.5]	ns.
38	F	491	Mons	42.7	[38.8;46.5]	<0.05
39	F	159	Ath	43.6	[36.7;50.5]	ns.
40	F	387	Dendermonde	44.1	[39.7;48.6]	<0.01
41	F	577	Kortrijk	44.6	[40.9;48.3]	<0.001
42	F	304	Thuin	45.1	[40.0;50.3]	<0.01
43	F	108	Marche-en-Famenne	47.2	[38.1;56.2]	<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 = 37.7

2.2. PROSTATE CANCER

Overall Prostate Ca Mortality in Men (all-ages), Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 28 - 51 per 100.000

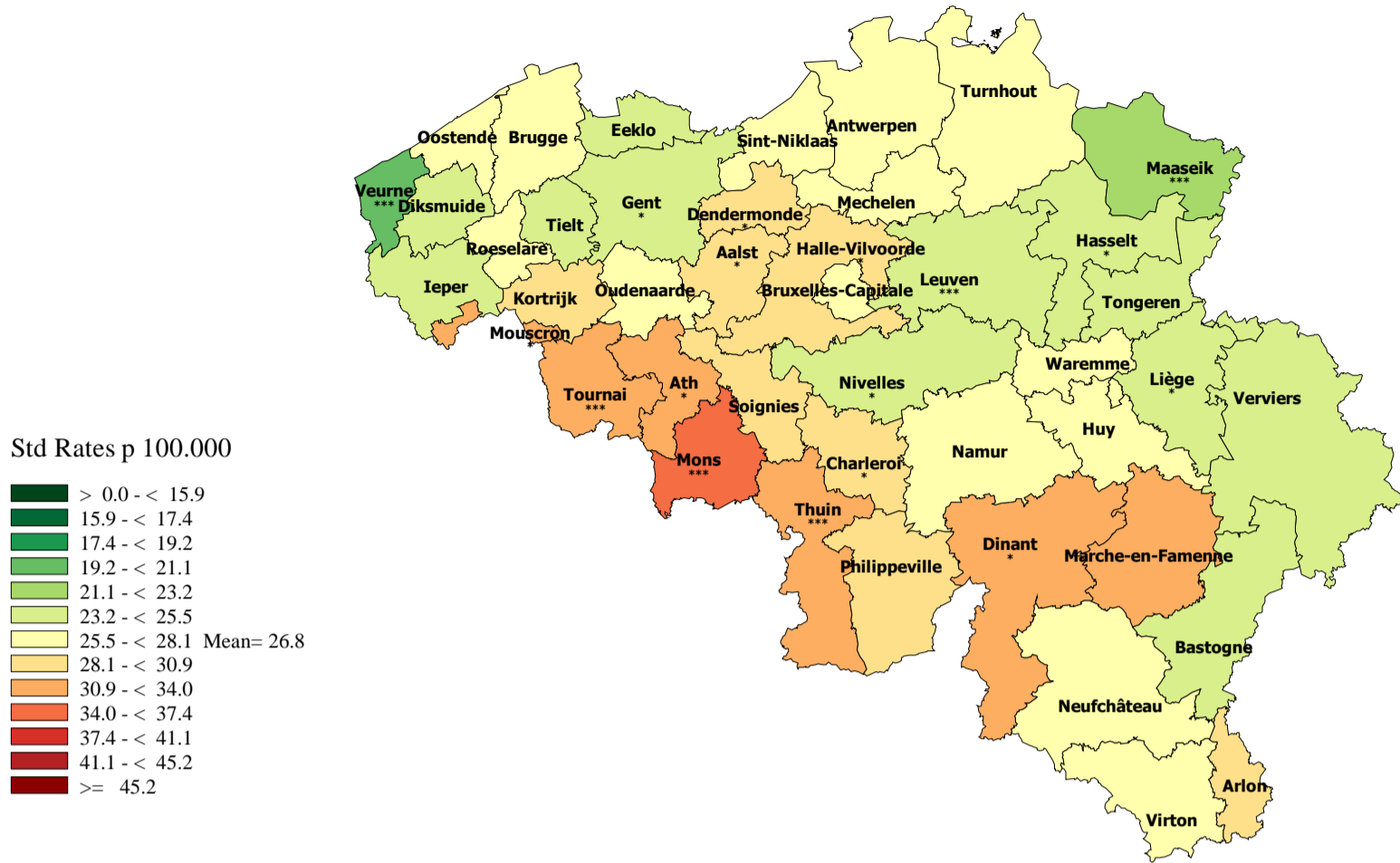
Ranking of the districts by increasing all ages premature mortality rate of Prostate Cancer, in Men, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	M	90	Turnhout	6.0	[4.7; 7.2]	<0.001
2	M	49	Maaseik	6.1	[4.4; 7.8]	<0.01
3	M	18	Eeklo	6.1	[3.3; 9.0]	ns.
4	M	19	Tielt	6.4	[3.5; 9.3]	ns.
5	M	68	Brugge	6.4	[4.9; 7.9]	<0.05
6	M	24	Ieper	6.7	[4.0; 9.5]	ns.
7	M	58	Verviers	6.8	[5.0; 8.6]	ns.
8	M	21	Veurne	6.9	[3.9; 9.8]	ns.
9	M	17	Waremmе	6.9	[3.6; 10.2]	ns.
10	M	113	Leuven	7.0	[5.7; 8.3]	<0.05
11	M	13	Marche-en-Famenne	7.0	[3.2; 10.9]	ns.
12	M	102	Hasselt	7.4	[5.9; 8.8]	ns.
13	M	47	Dendermonde	7.4	[5.3; 9.6]	ns.
14	M	34	Thuin	7.6	[5.0; 10.2]	ns.
15	M	52	Tongeren	7.6	[5.5; 9.7]	ns.
16	M	10	Virton	7.6	[2.8; 12.5]	ns.
17	M	11	Arlon	8.0	[3.2; 12.8]	ns.
18	M	152	Liege	8.4	[7.0; 9.7]	ns.
19	M	264	Antwerpen	8.4	[7.4; 9.4]	ns.
20	M	80	Kortrijk	8.4	[6.6; 10.3]	ns.
21	M	106	Charleroi	8.8	[7.1; 10.5]	ns.
22	M	79	Aalst	8.8	[6.9; 10.8]	ns.
23	M	15	Diksmuide	8.9	[4.4; 13.4]	ns.
24	M	216	Brussels	9.0	[7.8; 10.2]	ns.
25	M	58	Oostende	9.1	[6.8; 11.5]	ns.
26	M	173	Halle-Vilvoorde	9.3	[7.9; 10.7]	ns.
27	M	17	Neufchateau	9.3	[4.8; 13.8]	ns.
28	M	80	Namur	9.3	[7.3; 11.4]	ns.
29	M	11	Bastogne	9.4	[3.8; 15.0]	ns.
30	M	103	Mechelen	9.6	[7.7; 11.4]	ns.
31	M	20	Philippeville	9.6	[5.3; 13.9]	ns.
32	M	159	Gent	9.7	[8.2; 11.2]	ns.
33	M	55	Soignies	9.7	[7.1; 12.3]	ns.
34	M	115	Nivelles	9.7	[7.9; 11.5]	ns.
35	M	24	Ath	9.8	[5.8; 13.8]	ns.
36	M	68	Mons	9.8	[7.5; 12.2]	ns.
37	M	33	Dinant	9.9	[6.5; 13.3]	ns.
38	M	49	Roeselare	9.9	[7.2; 12.7]	ns.
39	M	22	Mouscron	10.0	[5.8; 14.3]	ns.
40	M	81	Sint Niklaas	10.2	[8.0; 12.5]	ns.
41	M	42	Tournai	10.3	[7.2; 13.5]	ns.
42	M	34	Huy	10.7	[7.0; 14.3]	ns.
43	M	43	Oudenaarde	11.5	[8.0; 14.9]	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 = 8.4

2.3. COLORECTAL CANCER

Overall Colorectal Ca Mortality in both genders (all-ages), Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 21 - 34 per 100.000

Ranking of the districts by increasing all ages mortality rate of Colorectal Ca, in Both genders, 2010-2017

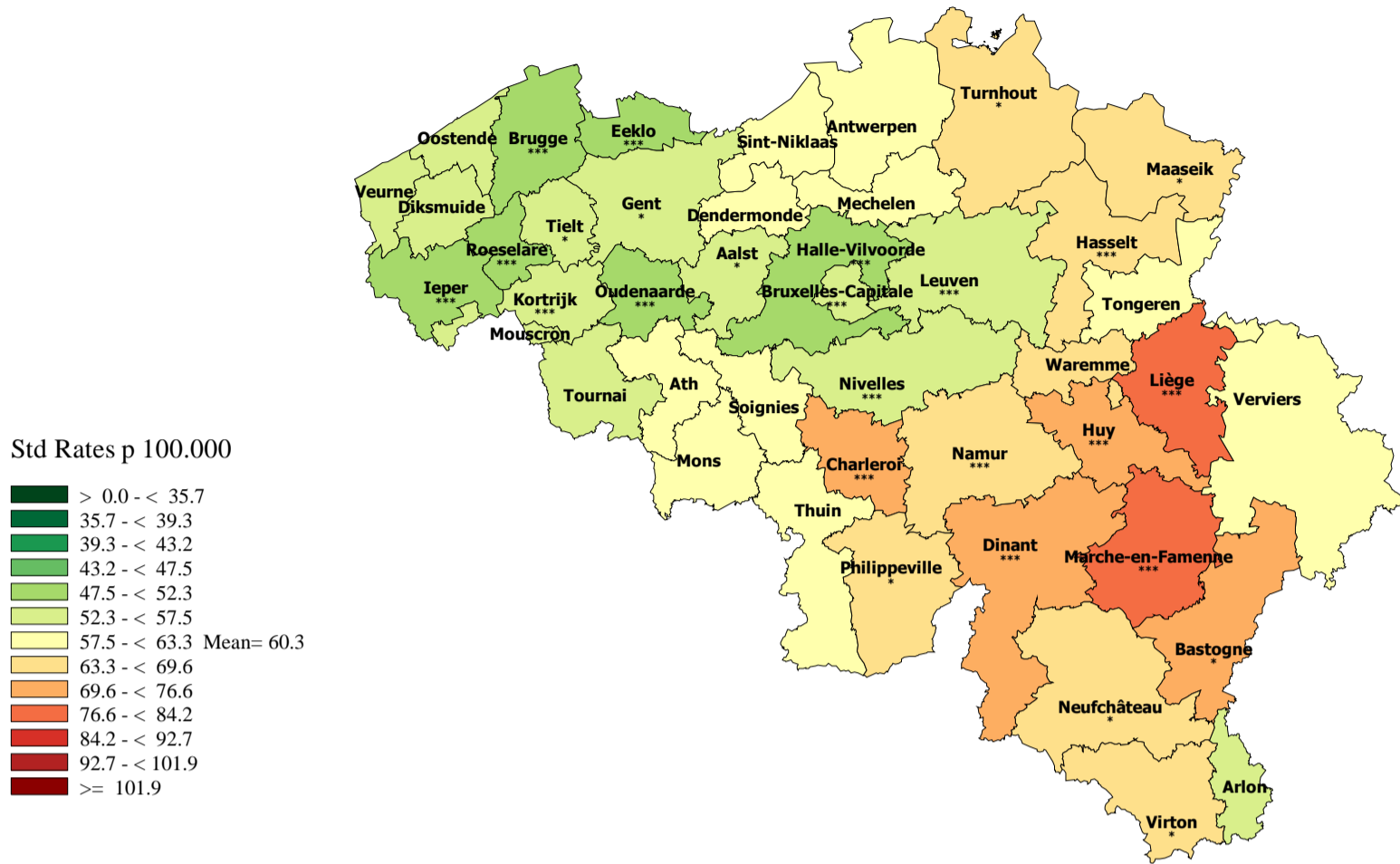
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	143	Veurne	21.0	[17.5;24.5]	<0.01
2	Both	379	Maaseik	22.3	[19.9;24.6]	<0.001
3	Both	762	Hasselt	24.0	[22.3;25.8]	<0.01
4	Both	225	Ieper	24.1	[20.9;27.3]	ns.
5	Both	962	Leuven	24.2	[22.6;25.7]	<0.01
6	Both	108	Diksmuide	24.4	[19.7;29.0]	ns.
7	Both	702	Nivelles	24.4	[22.6;26.3]	<0.05
8	Both	176	Eeklo	24.6	[20.9;28.3]	ns.
9	Both	1048	Gent	24.7	[23.2;26.2]	<0.01
10	Both	72	Bastogne	24.7	[18.9;30.6]	ns.
11	Both	529	Verviers	25.0	[22.8;27.1]	ns.
12	Both	389	Tongeren	25.1	[22.5;27.6]	ns.
13	Both	192	Tielt	25.1	[21.5;28.7]	ns.
14	Both	1196	Liege	25.1	[23.7;26.6]	<0.05
15	Both	685	Brugge	25.6	[23.7;27.5]	ns.
16	Both	2069	Antwerpen	25.9	[24.8;27.0]	ns.
17	Both	866	Turnhout	25.9	[24.2;27.7]	ns.
18	Both	101	Virton	26.1	[20.9;31.3]	ns.
19	Both	209	Huy	26.2	[22.6;29.8]	ns.
20	Both	411	Oostende	26.2	[23.6;28.7]	ns.
21	Both	121	Neufchateau	26.2	[21.4;30.9]	ns.
22	Both	584	Namur	26.3	[24.1;28.5]	ns.
23	Both	1865	Brussels	26.4	[25.2;27.6]	ns.
24	Both	149	Waremme	26.8	[22.5;31.2]	ns.
25	Both	508	Sint Niklaas	26.9	[24.6;29.3]	ns.
26	Both	347	Roeselare	27.1	[24.2;30.0]	ns.
27	Both	740	Mechelen	27.5	[25.5;29.5]	ns.
28	Both	279	Oudenaarde	27.8	[24.5;31.1]	ns.
29	Both	684	Kortrijk	28.1	[26.0;30.2]	ns.
30	Both	142	Philippeville	28.3	[23.6;33.0]	ns.
31	Both	111	Arlon	28.7	[23.2;34.1]	ns.
32	Both	393	Soignies	28.8	[25.9;31.7]	ns.
33	Both	1390	Halle-Vilvoorde	29.2	[27.6;30.7]	<0.01
34	Both	679	Aalst	29.8	[27.5;32.1]	<0.05
35	Both	942	Charleroi	29.9	[28.0;31.9]	<0.01
36	Both	480	Dendermonde	30.7	[27.9;33.5]	<0.01
37	Both	256	Dinant	31.0	[27.2;34.9]	<0.05
38	Both	129	Marche-en-Famenne	32.0	[26.4;37.6]	ns.
39	Both	204	Ath	32.1	[27.7;36.6]	<0.05
40	Both	193	Mouscron	32.3	[27.7;36.9]	<0.05
41	Both	373	Tournai	32.5	[29.1;35.8]	<0.001
42	Both	385	Thuin	33.1	[29.7;36.4]	<0.001
43	Both	648	Mons	34.5	[31.8;37.2]	<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



