

# **ATLAS OF CAUSE-SPECIFIC PREMATURE MORTALITY (0- 74 YEARS) BY DISTRICT IN BELGIUM**

**2003-2009**

**Sciensano**

Epidemiology and public health  
Lifestyle and chronic diseases

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*This atlas about premature 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 CONTAINS?

This atlas presents maps and data tables of the cause-specific premature mortality rates for the 2003-2009 period.

Premature mortality refers stricto sensu to deaths occurring too early i.e. at any age lower than the life expectancy, defined here as below 75 years old. Since a great part of premature mortality is avoidable by the means of public health actions, reducing premature mortality is a key public health objective. More than all-age mortality, premature mortality reflects the complex interplay of factors interacting with poor health and death. Between-district disparity in premature mortality crucially highlights the room for improvement in given areas of Belgium.

## 1.2. METHODS

### Data

The premature 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.	Colorectal cancer	C18-C20
2.3.	Lung cancer	C33-C34
2.4.	Head, neck and oesophageal cancer	C00-C14 ,C30-C32, C15
2.5.	Ischemic heart disease	I20- I25
2.6.	Diabetes	E10-E14
2.7.	Cerebrovascular diseases and arterial hypertension	I10-I13, I60-I69
2.8.	Chronic liver diseases	K70, K73, K74
2.9.	Chronic obstructive pulmonary diseases	J40-J44
2.10.	Suicide	X60-X84
2.11.	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 premature mortality (2003-2009)

Ischemic Heart Disease (IHD) is one of the main causes of premature death. The analysis by district shows a difference, with generally lower rates in Flanders than in Wallonia, Brussels having an intermediate position.

During the period 2003-2009, the average IHD premature mortality rate was 40.2 per 100,000. The average range (38.3-42.2) is represented in yellow, and can be observed in Tongeren, Dendermonde, Oostende, Sint-Niklaas, leper, Dinant and Virton. During this period, the minimum rate was 32.9, observed in Nivelles, and the maximum was 57.8 per 100,000, observed in Charleroi.

Higher rates are observed in the province of Hainaut with, for instance, the rate in Mons and Philippeville laying in the 51.0 to 56.1 per 100,000 range, represented by a red-brown color. Lower rates were observed in Gent, Nivelles, Mouscron, Halle-Vilvoorde, Oudenaarde, and Eeklo, with rates situated in the range going from 31.7 to 34.8 per 100,000 and displayed in green.

### 1.4. GENERAL OBSERVATIONS

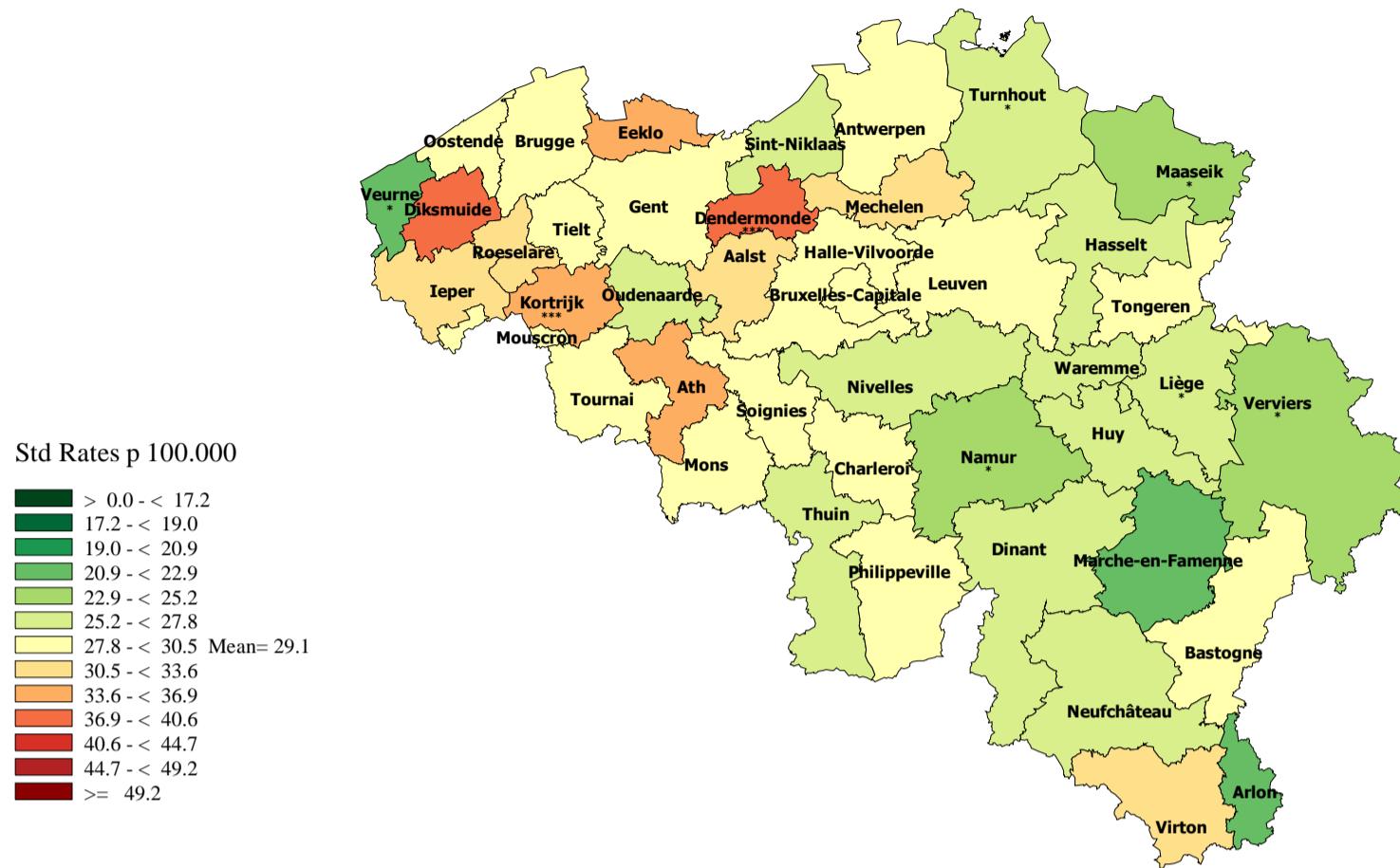
For most causes of death, premature mortality rates are much higher in men than in women. They are usually also lower in Flanders than in Wallonia, with intermediate rates in Brussels (North-South gradient). However, the rates are not homogenous within regions, and some districts can experience mortality 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 premature mortality maps

### 2.1. BREAST CANCER

Premature Breast Ca Mortality in Women (0-74 yr), 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: 22 - 39 per 100.000

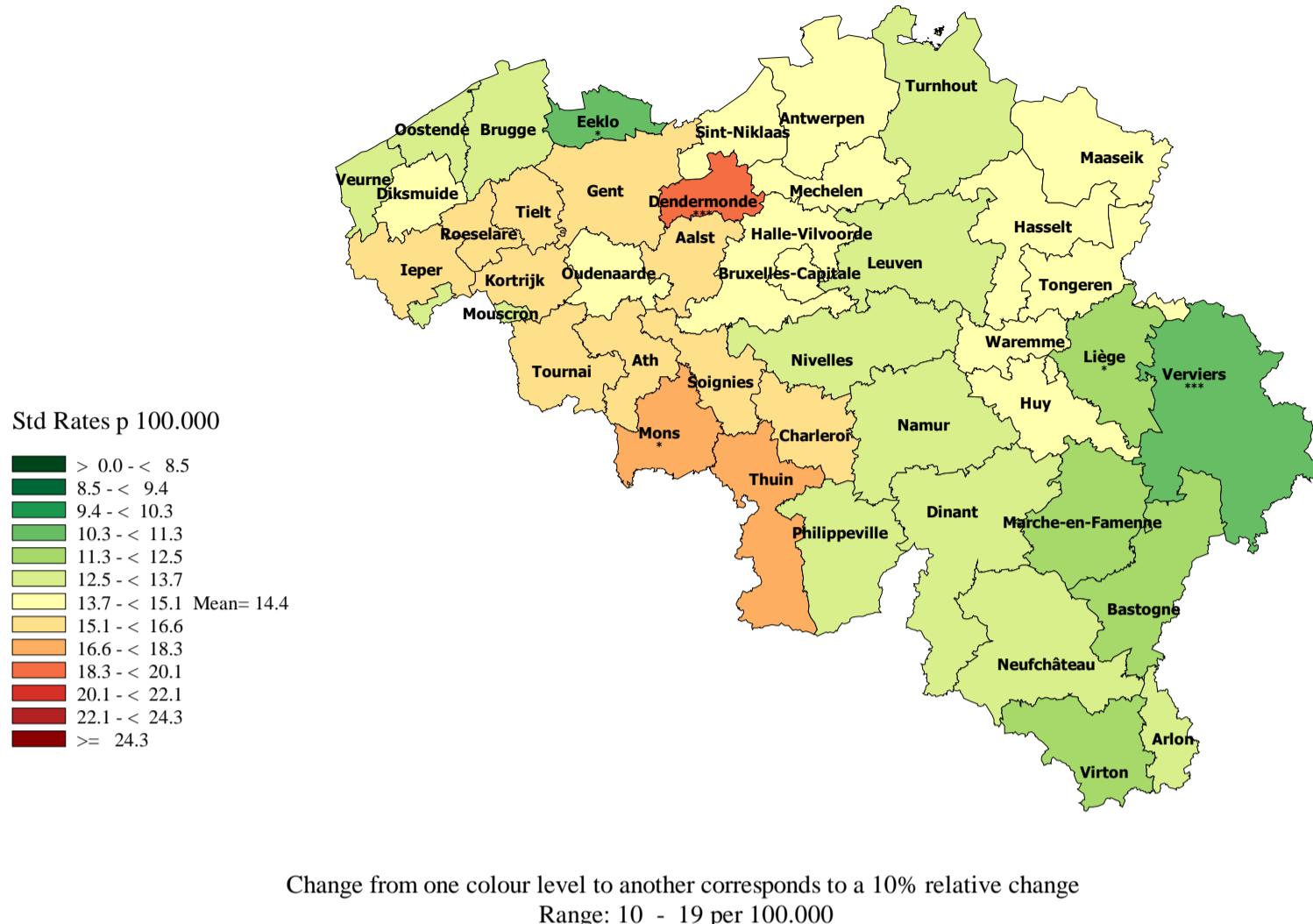
**Ranking of the districts by increasing premature mortality rate of Breast Cancer, in Women, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	33	Marche-en-Famenne	21.7	[14.3;29.1]	ns.
2	F	50	Veurne	22.2	[16.0;28.4]	<0.05
3	F	33	Arlon	22.4	[14.7;30.1]	ns.
4	F	193	Verviers	24.1	[20.7;27.5]	<0.01
5	F	165	Maaseik	24.3	[20.6;28.0]	<0.05
6	F	211	Namur	24.8	[21.4;28.2]	<0.05
7	F	78	Dinant	25.4	[19.8;31.0]	ns.
8	F	329	Turnhout	25.6	[22.8;28.4]	<0.05
9	F	118	Thuin	25.7	[21.1;30.4]	ns.
10	F	93	Oudenaarde	26.0	[20.7;31.3]	ns.
11	F	78	Huy	26.1	[20.2;31.9]	ns.
12	F	487	Liege	26.5	[24.1;28.8]	<0.05
13	F	60	Waregem	27.1	[20.2;34.0]	ns.
14	F	44	Neufchateau	27.1	[19.1;35.1]	ns.
15	F	300	Nivelles	27.4	[24.2;30.5]	ns.
16	F	335	Hasselt	27.6	[24.6;30.5]	ns.
17	F	195	Sint Niklaas	27.7	[23.8;31.6]	ns.
18	F	216	Mons	27.9	[24.2;31.7]	ns.
19	F	418	Leuven	29.0	[26.2;31.8]	ns.
20	F	34	Bastogne	29.0	[19.2;38.8]	ns.
21	F	152	Oostende	29.2	[24.5;33.9]	ns.
22	F	57	Philippeville	29.5	[21.8;37.2]	ns.
23	F	125	Tournai	29.6	[24.4;34.8]	ns.
24	F	156	Soignies	29.7	[25.0;34.4]	ns.
25	F	536	Halle-Vilvoorde	29.9	[27.4;32.4]	ns.
26	F	458	Gent	29.9	[27.2;32.7]	ns.
27	F	872	Antwerpen	30.0	[28.0;31.9]	ns.
28	F	385	Charleroi	30.1	[27.1;33.1]	ns.
29	F	278	Brugge	30.1	[26.5;33.6]	ns.
30	F	64	Mouscron	30.1	[22.7;37.5]	ns.
31	F	79	Tielt	30.3	[23.6;36.9]	ns.
32	F	183	Tongeren	30.3	[25.9;34.7]	ns.
33	F	822	Brussels	30.3	[28.3;32.4]	ns.
34	F	301	Mechelen	31.1	[27.6;34.6]	ns.
35	F	41	Virton	31.3	[21.6;40.9]	ns.
36	F	99	Ieper	31.8	[25.5;38.0]	ns.
37	F	272	Aalst	31.9	[28.1;35.7]	ns.
38	F	147	Roeselare	33.2	[27.9;38.6]	ns.
39	F	82	Ath	33.7	[26.4;41.0]	ns.
40	F	88	Eeklo	34.3	[27.1;41.5]	ns.
41	F	313	Kortrijk	36.1	[32.1;40.1]	<0.001
42	F	225	Dendermonde	38.1	[33.1;43.1]	<0.001
43	F	56	Diksmuide	38.9	[28.7;49.1]	ns.

