



**EUROPEAN COUNCIL:  
THE STATE OF THE MENTAL HEALTH IN EUROPE**

*The EU Mental State Report*

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Paris 2004

**MACRO INDICATORS SOURCES:  
WHO, OECD, EUROSTAT-CRONOS, IMS**

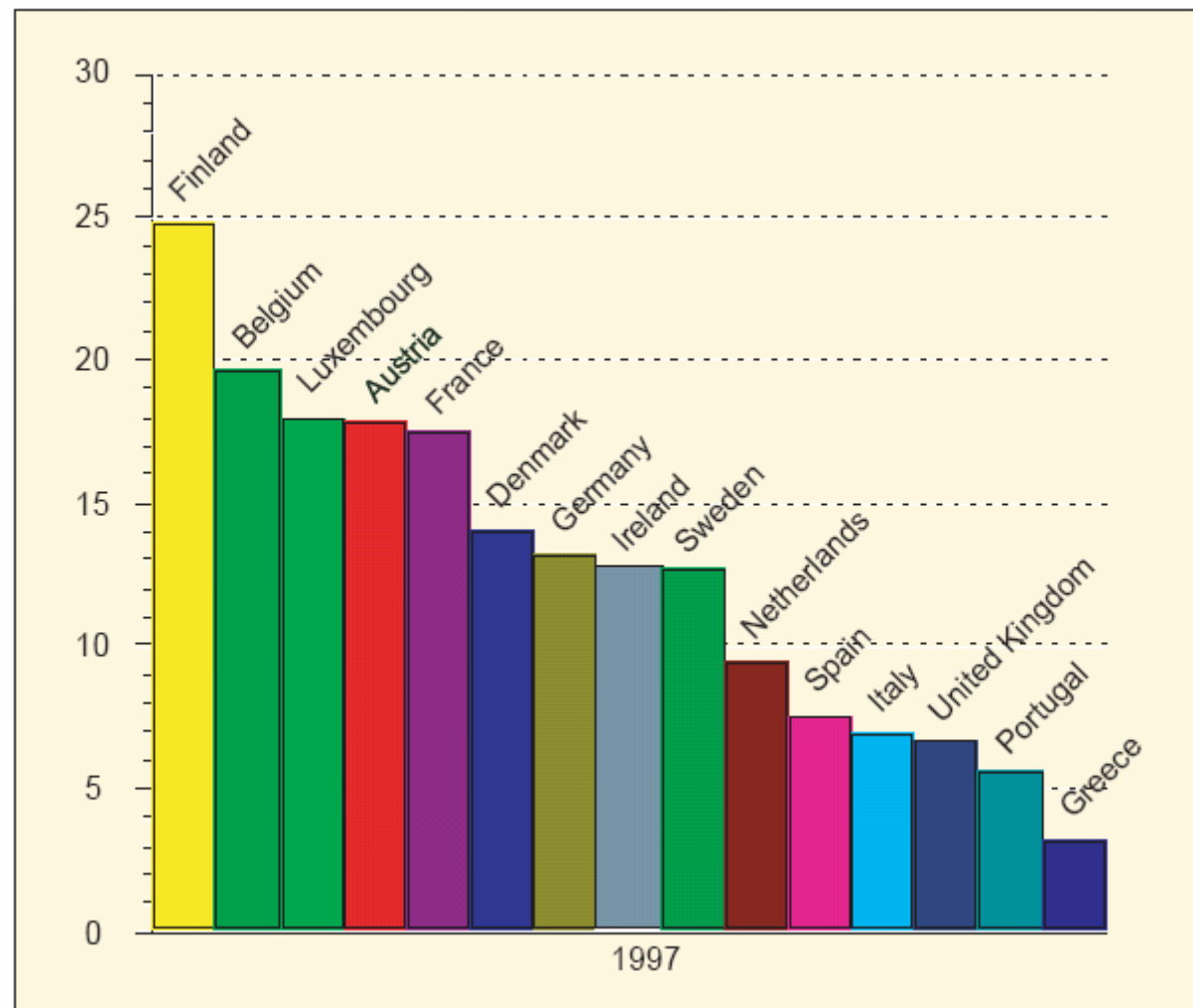
- General description of well being**
    - Source of hypothesis**
    - Complementary data**
- against “ad hoc” surveys**