2.4. LUNG CANCER

**Overall Lung Ca Mortality in both genders (all-ages), Belgium 2010-2017**  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



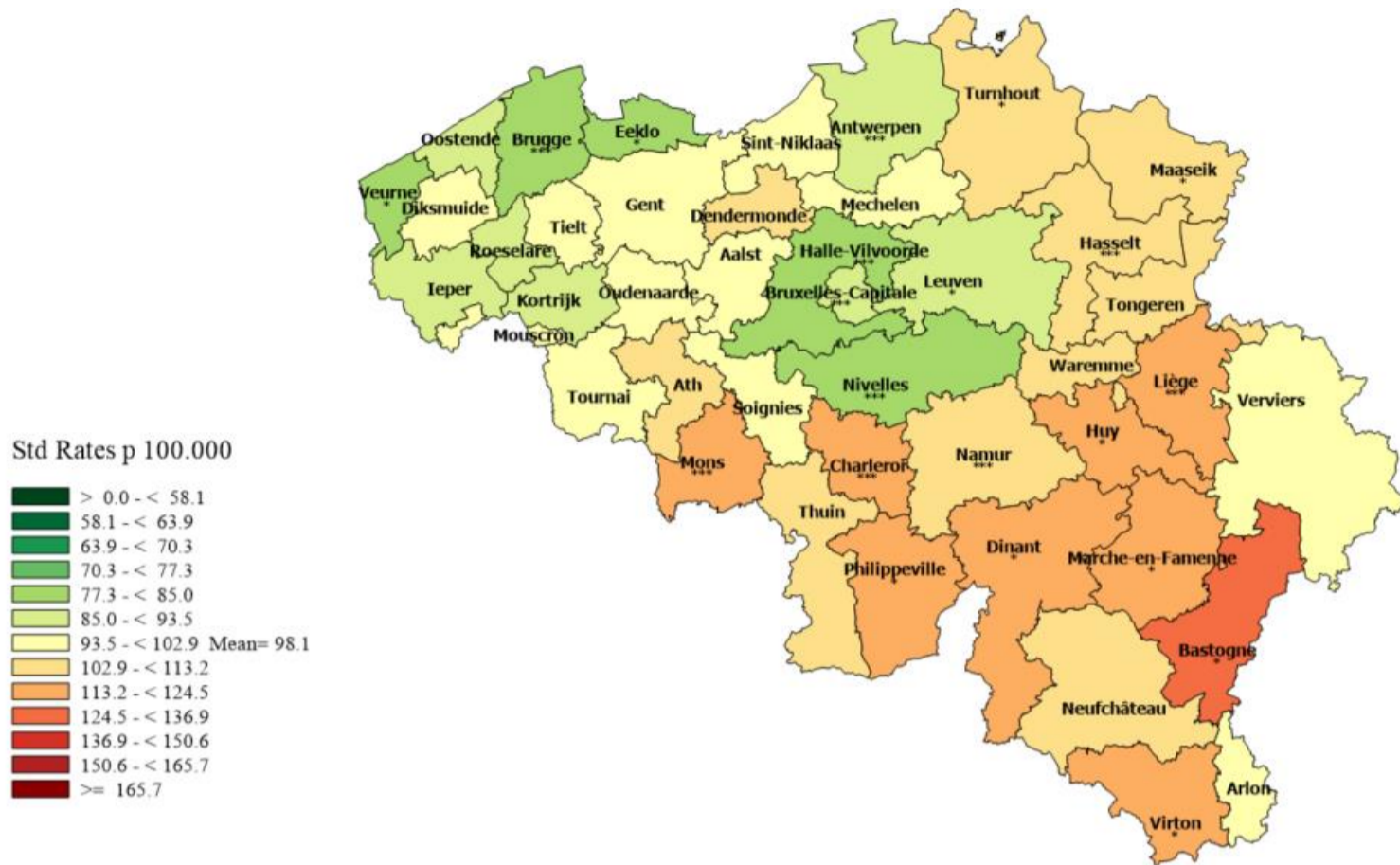
Change from one colour level to another corresponds to a 10% relative change  
Range: 48 - 80 per 100.000

**Ranking of the districts by increasing all age mortality rate of Lung Cancer, in Both genders, 2010-2017**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	343	Eeklo	47.9	[42.8;53.0]	<0.001
2	Both	2264	Halle-Vilvoorde	47.9	[45.9;49.9]	<0.001
3	Both	500	Oudenaarde	50.7	[46.2;55.2]	<0.001
4	Both	1348	Brugge	51.3	[48.6;54.1]	<0.001
5	Both	461	Ieper	52.2	[47.3;57.0]	<0.001
6	Both	635	Roeselare	52.2	[48.1;56.3]	<0.001
7	Both	390	Tielt	52.4	[47.1;57.6]	<0.01
8	Both	1541	Nivelles	52.9	[50.2;55.5]	<0.001
9	Both	1261	Kortrijk	53.1	[50.1;56.0]	<0.001
10	Both	224	Diksmuide	54.8	[47.6;62.1]	ns.
11	Both	2189	Leuven	55.5	[53.2;57.9]	<0.001
12	Both	384	Veurne	56.2	[50.5;61.9]	ns.
13	Both	222	Arlon	56.6	[49.1;64.2]	ns.
14	Both	1306	Aalst	56.8	[53.7;59.9]	<0.05
15	Both	2357	Gent	56.8	[54.5;59.1]	<0.01
16	Both	881	Oostende	57.0	[53.2;60.8]	ns.
17	Both	3840	Brussels	57.1	[55.3;58.9]	<0.001
18	Both	330	Mouscron	57.3	[51.0;63.5]	ns.
19	Both	650	Tournai	57.4	[52.9;61.9]	ns.
20	Both	1538	Mechelen	58.1	[55.1;61.0]	ns.
21	Both	4625	Antwerpen	59.0	[57.3;60.7]	ns.
22	Both	951	Dendermonde	60.4	[56.6;64.3]	ns.
23	Both	838	Soignies	61.0	[56.8;65.1]	ns.
24	Both	1165	Sint Niklaas	61.7	[58.1;65.3]	ns.
25	Both	404	Ath	62.8	[56.6;69.0]	ns.
26	Both	743	Thuin	62.9	[58.3;67.4]	ns.
27	Both	1335	Verviers	62.9	[59.5;66.3]	ns.
28	Both	1013	Tongeren	63.1	[59.2;67.0]	ns.
29	Both	1192	Mons	63.1	[59.5;66.8]	ns.
30	Both	2250	Turnhout	64.7	[62.0;67.4]	<0.01
31	Both	1163	Maaseik	65.1	[61.2;68.9]	<0.05
32	Both	2149	Hasselt	66.3	[63.5;69.1]	<0.001
33	Both	381	Waremmes	66.5	[59.7;73.2]	ns.
34	Both	1522	Namur	68.1	[64.7;71.6]	<0.001
35	Both	356	Philippeville	68.5	[61.3;75.7]	<0.05
36	Both	307	Neufchateau	68.9	[61.1;76.7]	<0.05
37	Both	260	Virton	69.4	[60.9;78.0]	<0.05
38	Both	610	Dinant	73.3	[67.4;79.1]	<0.001
39	Both	2339	Charleroi	73.8	[70.8;76.8]	<0.001
40	Both	593	Huy	74.1	[68.1;80.2]	<0.001
41	Both	230	Bastogne	74.9	[65.1;84.7]	<0.01
42	Both	3696	Liege	78.2	[75.7;80.7]	<0.001
43	Both	332	Marche-en-Famenne	80.5	[71.7;89.2]	<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 = 60.3

**Overall Lung Ca Mortality in Men (all-ages), Belgium 2010-2017**  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



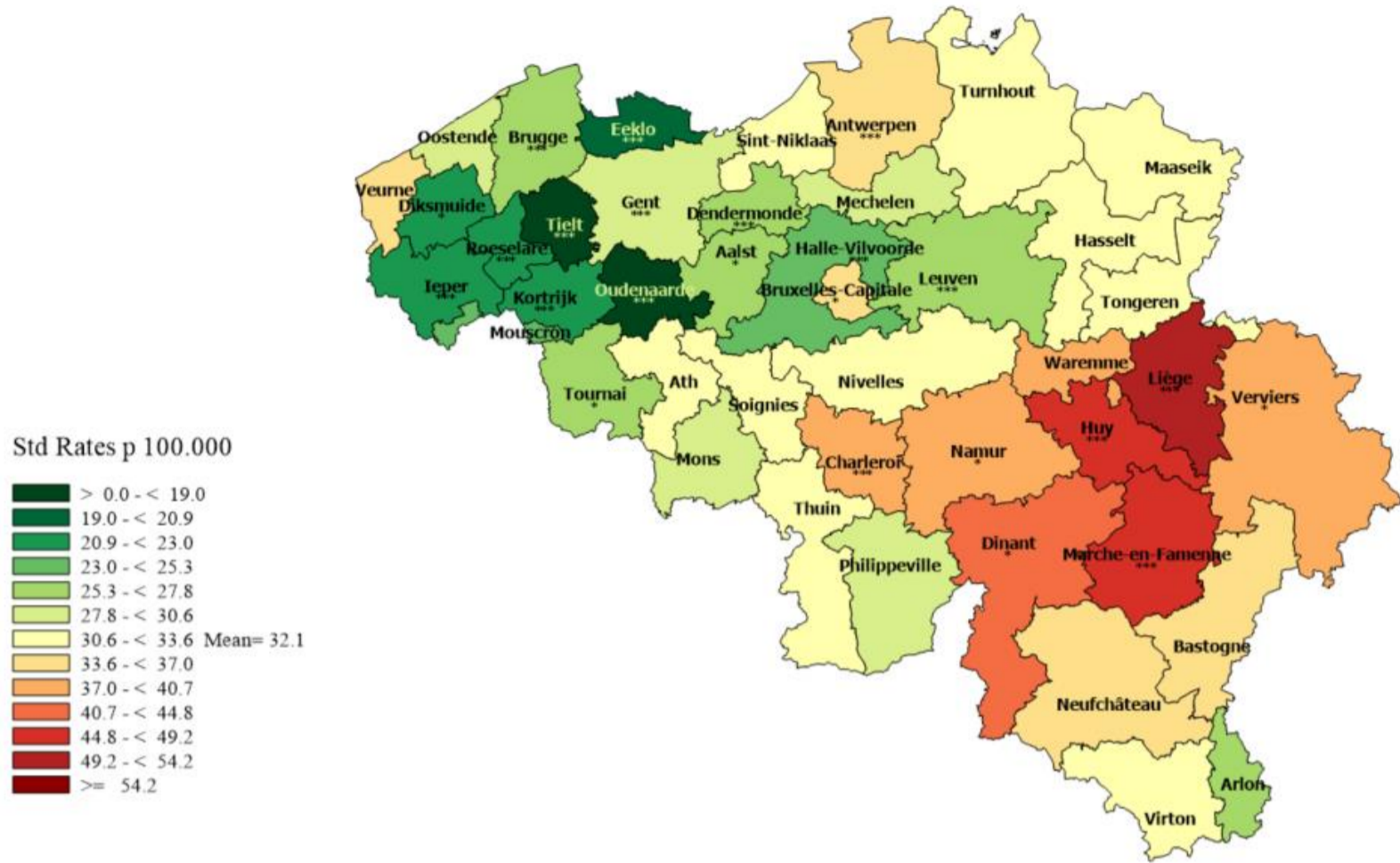
Change from one colour level to another corresponds to a 10% relative change  
Range: 78 - 130 per 100.000

**Ranking of the districts by increasing all age mortality rate of Lung Cancer, in Men, 2010-2017**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	M	1618	Halle-Vilvoorde	77.8	[74.0;81.7]	<0.001
2	M	1029	Nivelles	82.1	[77.0;87.3]	<0.001
3	M	270	Eeklo	82.3	[72.4;92.2]	<0.01
4	M	976	Brugge	83.6	[78.3;88.9]	<0.001
5	M	266	Veurne	83.9	[73.6;94.2]	<0.01
6	M	3101	Antwerpen	88.7	[85.5;91.8]	<0.001
7	M	2464	Brussels	88.9	[85.3;92.5]	<0.001
8	M	498	Roeselare	90.7	[82.6;98.8]	ns.
9	M	365	Ieper	91.6	[82.1; 101]	ns.
10	M	633	Oostende	91.8	[84.5;99.1]	ns.
11	M	1637	Leuven	92.8	[88.2;97.3]	<0.05
12	M	988	Kortrijk	93.3	[87.4;99.1]	ns.
13	M	1115	Mechelen	94.0	[88.4;99.6]	ns.
14	M	1724	Gent	94.5	[90.0;99.0]	ns.
15	M	320	Tielt	94.6	[84.1; 105]	ns.
16	M	176	Diksmuide	94.6	[80.4; 109]	ns.
17	M	405	Oudenaarde	95.1	[85.6; 105]	ns.
18	M	162	Arlon	96.3	[81.0; 112]	ns.
19	M	898	Verviers	96.9	[90.3; 103]	ns.
20	M	967	Aalst	97.3	[91.0; 104]	ns.
21	M	599	Soignies	102.0	[93.6; 110]	ns.
22	M	250	Mouscron	102.0	[89.1; 115]	ns.
23	M	489	Tournai	102.2	[92.8; 112]	ns.
24	M	851	Sint Niklaas	102.8	[95.7; 110]	ns.
25	M	1646	Turnhout	103.4	[98.3; 109]	<0.05
26	M	752	Tongeren	104.3	[96.6; 112]	ns.
27	M	529	Thuin	105.4	[96.2; 115]	ns.
28	M	738	Dendermonde	105.8	[98.0; 114]	ns.
29	M	860	Maaseik	106.0	[98.4; 114]	<0.05
30	M	293	Ath	107.5	[94.8; 120]	ns.
31	M	263	Waremmes	107.9	[94.4; 121]	ns.
32	M	1047	Namur	111.4	[104; 118]	<0.001
33	M	218	Neufchateau	111.8	[96.5; 127]	ns.
34	M	1610	Hasselt	112.6	[107; 118]	<0.001
35	M	869	Mons	113.2	[105; 121]	<0.001
36	M	381	Huy	113.9	[102; 126]	<0.05
37	M	424	Dinant	115.9	[105; 127]	<0.01
38	M	194	Virton	116.8	[99.7; 134]	<0.05
39	M	2367	Liege	118.0	[113; 123]	<0.001
40	M	269	Philippeville	118.0	[103; 133]	<0.01
41	M	1613	Charleroi	123.1	[117; 129]	<0.001
42	M	227	Marche-en-Famenne	124.4	[108; 141]	<0.01
43	M	174	Bastogne	129.5	[110; 150]	<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 = 98.1