\* p value of the z statistic testing for a difference between the district's rate and the mean rate  
Age-standardized rate in Belgium = 29.1

## 2.2. COLORECTAL CANCER

### Premature Colorectal Ca Mortality in both genders (0-74 yr), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



**Ranking of the districts by increasing premature mortality rate of Colorectal Cancer, in Both genders, 2003-2009**

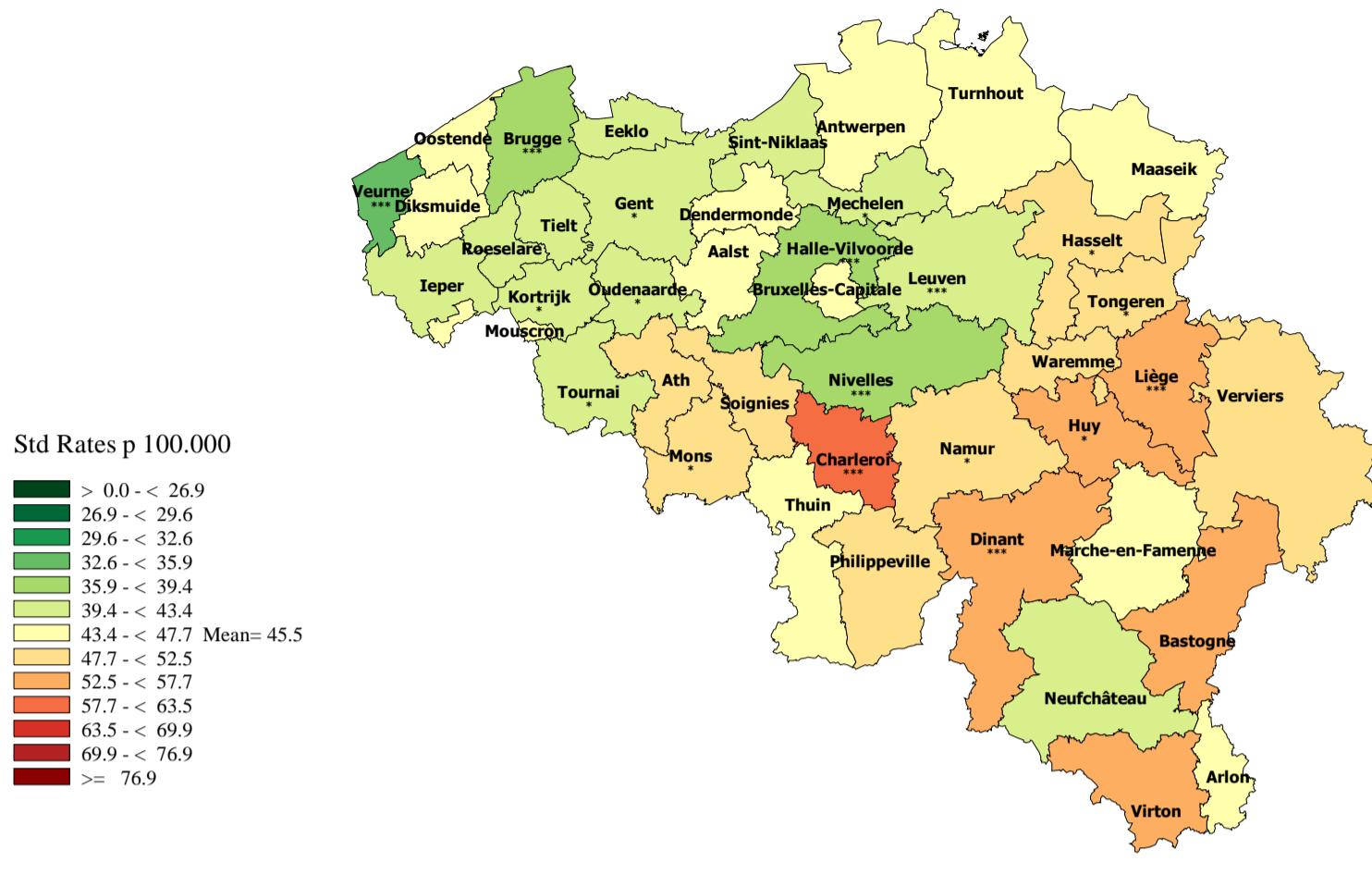
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	52	Eeklo	10.4	[ 7.5;13.2 ]	<0.01
2	Both	162	Verviers	10.8	[ 9.1;12.4 ]	<0.001
3	Both	30	Virton	11.8	[ 7.6;16.1 ]	ns.
4	Both	26	Bastogne	11.9	[ 7.3;16.6 ]	ns.
5	Both	34	Marche-en-Famenne	12.4	[ 8.2;16.6 ]	ns.
6	Both	425	Liege	12.5	[ 11.3;13.6 ]	<0.01
7	Both	59	Veurne	13.1	[ 9.7;16.4 ]	ns.
8	Both	201	Namur	13.1	[ 11.3;14.9 ]	ns.
9	Both	139	Oostende	13.2	[ 11.0;15.4 ]	ns.
10	Both	49	Philippeville	13.2	[ 9.5;17.0 ]	ns.
11	Both	41	Neufchateau	13.2	[ 9.2;17.3 ]	ns.
12	Both	329	Turnhout	13.4	[ 12.0;14.9 ]	ns.
13	Both	364	Leuven	13.4	[ 12.1;14.8 ]	ns.
14	Both	243	Brugge	13.6	[ 11.8;15.3 ]	ns.
15	Both	38	Arlon	13.6	[ 9.2;17.9 ]	ns.
16	Both	55	Mouscron	13.7	[ 10.0;17.3 ]	ns.
17	Both	80	Dinant	13.7	[ 10.7;16.7 ]	ns.
18	Both	270	Nivelles	13.7	[ 12.1;15.4 ]	ns.
19	Both	53	Waremme	13.7	[ 10.0;17.5 ]	ns.
20	Both	259	Mechelen	13.9	[ 12.2;15.6 ]	ns.
21	Both	77	Huy	13.9	[ 10.8;17.1 ]	ns.
22	Both	161	Tongeren	14.0	[ 11.8;16.1 ]	ns.
23	Both	189	Sint Niklaas	14.1	[ 12.1;16.1 ]	ns.
24	Both	688	Brussels	14.3	[ 13.2;15.4 ]	ns.
25	Both	330	Hasselt	14.4	[ 12.8;15.9 ]	ns.
26	Both	487	Halle-Vilvoorde	14.4	[ 13.1;15.7 ]	ns.
27	Both	41	Diksmuide	14.5	[ 10.1;19.0 ]	ns.
28	Both	194	Maaseik	15.0	[ 12.9;17.1 ]	ns.
29	Both	103	Oudenaarde	15.0	[ 12.1;17.9 ]	ns.
30	Both	839	Antwerpen	15.0	[ 14.0;16.1 ]	ns.
31	Both	444	Gent	15.2	[ 13.8;16.6 ]	ns.
32	Both	351	Charleroi	15.2	[ 13.6;16.8 ]	ns.
33	Both	69	Ath	15.5	[ 11.8;19.1 ]	ns.
34	Both	135	Roeselare	15.5	[ 12.9;18.1 ]	ns.
35	Both	94	Ieper	15.5	[ 12.4;18.6 ]	ns.
36	Both	80	Tielt	15.6	[ 12.2;19.0 ]	ns.
37	Both	124	Tournai	15.7	[ 12.9;18.4 ]	ns.
38	Both	157	Soignies	16.2	[ 13.7;18.8 ]	ns.
39	Both	271	Kortrijk	16.3	[ 14.3;18.2 ]	ns.
40	Both	267	Aalst	16.3	[ 14.4;18.3 ]	ns.
41	Both	221	Mons	16.7	[ 14.4;18.9 ]	<0.05
42	Both	139	Thuin	16.9	[ 14.1;19.7 ]	ns.
43	Both	210	Dendermonde	18.6	[ 16.1;21.1 ]	<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 = 14.4

## 2.3. LUNG CANCER

### Premature Lung Ca Mortality in both genders (0-74 yr), 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: 33 - 58 per 100.000

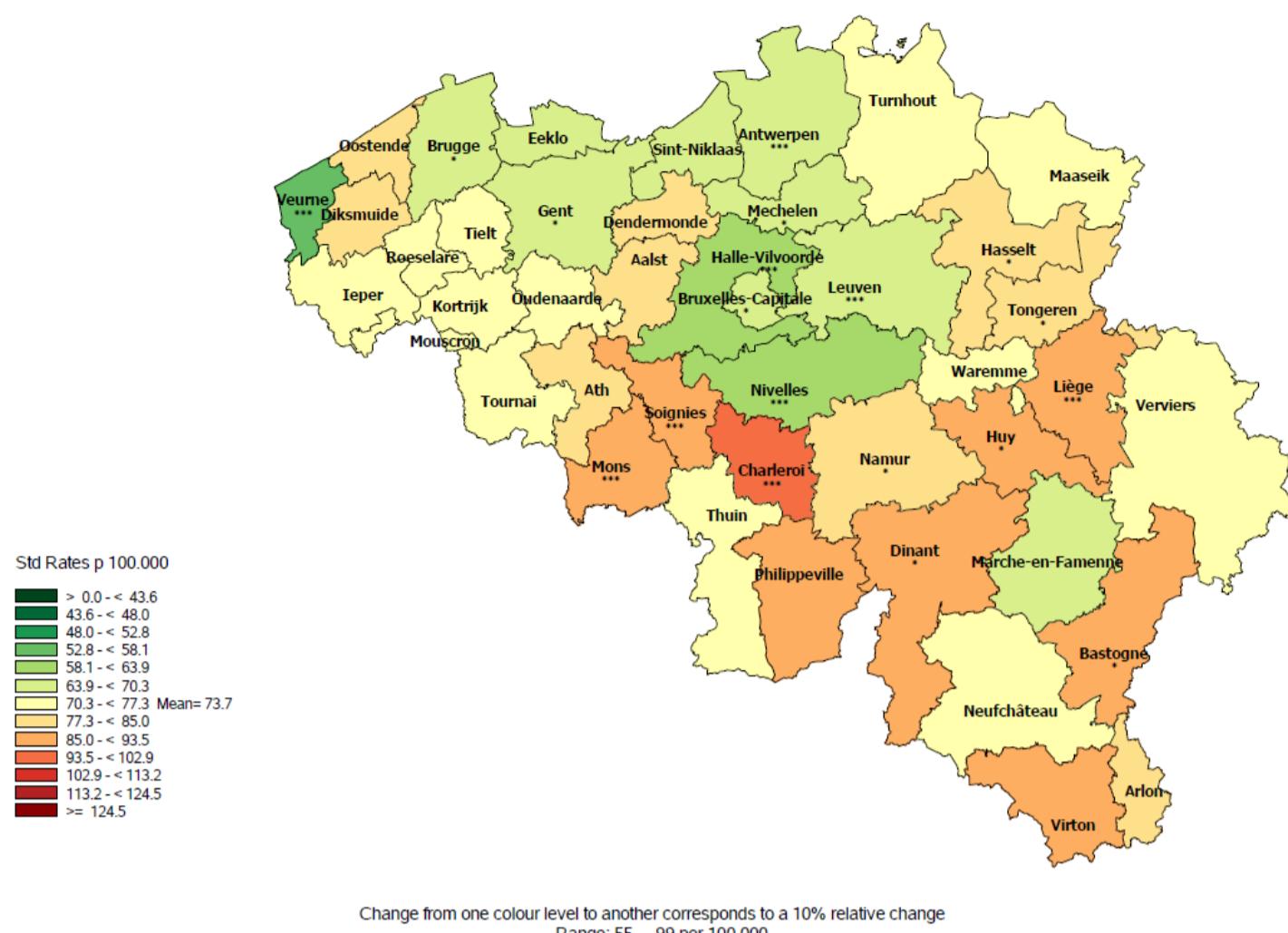
#### Ranking of the districts by increasing premature mortality rate of Lung Cancer, in Both genders, 2003-2009

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	149	Veurne	33.2	[27.9;38.6]	<0.001
2	Both	1296	Halle-Vilvoorde	38.3	[36.2;40.4]	<0.001
3	Both	691	Brugge	38.4	[35.6;41.3]	<0.001
4	Both	783	Nivelles	38.9	[36.2;41.7]	<0.001
5	Both	1077	Leuven	39.5	[37.1;41.8]	<0.001
6	Both	319	Tournai	40.0	[35.6;44.5]	<0.05
7	Both	276	Oudenaarde	40.2	[35.4;44.9]	<0.05
8	Both	674	Kortrijk	40.5	[37.5;43.6]	<0.01
9	Both	206	Eeklo	40.9	[35.3;46.5]	ns.
10	Both	1220	Gent	41.6	[39.3;44.0]	<0.01
11	Both	256	Ieper	41.7	[36.6;46.8]	ns.
12	Both	216	Tielt	41.9	[36.3;47.5]	ns.
13	Both	365	Roeselare	42.1	[37.8;46.4]	ns.
14	Both	571	Sint Niklaas	42.1	[38.7;45.6]	ns.
15	Both	786	Mechelen	42.3	[39.3;45.2]	<0.05
16	Both	134	Neufchateau	43.3	[35.9;50.6]	ns.
17	Both	2426	Antwerpen	43.5	[41.8;45.3]	<0.05
18	Both	573	Maaseik	44.0	[40.4;47.7]	ns.
19	Both	176	Mouscron	44.2	[37.6;50.7]	ns.
20	Both	503	Dendermonde	44.3	[40.5;48.2]	ns.
21	Both	731	Aalst	45.0	[41.7;48.3]	ns.
22	Both	127	Diksmuide	45.1	[37.3;53.0]	ns.
23	Both	2193	Brussels	45.4	[43.5;47.3]	ns.
24	Both	392	Thuin	46.4	[41.8;51.0]	ns.
25	Both	134	Marche-en-Famenne	46.7	[38.7;54.6]	ns.
26	Both	493	Oostende	47.3	[43.1;51.5]	ns.
27	Both	1167	Turnhout	47.4	[44.7;50.2]	ns.
28	Both	132	Arlon	47.7	[39.5;55.9]	ns.
29	Both	191	Waremme	48.0	[41.2;54.9]	ns.
30	Both	737	Verviers	48.7	[45.1;52.2]	ns.
31	Both	1137	Hasselt	49.5	[46.6;52.4]	<0.01
32	Both	486	Soignies	49.9	[45.4;54.3]	ns.
33	Both	572	Tongeren	50.0	[45.9;54.1]	<0.05
34	Both	683	Mons	50.1	[46.3;53.9]	<0.05
35	Both	185	Philippeville	50.9	[43.5;58.3]	ns.
36	Both	809	Namur	51.2	[47.7;54.8]	<0.01
37	Both	234	Ath	51.6	[45.0;58.3]	ns.
38	Both	136	Virton	53.2	[44.2;62.2]	ns.
39	Both	306	Huy	54.3	[48.2;60.5]	<0.01
40	Both	117	Bastogne	55.2	[45.1;65.2]	ns.
41	Both	331	Dinant	56.7	[50.6;62.8]	<0.001
42	Both	1938	Liege	56.8	[54.3;59.4]	<0.001
43	Both	1358	Charleroi	58.0	[54.9;61.1]	<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 = 45.5

