



Health statistics

Atlas on mortality in the European Union

Chapter 20 Violent deaths

Data 1994–96



EUROPEAN
COMMISSION

Inserm

CépiDC — Centre d'épidémiologie
sur les causes médicales de décès



UNIVERSITÉ PARIS X NANTERRE



THEME 3
Population and
social conditions

3

Europe Direct is a service to help you find answers to your questions about the European Union

**New freephone number:
00 800 6 7 8 9 10 11**

A great deal of additional information on the European Union is available on the Internet.
It can be accessed through the Europa server (<http://europa.eu.int>).

Luxembourg: Office for Official Publications of the European Communities, 2002

ISBN 92-894-3727-8

© European Communities, 2002

ATLAS — Contents

1. Introduction.....	9
2. Methodology.....	11
3. General mortality.....	15
4. 'Premature' mortality.....	23
5. Mortality by age group.....	27
6. Typologies of mortality by age.....	43
7. Typologies of mortality by cause.....	49
8. Cardiovascular diseases.....	53
9. Respiratory diseases.....	59
10. Respiratory cancers.....	65
11. Intestinal cancers (colon, rectum and anus).....	71
12. Stomach cancers.....	75
13. Breast cancers.....	79
14. Cancers of the uterus.....	81
15. Prostate cancer.....	83
16. Cancer of the pancreas.....	85
17. Cancer of the bladder.....	89
18. Malignant melanoma of the skin.....	93
19. Mortality associated with alcoholism.....	97
20. Violent deaths.....	101
21. AIDS.....	111
Annex 1 — Standard European population.....	115
Annex 2 — Causes of death (European shortlist).....	116
Annex 3 — List of NUTS 2 regions.....	118

20. Violent deaths

Violent deaths cover deaths that occur in a very wide range of circumstances.

Transport accidents are the main cause of violent death in the male population, with a European rate of 15.5 per 100 000, followed by suicides with a rate of 13.8 per 100 000. These two causes of death mainly affect younger people (under 65 years). Accidental falls are the third most common cause of violent death and mostly affect older people. They are the main cause of violent death among women, followed by transport accidents and suicide.

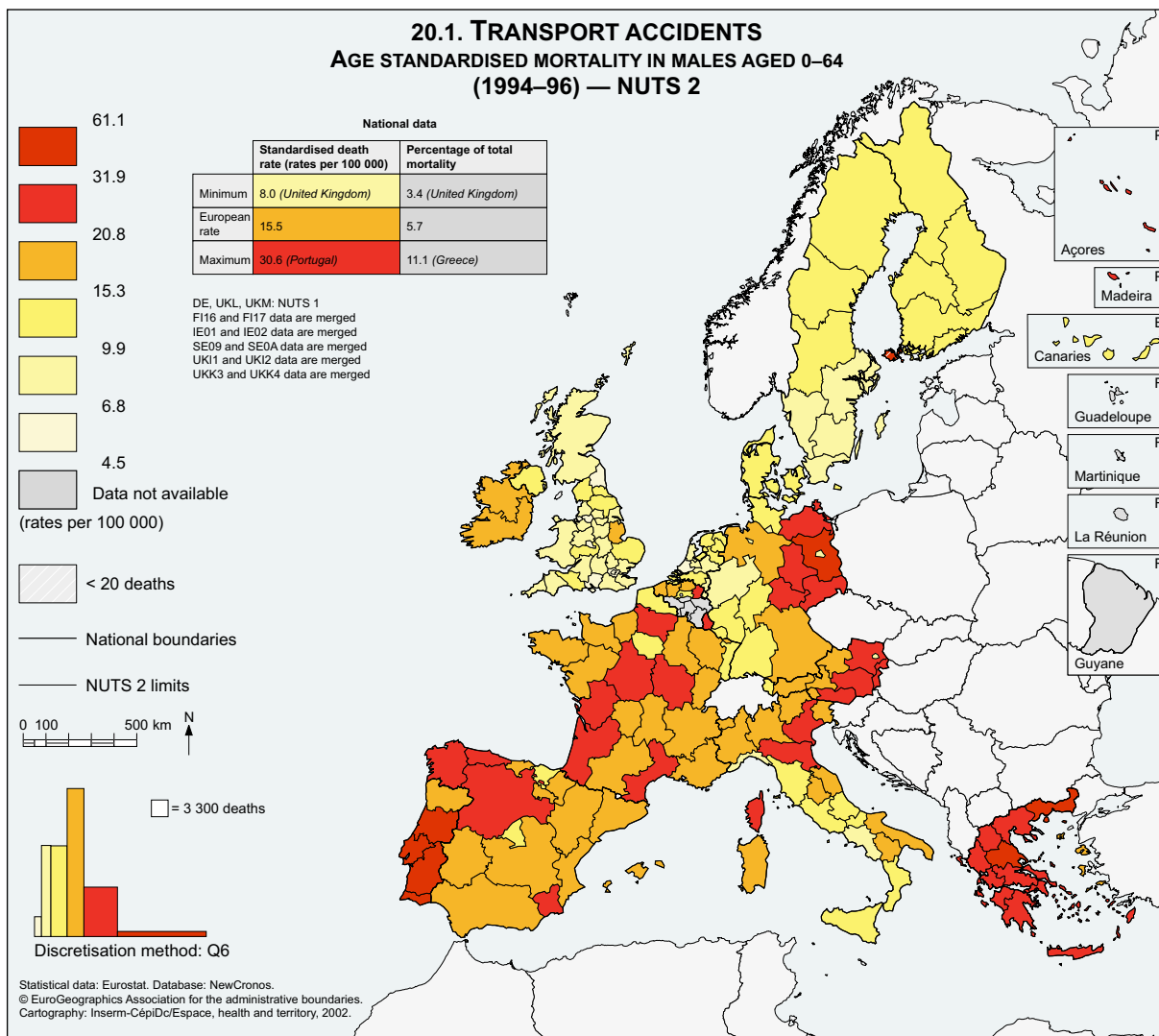
Excess male mortality from these causes of death is widespread and is particularly marked for transport accidents and suicides.