**Overall Lung Ca Mortality in Women (all-ages), Belgium 2010-2017**  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 17 - 50 per 100.000

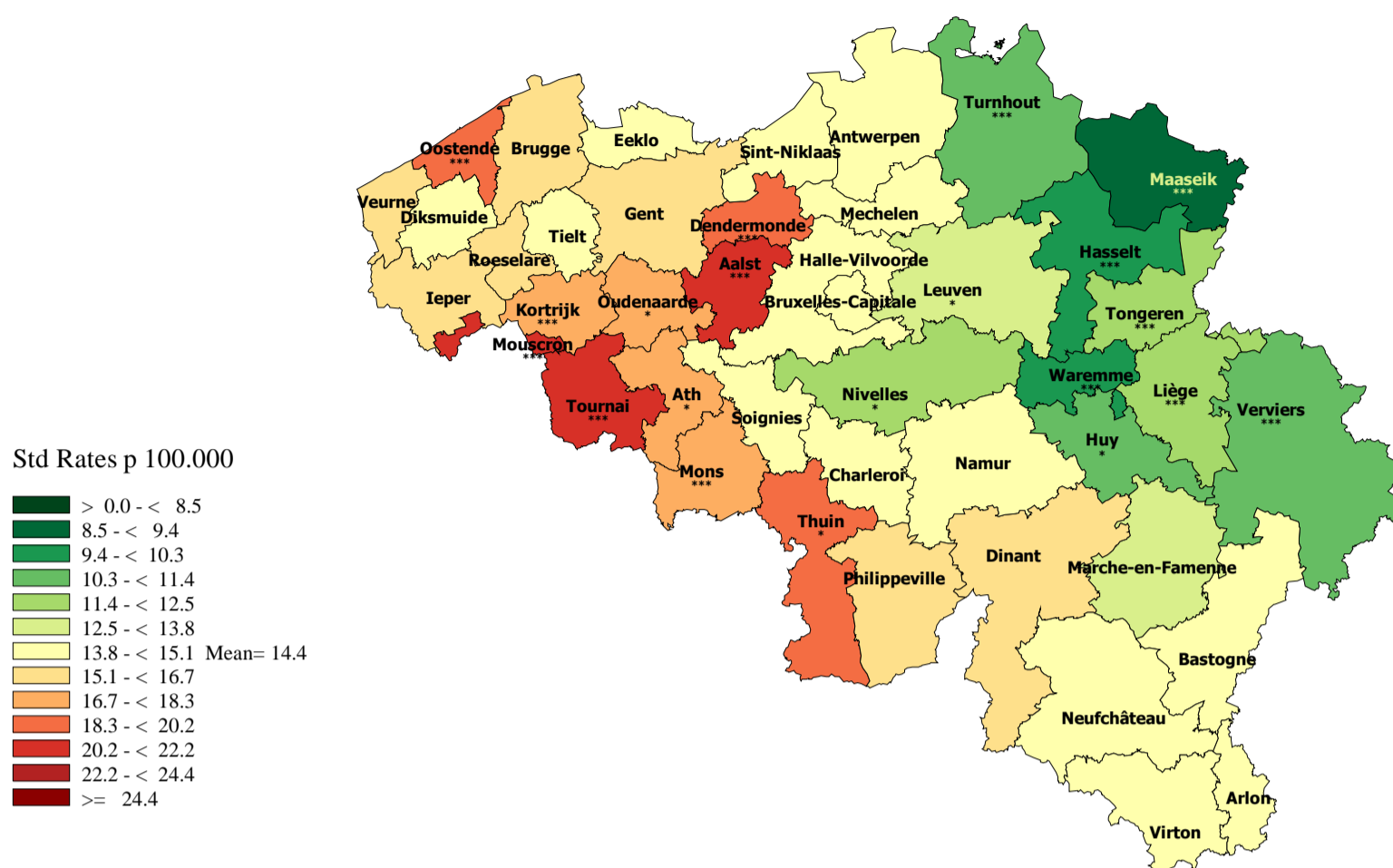
**Ranking of the districts by increasing all age mortality rate of Lung Cancer, in Women, 2010-2017**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	70	Tielt	17.1	[13.0;21.3]	<0.001
2	F	95	Oudenaarde	17.4	[13.8;21.0]	<0.001
3	F	73	Eeklo	19.9	[15.2;24.5]	<0.001
4	F	273	Kortrijk	21.1	[18.5;23.6]	<0.001
5	F	96	Ieper	21.2	[16.9;25.5]	<0.001
6	F	137	Roeselare	21.5	[17.8;25.1]	<0.001
7	F	48	Diksmuide	22.4	[15.9;28.9]	<0.01
8	F	80	Mouscron	24.6	[19.1;30.2]	<0.01
9	F	646	Halle-Vilvoorde	24.9	[22.9;26.8]	<0.001
10	F	213	Dendermonde	25.6	[22.1;29.0]	<0.001
11	F	161	Tournai	25.6	[21.6;29.6]	<0.01
12	F	372	Brugge	26.3	[23.6;29.0]	<0.001
13	F	552	Leuven	26.3	[24.1;28.6]	<0.001
14	F	339	Aalst	27.3	[24.3;30.2]	<0.01
15	F	60	Arlon	27.7	[20.6;34.9]	ns.
16	F	633	Gent	28.3	[26.0;30.5]	<0.01
17	F	323	Mons	29.6	[26.3;32.9]	ns.
18	F	423	Mechelen	29.9	[27.0;32.8]	ns.
19	F	248	Oostende	30.1	[26.3;33.9]	ns.
20	F	87	Philippeville	30.3	[23.9;36.8]	ns.
21	F	261	Tongeren	30.6	[26.9;34.4]	ns.
22	F	239	Soignies	30.7	[26.7;34.6]	ns.
23	F	539	Hasselt	30.7	[28.1;33.3]	ns.
24	F	314	Sint Niklaas	30.9	[27.4;34.3]	ns.
25	F	111	Ath	31.2	[25.3;37.1]	ns.
26	F	512	Nivelles	31.4	[28.7;34.2]	ns.
27	F	303	Maaseik	32.2	[28.5;35.8]	ns.
28	F	214	Thuin	32.9	[28.5;37.4]	ns.
29	F	604	Turnhout	33.0	[30.3;35.6]	ns.
30	F	66	Virton	33.2	[25.0;41.4]	ns.
31	F	56	Bastogne	33.7	[24.8;42.6]	ns.
32	F	118	Veurne	33.9	[27.5;40.2]	ns.
33	F	1376	Brussels	35.2	[33.3;37.1]	<0.01
34	F	1524	Antwerpen	36.1	[34.2;37.9]	<0.001
35	F	89	Neufchateau	36.1	[28.5;43.7]	ns.
36	F	475	Namur	37.7	[34.2;41.1]	<0.01
37	F	437	Verviers	37.8	[34.2;41.3]	<0.01
38	F	118	Waremmes	37.9	[31.0;44.8]	ns.
39	F	726	Charleroi	40.3	[37.3;43.3]	<0.001
40	F	186	Dinant	41.4	[35.4;47.4]	<0.01
41	F	105	Marche-en-Famenne	47.2	[38.0;56.3]	<0.01
42	F	212	Huy	47.7	[41.2;54.2]	<0.001
43	F	1329	Liege	50.5	[47.7;53.2]	<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 = 32.1

## 2.5. HEAD, NECK AND OESOPHAGEAL CANCER

### Overall Head\_and\_neck and oesophageal Ca Mortality in both genders (all-ages), Belgium 2010-2017 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 9 - 22 per 100.000

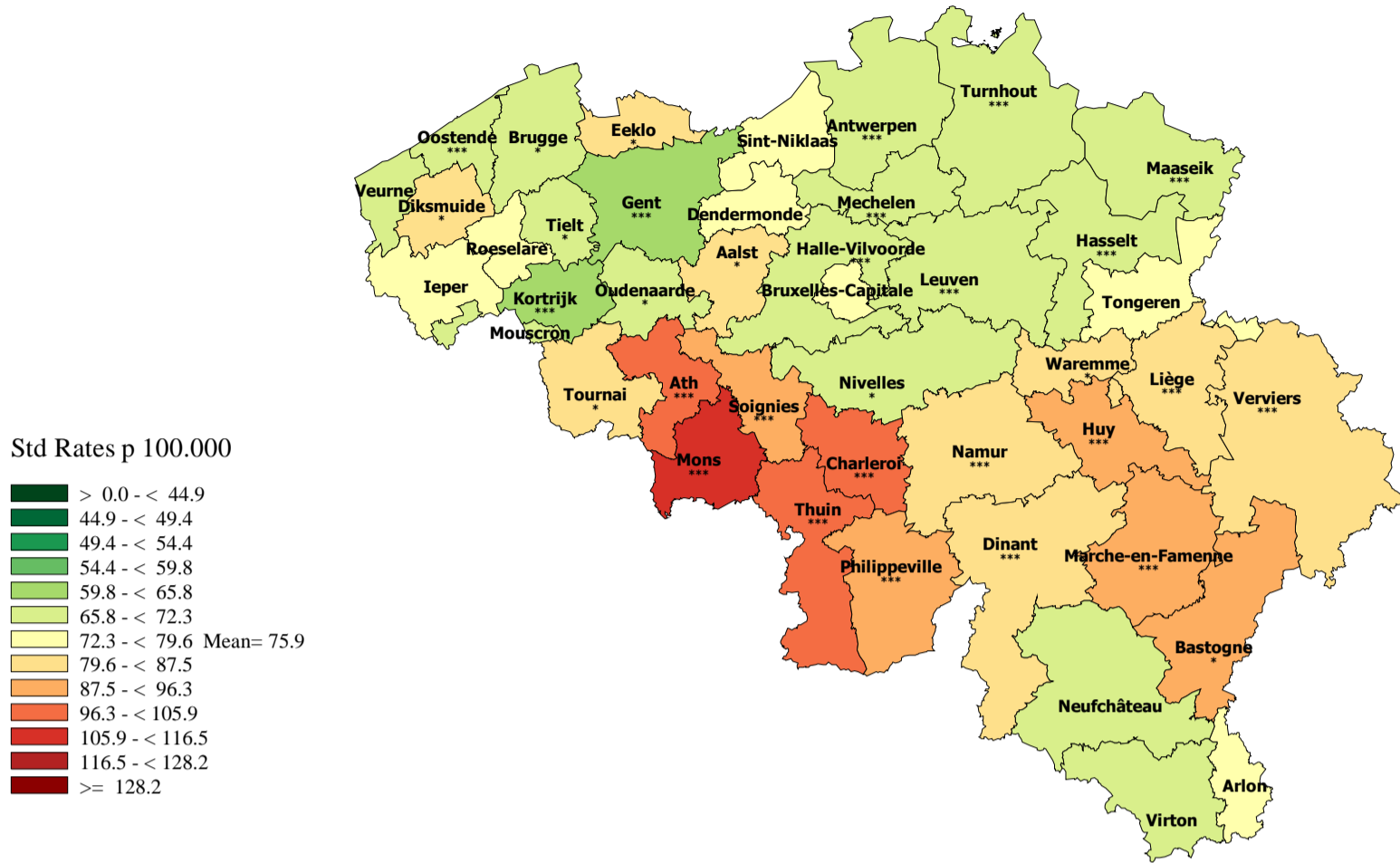
### Ranking of the districts by increasing all age mortality rate of Head and neck & Oesophageal Cancer, in Both genders, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	161	Maaseik	9.0	[7.5;10.4]	<0.001
2	Both	312	Hasselt	9.6	[8.5;10.7]	<0.001
3	Both	58	Waremmes	10.1	[7.4;12.7]	<0.01
4	Both	234	Verviers	10.9	[9.5;12.3]	<0.001
5	Both	90	Huy	10.9	[8.6;13.2]	<0.01
6	Both	386	Turnhout	11.0	[9.9;12.2]	<0.001
7	Both	184	Tongeren	11.5	[9.8;13.2]	<0.001
8	Both	366	Nivelles	12.4	[11.1;13.7]	<0.01
9	Both	595	Liege	12.5	[11.5;13.5]	<0.001
10	Both	500	Leuven	12.8	[11.6;13.9]	<0.01
11	Both	53	Marche-en-Famenne	13.0	[9.4;16.5]	ns.
12	Both	56	Arlon	14.0	[10.3;17.7]	ns.
13	Both	662	Halle-Vilvoorde	14.0	[12.9;15.1]	ns.
14	Both	377	Mechelen	14.2	[12.8;15.7]	ns.
15	Both	273	Sint Niklaas	14.3	[12.6;16.0]	ns.
16	Both	44	Bastogne	14.4	[10.1;18.7]	ns.
17	Both	60	Diksmuide	14.5	[10.8;18.2]	ns.
18	Both	103	Eeklo	14.5	[11.7;17.4]	ns.
19	Both	1137	Antwerpen	14.6	[13.7;15.4]	ns.
20	Both	56	Virton	14.6	[10.7;18.5]	ns.
21	Both	331	Namur	14.7	[13.1;16.3]	ns.
22	Both	68	Neufchateau	14.7	[11.2;18.2]	ns.
23	Both	1004	Brussels	14.8	[13.9;15.8]	ns.
24	Both	208	Soignies	14.9	[12.9;16.9]	ns.
25	Both	483	Charleroi	15.0	[13.6;16.3]	ns.
26	Both	111	Tielt	15.1	[12.3;17.9]	ns.
27	Both	131	Dinant	15.2	[12.6;17.8]	ns.
28	Both	102	Veurne	15.3	[12.3;18.3]	ns.
29	Both	635	Gent	15.4	[14.2;16.7]	ns.
30	Both	402	Brugge	15.7	[14.1;17.2]	ns.
31	Both	140	Ieper	15.7	[13.1;18.4]	ns.
32	Both	190	Roeselare	15.8	[13.5;18.0]	ns.
33	Both	83	Philippeville	15.9	[12.5;19.4]	ns.
34	Both	403	Kortrijk	17.3	[15.6;19.0]	<0.01
35	Both	171	Oudenaarde	17.4	[14.8;20.1]	<0.05
36	Both	342	Mons	17.9	[16.0;19.8]	<0.001
37	Both	118	Ath	18.2	[14.9;21.5]	<0.05
38	Both	290	Dendermonde	18.4	[16.2;20.5]	<0.001
39	Both	217	Thuin	18.5	[16.0;21.0]	<0.01
40	Both	304	Oostende	20.1	[17.9;22.4]	<0.001
41	Both	461	Aalst	20.2	[18.3;22.0]	<0.001
42	Both	122	Mouscron	21.1	[17.3;24.8]	<0.001
43	Both	251	Tournai	21.8	[19.0;24.5]	<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 = 14.4