Lung Ca Premature Mortality in Men (0-74 yr), Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)

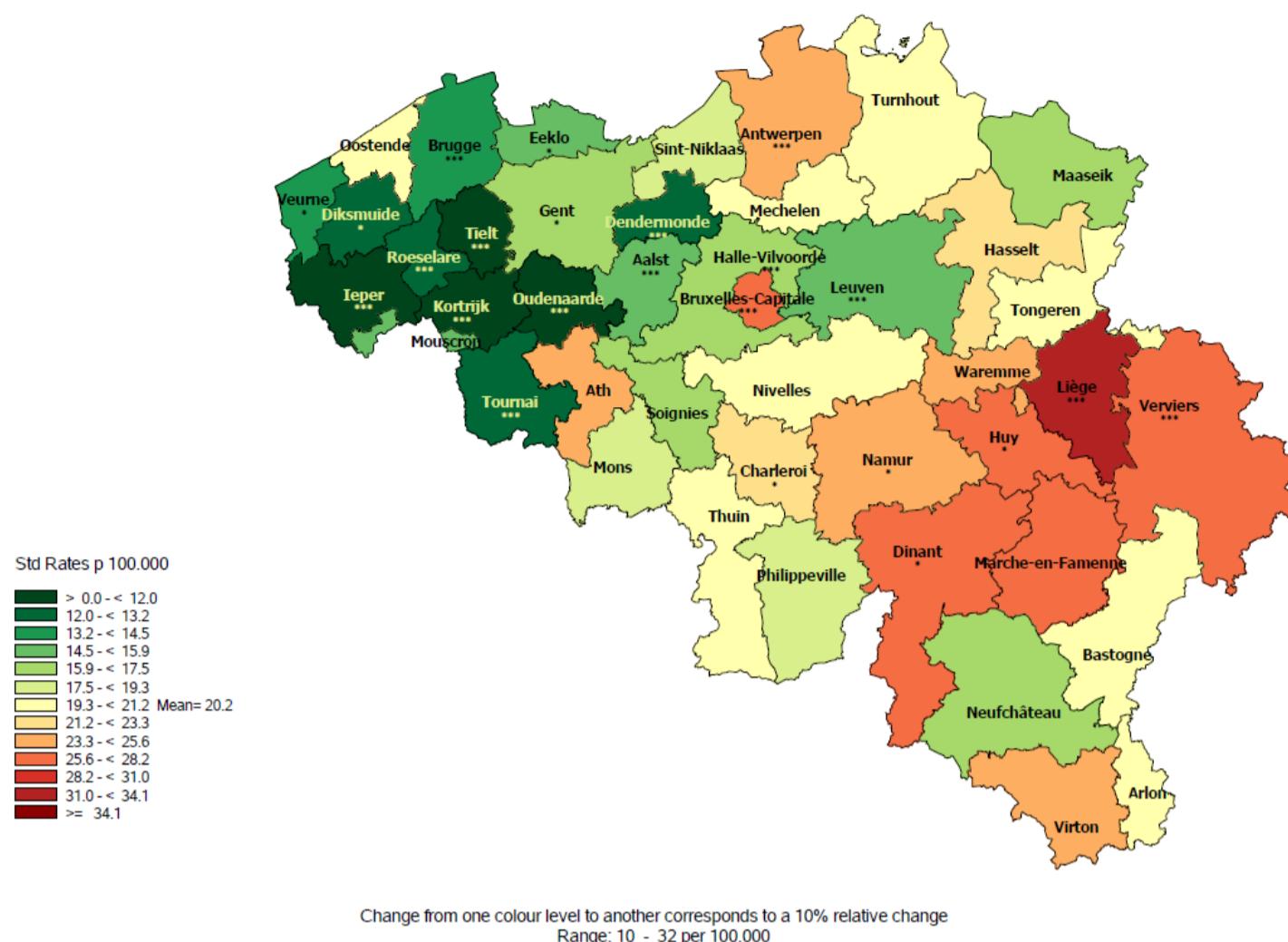


**Ranking of the districts by increasing premature mortality rate of Lung Cancer, in Men, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	M	118	Veurne	54.7	[44.8;64.6]	<0.001
2	M	562	Nivelles	60.2	[55.2;65.2]	<0.001
3	M	1000	Halle-Vilvoorde	62.7	[58.8;66.6]	<0.001
4	M	1736	Antwerpen	65.1	[62.1;68.2]	<0.001
5	M	563	Brugge	65.3	[59.9;70.7]	<0.01
6	M	869	Leuven	66.2	[61.8;70.6]	<0.01
7	M	598	Mechelen	66.8	[61.5;72.2]	<0.05
8	M	443	Sint Niklaas	67.5	[61.2;73.8]	ns.
9	M	167	Eeklo	67.7	[57.4;77.9]	ns.
10	M	1500	Brussels	68.5	[65.0;72.0]	<0.01
11	M	962	Gent	69.0	[64.6;73.4]	<0.05
12	M	95	Marche-en-Famenne	69.6	[55.5;83.7]	ns.
13	M	459	Maaseik	71.2	[64.7;77.8]	ns.
14	M	265	Tournai	71.8	[63.0;80.5]	ns.
15	M	108	Neufchâteau	72.1	[58.4;85.8]	ns.
16	M	239	Oudenaarde	72.5	[63.2;81.7]	ns.
17	M	521	Verviers	72.6	[66.3;78.8]	ns.
18	M	579	Kortrijk	72.7	[66.7;78.6]	ns.
19	M	309	Roeselare	73.6	[65.4;81.8]	ns.
20	M	901	Turnhout	74.2	[69.3;79.0]	ns.
21	M	188	Tielt	74.6	[63.9;85.2]	ns.
22	M	221	Ieper	74.6	[64.8;84.5]	ns.
23	M	141	Waremmme	76.0	[63.3;88.8]	ns.
24	M	304	Thuin	76.8	[68.1;85.5]	ns.
25	M	143	Mouscron	77.2	[64.5;90.0]	ns.
26	M	390	Oostende	78.3	[70.5;86.1]	ns.
27	M	102	Arlon	78.4	[63.0;93.7]	ns.
28	M	606	Aalst	78.6	[72.3;84.8]	ns.
29	M	427	Dendermonde	78.8	[71.3;86.3]	ns.
30	M	109	Diksmuide	79.1	[64.3;94.0]	ns.
31	M	883	Hasselt	79.8	[74.5;85.1]	<0.05
32	M	456	Tongeren	82.1	[74.5;89.7]	<0.05
33	M	174	Ath	82.2	[69.8;94.5]	ns.
34	M	596	Namur	82.4	[75.7;89.1]	<0.05
35	M	227	Huy	85.2	[73.9;96.4]	<0.05
36	M	104	Virton	85.8	[69.2; 102]	ns.
37	M	1354	Liege	85.9	[81.3;90.5]	<0.001
38	M	151	Philippeville	86.9	[72.9; 101]	ns.
39	M	396	Soignies	88.3	[79.5;97.1]	<0.01
40	M	542	Mons	88.5	[80.9;96.0]	<0.001
41	M	246	Dinant	89.5	[78.2; 101]	<0.01
42	M	94	Bastogne	93.5	[74.5; 113]	<0.05
43	M	1062	Charleroi	99.1	[93.1; 105]	<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 = 73.7

Lung Ca Premature Mortality in Women (0-74 yr), Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



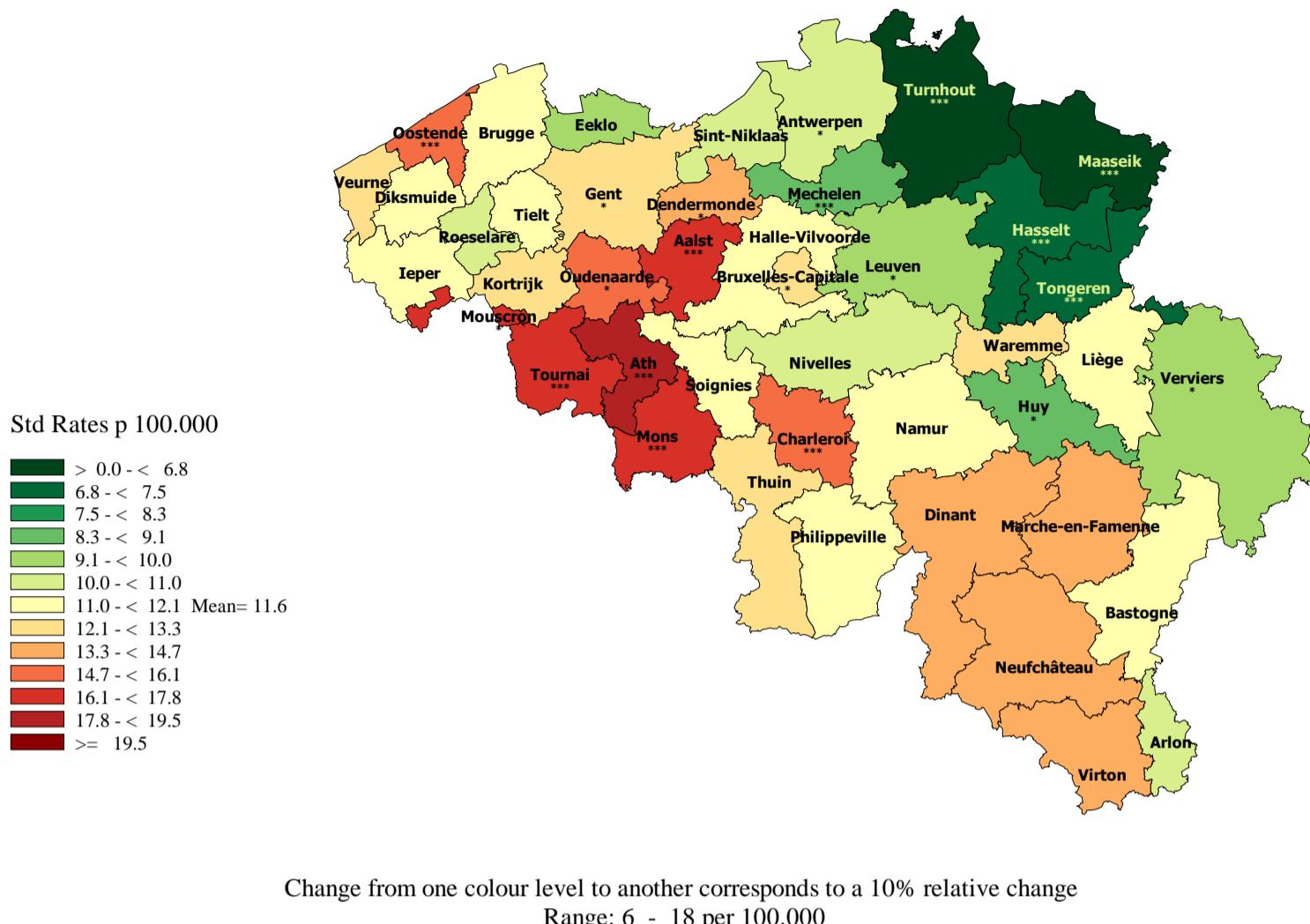
**Ranking of the districts by increasing premature mortality rate of Lung Cancer, in Women, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	37	Oudenaarde	10.4	[7.1;13.8]	<0.001
2	F	28	Tielt	10.5	[6.6;14.4]	<0.001
3	F	35	Ieper	11.0	[7.4;14.7]	<0.001
4	F	95	Kortrijk	11.0	[8.8;13.3]	<0.001
5	F	18	Diksmuide	12.6	[6.8;18.5]	<0.05
6	F	56	Roeselare	12.7	[9.3;16.0]	<0.001
7	F	54	Tournai	12.7	[9.3;16.1]	<0.001
8	F	76	Dendermonde	12.8	[9.9;15.7]	<0.001
9	F	31	Veurne	13.4	[8.6;18.1]	<0.01
10	F	128	Brugge	13.8	[11.4;16.2]	<0.001
11	F	208	Leuven	14.6	[12.7;16.6]	<0.001
12	F	125	Aalst	14.9	[12.3;17.6]	<0.001
13	F	39	Eeklo	15.4	[10.5;20.2]	<0.05
14	F	33	Mouscron	15.7	[10.3;21.1]	ns.
15	F	26	Neufchâteau	16.2	[9.9;22.4]	ns.
16	F	296	Halle-Vilvoorde	16.5	[14.6;18.4]	<0.001
17	F	258	Gent	16.9	[14.8;18.9]	<0.01
18	F	90	Soignies	16.9	[13.4;20.4]	ns.
19	F	114	Maaseik	17.1	[13.9;20.2]	ns.
20	F	34	Philippeville	18.2	[12.1;24.3]	ns.
21	F	128	Sint Niklaas	18.4	[15.2;21.6]	ns.
22	F	141	Mons	18.5	[15.5;21.6]	ns.
23	F	116	Tongeren	19.5	[15.9;23.1]	ns.
24	F	88	Thuin	19.5	[15.4;23.6]	ns.
25	F	188	Mechelen	19.6	[16.8;22.4]	ns.
26	F	103	Oostende	19.7	[15.9;23.6]	ns.
27	F	221	Nivelles	20.3	[17.6;22.9]	ns.
28	F	30	Arlon	20.8	[13.3;28.3]	ns.
29	F	23	Bastogne	20.9	[12.3;29.4]	ns.
30	F	266	Turnhout	21.2	[18.6;23.7]	ns.
31	F	254	Hasselt	21.2	[18.6;23.8]	ns.
32	F	296	Charleroi	23.3	[20.6;25.9]	<0.05
33	F	50	Waregem	23.6	[17.0;30.2]	ns.
34	F	690	Antwerpen	23.8	[22.0;25.6]	<0.001
35	F	32	Virton	24.0	[15.6;32.4]	ns.
36	F	213	Namur	24.8	[21.5;28.2]	<0.01
37	F	60	Ath	24.8	[18.5;31.1]	ns.
38	F	39	Marche-en-Famenne	25.8	[17.7;33.9]	ns.
39	F	693	Brussels	26.3	[24.3;28.3]	<0.001
40	F	79	Huy	26.6	[20.7;32.6]	<0.05
41	F	216	Verviers	27.1	[23.5;30.7]	<0.001
42	F	85	Dinant	27.5	[21.6;33.3]	<0.05
43	F	584	Liege	32.1	[29.5;34.7]	<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 = 20.2