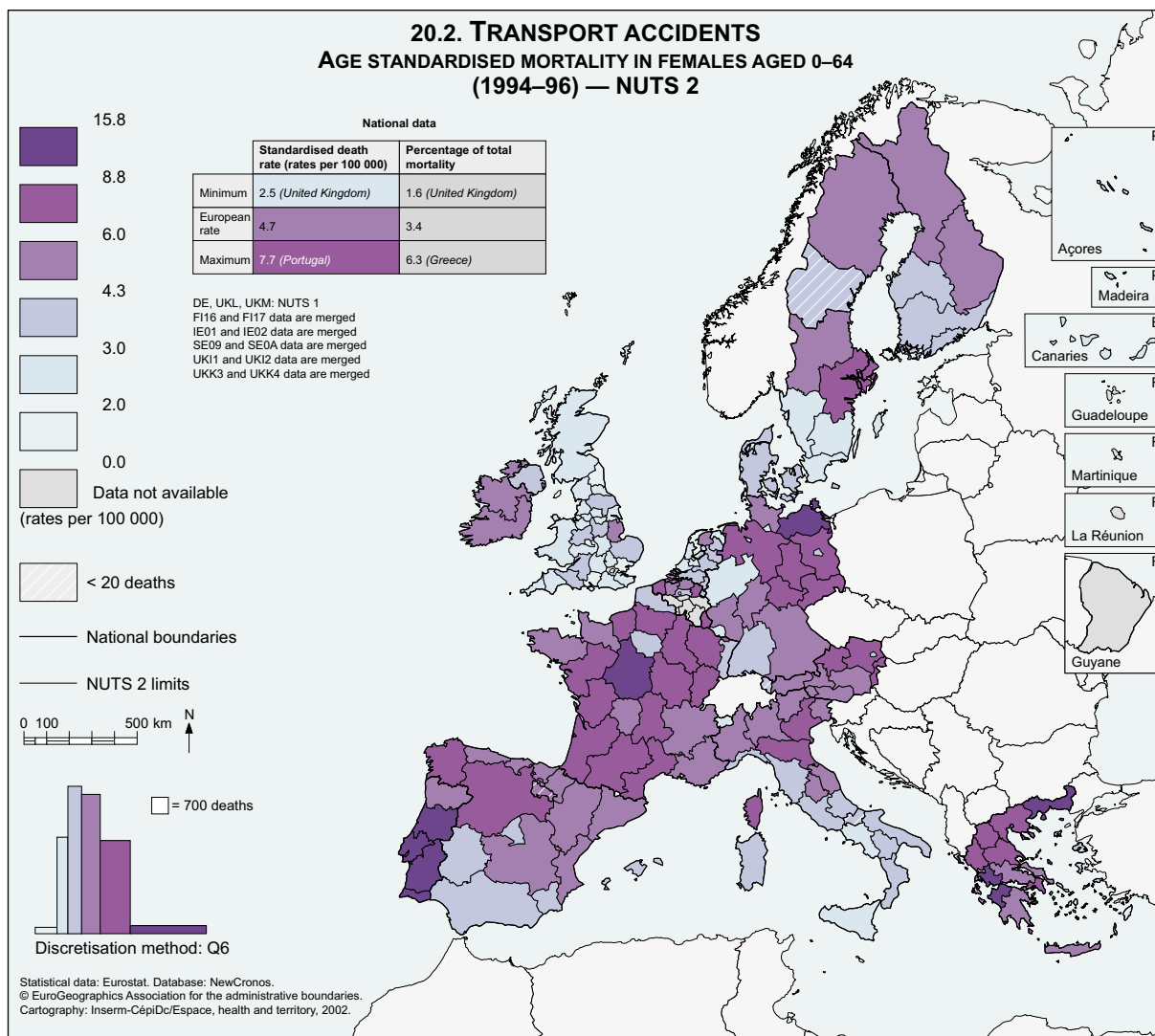
Transport accidents

Regional death rates from transport accidents (road, rail and air) mainly reflect mortality associated with road accidents, which cause by far the greatest number of deaths, since they account for almost 2 % of male deaths and 1 % of female deaths.