2.6. ISCHEMIC HEART DISEASES

Overall Isch\_Heart\_Disease Mortality in both genders (all-ages), Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 63 - 113 per 100.000

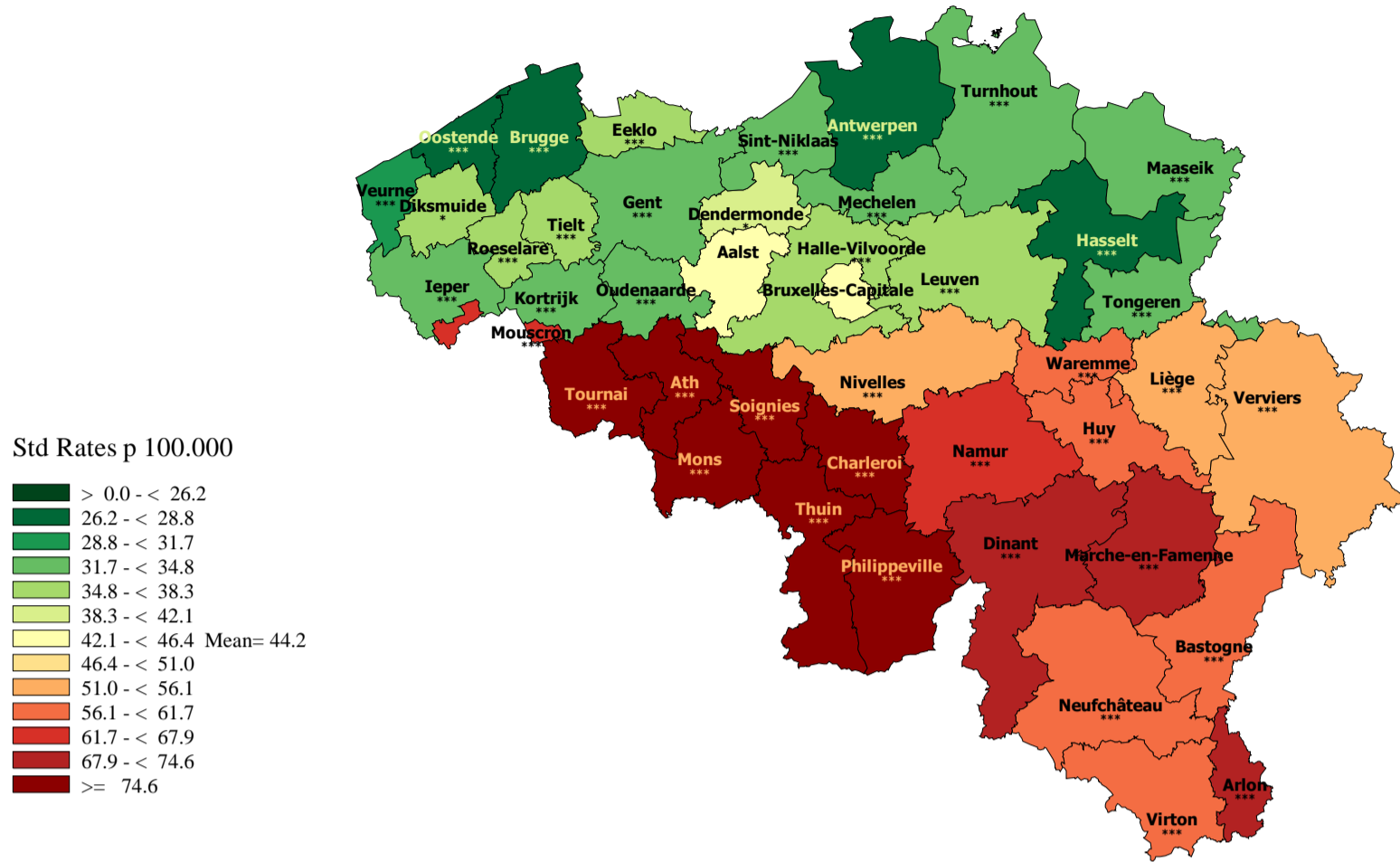
Ranking of the districts by increasing all age mortality rate of Ischemic Heart Disease, in Both genders, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	2708	Gent	63.4	[61.0;65.8]	<0.001
2	Both	1575	Kortrijk	64.9	[61.7;68.2]	<0.001
3	Both	2117	Turnhout	66.1	[63.2;69.0]	<0.001
4	Both	5353	Antwerpen	66.1	[64.3;67.9]	<0.001
5	Both	3134	Halle-Vilvoorde	66.3	[63.9;68.6]	<0.001
6	Both	1809	Mechelen	66.8	[63.7;69.9]	<0.001
7	Both	2094	Hasselt	67.5	[64.5;70.4]	<0.001
8	Both	1073	Maaseik	67.5	[63.2;71.7]	<0.001
9	Both	1074	Oostende	67.8	[63.7;71.9]	<0.001
10	Both	717	Oudenaarde	68.5	[63.4;73.6]	<0.01
11	Both	540	Tielt	69.1	[63.2;75.0]	<0.05
12	Both	437	Mouscron	69.5	[62.8;76.1]	ns.
13	Both	1898	Brugge	70.8	[67.5;74.0]	<0.01
14	Both	2848	Leuven	71.3	[68.7;74.0]	<0.01
15	Both	2071	Nivelles	71.6	[68.4;74.7]	<0.01
16	Both	278	Virton	71.7	[63.1;80.3]	ns.
17	Both	333	Neufchateau	71.9	[64.0;79.8]	ns.
18	Both	499	Veurne	72.1	[65.7;78.5]	ns.
19	Both	1339	Sint Niklaas	72.7	[68.8;76.7]	ns.
20	Both	704	Ieper	73.2	[67.7;78.6]	ns.
21	Both	1094	Tongeren	74.3	[69.8;78.8]	ns.
22	Both	1138	Dendermonde	74.4	[70.0;78.8]	ns.
23	Both	301	Arlon	76.0	[67.2;84.8]	ns.
24	Both	5569	Brussels	77.6	[75.5;79.7]	ns.
25	Both	992	Roeselare	77.7	[72.8;82.6]	ns.
26	Both	1879	Aalst	81.9	[78.1;85.7]	<0.01
27	Both	963	Tournai	82.5	[77.2;87.8]	<0.05
28	Both	1881	Namur	84.0	[80.2;87.9]	<0.001
29	Both	4061	Liege	84.8	[82.2;87.5]	<0.001
30	Both	382	Diksmuide	85.2	[76.5;93.9]	<0.05
31	Both	628	Eeklo	86.1	[79.3;93.0]	<0.01
32	Both	727	Dinant	86.8	[80.4;93.2]	<0.001
33	Both	487	Wareme	87.2	[79.4;95.1]	<0.01
34	Both	1832	Verviers	87.4	[83.3;91.4]	<0.001
35	Both	271	Bastogne	90.1	[79.2; 101]	<0.05
36	Both	732	Huy	92.8	[86.0;99.7]	<0.001
37	Both	1287	Soignies	92.9	[87.8;98.0]	<0.001
38	Both	376	Marche-en-Famenne	94.0	[84.3; 104]	<0.001
39	Both	474	Philippeville	95.5	[86.7; 104]	<0.001
40	Both	620	Ath	96.5	[88.8; 104]	<0.001
41	Both	1171	Thuin	98.5	[92.8; 104]	<0.001
42	Both	3241	Charleroi	102.8	[99.2; 106]	<0.001
43	Both	2144	Mons	112.9	[108; 118]	<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 = 75.9

2.7. DIABETES

Overall Diabetes\_in\_multiple\_causes Mortality in both genders (all-ages), Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 27 - 85 per 100.000

Ranking of the districts by increasing all age mortality rate of Diabetes (analysed in multiple causes<sup>§</sup>), in Both genders, 2010-2017

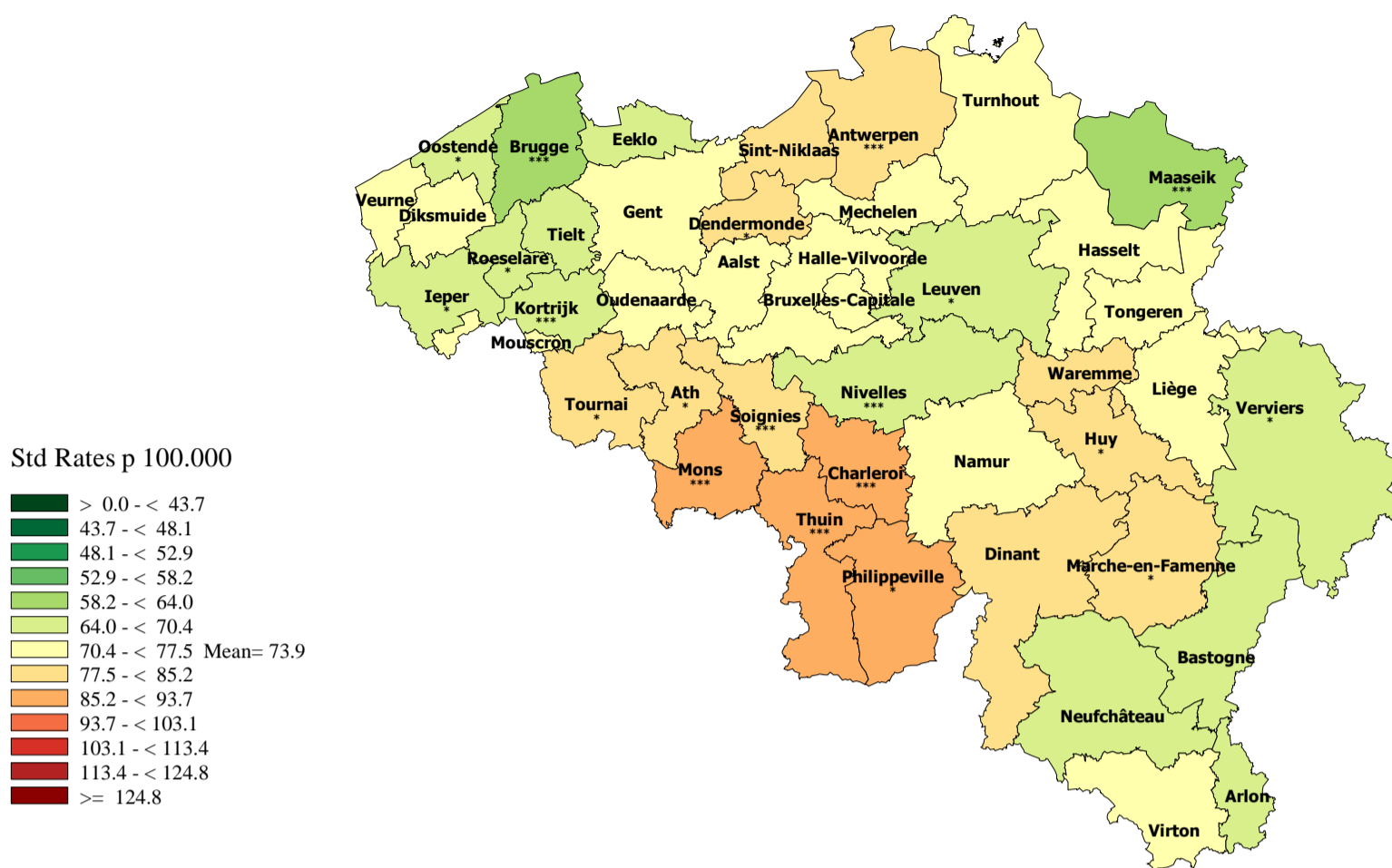
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	837	Hasselt	27.2	[25.3;29.1]	<0.001
2	Both	444	Oostende	27.9	[25.3;30.6]	<0.001
3	Both	2283	Antwerpen	28.0	[26.9;29.2]	<0.001
4	Both	774	Brugge	28.7	[26.7;30.8]	<0.001
5	Both	194	Veurne	28.8	[24.7;33.0]	<0.001
6	Both	338	Oudenaarde	32.1	[28.7;35.6]	<0.001
7	Both	1008	Turnhout	32.3	[30.2;34.3]	<0.001
8	Both	600	Sint Niklaas	32.6	[29.9;35.2]	<0.001
9	Both	891	Mechelen	32.7	[30.5;34.9]	<0.001
10	Both	502	Maaseik	33.3	[30.2;36.4]	<0.001
11	Both	1424	Gent	33.3	[31.6;35.1]	<0.001
12	Both	824	Kortrijk	33.3	[31.0;35.6]	<0.001
13	Both	499	Tongeren	33.4	[30.4;36.5]	<0.001
14	Both	328	Ieper	34.8	[31.0;38.6]	<0.001
15	Both	1406	Leuven	35.1	[33.3;37.0]	<0.001
16	Both	1702	Halle-Vilvoorde	35.6	[33.9;37.3]	<0.001
17	Both	263	Eeklo	35.8	[31.4;40.1]	<0.001
18	Both	165	Diksmuide	36.6	[30.9;42.2]	<0.01
19	Both	295	Tielt	36.9	[32.6;41.2]	<0.001
20	Both	481	Roeselare	37.5	[34.1;40.9]	<0.001
21	Both	619	Dendermonde	40.8	[37.5;44.1]	<0.05
22	Both	1006	Aalst	44.4	[41.6;47.2]	ns.
23	Both	3134	Brussels	44.6	[43.0;46.2]	ns.
24	Both	1476	Nivelles	51.1	[48.5;53.8]	<0.001
25	Both	1125	Verviers	53.8	[50.6;57.0]	<0.001
26	Both	2626	Liege	55.1	[53.0;57.2]	<0.001
27	Both	226	Virton	58.4	[50.7;66.2]	<0.001
28	Both	458	Huy	58.8	[53.3;64.2]	<0.001
29	Both	181	Bastogne	61.6	[52.5;70.8]	<0.001
30	Both	340	Waremmes	61.7	[55.0;68.3]	<0.001
31	Both	285	Neufchateau	61.7	[54.4;69.0]	<0.001
32	Both	1469	Namur	65.7	[62.3;69.1]	<0.001
33	Both	417	Mouscron	66.0	[59.5;72.5]	<0.001
34	Both	568	Dinant	69.3	[63.5;75.0]	<0.001
35	Both	281	Arlon	72.7	[64.0;81.5]	<0.001
36	Both	297	Marche-en-Famenne	73.6	[65.1;82.1]	<0.001
37	Both	878	Tournai	75.6	[70.5;80.7]	<0.001
38	Both	1047	Soignies	76.0	[71.3;80.6]	<0.001
39	Both	396	Philippeville	79.4	[71.4;87.3]	<0.001
40	Both	524	Ath	80.6	[73.6;87.6]	<0.001
41	Both	960	Thuin	80.9	[75.7;86.1]	<0.001
42	Both	1559	Mons	83.4	[79.2;87.6]	<0.001
43	Both	2685	Charleroi	85.4	[82.1;88.7]	<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 = 44.2