## 2.4. HEAD, NECK AND OESOPHAGEAL CANCER

Premature Head\_and\_neck and oesophageal Ca Mortality in both genders (0-74 yr), Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



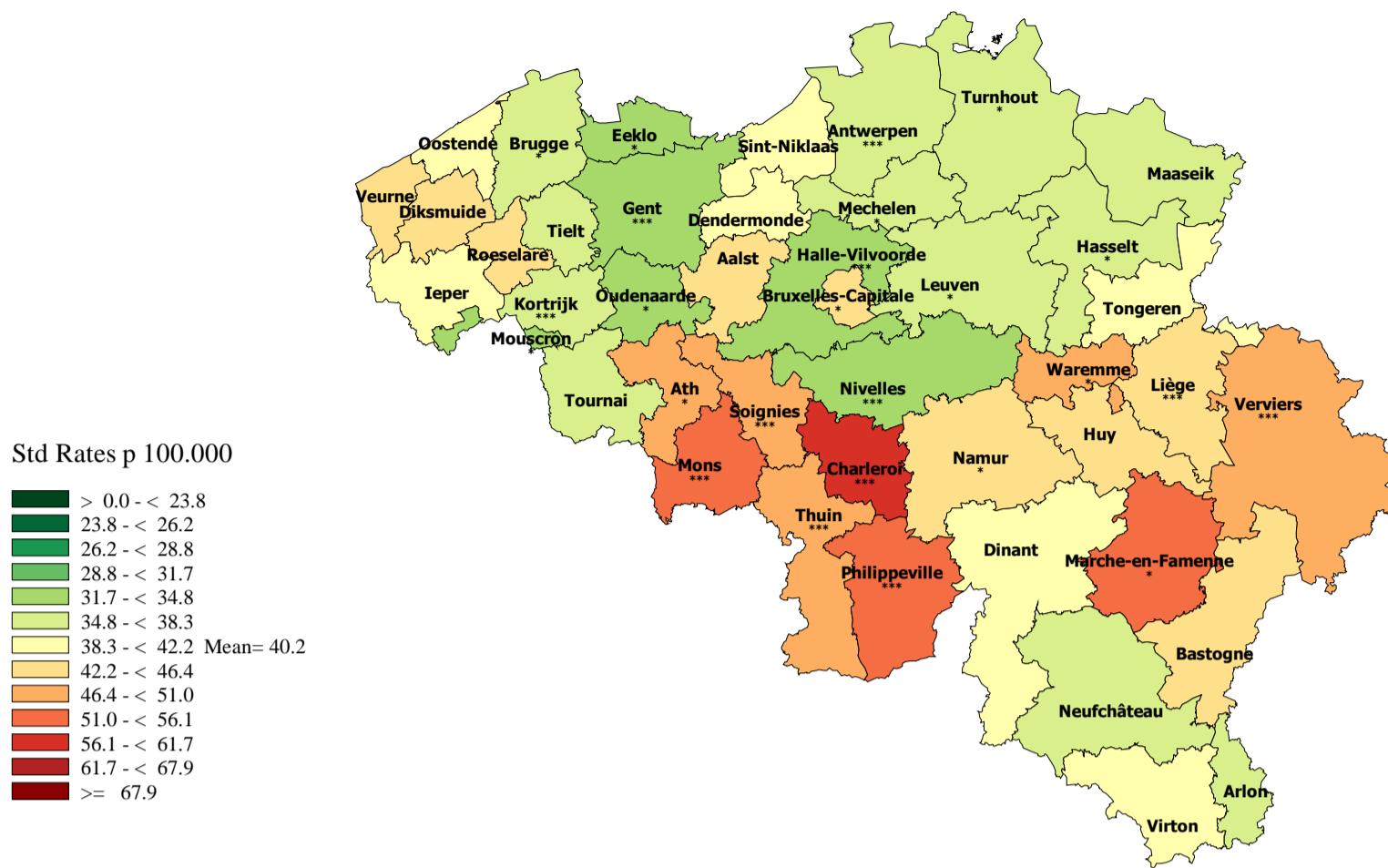
**Ranking of the districts by increasing premature mortality rate of Head and neck & Oesophageal Cancer, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	164	Turnhout	6.5	[ 5.5; 7.4]	<0.001
2	Both	92	Maaseik	6.8	[ 5.4; 8.2]	<0.001
3	Both	87	Tongeren	7.4	[ 5.8; 9.0]	<0.001
4	Both	177	Hasselt	7.5	[ 6.4; 8.6]	<0.001
5	Both	48	Huy	8.6	[ 6.2; 11.1]	<0.05
6	Both	171	Mechelen	9.1	[ 7.7; 10.5]	<0.001
7	Both	144	Verviers	9.2	[ 7.7; 10.7]	<0.01
8	Both	50	Eeklo	9.9	[ 7.1; 12.6]	ns.
9	Both	274	Leuven	9.9	[ 8.7; 11.0]	<0.01
10	Both	217	Nivelles	10.4	[ 9.0; 11.8]	ns.
11	Both	587	Antwerpen	10.5	[ 9.6; 11.3]	<0.05
12	Both	146	Sint Niklaas	10.6	[ 8.9; 12.3]	ns.
13	Both	91	Roeselare	10.6	[ 8.4; 12.8]	ns.
14	Both	32	Arlon	10.9	[ 7.1; 14.7]	ns.
15	Both	200	Brugge	11.1	[ 9.6; 12.6]	ns.
16	Both	387	Liege	11.1	[ 10.0; 12.3]	ns.
17	Both	113	Soignies	11.2	[ 9.1; 13.3]	ns.
18	Both	388	Halle-Vilvoorde	11.3	[ 10.2; 12.4]	ns.
19	Both	45	Philippeville	11.5	[ 8.1; 14.9]	ns.
20	Both	33	Diksmuide	11.6	[ 7.6; 15.5]	ns.
21	Both	26	Bastogne	11.6	[ 7.1; 16.1]	ns.
22	Both	74	Ieper	11.9	[ 9.2; 14.6]	ns.
23	Both	197	Namur	11.9	[ 10.2; 13.6]	ns.
24	Both	64	Tielt	12.1	[ 9.1; 15.1]	ns.
25	Both	111	Thuin	12.5	[ 10.1; 14.8]	ns.
26	Both	211	Kortrijk	12.6	[ 10.9; 14.3]	ns.
27	Both	51	Waregem	13.0	[ 9.4; 16.6]	ns.
28	Both	57	Veurne	13.0	[ 9.6; 16.4]	ns.
29	Both	389	Gent	13.2	[ 11.9; 14.5]	<0.05
30	Both	646	Brussels	13.2	[ 12.2; 14.2]	<0.01
31	Both	81	Dinant	13.6	[ 10.6; 16.6]	ns.
32	Both	45	Neufchateau	14.1	[ 10.0; 18.3]	ns.
33	Both	41	Marche-en-Famenne	14.2	[ 9.8; 18.6]	ns.
34	Both	38	Virton	14.4	[ 9.7; 19.0]	ns.
35	Both	168	Dendermonde	14.5	[ 12.3; 16.7]	<0.01
36	Both	354	Charleroi	14.8	[ 13.2; 16.3]	<0.001
37	Both	106	Oudenaarde	15.3	[ 12.4; 18.3]	<0.05
38	Both	163	Oostende	15.8	[ 13.4; 18.3]	<0.001
39	Both	267	Aalst	16.2	[ 14.2; 18.1]	<0.001
40	Both	241	Mons	16.8	[ 14.6; 18.9]	<0.001
41	Both	72	Mouscron	17.4	[ 13.3; 21.4]	<0.01
42	Both	146	Tournai	17.7	[ 14.8; 20.6]	<0.001
43	Both	87	Ath	18.2	[ 14.4; 22.1]	<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

## 2.5. ISCHEMIC HEART DISEASE

### Premature Isch\_Heart\_Disease Mortality in both genders (0-74 yr), 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: 33 - 58 per 100.000

#### Ranking of the districts by increasing premature mortality rate of Ischemic Heart Disease, in Both genders, 2003-2009

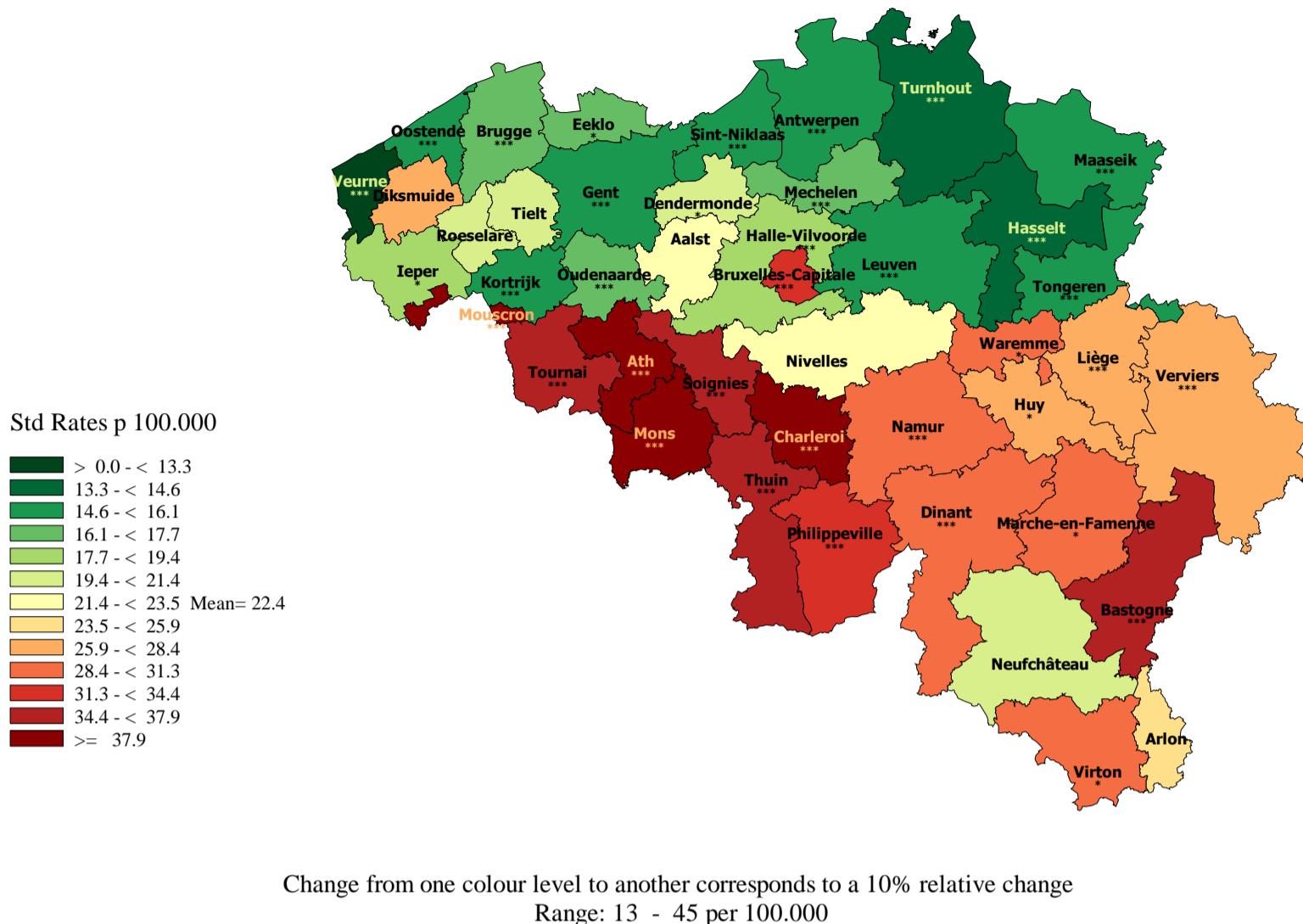
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	656	Nivelles	32.9	[30.4;35.5]	<0.001
2	Both	131	Mouscron	33.1	[27.4;38.8]	<0.05
3	Both	1131	Halle-Vilvoorde	33.4	[31.4;35.3]	<0.001
4	Both	1011	Gent	34.4	[32.3;36.6]	<0.001
5	Both	240	Oudenaarde	34.6	[30.2;39.0]	<0.05
6	Both	175	Eeklo	34.6	[29.5;39.8]	<0.05
7	Both	587	Kortrijk	35.1	[32.3;38.0]	<0.001
8	Both	1972	Antwerpen	35.3	[33.8;36.9]	<0.001
9	Both	835	Hasselt	36.2	[33.7;38.6]	<0.01
10	Both	654	Brugge	36.4	[33.6;39.2]	<0.01
11	Both	683	Mechelen	36.6	[33.8;39.3]	<0.05
12	Both	905	Turnhout	36.8	[34.4;39.2]	<0.01
13	Both	193	Tielt	37.0	[31.8;42.2]	ns.
14	Both	104	Arlon	37.4	[30.2;44.6]	ns.
15	Both	292	Tournai	37.7	[33.4;42.1]	ns.
16	Both	1031	Leuven	37.8	[35.4;40.1]	<0.05
17	Both	490	Maaseik	37.8	[34.4;41.2]	ns.
18	Both	118	Neufchateau	37.9	[31.1;44.8]	ns.
19	Both	440	Tongeren	38.3	[34.7;41.9]	ns.
20	Both	446	Dendermonde	39.5	[35.8;43.2]	ns.
21	Both	414	Oostende	39.5	[35.7;43.4]	ns.
22	Both	540	Sint Niklaas	40.2	[36.8;43.6]	ns.
23	Both	249	Ieper	40.6	[35.6;45.7]	ns.
24	Both	238	Dinant	40.6	[35.4;45.8]	ns.
25	Both	111	Virton	41.9	[34.0;49.8]	ns.
26	Both	2025	Brussels	42.4	[40.5;44.3]	<0.05
27	Both	188	Veurne	42.6	[36.5;48.7]	ns.
28	Both	712	Aalst	43.4	[40.2;46.5]	ns.
29	Both	378	Roeselare	43.6	[39.2;48.0]	ns.
30	Both	95	Bastogne	43.8	[35.0;52.7]	ns.
31	Both	124	Diksmuide	44.0	[36.2;51.7]	ns.
32	Both	1514	Liege	44.2	[42.0;46.4]	<0.001
33	Both	253	Huy	44.8	[39.2;50.4]	ns.
34	Both	700	Namur	44.8	[41.5;48.1]	<0.01
35	Both	193	Waremme	48.7	[41.7;55.6]	<0.05
36	Both	224	Ath	48.9	[42.5;55.3]	<0.01
37	Both	409	Thuin	49.0	[44.2;53.7]	<0.001
38	Both	477	Soignies	49.5	[45.0;53.9]	<0.001
39	Both	753	Verviers	49.7	[46.2;53.3]	<0.001
40	Both	147	Marche-en-Famenne	52.0	[43.5;60.4]	<0.01
41	Both	714	Mons	52.5	[48.6;56.4]	<0.001
42	Both	204	Philippeville	55.4	[47.8;63.1]	<0.001
43	Both	1340	Charleroi	57.8	[54.7;60.9]	<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 = 40.2

