

National borders determine mortality rate

Differences between Flanders and the Netherlands

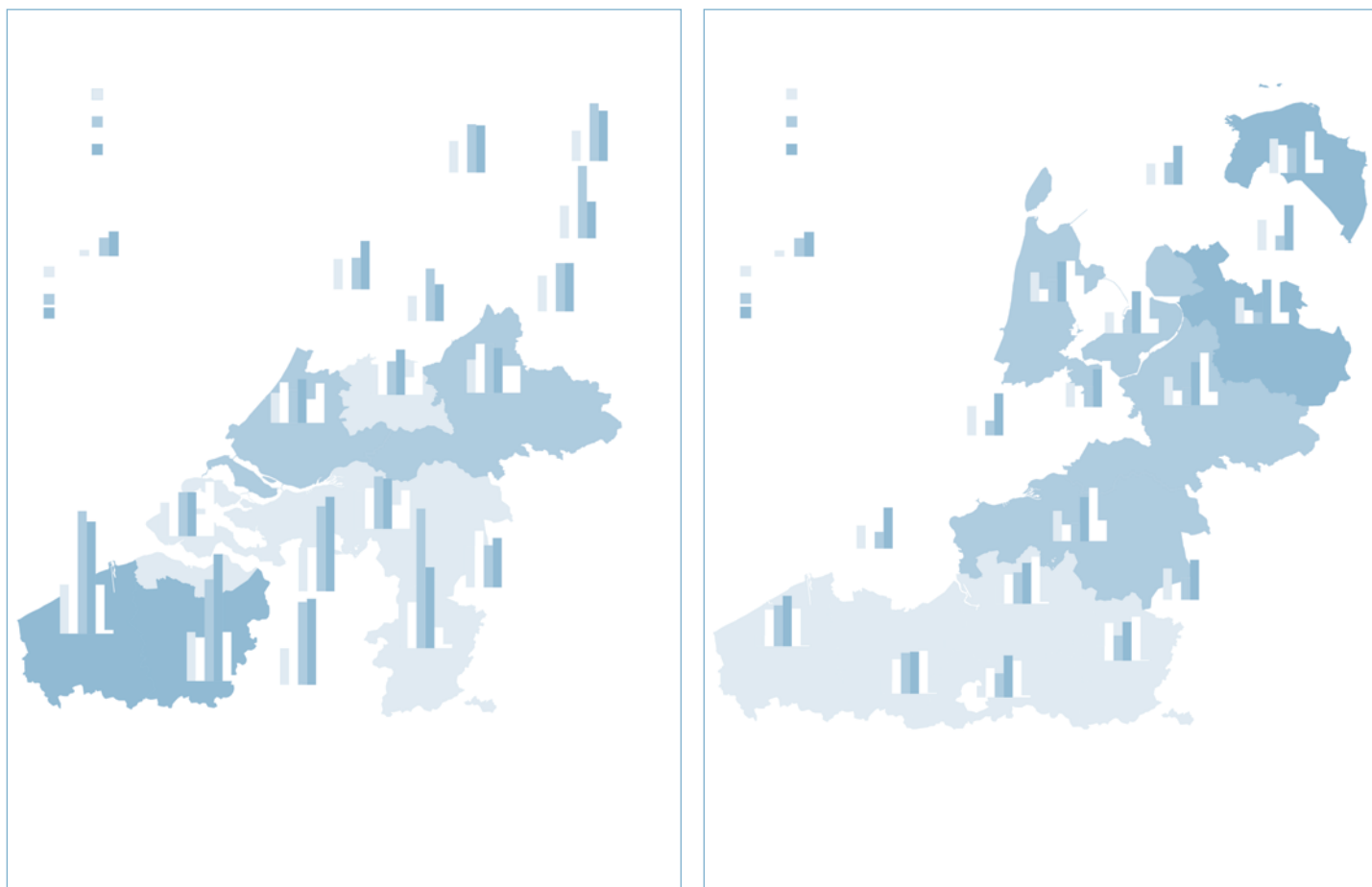
DR LUC BONNEUX AND CORINA HUISMAN,
Contact: bonneux@nidi.nl

NIDI recently compiled a mortality atlas of 272 regions in the European Union and the EFTA countries. For each region, the atlas describes mortality by age, sex and cause of death. National borders proved to be important predictors of mortality. We found marked differences in cause specific mortality between the historically closely linked Flanders and the Netherlands. Flanders suffered most from suicide and road traffic accidents among men, the Netherlands most from smoking related mortality among women.