## 2.8. CEREBROVASCULAR DISEASES AND HTA

### Overall Cerebrovasc\_Dis & HTA Mortality in both genders (all-ages), Belgium 2010-2017 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 58 - 91 per 100.000

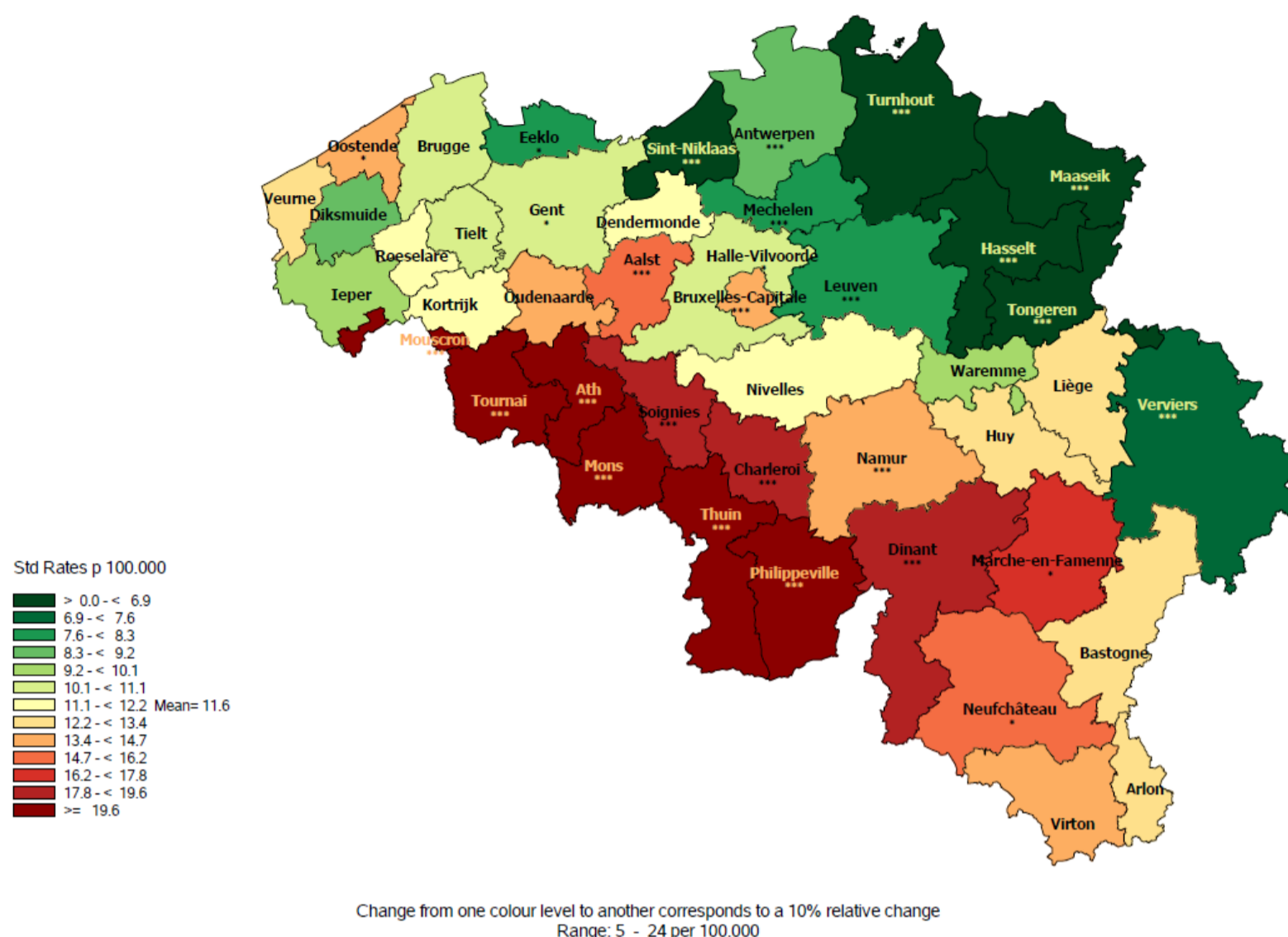
#### Ranking of the districts by increasing all age mortality rate of Cerebrovascular diseases & HTA, in Both genders, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	910	Maaseik	58.2	[54.2;62.2]	<0.001
2	Both	1696	Brugge	63.6	[60.5;66.7]	<0.001
3	Both	253	Arlon	66.6	[58.1;75.1]	ns.
4	Both	198	Bastogne	67.0	[57.5;76.5]	ns.
5	Both	649	Ieper	67.0	[61.8;72.2]	<0.05
6	Both	867	Roeselare	67.4	[62.8;71.9]	<0.01
7	Both	1927	Nivelles	67.6	[64.5;70.6]	<0.001
8	Both	1656	Kortrijk	67.7	[64.3;71.0]	<0.001
9	Both	1090	Oostende	68.2	[64.1;72.3]	<0.01
10	Both	541	Tielt	68.5	[62.6;74.4]	ns.
11	Both	1434	Verviers	69.6	[65.9;73.3]	<0.05
12	Both	2800	Leuven	69.8	[67.2;72.4]	<0.01
13	Both	319	Neufchateau	70.1	[62.3;78.0]	ns.
14	Both	513	Eeklo	70.4	[64.2;76.6]	ns.
15	Both	3313	Halle-Vilvoorde	70.5	[68.0;72.9]	<0.01
16	Both	484	Veurne	70.9	[64.4;77.3]	ns.
17	Both	1642	Aalst	71.9	[68.4;75.5]	ns.
18	Both	3107	Gent	72.1	[69.6;74.7]	ns.
19	Both	1617	Namur	72.4	[68.8;75.9]	ns.
20	Both	768	Oudenaarde	72.5	[67.3;77.7]	ns.
21	Both	2236	Turnhout	72.5	[69.4;75.7]	ns.
22	Both	290	Virton	73.0	[64.5;81.6]	ns.
23	Both	2204	Hasselt	73.2	[70.0;76.3]	ns.
24	Both	470	Mouscron	73.3	[66.5;80.0]	ns.
25	Both	5387	Brussels	73.3	[71.4;75.3]	ns.
26	Both	1051	Tongeren	73.6	[69.0;78.2]	ns.
27	Both	337	Diksmuide	74.4	[66.3;82.5]	ns.
28	Both	3630	Liege	76.1	[73.6;78.6]	ns.
29	Both	2104	Mechelen	77.2	[73.8;80.5]	ns.
30	Both	1431	Sint Niklaas	77.6	[73.5;81.7]	ns.
31	Both	640	Dinant	77.7	[71.6;83.8]	ns.
32	Both	425	Waremmes	78.3	[70.7;85.9]	ns.
33	Both	6422	Antwerpen	78.5	[76.6;80.5]	<0.001
34	Both	936	Tournai	79.1	[73.9;84.2]	<0.05
35	Both	1192	Dendermonde	79.2	[74.6;83.8]	<0.05
36	Both	619	Huy	80.8	[74.2;87.3]	<0.05
37	Both	539	Ath	82.3	[75.3;89.4]	<0.05
38	Both	336	Marche-en-Famenne	84.2	[75.0;93.4]	<0.05
39	Both	1149	Soignies	84.4	[79.5;89.4]	<0.001
40	Both	1606	Mons	85.2	[81.0;89.5]	<0.001
41	Both	2677	Charleroi	85.5	[82.2;88.8]	<0.001
42	Both	425	Philippeville	87.2	[78.8;95.7]	<0.01
43	Both	1079	Thuin	91.1	[85.6;96.7]	<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 = 73.9

## 2.9. CHRONIC LIVER DISEASES

Chronic Liver Disease Dis overall Mortality in both genders, Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Ranking of the districts by increasing all age mortality rate of Chronic Liver Diseases, in Both genders, 2010-2017

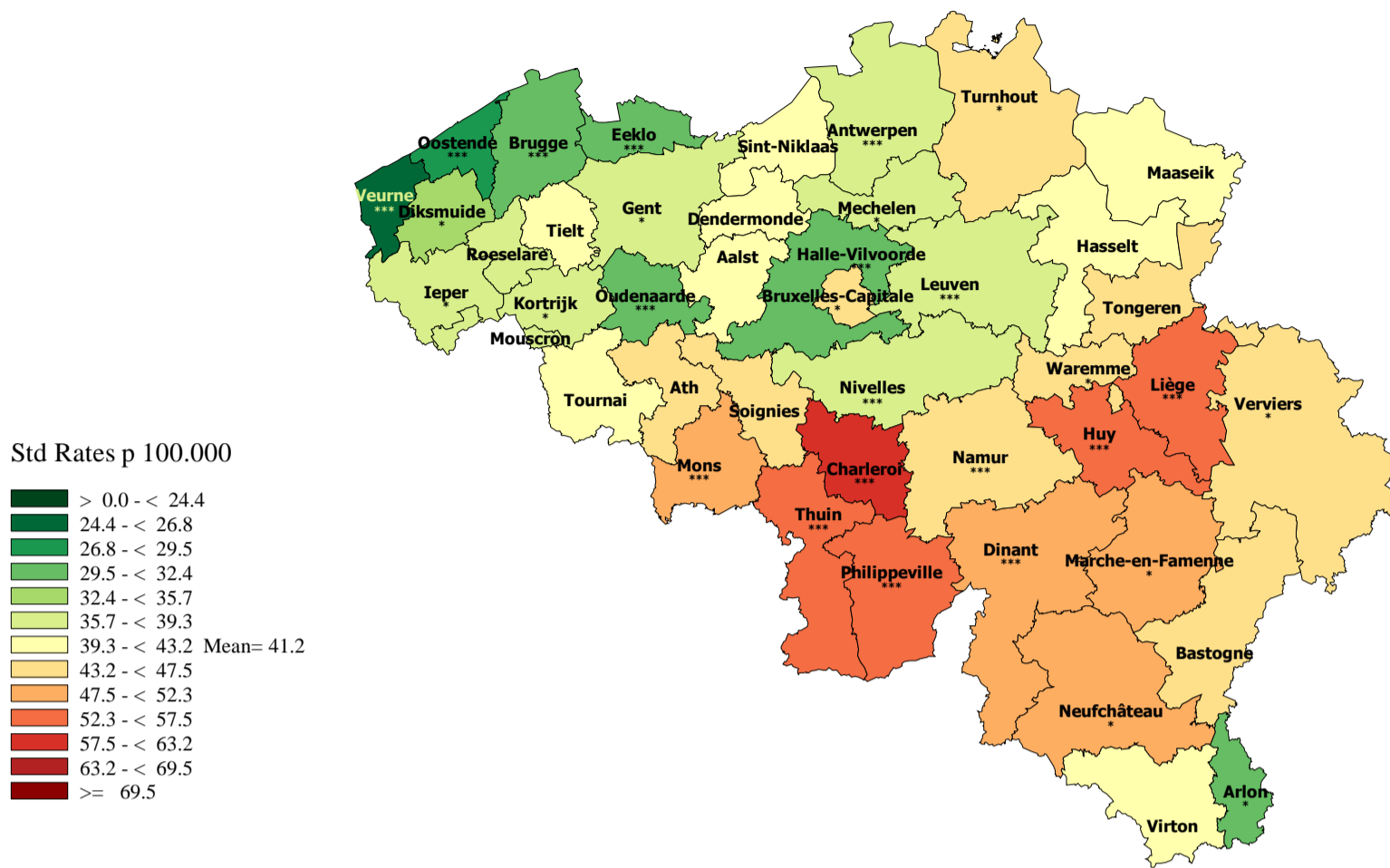
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	92	Maaseik	4.8	[3.8; 5.9]	<0.001
2	Both	177	Turnhout	5.0	[4.2; 5.7]	<0.001
3	Both	87	Tongeren	5.3	[4.2; 6.4]	<0.001
4	Both	214	Hasselt	6.3	[5.4; 7.1]	<0.001
5	Both	131	Sint Niklaas	6.8	[5.7; 8.0]	<0.001
6	Both	162	Verviers	7.5	[6.3; 8.6]	<0.001
7	Both	316	Leuven	8.0	[7.1; 8.9]	<0.001
8	Both	220	Mechelen	8.2	[7.1; 9.3]	<0.001
9	Both	57	Eeklo	8.3	[6.1; 10.4]	<0.01
10	Both	668	Antwerpen	8.5	[7.9; 9.2]	<0.001
11	Both	36	Diksmuide	9.0	[6.1; 12.0]	ns.
12	Both	60	Waremmes	9.9	[7.4; 12.5]	ns.
13	Both	87	Ieper	10.0	[7.9; 12.1]	ns.
14	Both	73	Tielt	10.2	[7.8; 12.5]	ns.
15	Both	488	Halle-Vilvoorde	10.3	[9.3; 11.2]	<0.01
16	Both	421	Gent	10.3	[9.3; 11.3]	<0.05
17	Both	272	Brugge	10.8	[9.5; 12.1]	ns.
18	Both	135	Roeselare	11.3	[9.4; 13.3]	ns.
19	Both	276	Kortrijk	11.9	[10.5; 13.3]	ns.
20	Both	358	Nivelles	11.9	[10.6; 13.1]	ns.
21	Both	190	Dendermonde	12.0	[10.3; 13.7]	ns.
22	Both	40	Bastogne	12.5	[8.6; 16.4]	ns.
23	Both	53	Arlon	12.5	[9.1; 16.0]	ns.
24	Both	600	Liege	12.6	[11.6; 13.6]	ns.
25	Both	76	Veurne	12.7	[9.8; 15.7]	ns.
26	Both	109	Huy	13.3	[10.8; 15.9]	ns.
27	Both	137	Oudenaarde	13.6	[11.3; 15.9]	ns.
28	Both	53	Virton	13.8	[10.0; 17.5]	ns.
29	Both	962	Brussels	14.0	[13.1; 14.9]	<0.001
30	Both	208	Oostende	14.3	[12.3; 16.3]	<0.01
31	Both	333	Namur	14.4	[12.8; 15.9]	<0.001
32	Both	342	Aalst	14.9	[13.3; 16.5]	<0.001
33	Both	72	Neufchateau	15.6	[12.0; 19.2]	<0.05
34	Both	72	Marche-en-Famenne	16.7	[12.8; 20.6]	<0.05
35	Both	156	Dinant	18.2	[15.4; 21.1]	<0.001
36	Both	266	Soignies	18.4	[16.2; 20.6]	<0.001
37	Both	633	Charleroi	19.3	[17.8; 20.8]	<0.001
38	Both	132	Ath	19.8	[16.4; 23.3]	<0.001
39	Both	245	Thuin	20.1	[17.6; 22.6]	<0.001
40	Both	118	Philippeville	22.0	[18.0; 26.0]	<0.001
41	Both	261	Tournai	22.7	[19.9; 25.5]	<0.001
42	Both	132	Mouscron	23.5	[19.4; 27.5]	<0.001
43	Both	475	Mons	24.0	[21.8; 26.1]	<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 = 11.6