## 2.6. DIABETES

### Premature Diabetes\_in\_multiple\_causes Mortality in both genders (0-74 yr), Belgium 2003-2009 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



Ranking of the districts by increasing premature 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	57	Veurne	12.7	[9.4;16.1]	<0.001
2	Both	331	Turnhout	13.6	[12.1;15.1]	<0.001
3	Both	314	Hasselt	13.8	[12.2;15.3]	<0.001
4	Both	817	Antwerpen	14.7	[13.7;15.7]	<0.001
5	Both	154	Oostende	14.7	[12.4;17.1]	<0.001
6	Both	168	Tongeren	14.9	[12.7;17.2]	<0.001
7	Both	201	Sint Niklaas	14.9	[12.9;17.0]	<0.001
8	Both	412	Leuven	15.2	[13.8;16.7]	<0.001
9	Both	469	Gent	16.0	[14.5;17.4]	<0.001
10	Both	202	Maaseik	16.0	[13.8;18.2]	<0.001
11	Both	268	Kortrijk	16.1	[14.1;18.0]	<0.001
12	Both	294	Brugge	16.4	[14.5;18.3]	<0.001
13	Both	307	Mechelen	16.5	[14.7;18.4]	<0.001
14	Both	115	Oudenaarde	16.6	[13.5;19.6]	<0.001
15	Both	87	Eeklo	17.2	[13.6;20.8]	<0.01
16	Both	601	Halle-Vilvoorde	18.0	[16.5;19.4]	<0.001
17	Both	115	Ieper	18.7	[15.3;22.2]	<0.05
18	Both	219	Dendermonde	19.5	[16.9;22.1]	<0.05
19	Both	171	Roeselare	19.7	[16.7;22.6]	ns.
20	Both	106	Tielt	20.4	[16.5;24.3]	ns.
21	Both	62	Neufchateau	20.5	[15.4;25.7]	ns.
22	Both	362	Aalst	22.2	[19.9;24.5]	ns.
23	Both	460	Nivelles	23.5	[21.3;25.6]	ns.
24	Both	70	Arlon	25.3	[19.4;31.3]	ns.
25	Both	898	Liege	26.5	[24.7;28.2]	<0.001
26	Both	407	Verviers	27.2	[24.5;29.8]	<0.001
27	Both	78	Diksmuide	27.5	[21.4;33.6]	ns.
28	Both	155	Huy	28.3	[23.8;32.8]	<0.05
29	Both	82	Marche-en-Famenne	29.0	[22.7;35.3]	<0.05
30	Both	173	Dinant	29.8	[25.3;34.2]	<0.01
31	Both	79	Virton	30.2	[23.5;36.9]	<0.05
32	Both	118	Waregem	30.2	[24.7;35.7]	<0.01
33	Both	481	Namur	31.1	[28.3;33.9]	<0.001
34	Both	1507	Brussels	31.9	[30.3;33.5]	<0.001
35	Both	116	Philippeville	32.1	[26.2;38.0]	<0.01
36	Both	288	Thuin	35.0	[30.9;39.0]	<0.001
37	Both	79	Bastogne	36.5	[28.4;44.6]	<0.001
38	Both	358	Soignies	37.4	[33.5;41.3]	<0.001
39	Both	290	Tournai	37.5	[33.1;41.8]	<0.001
40	Both	176	Ath	39.5	[33.6;45.3]	<0.001
41	Both	544	Mons	41.0	[37.5;44.5]	<0.001
42	Both	959	Charleroi	42.0	[39.3;44.7]	<0.001
43	Both	176	Mouscron	44.7	[38.1;51.3]	<0.001

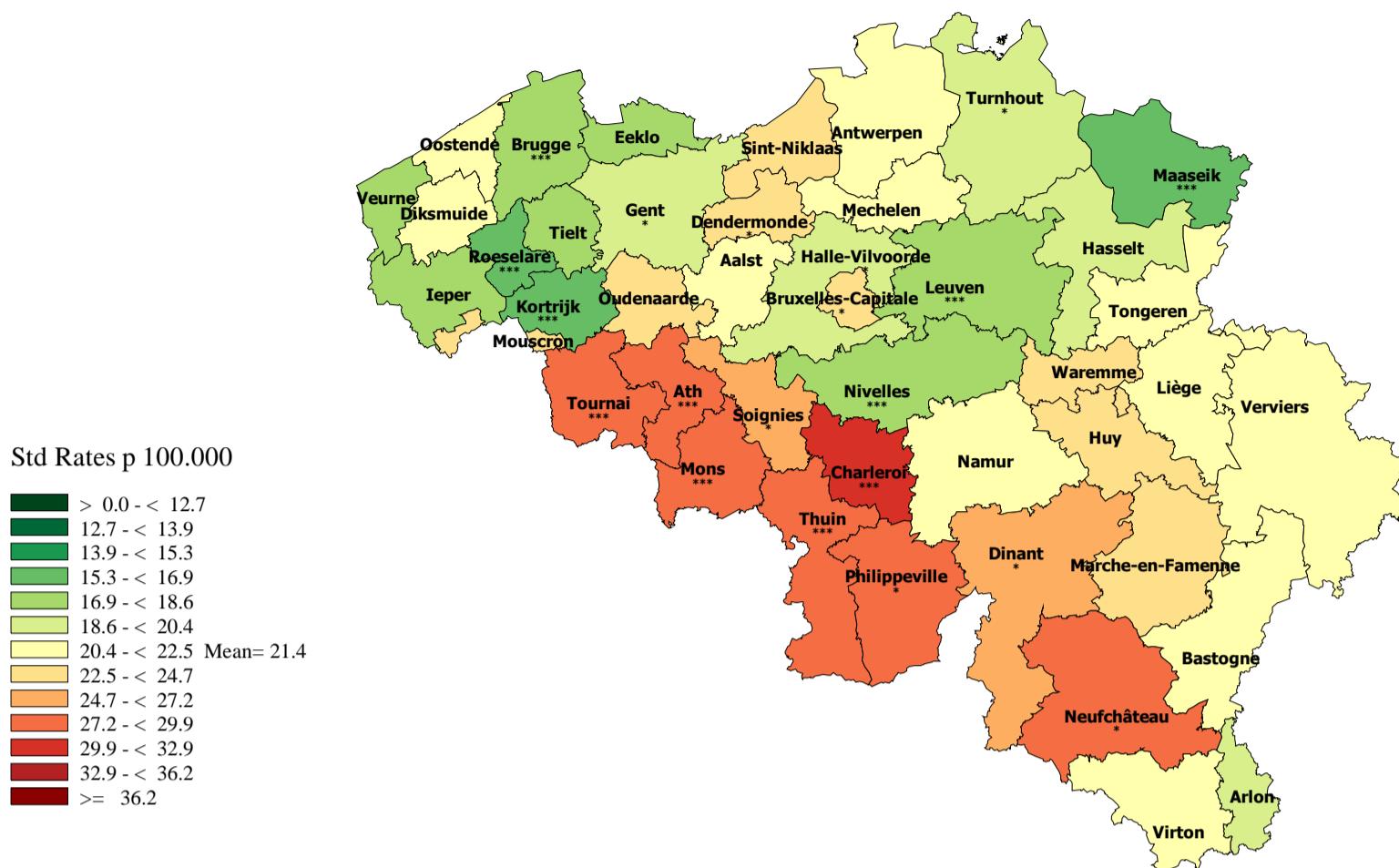
<sup>\$</sup> For this analyse, diabetes was looked for not only in the underlying, but also the immediate or intermediate causes of death

\* 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 = 22.4

## 2.7. CEREBROVASCULAR DISEASES AND HTA

### Premature Cerebrovasc\_Dis & HTA Mortality in both genders (0-74 yr), 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 - 30 per 100.000

#### Ranking of the districts by increasing premature mortality rate of Cerebrovascular Diseases & HTA, in Both genders, 2003-2009

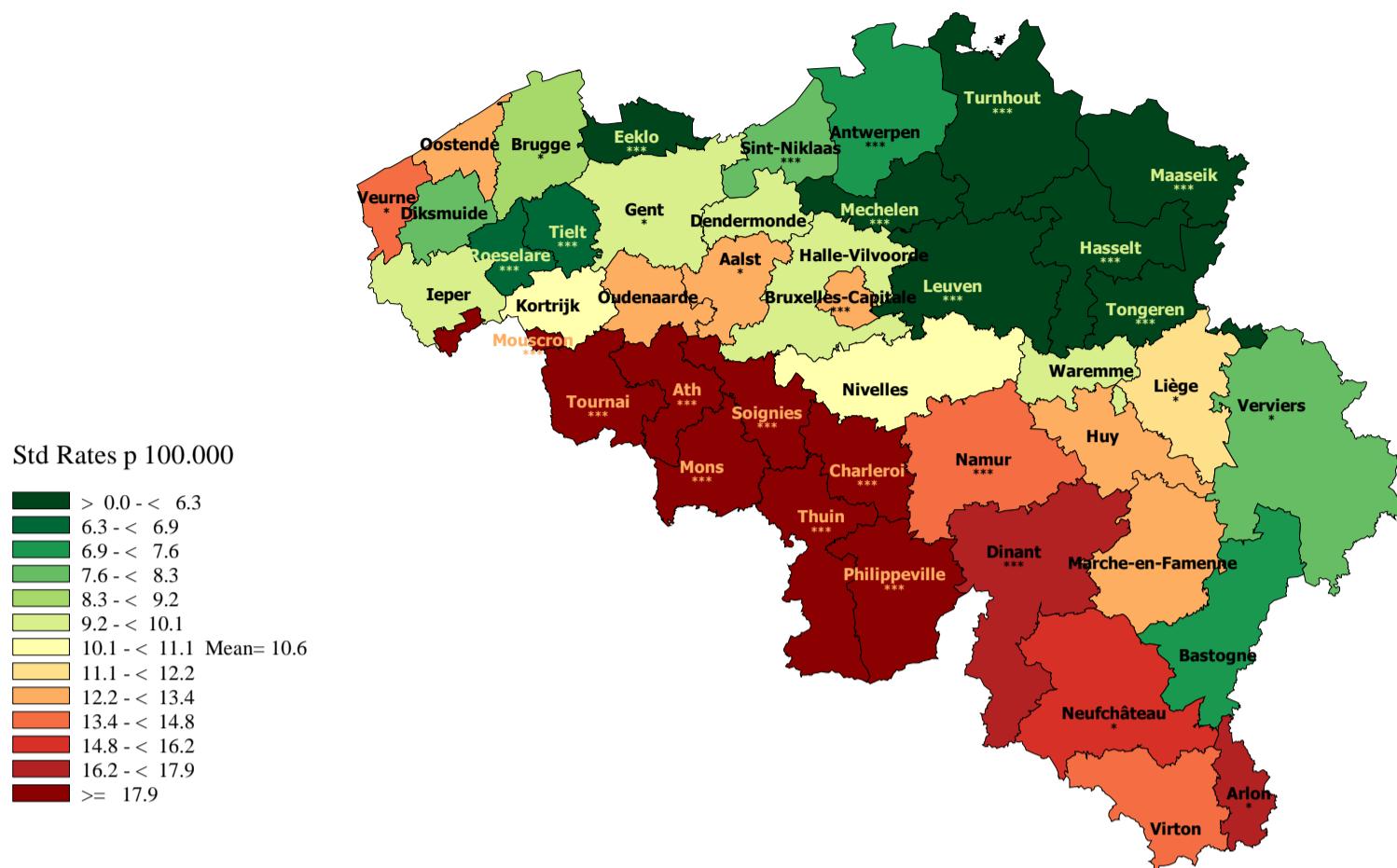
Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	134	Roeselare	15.4	[12.8;18.0]	<0.001
2	Both	216	Maaseik	16.6	[14.4;18.9]	<0.001
3	Both	282	Kortrijk	16.8	[14.8;18.8]	<0.001
4	Both	304	Brugge	16.9	[15.0;18.8]	<0.001
5	Both	340	Nivelles	17.1	[15.3;18.9]	<0.001
6	Both	475	Leuven	17.2	[15.7;18.8]	<0.001
7	Both	78	Veurne	17.6	[13.7;21.5]	ns.
8	Both	94	Tielt	18.1	[14.4;21.7]	ns.
9	Both	92	Eeklo	18.1	[14.4;21.8]	ns.
10	Both	113	Ieper	18.2	[14.8;21.6]	ns.
11	Both	464	Turnhout	19.0	[17.3;20.7]	<0.01
12	Both	653	Halle-Vilvoorde	19.2	[17.8;20.7]	<0.01
13	Both	570	Gent	19.3	[17.7;20.9]	<0.05
14	Both	56	Arlon	20.2	[14.9;25.5]	ns.
15	Both	465	Hasselt	20.3	[18.4;22.1]	ns.
16	Both	312	Verviers	20.9	[18.5;23.2]	ns.
17	Both	238	Tongeren	20.9	[18.2;23.6]	ns.
18	Both	219	Oostende	20.9	[18.1;23.7]	ns.
19	Both	346	Aalst	21.1	[18.9;23.3]	ns.
20	Both	61	Diksmuide	21.1	[15.8;26.5]	ns.
21	Both	46	Bastogne	21.2	[15.1;27.4]	ns.
22	Both	410	Mechelen	21.9	[19.8;24.1]	ns.
23	Both	58	Virton	22.0	[16.3;27.7]	ns.
24	Both	1235	Antwerpen	22.1	[20.8;23.3]	ns.
25	Both	754	Liege	22.2	[20.6;23.7]	ns.
26	Both	343	Namur	22.2	[19.8;24.5]	ns.
27	Both	64	Marche-en-Famenne	22.5	[17.0;28.1]	ns.
28	Both	89	Waremme	22.6	[17.8;27.3]	ns.
29	Both	305	Sint Niklaas	22.7	[20.2;25.3]	ns.
30	Both	159	Oudenaarde	22.9	[19.3;26.5]	ns.
31	Both	127	Huy	23.0	[19.0;27.1]	ns.
32	Both	1114	Brussels	23.1	[21.7;24.4]	<0.05
33	Both	93	Mouscron	23.4	[18.6;28.2]	ns.
34	Both	280	Dendermonde	24.7	[21.8;27.5]	<0.05
35	Both	253	Soignies	25.6	[22.4;28.8]	<0.05
36	Both	154	Dinant	26.2	[22.1;30.4]	<0.05
37	Both	84	Neufchateau	27.4	[21.5;33.3]	<0.05
38	Both	230	Thuin	27.6	[24.0;31.2]	<0.001
39	Both	221	Tournai	27.7	[24.0;31.4]	<0.001
40	Both	378	Mons	28.1	[25.3;31.0]	<0.001
41	Both	105	Philippeville	29.0	[23.4;34.5]	<0.01
42	Both	134	Ath	29.8	[24.7;34.9]	<0.01
43	Both	705	Charleroi	30.4	[28.1;32.6]	<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 = 21.4