Deaths from transport accidents do not affect the whole population evenly. Male rates are 3.3 times higher than female rates. Over three quarters of these deaths affect the population aged under 65 years.

Road accidents are the main cause of mortality in the 15–24 age group in most of the European regions (see mortality of adolescents and young adults by age group, Chapter 5).





Very great regional contrasts

European disparities in deaths from transport accidents are very marked. Male and female death rates vary at a ratio of 1 to 15.

The distribution of regional male rates shows a relatively clear split between the northern and southern Member States.

Portugal and Greece have the highest European rates, contrasting strongly with those of the Scandinavian countries, the Netherlands and the UK, where the rates are well below average.

Belgium, France, Spain, Luxembourg and Austria also have an overall excess mortality. In these Member States, the regions containing the capitals do, however, form an exception by virtue of their lower rates. Nord-Pas-de-Calais and Alsace, Cantabria and the Basque country, and Vorarlberg are also re-

gions with below-average mortality in these Member States.

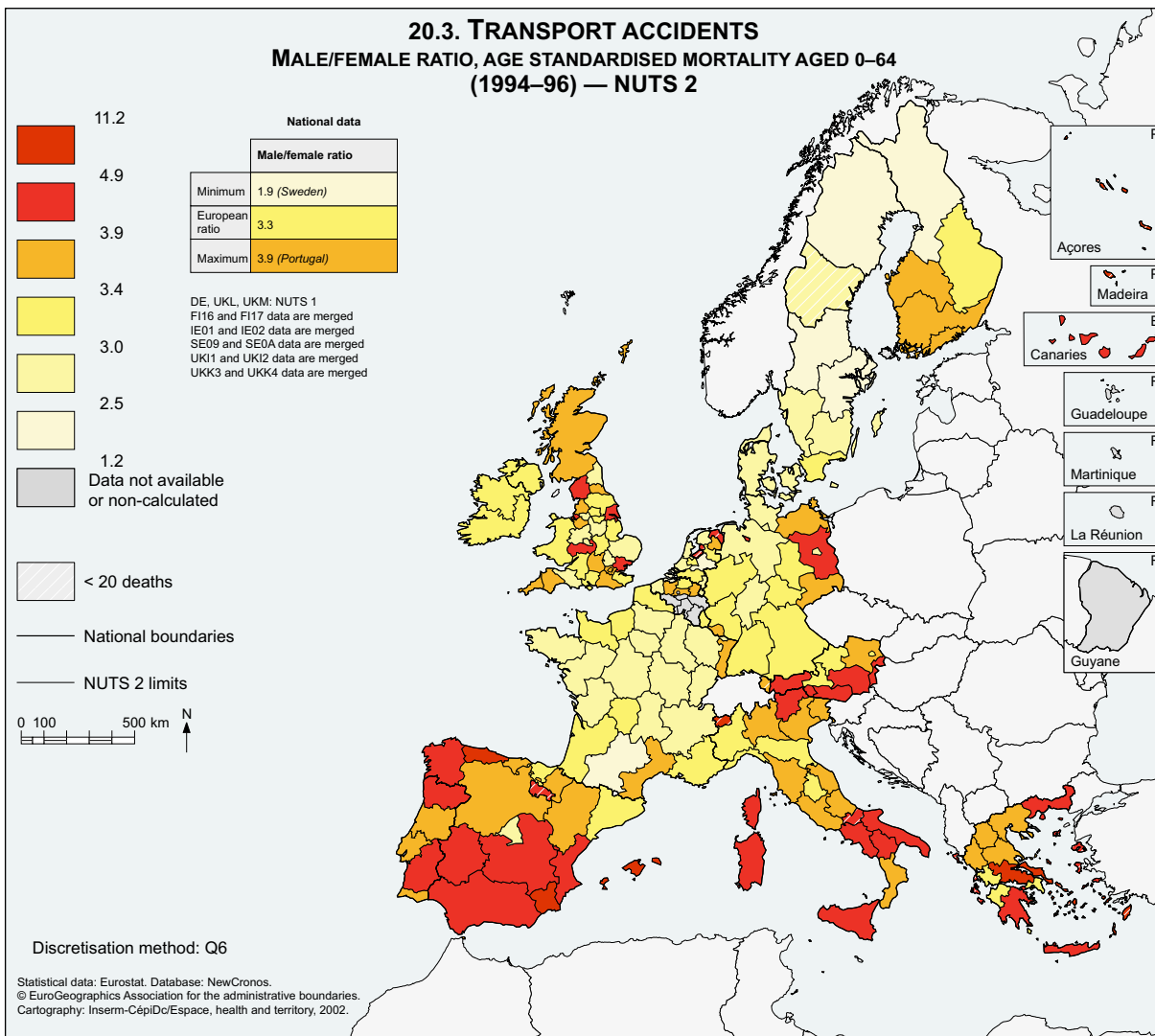
In Germany, the eastern *Länder* stand out sharply from the rest of the country, since they have much higher death rates, although Berlin is an exception with significantly lower rates similar to those of Hamburg and Bremen.