2.10. CHRONIC OBSTRUCTIVE PULMONARY DISEASES

Overall Chronic Obstr Pulm Dis Mortality in both genders (all-ages), Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



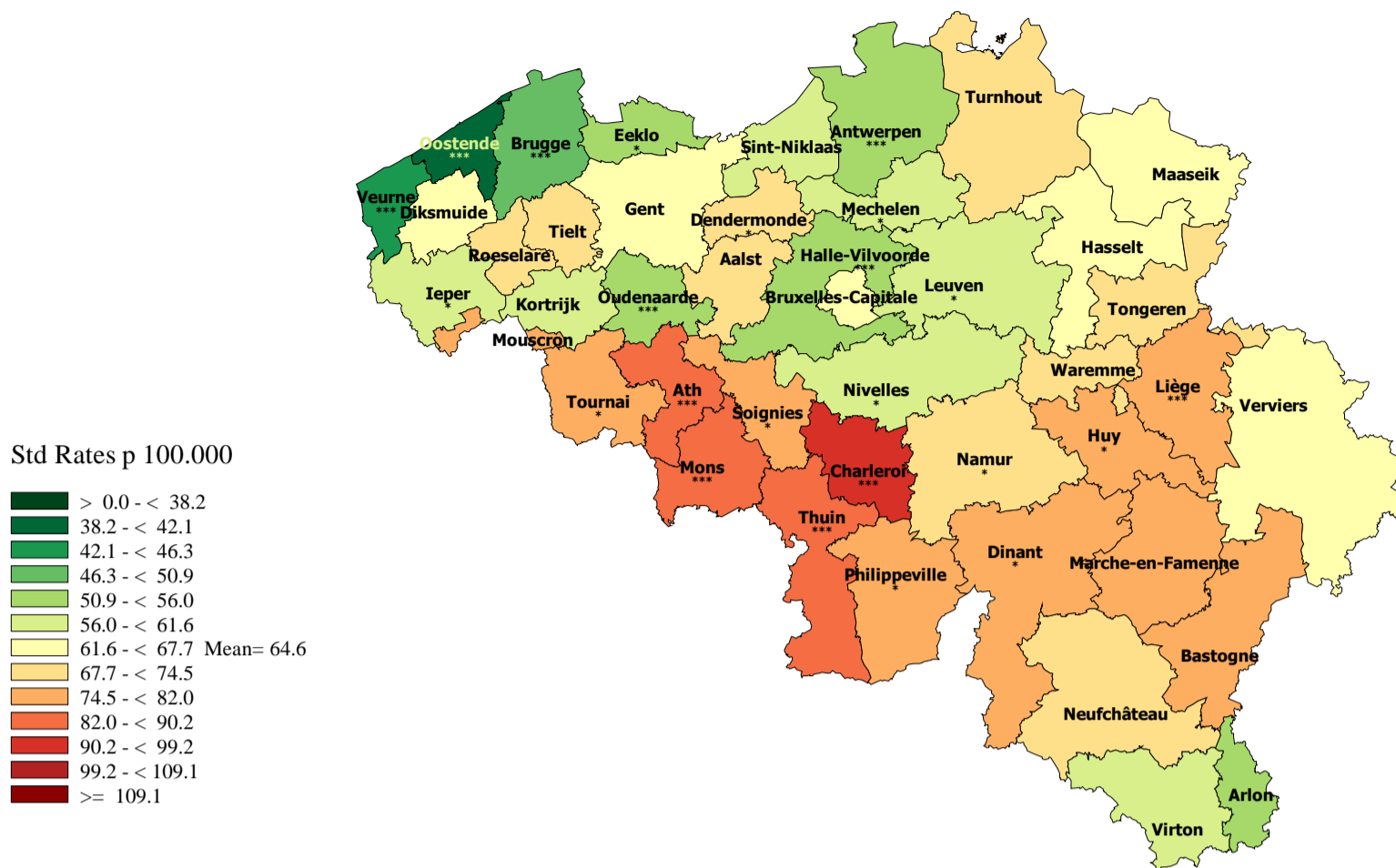
Change from one colour level to another corresponds to a 10% relative change  
Range: 25 - 59 per 100.000

Ranking of the districts by increasing all age mortality rate of COPD, in Both genders, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	177	Veurne	25.3	[21.5;29.0]	<0.001
2	Both	463	Oostende	29.0	[26.4;31.7]	<0.001
3	Both	316	Oudenaarde	29.8	[26.5;33.1]	<0.001
4	Both	818	Brugge	30.8	[28.7;32.9]	<0.001
5	Both	119	Arlon	32.1	[26.2;38.0]	<0.01
6	Both	1522	Halle-Vilvoorde	32.1	[30.5;33.7]	<0.001
7	Both	236	Eeklo	32.4	[28.2;36.6]	<0.001
8	Both	151	Diksmuide	33.6	[28.1;39.0]	<0.01
9	Both	1443	Leuven	36.4	[34.5;38.3]	<0.001
10	Both	226	Mouscron	36.5	[31.7;41.4]	ns.
11	Both	2994	Antwerpen	36.9	[35.6;38.2]	<0.001
12	Both	1060	Nivelles	37.1	[34.8;39.3]	<0.001
13	Both	355	Ieper	37.2	[33.2;41.1]	<0.05
14	Both	1005	Mechelen	37.3	[35.0;39.7]	<0.01
15	Both	925	Kortrijk	37.7	[35.3;40.2]	<0.01
16	Both	1618	Gent	38.2	[36.3;40.0]	<0.01
17	Both	494	Roeselare	38.8	[35.3;42.2]	ns.
18	Both	151	Virton	39.4	[33.0;45.8]	ns.
19	Both	304	Tielt	39.5	[35.0;44.0]	ns.
20	Both	913	Aalst	40.3	[37.6;42.9]	ns.
21	Both	757	Sint Niklaas	40.6	[37.7;43.6]	ns.
22	Both	634	Dendermonde	41.5	[38.2;44.8]	ns.
23	Both	484	Tournai	41.7	[37.9;45.5]	ns.
24	Both	1306	Hasselt	41.8	[39.5;44.2]	ns.
25	Both	711	Maaseik	43.1	[39.8;46.3]	ns.
26	Both	659	Tongeren	43.3	[39.9;46.7]	ns.
27	Both	1422	Turnhout	43.5	[41.2;45.9]	<0.05
28	Both	3041	Brussels	43.7	[42.1;45.3]	<0.01
29	Both	599	Soignies	44.1	[40.5;47.7]	ns.
30	Both	279	Ath	44.3	[39.0;49.5]	ns.
31	Both	966	Verviers	45.7	[42.8;48.6]	<0.01
32	Both	1037	Namur	46.4	[43.6;49.3]	<0.001
33	Both	143	Bastogne	47.0	[39.2;54.8]	ns.
34	Both	269	Waremme	47.4	[41.6;53.2]	<0.05
35	Both	909	Mons	48.3	[45.1;51.5]	<0.001
36	Both	225	Neufchateau	50.1	[43.4;56.8]	<0.01
37	Both	202	Marche-en-Famenne	50.6	[43.5;57.7]	<0.01
38	Both	420	Dinant	51.0	[46.0;55.9]	<0.001
39	Both	616	Thuin	52.8	[48.6;57.0]	<0.001
40	Both	2531	Liege	53.0	[50.9;55.1]	<0.001
41	Both	268	Philippeville	53.7	[47.2;60.2]	<0.001
42	Both	413	Huy	54.5	[49.1;59.8]	<0.001
43	Both	1853	Charleroi	58.9	[56.2;61.7]	<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 = 41.2

**Overall Chronic Obstr Pulm Dis Mortality in Men (all-ages), Belgium 2010-2017**  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



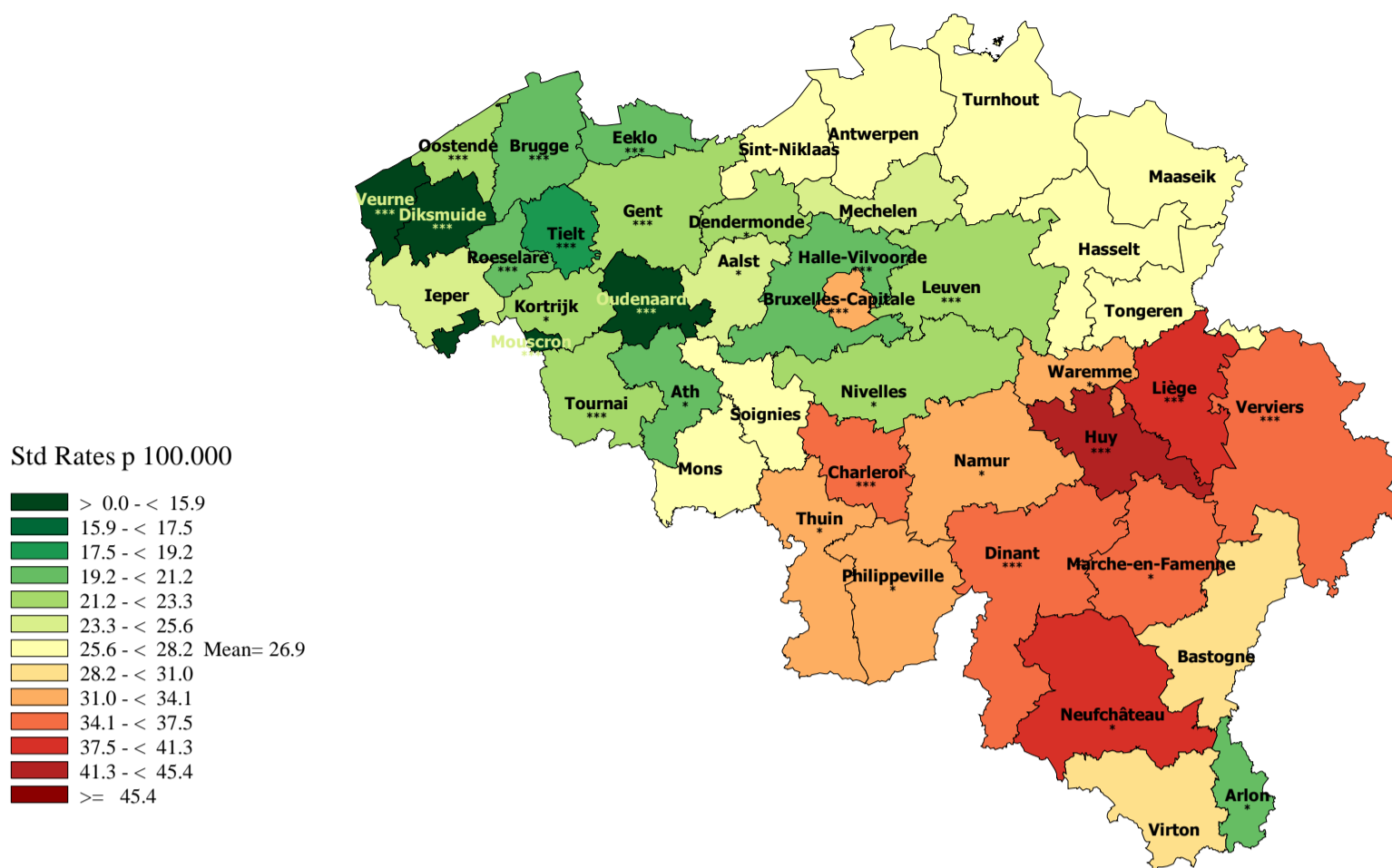
Change from one colour level to another corresponds to a 10% relative change  
Range: 41 - 98 per 100.000