## 2.8. CHRONIC LIVER DISEASES

Premature Chronic Liver Disease Dis Mortality in both genders (0-74 yr), 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: 3 - 26 per 100.000

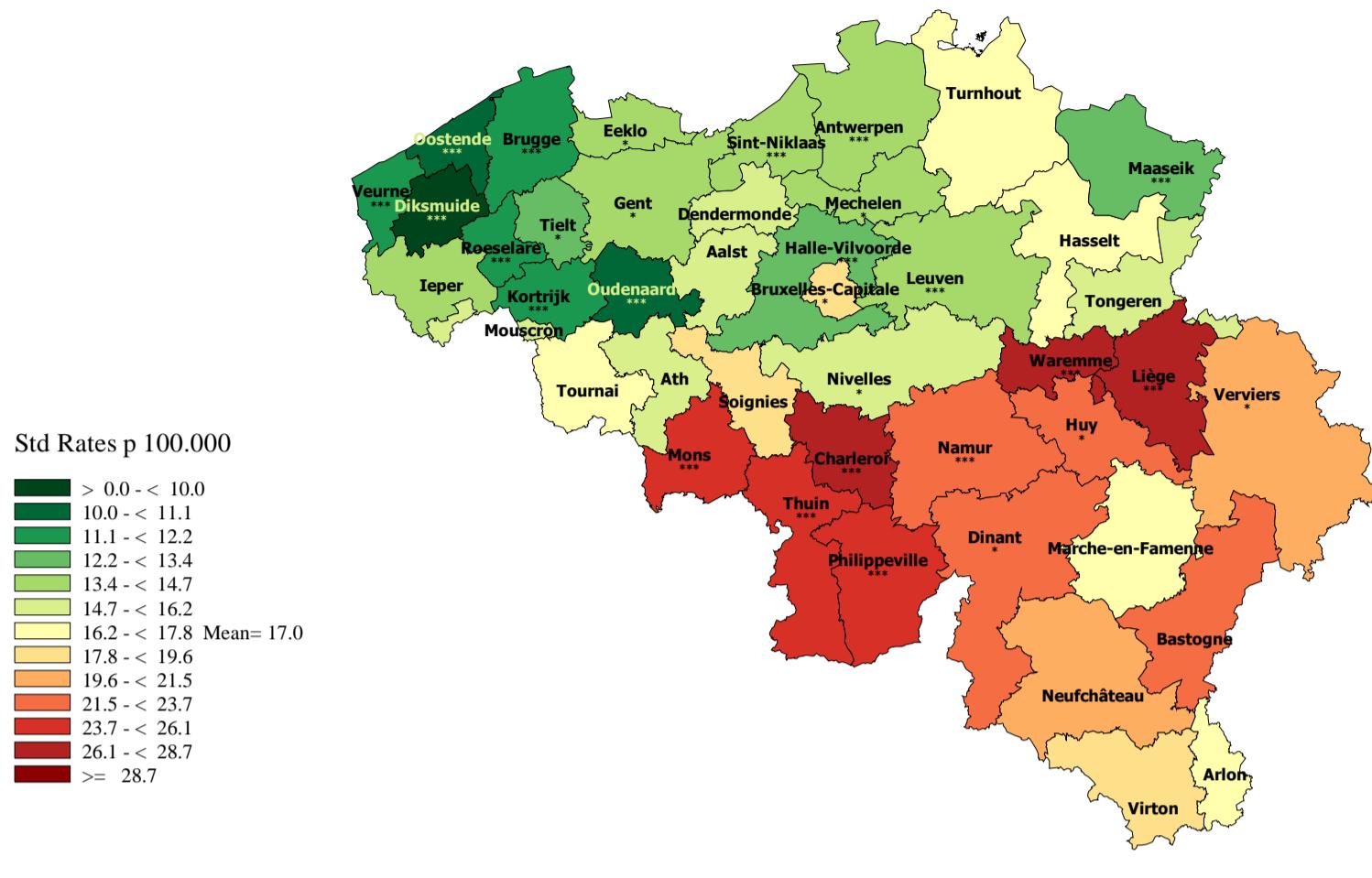
**Ranking of the districts by increasing premature mortality rate of Chronic Liver Diseases, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	36	Maaseik	2.6	[ 1.7; 3.5 ]	<0.001
2	Both	99	Turnhout	3.8	[ 3.0; 4.5 ]	<0.001
3	Both	49	Tongeren	4.0	[ 2.9; 5.2 ]	<0.001
4	Both	109	Hasselt	4.4	[ 3.6; 5.3 ]	<0.001
5	Both	94	Mechelen	4.9	[ 3.9; 5.9 ]	<0.001
6	Both	170	Leuven	5.9	[ 5.0; 6.8 ]	<0.001
7	Both	31	Eeklo	6.0	[ 3.9; 8.1 ]	<0.001
8	Both	33	Tielt	6.3	[ 4.2; 8.5 ]	<0.001
9	Both	60	Roeselare	6.9	[ 5.1; 8.6 ]	<0.001
10	Both	399	Antwerpen	7.0	[ 6.3; 7.7 ]	<0.001
11	Both	17	Bastogne	7.4	[ 3.8; 10.9 ]	ns.
12	Both	107	Sint Niklaas	7.6	[ 6.1; 9.0 ]	<0.001
13	Both	22	Diksmuide	7.8	[ 4.5; 11.1 ]	ns.
14	Both	132	Verviers	8.3	[ 6.9; 9.7 ]	<0.01
15	Both	158	Brugge	8.8	[ 7.4; 10.2 ]	<0.05
16	Both	280	Gent	9.3	[ 8.2; 10.4 ]	<0.05
17	Both	41	Waremme	9.8	[ 6.7; 12.8 ]	ns.
18	Both	62	Ieper	9.8	[ 7.4; 12.3 ]	ns.
19	Both	117	Dendermonde	9.9	[ 8.1; 11.7 ]	ns.
20	Both	348	Halle-Vilvoorde	9.9	[ 8.9; 11.0 ]	ns.
21	Both	236	Nivelles	10.8	[ 9.4; 12.2 ]	ns.
22	Both	188	Kortrijk	11.1	[ 9.5; 12.7 ]	ns.
23	Both	424	Liège	11.8	[ 10.7; 13.0 ]	<0.05
24	Both	127	Oostende	12.4	[ 10.2; 14.6 ]	ns.
25	Both	39	Marche-en-Famenne	12.6	[ 8.6; 16.6 ]	ns.
26	Both	215	Aalst	12.8	[ 11.1; 14.5 ]	<0.05
27	Both	81	Huy	13.0	[ 10.1; 15.8 ]	ns.
28	Both	91	Oudenaarde	13.0	[ 10.3; 15.7 ]	ns.
29	Both	678	Brussels	13.0	[ 12.0; 14.0 ]	<0.001
30	Both	229	Namur	13.5	[ 11.8; 15.3 ]	<0.01
31	Both	37	Virton	13.7	[ 9.3; 18.2 ]	ns.
32	Both	61	Veurne	14.7	[ 11.0; 18.5 ]	<0.05
33	Both	50	Neufchâteau	15.2	[ 10.9; 19.4 ]	<0.05
34	Both	101	Dinant	16.4	[ 13.2; 19.6 ]	<0.001
35	Both	48	Arlon	16.4	[ 11.7; 21.1 ]	<0.05
36	Both	192	Soignies	18.2	[ 15.6; 20.8 ]	<0.001
37	Both	476	Charleroi	19.1	[ 17.4; 20.8 ]	<0.001
38	Both	83	Mouscron	19.7	[ 15.4; 23.9 ]	<0.001
39	Both	171	Tournai	20.4	[ 17.3; 23.5 ]	<0.001
40	Both	185	Thuin	20.7	[ 17.7; 23.7 ]	<0.001
41	Both	105	Ath	21.6	[ 17.5; 25.8 ]	<0.001
42	Both	86	Philippeville	22.0	[ 17.4; 26.7 ]	<0.001
43	Both	386	Mons	26.2	[ 23.6; 28.9 ]	<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 = 10.6

## 2.9. CHRONIC OBSTRUCTIVE PULMONARY DISEASES

Premature Chronic Obstr Pulm Dis Mortality in both genders (0-74 yr), Belgium 2003-2009  
Age-Adjusted Mortality Rates (Std: Eu pop 2013)



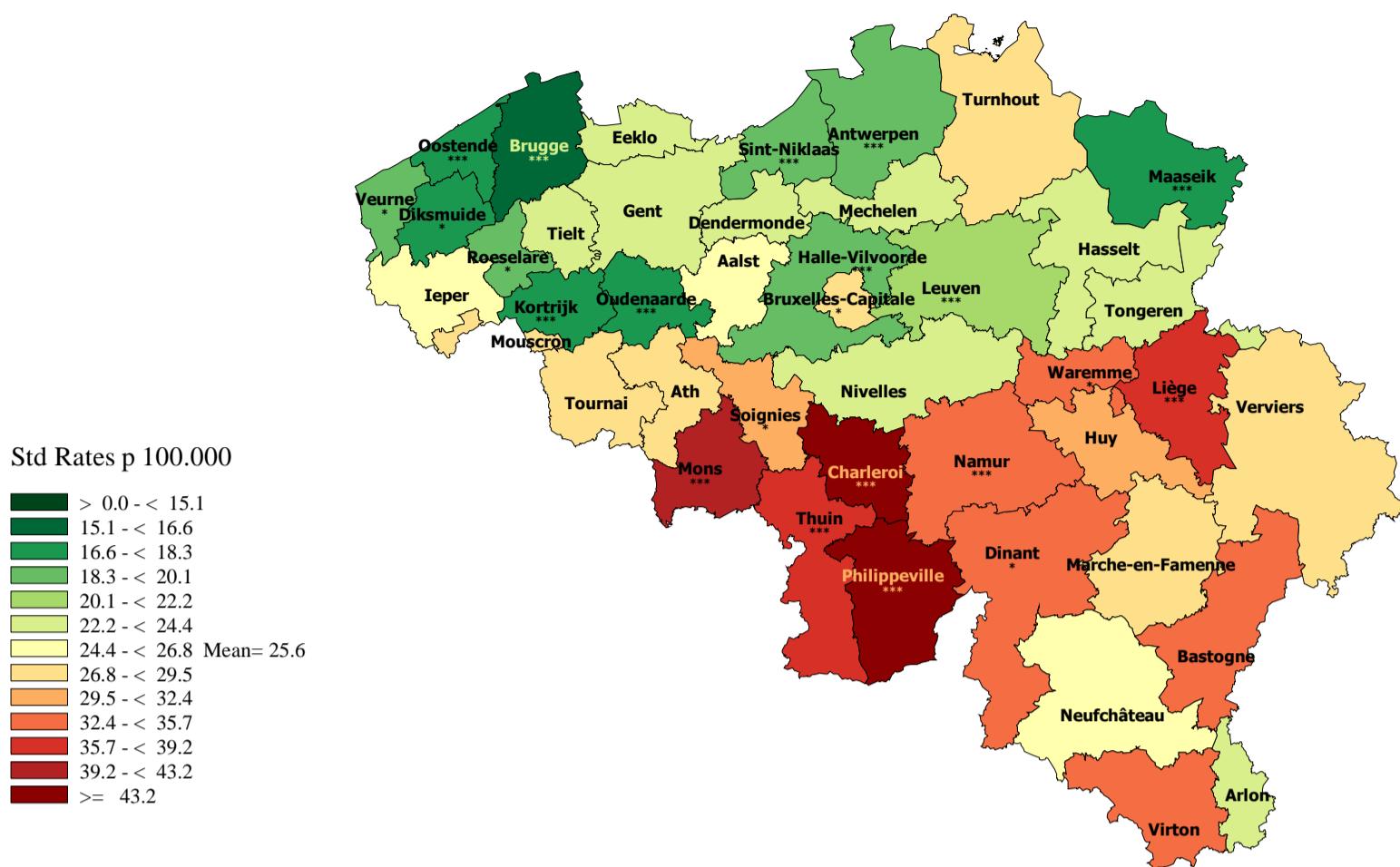
Change from one colour level to another corresponds to a 10% relative change  
Range: 10 - 28 per 100.000