In Italy, there is a contrast between the worse affected northern regions and the southern regions.

The geographical pattern for female mortality is virtually identical to that for men, except in Sweden and Finland, where the situation is less favourable than in the rest of the EU.

Known risk factors

There are disparities in mortality from transport accidents despite the fact that a common European road-safety policy was launched a number of years



ago relating, in particular, to traffic regulation and safety equipment. The sharp contrasts in mortality show that the rules are implemented and enforced differently from one Member State to another. The contrast between the northern and southern Member States may be partly explained by these differences, since a willingness to obey rules is, culturally and historically, more a feature of the northern countries.

Alcohol consumption also plays an important part in these accidents. A large proportion of road accidents is caused by excessive alcohol consumption. Furthermore, there are similarities between the geographical pattern of mortality associated with alcoholism and that of mortality from transport accidents.

The favourable position of urban regions, which have better infrastructure, testifies to the importance of the quality of road networks.

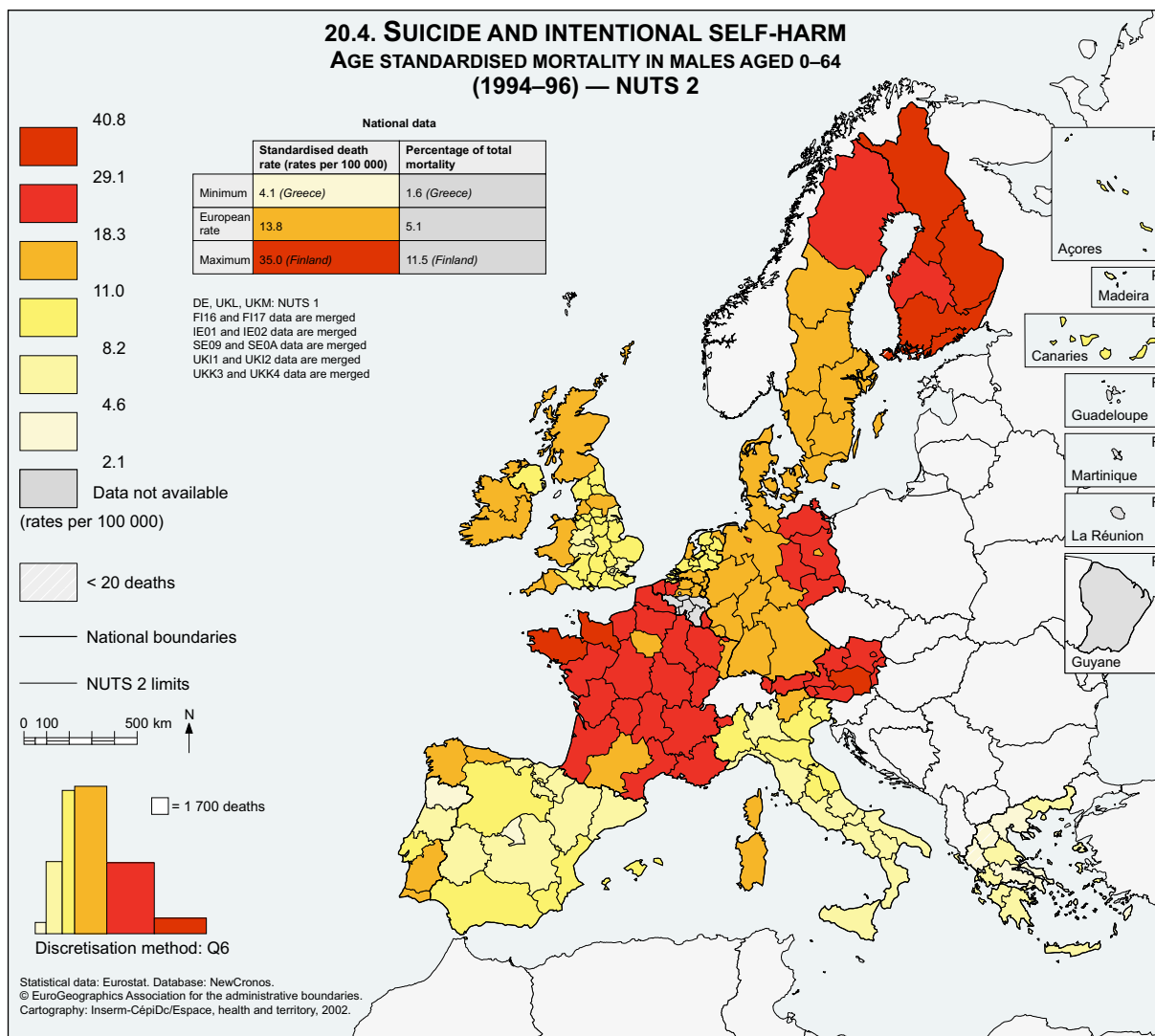
The differences across Europe may also reflect the quality and speed of the emergency care provided to accident victims.