**Ranking of the districts by increasing all age mortality rate of COPD, in Men, 2010-2017**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	M	259	Oostende	40.8	[35.6;46.1]	<0.001
2	M	122	Veurne	43.9	[35.5;52.2]	<0.001
3	M	511	Brugge	48.9	[44.4;53.4]	<0.001
4	M	154	Eeklo	51.0	[42.7;59.4]	<0.01
5	M	969	Halle-Vilvoorde	51.5	[48.1;54.9]	<0.001
6	M	1662	Antwerpen	51.5	[48.9;54.1]	<0.001
7	M	205	Oudenaarde	52.2	[44.6;59.7]	<0.01
8	M	73	Arlon	55.4	[41.5;69.4]	ns.
9	M	212	Ieper	56.3	[48.5;64.2]	<0.05
10	M	606	Mechelen	56.8	[52.1;61.6]	<0.01
11	M	87	Virton	58.9	[45.7;72.1]	ns.
12	M	655	Nivelles	59.0	[54.3;63.7]	<0.05
13	M	950	Leuven	59.3	[55.3;63.3]	<0.05
14	M	577	Kortrijk	60.9	[55.6;66.1]	ns.
15	M	454	Sint Niklaas	61.3	[55.2;67.3]	ns.
16	M	108	Diksmuide	63.9	[50.9;76.8]	ns.
17	M	1050	Gent	64.0	[59.9;68.0]	ns.
18	M	532	Verviers	64.1	[58.2;70.0]	ns.
19	M	1637	Brussels	65.2	[62.0;68.4]	ns.
20	M	472	Maaseik	65.7	[59.3;72.2]	ns.
21	M	844	Hasselt	67.6	[62.5;72.6]	ns.
22	M	921	Turnhout	68.0	[63.2;72.9]	ns.
23	M	342	Roeselare	68.2	[60.5;75.9]	ns.
24	M	599	Aalst	68.8	[62.9;74.7]	ns.
25	M	431	Tongeren	69.1	[62.0;76.3]	ns.
26	M	122	Neufchateau	70.5	[57.3;83.6]	ns.
27	M	154	Waremme	71.3	[59.0;83.6]	ns.
28	M	608	Namur	72.4	[66.3;78.4]	<0.05
29	M	424	Dendermonde	73.1	[65.4;80.9]	<0.05
30	M	214	Tielt	73.1	[62.7;83.6]	ns.
31	M	89	Bastogne	74.6	[58.1;91.0]	ns.
32	M	1378	Liege	75.3	[71.1;79.5]	<0.001
33	M	322	Tournai	76.1	[67.4;84.8]	<0.05
34	M	383	Soignies	76.2	[68.0;84.4]	<0.01
35	M	224	Huy	76.6	[65.8;87.5]	<0.05
36	M	163	Mouscron	76.8	[64.3;89.4]	ns.
37	M	246	Dinant	77.5	[67.1;87.8]	<0.05
38	M	118	Marche-en-Famenne	77.6	[62.5;92.8]	ns.
39	M	169	Philippeville	81.6	[68.9;94.4]	<0.01
40	M	581	Mons	86.9	[79.4;94.4]	<0.001
41	M	199	Ath	88.0	[75.0; 101]	<0.001
42	M	393	Thuin	89.1	[79.9;98.4]	<0.001
43	M	1140	Charleroi	98.1	[92.1; 104]	<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 = 64.6

**Overall Chronic Obstr Pulm Dis Mortality in Women (all-ages), Belgium 2010-2017**  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 13 - 41 per 100.000

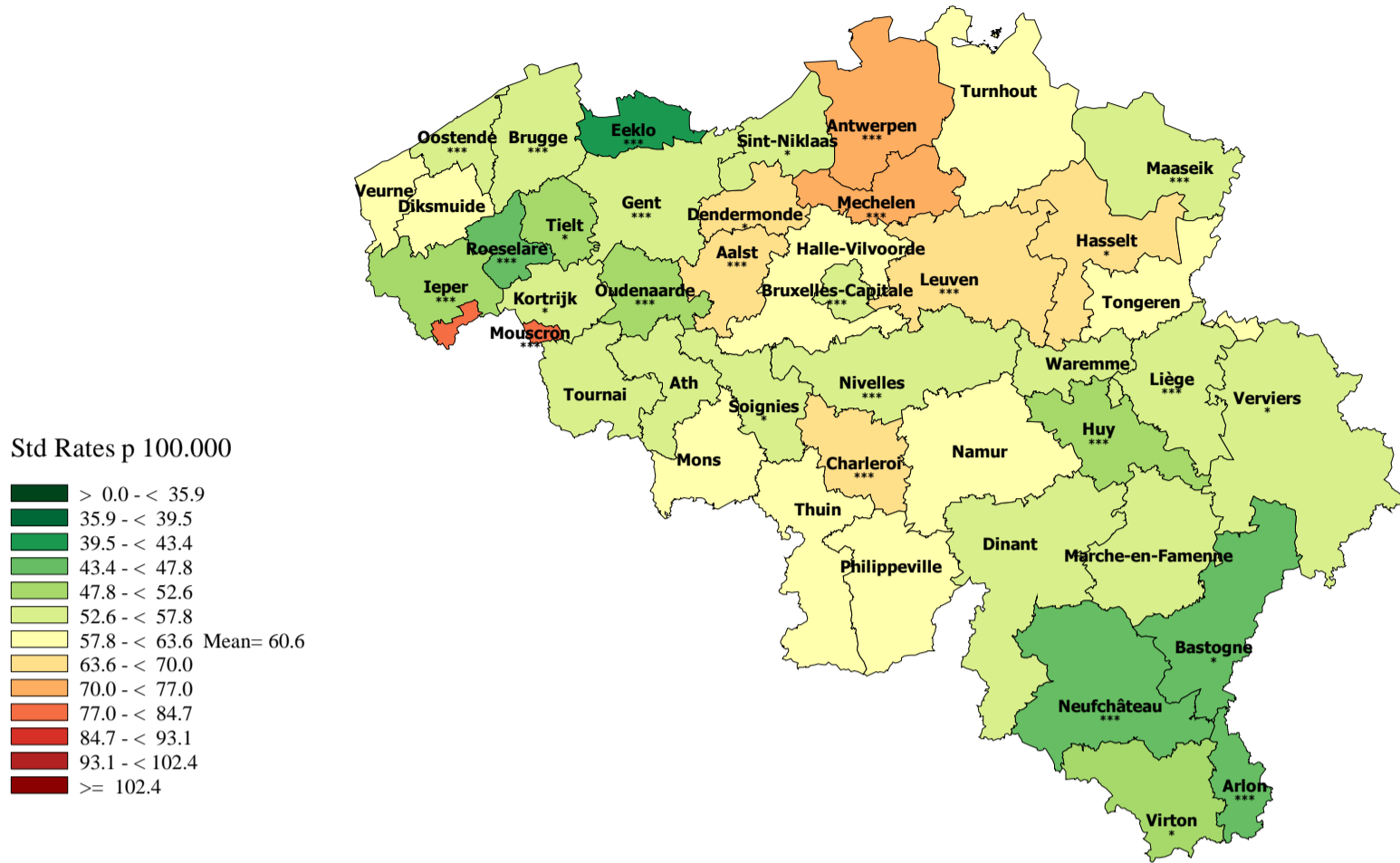
**Ranking of the districts by increasing all age mortality rate of COPD, in Women, 2010-2017**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	55	Veurne	13.4	[ 9.8;17.1]	<0.001
2	F	43	Diksmuide	14.9	[10.4;19.4]	<0.001
3	F	63	Mouscron	15.7	[11.6;19.7]	<0.001
4	F	111	Oudenaarde	15.9	[12.9;18.9]	<0.001
5	F	90	Tielt	18.2	[14.4;22.1]	<0.001
6	F	307	Brugge	19.4	[17.2;21.6]	<0.001
7	F	553	Halle-Vilvoorde	19.4	[17.8;21.1]	<0.001
8	F	152	Roeselare	19.5	[16.4;22.7]	<0.001
9	F	82	Eeklo	19.6	[15.3;23.9]	<0.01
10	F	46	Arlon	20.4	[14.4;26.5]	<0.05
11	F	80	Ath	20.5	[15.9;25.1]	<0.01
12	F	204	Oostende	21.2	[18.2;24.2]	<0.001
13	F	162	Tournai	21.2	[17.9;24.6]	<0.01
14	F	493	Leuven	21.3	[19.4;23.3]	<0.001
15	F	568	Gent	22.1	[20.2;23.9]	<0.001
16	F	210	Dendermonde	22.7	[19.6;25.9]	<0.05
17	F	348	Kortrijk	23.3	[20.8;25.8]	<0.01
18	F	405	Nivelles	23.3	[21.0;25.6]	<0.01
19	F	314	Aalst	23.3	[20.7;26.0]	<0.01
20	F	143	Ieper	24.1	[20.1;28.2]	ns.
21	F	399	Mechelen	25.1	[22.6;27.6]	ns.
22	F	216	Soignies	25.8	[22.3;29.3]	ns.
23	F	462	Hasselt	25.8	[23.4;28.2]	ns.
24	F	228	Tongeren	26.6	[23.1;30.1]	ns.
25	F	239	Maaseik	26.8	[23.3;30.2]	ns.
26	F	501	Turnhout	27.5	[25.1;29.9]	ns.
27	F	303	Sint Niklaas	27.6	[24.4;30.7]	ns.
28	F	328	Mons	27.6	[24.6;30.7]	ns.
29	F	1332	Antwerpen	27.7	[26.2;29.2]	ns.
30	F	64	Virton	28.9	[21.6;36.2]	ns.
31	F	54	Bastogne	29.6	[21.6;37.6]	ns.
32	F	223	Thuin	31.3	[27.1;35.5]	<0.05
33	F	1404	Brussels	31.5	[29.8;33.3]	<0.001
34	F	429	Namur	31.9	[28.8;35.0]	<0.01
35	F	115	Waremmes	33.6	[27.4;39.9]	<0.05
36	F	99	Philippeville	34.1	[27.3;40.9]	<0.05
37	F	434	Verviers	34.9	[31.6;38.3]	<0.001
38	F	174	Dinant	35.8	[30.4;41.3]	<0.01
39	F	84	Marche-en-Famenne	36.3	[28.4;44.2]	<0.05
40	F	713	Charleroi	37.5	[34.6;40.3]	<0.001
41	F	103	Neufchateau	38.6	[31.0;46.3]	<0.01
42	F	1153	Liege	40.5	[38.1;42.9]	<0.001
43	F	189	Huy	41.3	[35.3;47.3]	<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 = 26.9

2.11. DEMENTIA & ALZHEIMER

Overall Dementia & Alzheimer Mortality in both genders (all-ages), Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 42 - 79 per 100.000

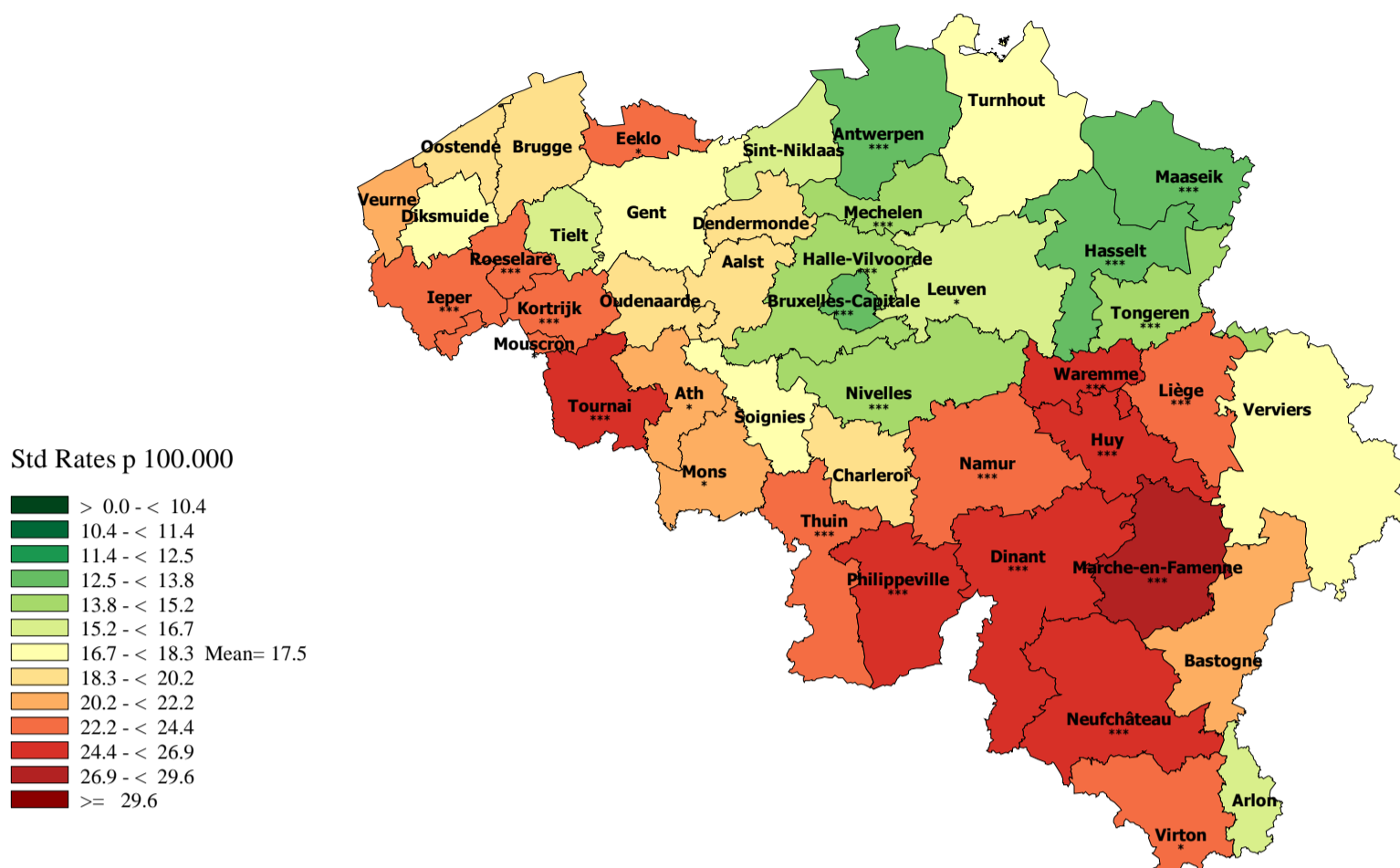
Ranking of the districts by increasing all age mortality rate of Dementia & Alzheimer, in Both genders, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	310	Eeklo	42.1	[37.3;46.8]	<0.001
2	Both	210	Neufchateau	43.7	[37.7;49.7]	<0.001
3	Both	169	Arlon	43.7	[36.9;50.6]	<0.001
4	Both	610	Roeselare	47.3	[43.5;51.2]	<0.001
5	Both	140	Bastogne	47.7	[39.5;55.8]	<0.01
6	Both	476	Ieper	47.8	[43.5;52.2]	<0.001
7	Both	395	Huy	50.6	[45.5;55.7]	<0.001
8	Both	562	Oudenaarde	51.5	[47.2;55.8]	<0.001
9	Both	209	Virton	51.7	[44.5;58.8]	<0.05
10	Both	417	Tielt	52.3	[47.1;57.4]	<0.01
11	Both	1428	Brugge	53.4	[50.6;56.2]	<0.001
12	Both	795	Maaseik	53.9	[49.9;57.9]	<0.001
13	Both	864	Oostende	54.1	[50.4;57.7]	<0.001
14	Both	2354	Gent	54.4	[52.1;56.6]	<0.001
15	Both	222	Marche-en-Famenne	54.5	[47.1;61.8]	ns.
16	Both	2681	Liege	55.0	[52.8;57.1]	<0.001
17	Both	1584	Nivelles	55.4	[52.7;58.2]	<0.001
18	Both	462	Dinant	55.7	[50.5;60.9]	ns.
19	Both	309	Waremmes	56.0	[49.6;62.4]	ns.
20	Both	766	Soignies	56.0	[52.0;60.0]	<0.05
21	Both	1379	Kortrijk	56.0	[53.0;59.0]	<0.01
22	Both	685	Tournai	56.4	[52.1;60.7]	ns.
23	Both	370	Ath	56.6	[50.8;62.5]	ns.
24	Both	4338	Brussels	57.0	[55.3;58.7]	<0.001
25	Both	1018	Sint Niklaas	57.0	[53.4;60.6]	<0.05
26	Both	1173	Verviers	57.1	[53.7;60.4]	<0.05
27	Both	1118	Mons	58.8	[55.3;62.4]	ns.
28	Both	1827	Turnhout	60.1	[57.2;62.9]	ns.
29	Both	283	Diksmuide	61.1	[53.8;68.3]	ns.
30	Both	732	Thuin	61.1	[56.6;65.6]	ns.
31	Both	426	Veurne	61.4	[55.5;67.3]	ns.
32	Both	294	Philippeville	62.1	[54.8;69.3]	ns.
33	Both	1405	Namur	62.6	[59.3;65.9]	ns.
34	Both	2969	Halle-Vilvoorde	62.8	[60.5;65.1]	ns.
35	Both	886	Tongeren	63.4	[59.1;67.8]	ns.
36	Both	1909	Hasselt	65.5	[62.5;68.6]	<0.01
37	Both	2061	Charleroi	65.8	[62.9;68.7]	<0.001
38	Both	976	Dendermonde	66.6	[62.3;70.9]	<0.01
39	Both	1540	Aalst	67.2	[63.8;70.7]	<0.001
40	Both	2704	Leuven	67.3	[64.7;69.9]	<0.001
41	Both	1985	Mechelen	73.5	[70.2;76.8]	<0.001
42	Both	6242	Antwerpen	76.0	[74.1;78.0]	<0.001
43	Both	524	Mouscron	79.5	[72.6;86.4]	<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 = 60.6