**Ranking of the districts by increasing premature 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	27	Diksmuide	9.7	[ 6.1;13.4]	<0.001
2	Both	71	Oudenaarde	10.4	[ 8.0;12.9]	<0.001
3	Both	115	Oostende	10.9	[ 8.9;12.9]	<0.001
4	Both	201	Brugge	11.2	[ 9.6;12.7]	<0.001
5	Both	98	Roeselare	11.3	[ 9.0;13.5]	<0.001
6	Both	52	Veurne	11.5	[ 8.4;14.6]	<0.001
7	Both	195	Kortrijk	11.7	[10.0;13.3]	<0.001
8	Both	408	Halle-Vilvoorde	12.3	[11.1;13.5]	<0.001
9	Both	66	Tielt	12.7	[ 9.6;15.8]	<0.01
10	Both	161	Maaseik	12.9	[10.9;14.9]	<0.001
11	Both	178	Sint Niklaas	13.4	[11.5;15.4]	<0.001
12	Both	358	Leuven	13.5	[12.1;14.8]	<0.001
13	Both	69	Eeklo	13.7	[10.5;16.9]	<0.05
14	Both	761	Antwerpen	13.8	[12.8;14.8]	<0.001
15	Both	266	Mechelen	14.4	[12.7;16.1]	<0.01
16	Both	89	Ieper	14.5	[11.5;17.5]	ns.
17	Both	427	Gent	14.6	[13.2;16.0]	<0.01
18	Both	284	Nivelles	14.9	[13.2;16.7]	<0.05
19	Both	60	Mouscron	15.2	[11.3;19.1]	ns.
20	Both	170	Dendermonde	15.2	[12.9;17.5]	ns.
21	Both	178	Tongeren	15.9	[13.5;18.2]	ns.
22	Both	259	Aalst	16.0	[14.0;17.9]	ns.
23	Both	71	Ath	16.0	[12.3;19.8]	ns.
24	Both	365	Hasselt	16.2	[14.5;17.9]	ns.
25	Both	133	Tournai	17.0	[14.1;19.9]	ns.
26	Both	47	Arlon	17.3	[12.3;22.2]	ns.
27	Both	418	Turnhout	17.4	[15.8;19.1]	ns.
28	Both	48	Marche-en-Famenne	17.5	[12.5;22.4]	ns.
29	Both	47	Virton	18.3	[13.0;23.5]	ns.
30	Both	876	Brussels	18.9	[17.7;20.2]	<0.01
31	Both	179	Soignies	19.2	[16.3;22.0]	ns.
32	Both	60	Neufchateau	20.0	[14.9;25.1]	ns.
33	Both	308	Verviers	20.8	[18.4;23.1]	<0.01
34	Both	46	Bastogne	21.7	[15.4;28.0]	ns.
35	Both	126	Dinant	22.0	[18.1;25.8]	<0.05
36	Both	355	Namur	23.3	[20.8;25.7]	<0.001
37	Both	128	Huy	23.7	[19.6;27.8]	<0.01
38	Both	194	Thuin	23.9	[20.5;27.3]	<0.001
39	Both	318	Mons	24.6	[21.8;27.3]	<0.001
40	Both	91	Philippeville	25.6	[20.4;30.9]	<0.01
41	Both	100	Waregem	26.4	[21.2;31.6]	<0.001
42	Both	635	Charleroi	28.0	[25.8;30.2]	<0.001
43	Both	949	Liege	28.2	[26.4;30.0]	<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 = 17.0

**Premature Chronic Obstr Pulm Dis Mortality in Men (0-74 yr), Belgium 2003-2009**  
 Age-Adjusted Mortality Rates (Std: Eu pop 2013)



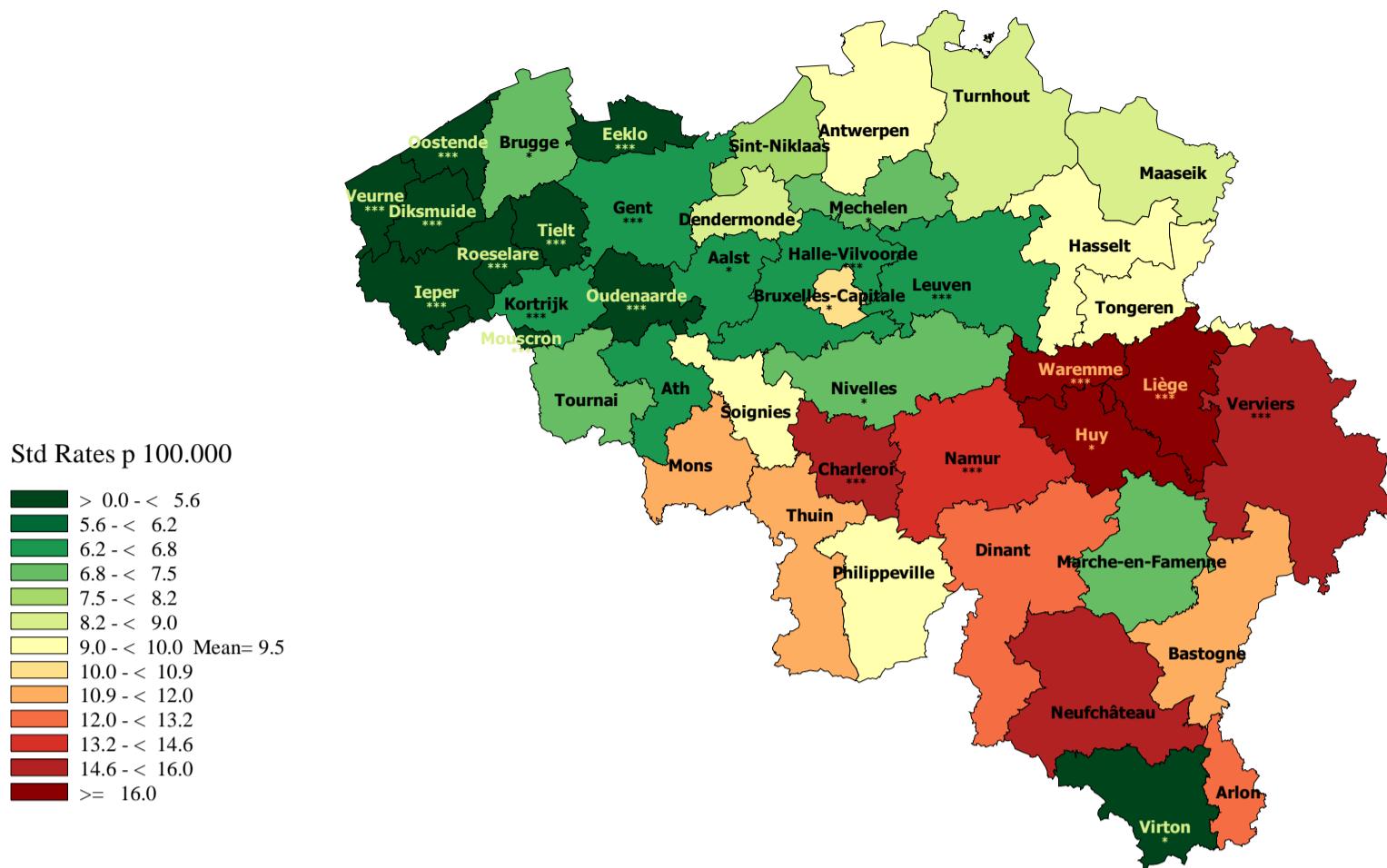
Change from one colour level to another corresponds to a 10% relative change  
 Range: 16 - 45 per 100.000

**Ranking of the districts by increasing premature 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	136	Brugge	15.9	[13.2;18.6]	<0.001
2	M	84	Oostende	16.9	[13.3;20.5]	<0.001
3	M	23	Diksmuide	16.9	[10.0;23.9]	<0.05
4	M	109	Maaseik	17.6	[14.3;20.9]	<0.001
5	M	141	Kortrijk	17.9	[14.9;20.8]	<0.001
6	M	58	Oudenaarde	17.9	[13.3;22.6]	<0.01
7	M	41	Veurne	18.9	[13.1;24.6]	<0.05
8	M	495	Antwerpen	19.0	[17.3;20.7]	<0.001
9	M	296	Halle-Vilvoorde	19.0	[16.9;21.2]	<0.001
10	M	124	Sint Niklaas	19.7	[16.2;23.1]	<0.01
11	M	82	Roeselare	19.7	[15.4;24.0]	<0.01
12	M	268	Leuven	21.1	[18.6;23.6]	<0.001
13	M	197	Mechelen	22.5	[19.4;25.7]	ns.
14	M	56	Eeklo	22.9	[16.9;28.9]	ns.
15	M	57	Tielt	22.9	[16.9;28.8]	ns.
16	M	120	Dendermonde	22.9	[18.8;27.1]	ns.
17	M	29	Arlon	23.2	[14.7;31.7]	ns.
18	M	125	Tongeren	23.2	[19.1;27.3]	ns.
19	M	209	Nivelles	23.7	[20.4;26.9]	ns.
20	M	325	Gent	23.7	[21.1;26.3]	ns.
21	M	257	Hasselt	24.0	[21.1;27.0]	ns.
22	M	73	Ieper	25.0	[19.3;30.8]	ns.
23	M	37	Neufchâteau	25.1	[17.0;33.3]	ns.
24	M	201	Aalst	26.7	[23.0;30.4]	ns.
25	M	315	Turnhout	26.8	[23.9;29.8]	ns.
26	M	190	Verviers	27.3	[23.4;31.2]	ns.
27	M	55	Ath	27.6	[20.3;35.0]	ns.
28	M	102	Tournai	28.6	[23.0;34.2]	ns.
29	M	596	Brussels	29.0	[26.6;31.3]	<0.01
30	M	38	Marche-en-Famenne	29.2	[19.9;38.6]	ns.
31	M	53	Mouscron	29.3	[21.3;37.2]	ns.
32	M	132	Soignies	31.2	[25.8;36.5]	<0.05
33	M	80	Huy	31.7	[24.7;38.7]	ns.
34	M	89	Dinant	33.1	[26.2;40.0]	<0.05
35	M	33	Bastogne	33.5	[22.0;45.0]	ns.
36	M	236	Namur	34.2	[29.8;38.7]	<0.001
37	M	41	Virton	34.4	[23.8;44.9]	ns.
38	M	59	Waremme	34.5	[25.6;43.3]	<0.05
39	M	558	Liege	36.5	[33.4;39.5]	<0.001
40	M	142	Thuin	38.0	[31.7;44.3]	<0.001
41	M	238	Mons	41.5	[36.2;46.9]	<0.001
42	M	74	Philippeville	44.1	[34.0;54.2]	<0.001
43	M	454	Charleroi	44.5	[40.4;48.6]	<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 = 25.6

**Premature Chronic Obstr Pulm Dis Mortality in Women (0-74 yr), 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: 3 - 21 per 100.000

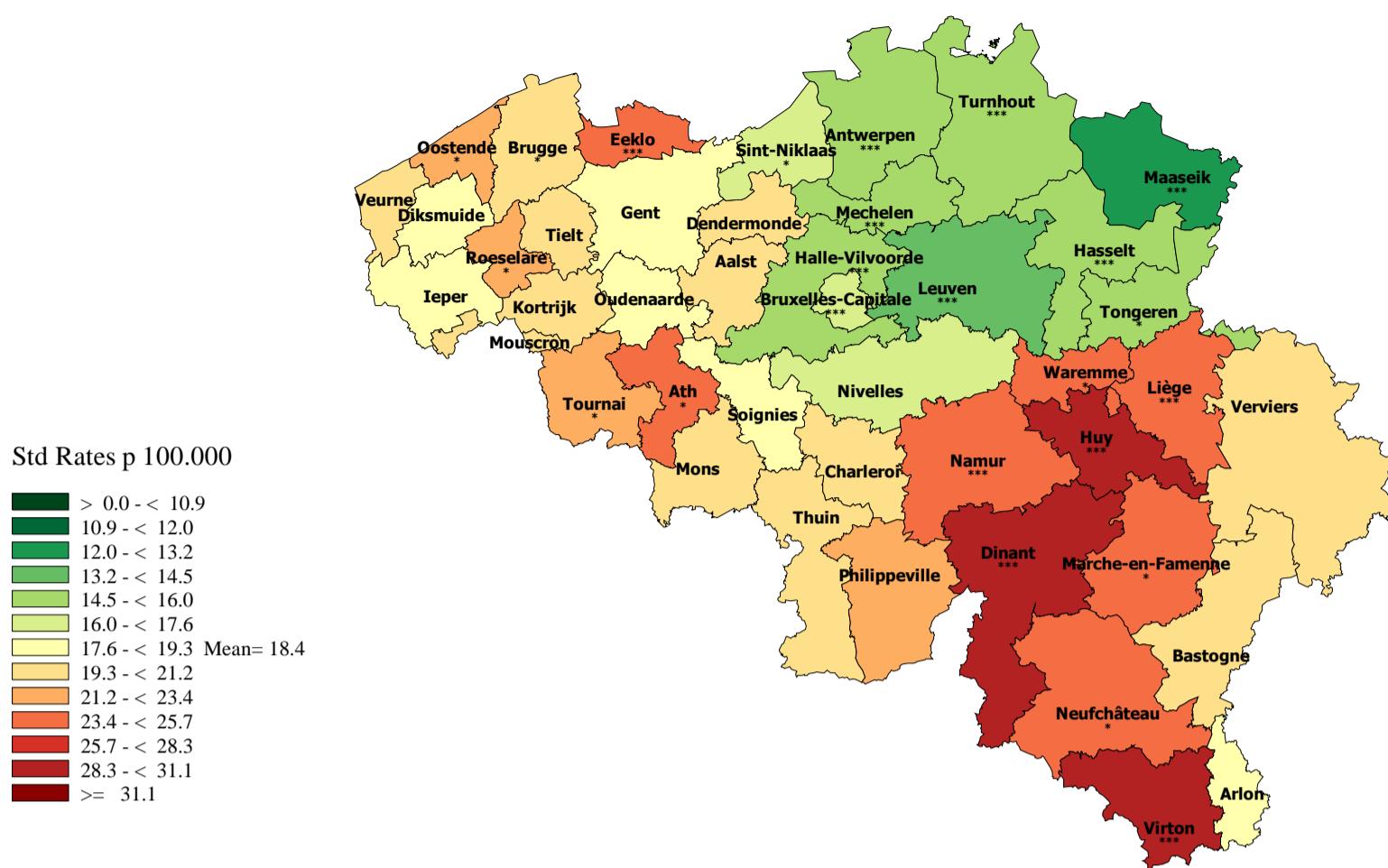
**Ranking of the districts by increasing premature mortality rate of Chronic obstructive pulmonary diseases, in Women, 2003-2009**