Suicide

Suicide has a major impact on premature mortality. After road accidents, it is the main cause of mortality among young people in the 15–24 age group. Three quarters of deaths from suicide involve a population aged under 65.

Excess male mortality is very marked, with an average European rate 3.3 times higher than that for women.

The maps showing mortality rates from suicide before 65 years reveal particularly marked spatial disparities within the EU. These disparities are greater than for all other causes of death (except AIDS).



Rates vary at a ratio of 1 to 20 for men and 1 to 50 for women, depending on the region.

Although male rates are much higher, in most regions there is a correlation between male and female rates.

The maps showing mortality from suicide reveal national trends.

Finland is the worst affected European country, with high rates for all its regions. It is the only European country where suicide is the main cause of mortality among young people in the 15–24 age group, ahead of road accidents.

All the regions of Austria and France also have high rates, although they are lower in Alsace, Île-de-France and Midi-Pyrénées.

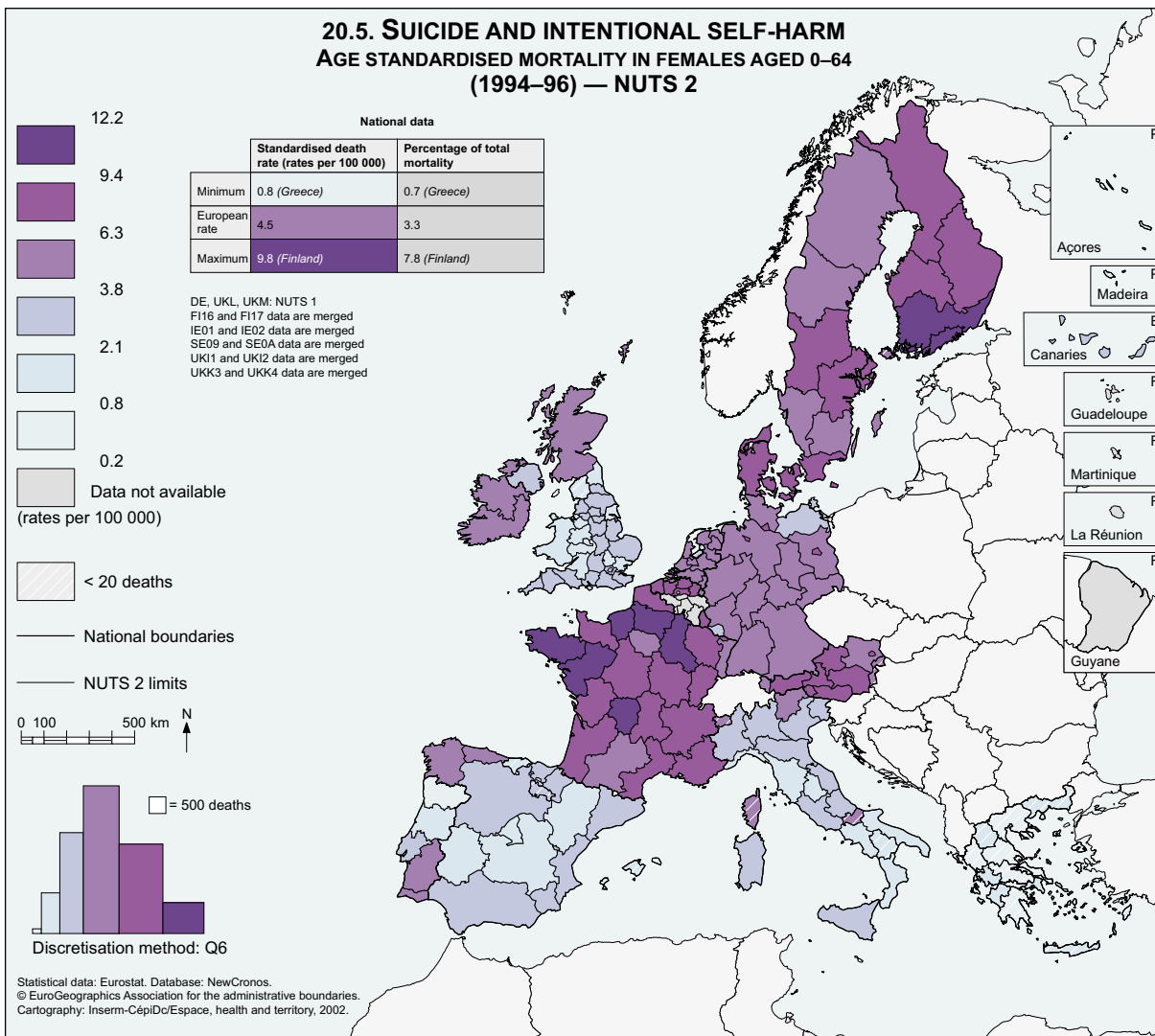
Belgium, Denmark, Germany, Ireland, Luxembourg and Sweden have intermediate rates close to the

European average. Germany has higher rates in the eastern *Länder* for men and in the urban *Länder* for women.