## Overall Suicide Mortality in both genders (all-ages), Belgium 2010-2017

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



Change from one colour level to another corresponds to a 10% relative change  
Range: 13 - 27 per 100.000

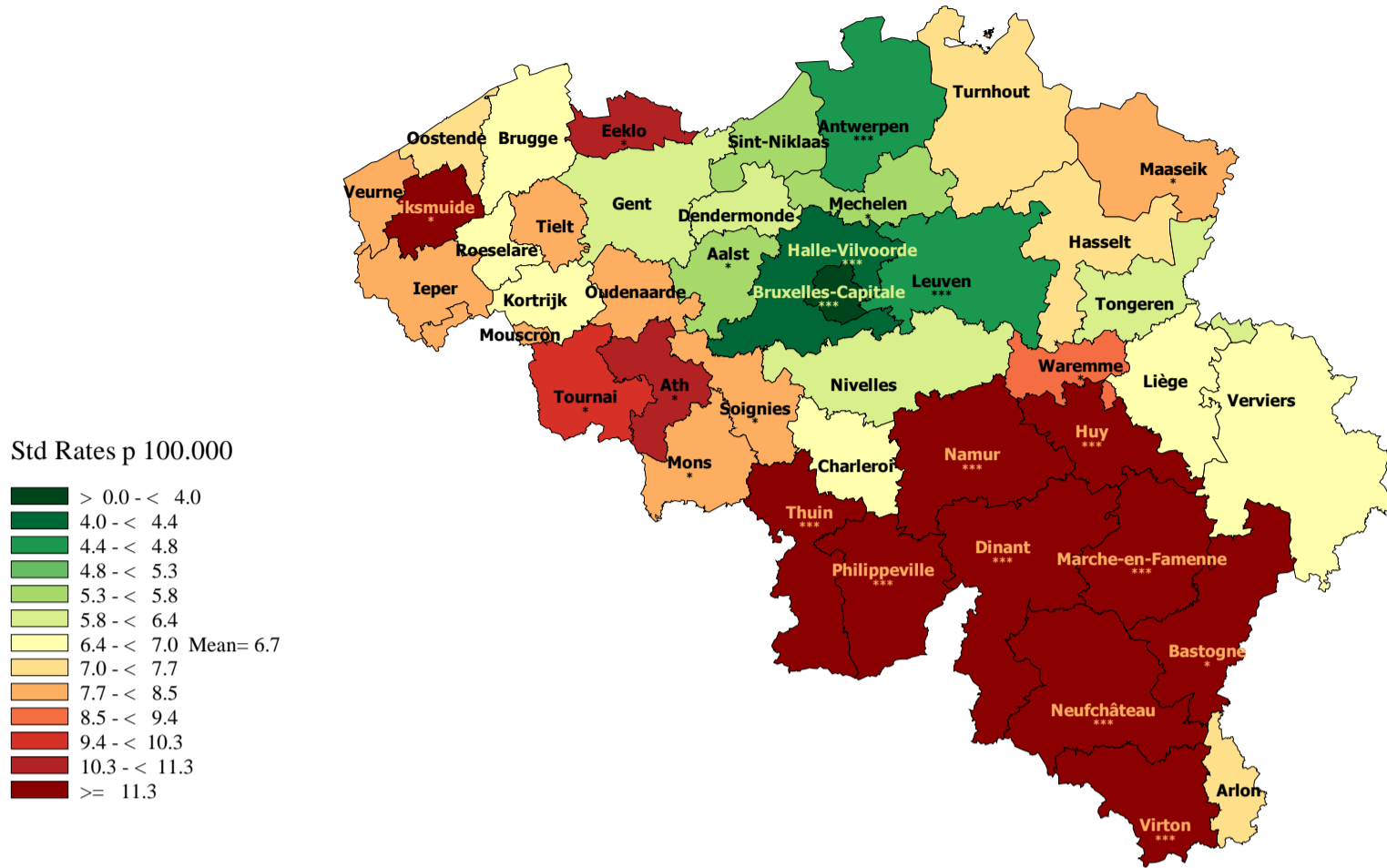
### Ranking of the districts by increasing all age mortality rate of Suicide, in Both genders, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	1047	Brussels	12.8	[12.0;13.6]	<0.001
2	Both	253	Maaseik	13.1	[11.4;14.7]	<0.001
3	Both	444	Hasselt	13.2	[12.0;14.4]	<0.001
4	Both	1093	Antwerpen	13.6	[12.8;14.4]	<0.001
5	Both	237	Tongeren	14.3	[12.5;16.2]	<0.001
6	Both	385	Mechelen	14.4	[13.0;15.9]	<0.001
7	Both	705	Halle-Vilvoorde	14.5	[13.4;15.6]	<0.001
8	Both	459	Nivelles	15.0	[13.6;16.4]	<0.001
9	Both	619	Leuven	15.5	[14.3;16.7]	<0.01
10	Both	117	Tielt	15.8	[12.9;18.7]	ns.
11	Both	74	Arlon	16.0	[12.3;19.6]	ns.
12	Both	313	Sint Niklaas	16.3	[14.5;18.1]	ns.
13	Both	246	Soignies	16.8	[14.6;18.9]	ns.
14	Both	602	Turnhout	16.8	[15.4;18.1]	ns.
15	Both	397	Verviers	17.9	[16.1;19.7]	ns.
16	Both	779	Gent	18.0	[16.8;19.3]	ns.
17	Both	75	Diksmuide	18.3	[14.1;22.5]	ns.
18	Both	296	Dendermonde	18.7	[16.6;20.9]	ns.
19	Both	624	Charleroi	18.7	[17.2;20.2]	ns.
20	Both	430	Aalst	18.7	[17.0;20.5]	ns.
21	Both	244	Oostende	18.9	[16.5;21.3]	ns.
22	Both	437	Brugge	19.0	[17.2;20.8]	ns.
23	Both	192	Oudenaarde	19.9	[17.1;22.7]	ns.
24	Both	73	Bastogne	20.2	[15.5;24.9]	ns.
25	Both	406	Mons	20.3	[18.3;22.3]	<0.01
26	Both	107	Veurne	21.1	[16.9;25.3]	ns.
27	Both	149	Ath	22.1	[18.5;25.6]	<0.05
28	Both	537	Namur	22.4	[20.5;24.3]	<0.001
29	Both	520	Kortrijk	22.9	[20.9;24.8]	<0.001
30	Both	157	Eeklo	23.0	[19.4;26.7]	<0.01
31	Both	276	Roeselare	23.4	[20.6;26.1]	<0.001
32	Both	1134	Liege	23.4	[22.1;24.8]	<0.001
33	Both	279	Thuin	23.6	[20.8;26.3]	<0.001
34	Both	137	Mouscron	23.7	[19.7;27.6]	<0.01
35	Both	202	Ieper	23.7	[20.4;26.9]	<0.001
36	Both	98	Virton	23.9	[19.1;28.7]	<0.01
37	Both	208	Dinant	24.4	[21.1;27.8]	<0.001
38	Both	153	Waremmes	24.9	[20.9;28.8]	<0.001
39	Both	130	Philippeville	24.9	[20.6;29.2]	<0.001
40	Both	220	Huy	25.6	[22.2;29.0]	<0.001
41	Both	122	Neufchateau	25.6	[21.0;30.2]	<0.001
42	Both	312	Tournai	26.6	[23.6;29.6]	<0.001
43	Both	119	Marche-en-Famenne	27.2	[22.3;32.2]	<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 = 17.5

2.13. TRANSPORT ACCIDENT

Overall Transport Acc Mortality in both genders (all-ages), Belgium 2010-2017  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Change from one colour level to another corresponds to a 10% relative change  
Range: 3 - 17 per 100.000

Ranking of the districts by increasing all age mortality rate of Transport Accident, in Both genders, 2010-2017

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	300	Brussels	3.5	[3.1; 3.9]	<0.001
2	Both	209	Halle-Vilvoorde	4.3	[3.7; 4.9]	<0.001
3	Both	366	Antwerpen	4.5	[4.0; 4.9]	<0.001
4	Both	182	Leuven	4.6	[3.9; 5.3]	<0.001
5	Both	145	Mechelen	5.4	[4.5; 6.3]	<0.01
6	Both	120	Aalst	5.4	[4.4; 6.4]	<0.05
7	Both	111	Sint Niklaas	5.7	[4.7; 6.8]	ns.
8	Both	94	Dendermonde	6.0	[4.8; 7.2]	ns.
9	Both	265	Gent	6.1	[5.4; 6.8]	ns.
10	Both	97	Tongeren	6.2	[4.9; 7.4]	ns.
11	Both	189	Nivelles	6.2	[5.3; 7.1]	ns.
12	Both	78	Roeselare	6.5	[5.0; 7.9]	ns.
13	Both	149	Verviers	6.7	[5.6; 7.8]	ns.
14	Both	156	Kortrijk	6.8	[5.7; 7.9]	ns.
15	Both	336	Liege	6.8	[6.1; 7.5]	ns.
16	Both	235	Charleroi	7.0	[6.1; 7.8]	ns.
17	Both	158	Brugge	7.0	[5.9; 8.1]	ns.
18	Both	34	Arlon	7.2	[4.8; 9.7]	ns.
19	Both	247	Hasselt	7.4	[6.5; 8.3]	ns.
20	Both	269	Turnhout	7.6	[6.7; 8.5]	ns.
21	Both	94	Oostende	7.6	[6.1; 9.2]	ns.
22	Both	40	Veurne	7.8	[5.2; 10.3]	ns.
23	Both	46	Mouscron	7.8	[5.6; 10.1]	ns.
24	Both	77	Oudenaarde	7.9	[6.2; 9.7]	ns.
25	Both	165	Mons	8.0	[6.8; 9.3]	<0.05
26	Both	153	Maaseik	8.3	[6.9; 9.6]	<0.05
27	Both	123	Soignies	8.3	[6.8; 9.8]	<0.05
28	Both	61	Tielt	8.4	[6.3; 10.5]	ns.
29	Both	72	Ieper	8.4	[6.5; 10.4]	ns.
30	Both	57	Waremmes	9.2	[6.8; 11.6]	<0.05
31	Both	111	Tournai	9.6	[7.8; 11.4]	<0.01
32	Both	71	Ath	10.7	[8.2; 13.2]	<0.01
33	Both	71	Eeklo	10.8	[8.3; 13.3]	<0.01
34	Both	47	Diksmuide	11.7	[8.3; 15.1]	<0.01
35	Both	293	Namur	12.0	[10.6; 13.4]	<0.001
36	Both	46	Bastogne	12.3	[8.7; 15.9]	<0.01
37	Both	109	Huy	12.6	[10.2; 15.0]	<0.001
38	Both	56	Marche-en-Famenne	12.8	[9.4; 16.2]	<0.001
39	Both	157	Thuin	13.2	[11.2; 15.3]	<0.001
40	Both	113	Dinant	13.3	[10.8; 15.7]	<0.001
41	Both	57	Virton	13.3	[9.9; 16.8]	<0.001
42	Both	85	Philippeville	16.3	[12.8; 19.8]	<0.001
43	Both	83	Neufchâteau	16.9	[13.2; 20.6]	<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 = 6.7