Potential years of life lost broken down by the five leading causes of death in the Netherlands and Flanders (also indicated: other and unknown causes of death)						
		PYLL				
		Men		Women		
Position		Flanders	Netherlands		Flanders	Netherlands
1	Suicide	6.1	2.8	Breast cancer	2.5	2.5
2	Traffic accidents	6.1	2.5	Lung cancer	0.8	1.7
3	Lung cancer	2.7	2.0	Suicide	2.0	1.1
4	Ischaemic heart disease	2.7	2.5	Traffic accidents	2.0	0.8
5	Alcohol-related	2.3	1.4	Stroke	0.8	0.9
	Other	14.5	22.2	Other	10.0	16.4
	Recorded as unknown	0.4	2.4	Recorded as unknown	0.1	1.4
	Total	34.8	35.8	Total	18.2	24.8

We were able to compare mortality in the Flemish and Dutch provinces (NUTS-2 regions in EU jargon), who are culturally, ethnically and linguistically closely linked. Flanders is the Dutch speaking part of Belgium. Male life expectancy in the Netherlands is similar to that in Flanders, but Flemish women live 14 months longer than Dutch women. Potential Years of Life Lost (PYLL) is a measure of the loss of productive life years before age 65 (see box page 16). Again among men, differences were small, but 1,000 Dutch women lost 6.6 more productive years than women born south of the Dutch-Belgian border (see table).

Mortality up to age 65 in the 15 provinces of the Netherlands and Flanders. The darker the colour, the higher the mortality rate. The bars in each province give the top five causes of death, the sixth bar being the category 'unknown'.



The table shows the main reasons of loss of life by premature death. In Flanders, suicide and traffic accidents top the list of causes of death among men. Lung cancer (smoking) comes in third, followed by ischaemic heart diseases and, in fifth place, alcohol-related mortality. The latter is no more than a rough proxy of death from alcohol, based on reported deaths from alcohol consumption and chronic liver disease. Flemish men lose 6.9 years of life more than Dutch men through suicide and traffic accidents. In the Netherlands, suicide also tops the list, followed by traffic accidents and ischaemic heart disease. Lung cancer and alcohol-related mortality occupies the fourth and fifth place. Among women breast cancer accounts for most deaths. Dutch women lose almost a year of life more to lung cancer than do Flemish women. Whereas suicide and traffic accidents account for twice as many years of life lost among women in Flanders than among Dutch women, this is still much less than among Flemish men. The large cause-of-death category 'unknown' makes interpretation difficult, as in the Netherlands this is very large. The category 'unknown' would rank fourth among Dutch men, close to ischaemic heart disease, and third among Dutch women. The seemingly lower mortality from ischaemic heart disease in the Netherlands, may likely be attributed to misclassified causes of death.

death. Among men, suicide rates and traffic accidents are very high in Flanders, especially in the two Western provinces touching to France. Female suicide is high too in these provinces. In the Netherlands, suicide rates are much lower and vary less. There is a clear-cut dividing line between Flanders and the Netherlands, straight through the old dukedoms that straddle the border.

Photo: www.lh6.ggpht.com / Dirk



Geographic differences

The maps show geographic differences in mortality broken down by the five causes of



Photo: www.blogimages.bloggen.be/willysegers

Death from breast cancer is high in all regions of Flanders and the Netherlands. Whereas differences in death from traffic accidents and suicide between Flanders and the Netherlands are less marked among women than among men, they do exist. Flemish and Dutch women differ most in terms of mortality from lung cancer. If these figures are extrapolated to other smoking-related causes of death, thousand Dutch women lose over four years of their productive lives to smoking, the double of Flemish women.