The figures for the Netherlands are less favourable for women than for men, since the male rates are similar to those for the United Kingdom. These two Member States stand out from among the northern EU countries by virtue of their overall low mortality rates from suicide.

The most striking contrast in the EU is between the southernmost Member States of Greece, Italy, Spain and Portugal and the rest of Europe. Suicide has a very low impact on mortality in these Member States, particularly among the female population in Greece.

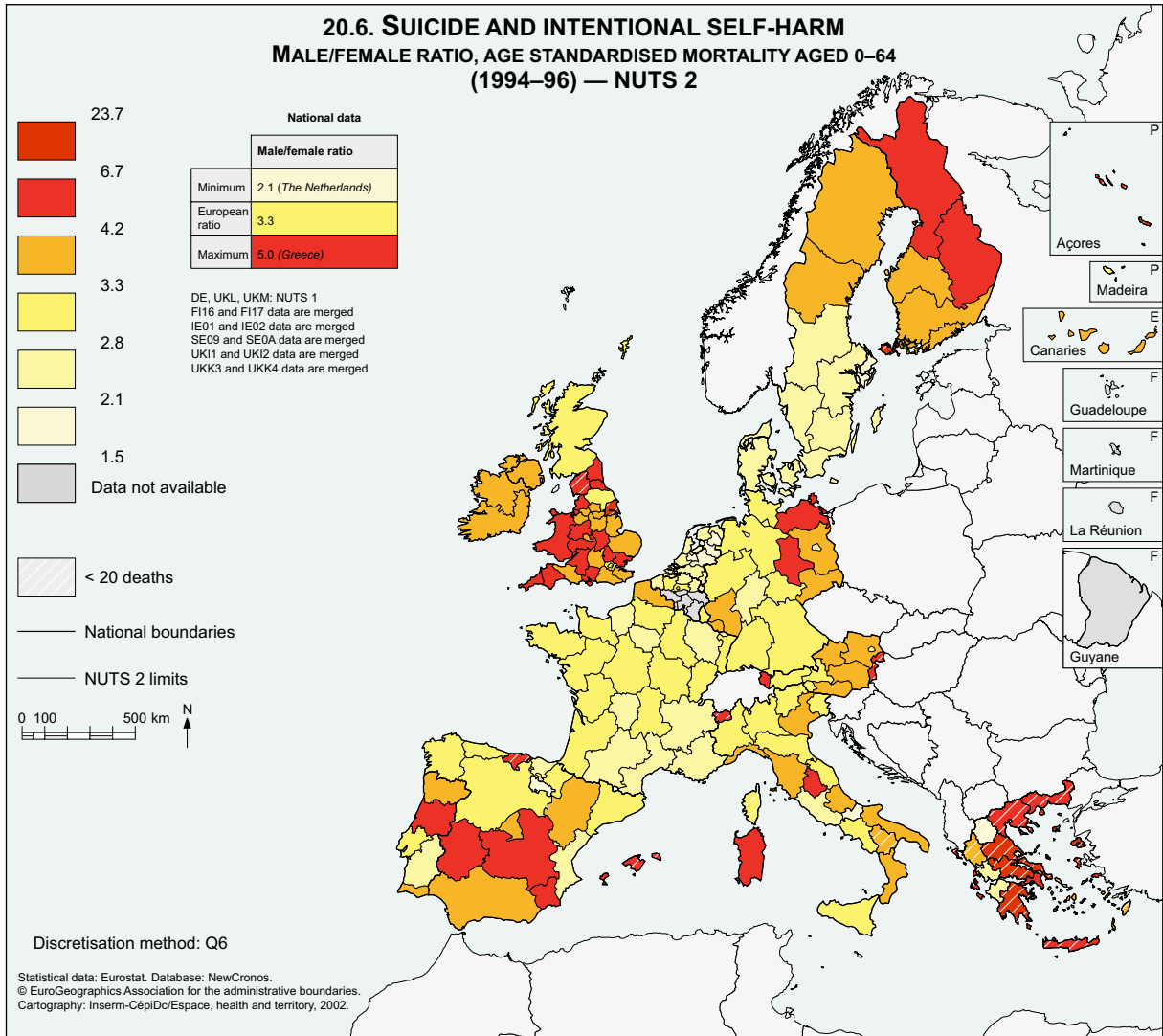
There are, however, a number of nuances. Northern Italy, for example, is worse affected than the south. In Portugal, on the other hand, rates are



higher in the south than in the north. Lastly, Galicia and Principado de Asturias have higher rates than the other Spanish provinces.

These very marked disparities are not easy to interpret. Of all causes of death, suicide is the one that has been the subject of the largest number of studies dealing with the validity of data both within individual Member States and in terms of international comparability. The problems raised concern the absence of precise criteria for declaring a suicide and the lack of autopsies for accurately determining the cause of death, in particular for cases of

undetermined intent. Preparedness to record a death as suicide may also depend on the type of doctor responsible for certifying the death or on the socio-demographic characteristics of the deceased person. This preparedness may also vary depending on cultural or religious criteria. The very low rates recorded in some southern countries may also be partly due to under-reporting. Most studies conclude that official statistics underestimate death from suicide. However, the differences in mortality are such that they cannot be due solely to differences in reporting practices.