Rank	Sex	Death s	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	F	4	Diksmuide	2.9	[ 0.1; 5.8]	<0.001
2	F	7	Mouscron	3.2	[ 0.8; 5.6]	<0.001
3	F	9	Tielt	3.4	[ 1.2; 5.6]	<0.001
4	F	16	Roeselare	3.6	[ 1.8; 5.4]	<0.001
5	F	13	Oudenaarde	3.7	[ 1.7; 5.7]	<0.001
6	F	6	Virton	4.3	[ 0.8; 7.8]	<0.01
7	F	11	Veurne	4.8	[ 1.9; 7.6]	<0.01
8	F	16	Ieper	5.0	[ 2.5; 7.4]	<0.001
9	F	13	Eeklo	5.0	[ 2.3; 7.7]	<0.01
10	F	31	Oostende	5.6	[ 3.6; 7.6]	<0.001
11	F	54	Kortrijk	6.2	[ 4.5; 7.8]	<0.001
12	F	112	Halle-Vilvoorde	6.4	[ 5.2; 7.6]	<0.001
13	F	90	Leuven	6.5	[ 5.2; 7.9]	<0.001
14	F	16	Ath	6.5	[ 3.3; 9.8]	ns.
15	F	102	Gent	6.6	[ 5.3; 7.9]	<0.001
16	F	58	Aalst	6.7	[ 5.0; 8.4]	<0.01
17	F	10	Marche-en-Famenne	6.9	[ 2.6; 11.1]	ns.
18	F	65	Brugge	6.9	[ 5.3; 8.6]	<0.01
19	F	69	Mechelen	7.2	[ 5.5; 8.9]	<0.01
20	F	75	Nivelles	7.3	[ 5.7; 9.0]	<0.05
21	F	31	Tournai	7.5	[ 4.8; 10.1]	ns.
22	F	54	Sint Niklaas	7.8	[ 5.7; 9.9]	ns.
23	F	52	Maaseik	8.3	[ 6.0; 10.5]	ns.
24	F	103	Turnhout	8.4	[ 6.8; 10.0]	ns.
25	F	50	Dendermonde	8.6	[ 6.2; 10.9]	ns.
26	F	53	Tongeren	9.1	[ 6.7; 11.6]	ns.
27	F	266	Antwerpen	9.2	[ 8.1; 10.3]	ns.
28	F	108	Hasselt	9.2	[ 7.5; 10.9]	ns.
29	F	17	Philippeville	9.2	[ 4.8; 13.6]	ns.
30	F	47	Soignies	9.2	[ 6.6; 11.9]	ns.
31	F	280	Brussels	10.9	[ 9.6; 12.2]	<0.05
32	F	80	Mons	11.1	[ 8.7; 13.6]	ns.
33	F	13	Bastogne	11.5	[ 5.2; 17.8]	ns.
34	F	52	Thuin	11.8	[ 8.6; 15.1]	ns.
35	F	37	Dinant	12.2	[ 8.3; 16.2]	ns.
36	F	18	Arlon	12.5	[ 6.7; 18.3]	ns.
37	F	119	Namur	14.3	[ 11.7; 16.9]	<0.001
38	F	181	Charleroi	14.7	[ 12.5; 16.8]	<0.001
39	F	118	Verviers	15.1	[ 12.3; 17.8]	<0.001
40	F	23	Neufchâteau	15.4	[ 9.1; 21.8]	ns.
41	F	48	Huy	16.6	[ 11.9; 21.3]	<0.01
42	F	41	Waremme	20.2	[ 14.0; 26.4]	<0.001
43	F	391	Liège	21.4	[ 19.3; 23.6]	<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 = 9.5

## 2.10. SUICIDE

### Premature Suicide Mortality in both genders (0-74 yr), 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: 13 - 30 per 100.000

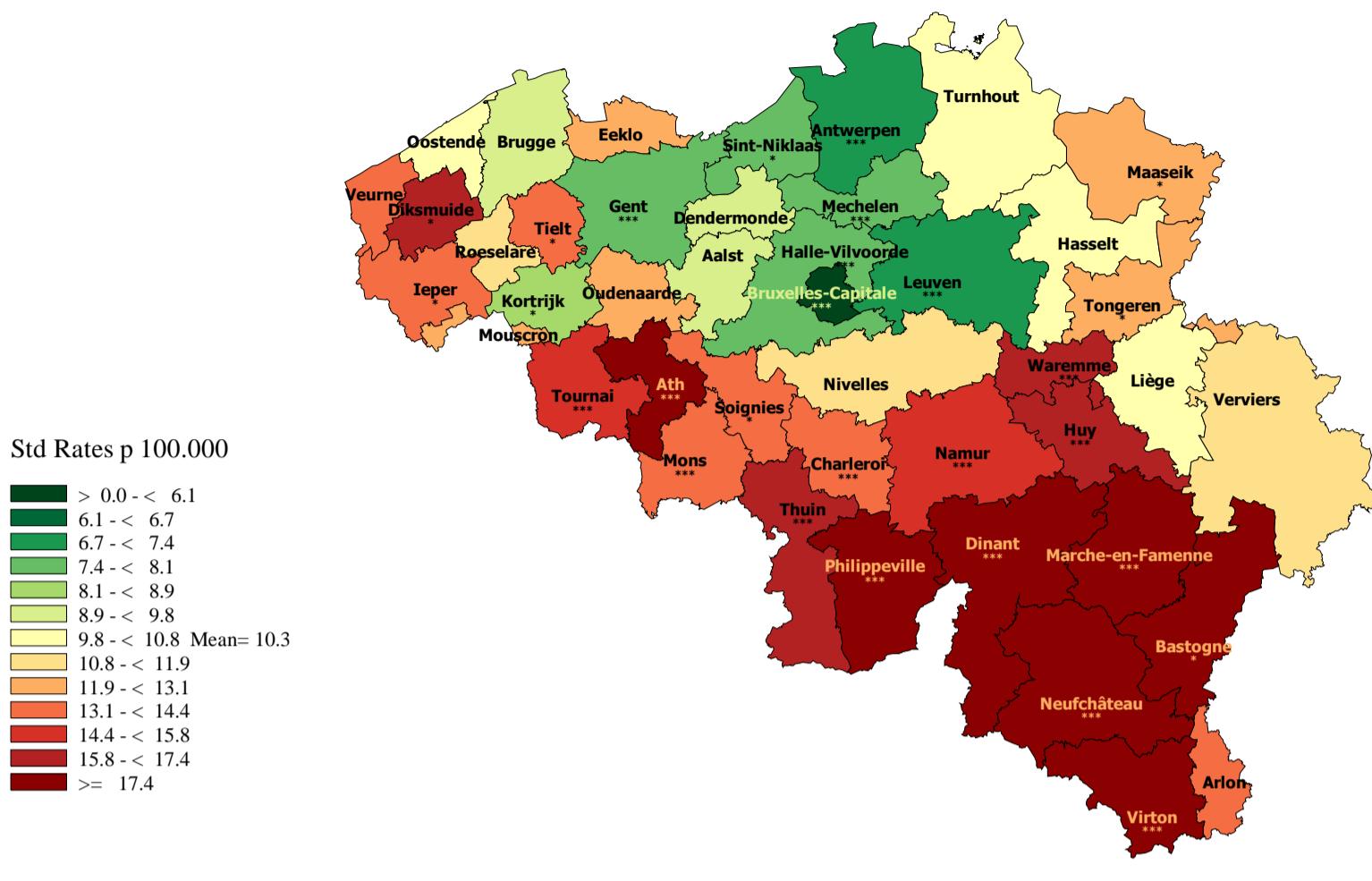
#### **Ranking of the districts by increasing premature mortality rate of Suicide, in Both genders, 2003-2009**

Rank	Sex	Deaths	District	Age-adj. Rates	CI on age-adj. Rates	p value*
1	Both	194	Maaseik	12.9	[11.1;14.7]	<0.001
2	Both	445	Leuven	14.5	[13.2;15.9]	<0.001
3	Both	294	Mechelen	14.6	[12.9;16.3]	<0.001
4	Both	893	Antwerpen	14.8	[13.8;15.7]	<0.001
5	Both	195	Tongeren	15.1	[12.9;17.2]	<0.01
6	Both	393	Hasselt	15.1	[13.6;16.7]	<0.001
7	Both	554	Halle-Vilvoorde	15.2	[13.9;16.4]	<0.001
8	Both	426	Turnhout	15.3	[13.8;16.7]	<0.001
9	Both	990	Brussels	16.2	[15.1;17.2]	<0.001
10	Both	239	Sint Niklaas	16.3	[14.2;18.3]	<0.05
11	Both	395	Nivelles	17.0	[15.3;18.7]	ns.
12	Both	204	Soignies	18.1	[15.6;20.6]	ns.
13	Both	56	Diksmuide	18.4	[13.6;23.2]	ns.
14	Both	606	Gent	18.6	[17.1;20.1]	ns.
15	Both	123	Ieper	18.8	[15.5;22.1]	ns.
16	Both	67	Arlon	18.9	[14.3;23.5]	ns.
17	Both	141	Oudenaarde	19.3	[16.1;22.5]	ns.
18	Both	520	Charleroi	19.7	[18.0;21.4]	ns.
19	Both	244	Dendermonde	19.7	[17.3;22.2]	ns.
20	Both	52	Bastogne	19.8	[14.3;25.2]	ns.
21	Both	344	Aalst	19.8	[17.7;21.9]	ns.
22	Both	111	Tielt	20.1	[16.3;23.8]	ns.
23	Both	321	Mons	20.5	[18.2;22.7]	ns.
24	Both	346	Verviers	20.5	[18.3;22.7]	ns.
25	Both	191	Thuin	20.5	[17.6;23.5]	ns.
26	Both	91	Mouscron	20.7	[16.4;24.9]	ns.
27	Both	368	Brugge	20.7	[18.6;22.8]	<0.05
28	Both	199	Roeselare	22.0	[19.0;25.1]	<0.05
29	Both	197	Tourmai	22.3	[19.1;25.4]	<0.05
30	Both	219	Oostende	22.8	[19.8;25.9]	<0.01
31	Both	92	Philippeville	23.0	[18.3;27.8]	ns.
32	Both	905	Liege	24.3	[22.7;25.9]	<0.001
33	Both	445	Namur	24.3	[22.0;26.6]	<0.001
34	Both	126	Ath	24.6	[20.2;28.9]	<0.01
35	Both	80	Marche-en-Famenne	24.9	[19.4;30.4]	<0.05
36	Both	114	Waremme	25.1	[20.5;29.8]	<0.01
37	Both	90	Neufchateau	25.5	[20.2;30.8]	<0.01
38	Both	132	Eeklo	25.6	[21.2;30.0]	<0.01
39	Both	89	Virton	28.9	[22.8;35.0]	<0.001
40	Both	188	Huy	29.1	[24.9;33.3]	<0.001
41	Both	194	Dinant	30.0	[25.8;34.3]	<0.001
42	Both	321	Mons	20.5	[18.2;22.7]	ns.
43	Both	346	Verviers	20.5	[18.3;22.7]	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 = 18.4

## 2.11. TRANSPORT ACCIDENTS

### Premature Transport Acc Mortality in both genders (0-74 yr), 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 premature 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	281	Brussels	4.4	[ 3.8; 4.9]	<0.001
2	Both	433	Antwerpen	7.1	[ 6.4; 7.7]	<0.001
3	Both	218	Leuven	7.2	[ 6.2; 8.1]	<0.001
4	Both	269	Halle-Vilvoorde	7.4	[ 6.6; 8.3]	<0.001
5	Both	155	Mechelen	7.8	[ 6.6; 9.0]	<0.001
6	Both	117	Sint Niklaas	7.9	[ 6.5; 9.4]	<0.01
7	Both	270	Gent	8.1	[ 7.1; 9.1]	<0.001
8	Both	156	Kortrijk	8.7	[ 7.4; 10.1]	<0.05
9	Both	156	Aalst	9.2	[ 7.7; 10.6]	ns.
10	Both	111	Dendermonde	9.2	[ 7.5; 10.9]	ns.
11	Both	170	Brugge	9.8	[ 8.3; 11.3]	ns.
12	Both	264	Hasselt	10.1	[ 8.9; 11.3]	ns.
13	Both	279	Turnhout	10.2	[ 9.0; 11.4]	ns.
14	Both	406	Liège	10.7	[ 9.6; 11.7]	ns.
15	Both	100	Oostende	10.8	[ 8.6; 12.9]	ns.
16	Both	253	Nivelles	10.8	[ 9.5; 12.2]	ns.
17	Both	194	Verviers	10.9	[ 9.4; 12.4]	ns.
18	Both	108	Roeselare	11.8	[ 9.5; 14.0]	ns.
19	Both	54	Mouscron	12.1	[ 8.9; 15.4]	ns.
20	Both	180	Maaseik	12.2	[ 10.4; 14.0]	<0.05
21	Both	157	Tongeren	12.3	[ 10.3; 14.2]	<0.05
22	Both	94	Oudenaarde	12.7	[ 10.1; 15.3]	ns.
23	Both	66	Eeklo	13.0	[ 9.9; 16.2]	ns.
24	Both	150	Soignies	13.1	[ 11.0; 15.2]	<0.01
25	Both	48	Veurne	13.4	[ 9.5; 17.2]	ns.
26	Both	78	Tielt	13.7	[ 10.6; 16.7]	<0.05
27	Both	50	Arlon	13.9	[ 10.0; 17.8]	ns.
28	Both	378	Charleroi	13.9	[ 12.5; 15.4]	<0.001
29	Both	226	Mons	14.1	[ 12.3; 16.0]	<0.001
30	Both	95	Ieper	14.3	[ 11.4; 17.1]	<0.01
31	Both	283	Namur	14.9	[ 13.1; 16.6]	<0.001
32	Both	138	Tournai	15.2	[ 12.7; 17.8]	<0.001
33	Both	103	Huy	15.8	[ 12.7; 18.9]	<0.001
34	Both	52	Diksmuide	16.8	[ 12.2; 21.4]	<0.01
35	Both	79	Waregem	17.0	[ 13.2; 20.8]	<0.001
36	Both	163	Thuin	17.4	[ 14.7; 20.0]	<0.001
37	Both	49	Bastogne	17.5	[ 12.5; 22.5]	<0.01
38	Both	58	Virton	18.1	[ 13.4; 22.8]	<0.01
39	Both	83	Neufchâteau	21.9	[ 17.2; 26.7]	<0.001
40	Both	121	Ath	23.4	[ 19.2; 27.6]	<0.001
41	Both	96	Philippeville	23.9	[ 19.1; 28.7]	<0.001
42	Both	160	Dinant	24.4	[ 20.6; 28.3]	<0.001
43	Both	91	Marche-en-Famenne	26.7	[ 21.2; 32.3]	<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 = 10.3