Mortality differences are culturally/socially determined

A comparison of Flanders and the Netherlands shows the importance of society and culture in explaining mortality differences. Breast cancer among young women is a tragedy, but similar mortality from breast cancer between the Netherlands and Flanders suggest that there is little we can do about it yet. Conversely, large differences between Flanders and the Netherlands suggest that suicide and traffic accidents can be prevented.

Suicide is usually an act of desperation. But where does this desperation come from in Flanders, one of the most prosperous regions of the world? Compared to other EU member states, suicide rates in the Netherlands are low while in Flanders being high. 'Something' in Dutch culture seems to offer relative protection against suicide, an opposite 'something' in Flemish culture gives rise to desperation and suicide.

Measures to prevent traffic accidents include safe roads, strict police controls and traffic education. Flanders didn't know a distinction between through roads and residential streets, police controls were not very popular among the electorate and traffic education was seen as a regrettable necessity. That said, Flanders is now making great progress, but the historical burden remains considerable.

Women's liberation is one of the greatest achievements of the 1960s. But Dutch women became pioneers in tobacco consumption. With a historically strong tobacco industry,

employment and income from excise duties were more important than public health. The Netherlands was one of the worst pupils in the European classes, learning slowly how to curtail the health impact of smoking...

To conclude

Flanders and the Netherlands are close neighbours, yet their mortality rates differ markedly. Whereas Flanders is improving its track record in traffic accidents, it is still in many ways groping in the dark when it comes to suicide. In the Netherlands, a tighter control of tobacco consumption and more quitting programmes targeted to women is needed. More attention should be paid to the large number of unknown causes of death in the Netherlands, as these may have an etiology and potential for prevention, too. That said, there is every reason to be optimistic. Premature mortality became very low. While combating breast cancer at a young age will remain a big challenge for science, premature mortality is dominated by suicide, traffic accidents, tobacco and alcohol abuse. These are not health problems that we should reconcile ourselves with. If these problems were to be reduced by half, the number of years of life lost before the age of 65 would be cut by a quarter. This is not a mission impossible. It's always someone's child, often someone's parent... and it's a commendable goal to strive for.

This article was first published in Dutch in Demos 24(6), pp. 1-4, titled 'Landsgrenzen bepalen sterftekans – Verschillen tussen Vlaanderen en Nederland onderzocht'.

DEMOS is published ten times a year with the aim of promoting knowledge and awareness of population issues. Inquiries about manuscripts for DEMOS can be addressed to the Editorial Committee.



Material from this publication may be reproduced freely, provided that credit is given to DEMOS, NIDI and a copy of the publication in which the material appears is forwarded to NIDI.

NIDI is an institute of the Royal Netherlands Academy of Arts and Sciences (KNAW), conducting scientific demographic research, both at the national and international level.

colofon

Demos	is a publication of the Netherlands Interdisciplinary Demographic Institute (NIDI), Director: Frans Willekens
Editorial Committee	Editor in Chief: Harry Bronsema Joop de Beer Gijs Beets Luc Bonneux Jeannette Schoorl
Address	NIDI/DEMOS P.O.Box 11650 2502 AR The Hague The Netherlands
Telephone	00 31 70 3565200
Telefax	00 31 70 3647187
E-mail	demos@nidi.nl
Internet	http://www.nidi.nl/public/demos/
Elementary design	Harmine Louwé
Printed by	Nadorp Druk b.v., Poeldijk

PYLL

The mortality and population data relating to the Netherlands and Flanders were provided by Eurostat as part of an international comparative study. Eurostat receives the data from the national statistical offices. Potential Years of Life Lost (PYLL) is an older measure that describes the number of productive years of life lost through death before the age of 65. It's a simple arithmetic: someone who dies at the age of 20 loses $65-20 = 45$ years of life. Someone who dies at the age of 60 loses $65-60 = 5$ years of life. PYLL only take into account premature mortality: people who die when they are 65 or older are not counted.