Accidental falls

Accidental falls are one of the main causes of death from everyday accidents (home, school, sports and leisure).

In contrast to the other types of violent death dealt with above, they mainly affect older people. This is particularly the case among women, for whom nine out of 10 deaths from accidental falls occur after 65 years.

Fractures, particularly those of the thigh-bone and hip, are a major contributory factor to these deaths among the older population.

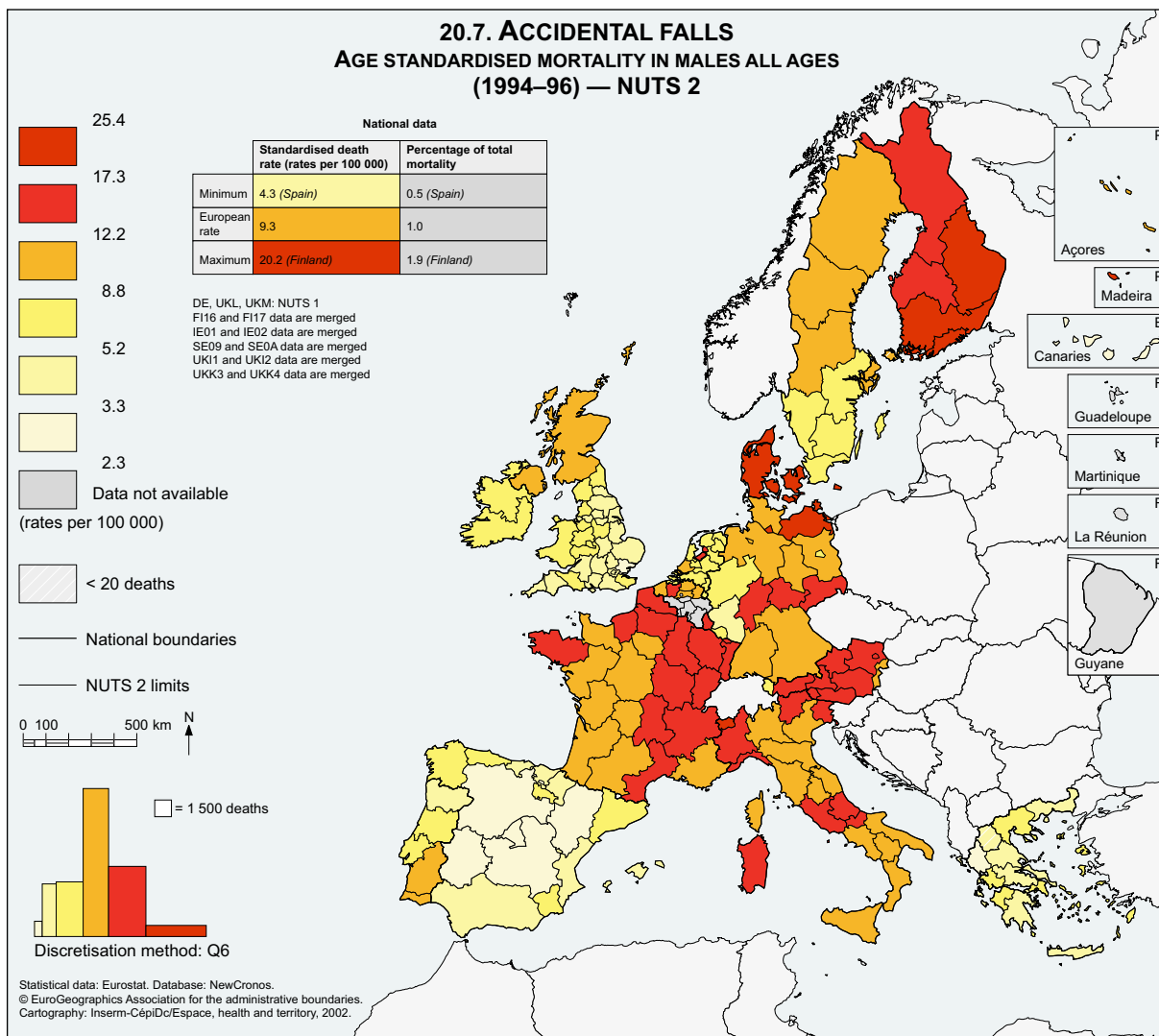
Excess male mortality from accidental falls is considerably less marked than for other violent causes of death. In certain European regions, particularly southern Italy, the rates are higher for women than for men.

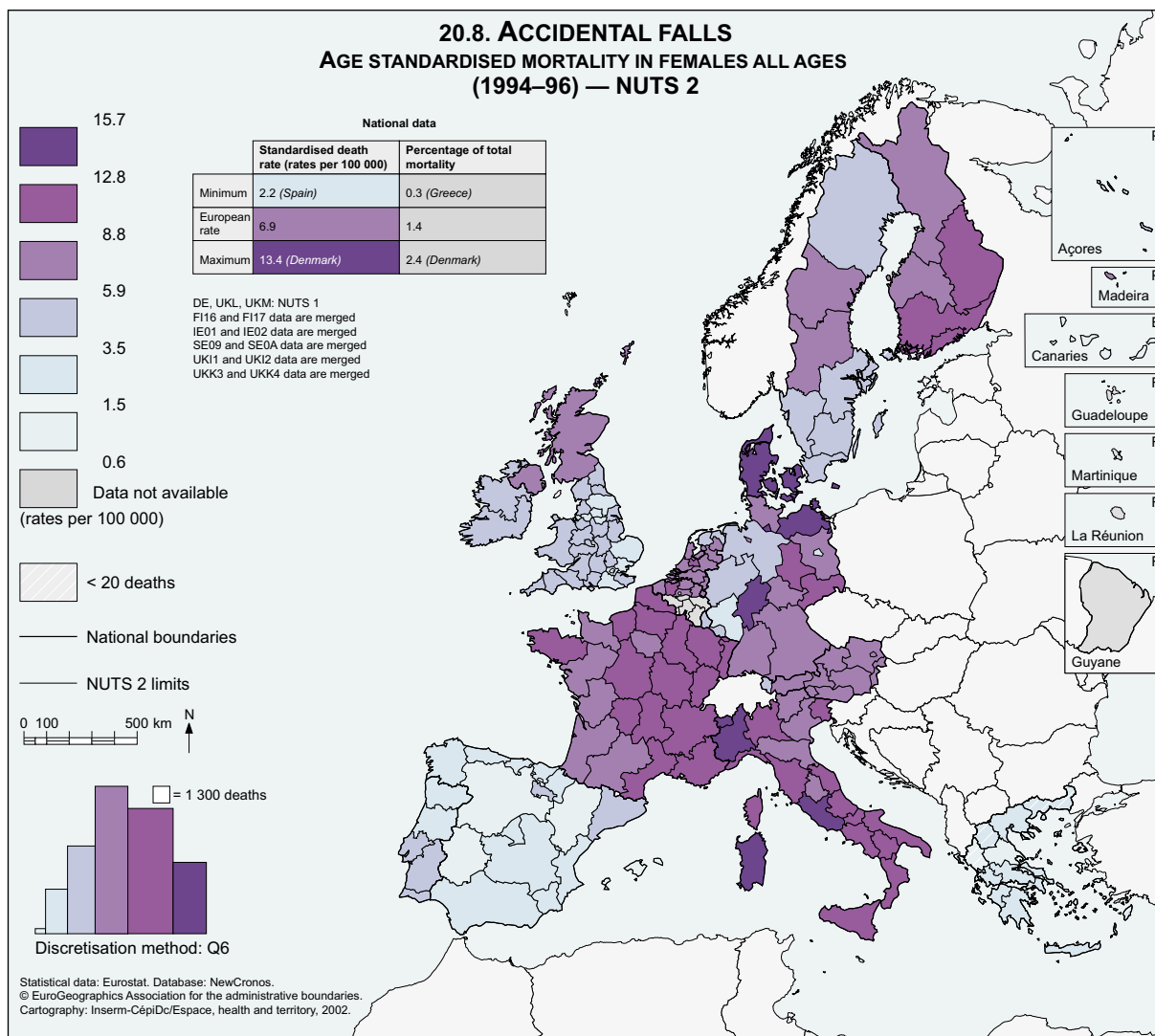
For men, three out of 10 deaths occur before 65 years. This, together with road accidents, is one of the main causes of mortality among very young boys.

Regional rates cover a very wide range, varying at a ratio of approximately 1 to 10 for men and 1 to 25 for women. The geographical patterns for the two sexes are similar in many points.

Denmark is the worst affected country for both men and women.

The Flemish part of Belgium, France, Italy, Austria and Finland have an overall excess mortality, although there are significant sub-national contrasts. Southern Finland is more affected than the north. In France, the western regions have lower rates than the eastern and mountainous regions, except for Bretagne. Vorarlberg is somewhat less affected than the rest of Austria. In Italy, the Alpine regions,





Lazio and Sardegna have higher rates than the other regions.

In Germany, the disparities are more pronounced than in the other Member States. Some neighbouring *Länder* have extreme rates. The situation is very variable in the urban *Länder*. Berlin has below-average mortality, while Hamburg has marked excess mortality.

In certain Member States, there is no correlation between the male and female rates. In the Netherlands, men are overall in a favourable situation compared with the other Member States, while the female rates are relatively high and similar to those for Belgium. In contrast, Luxembourg has higher

male rates, while female rates are close to the European average.

The situation of some European countries contrasts sharply with that of the countries mentioned above. Greece, the Iberian Peninsula and England and Wales have much lower mortality rates.

The risk of bone fractures (linked to bone mass), which is higher in northern than in southern Europe, may explain the disparities in mortality from accidental falls that exist, for example, between Finland and Greece. However, the absence of clear gradients indicates that there are probably other factors: type of housing (scattered detached houses), types of activity (gardening, outdoor activities, etc.) or eating habits (consumption of dairy produce).