## **AVAILABLE INDICATORS**

### **Mental health Indicators**

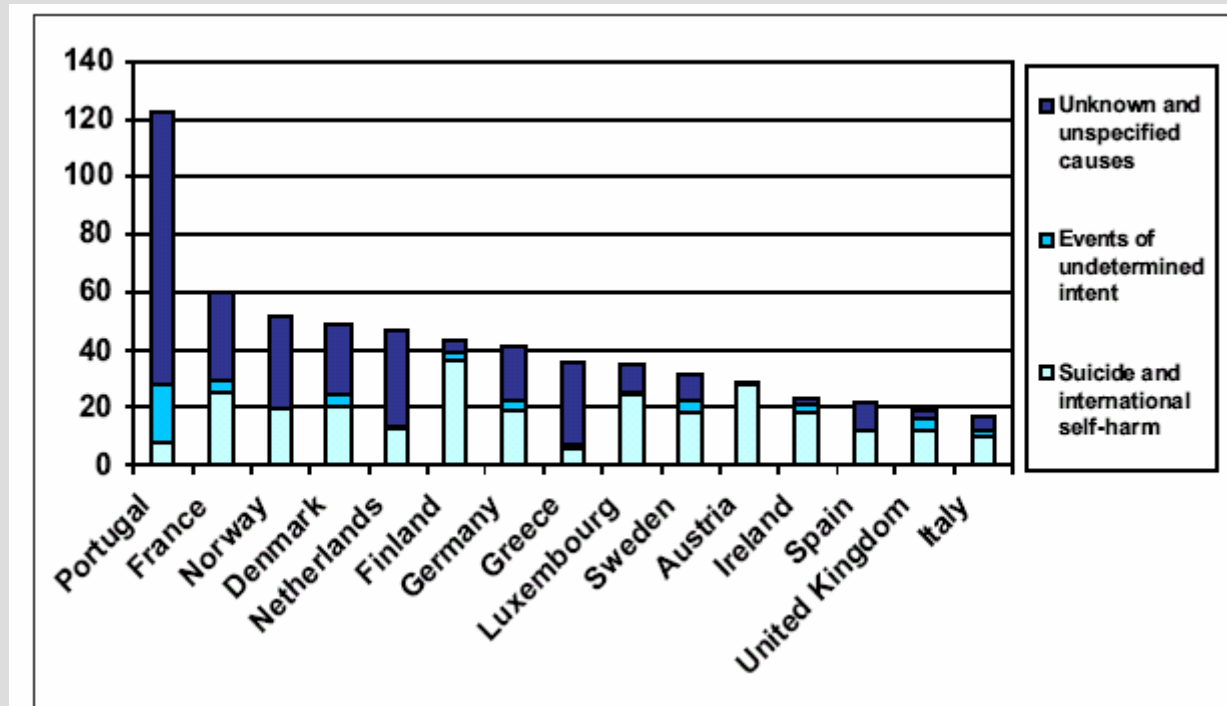
- Suicide**
- Alcohol consumption**
- Alcohol related deaths**
- Drug related deaths**
- Mental disorder mortality**

**Total suicide mortality rates across Europe, 1997.  
Standardised death rates, suicide and self-inflicted injury,  
all ages per 100,000.**



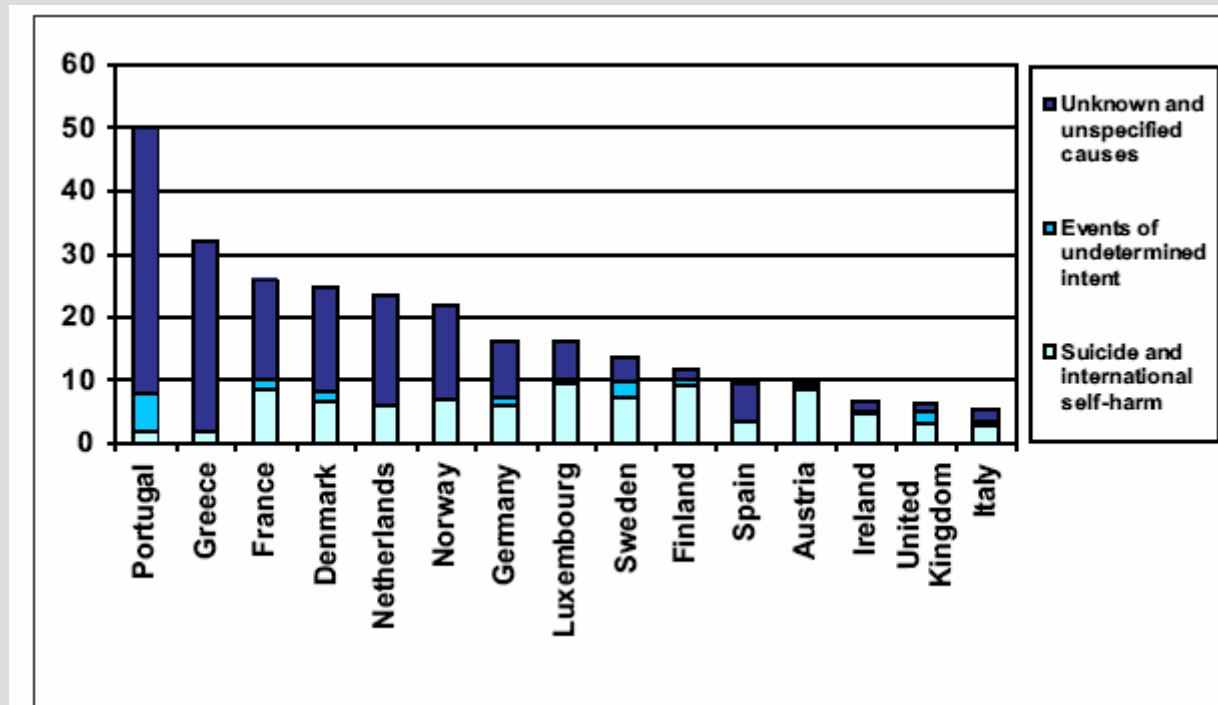
**Source WHO Health for All database**

# Male deaths from suicide, events of undetermined intent and unknown and unspecified causes. 1999 by country



Source: Eurostat New Cronos

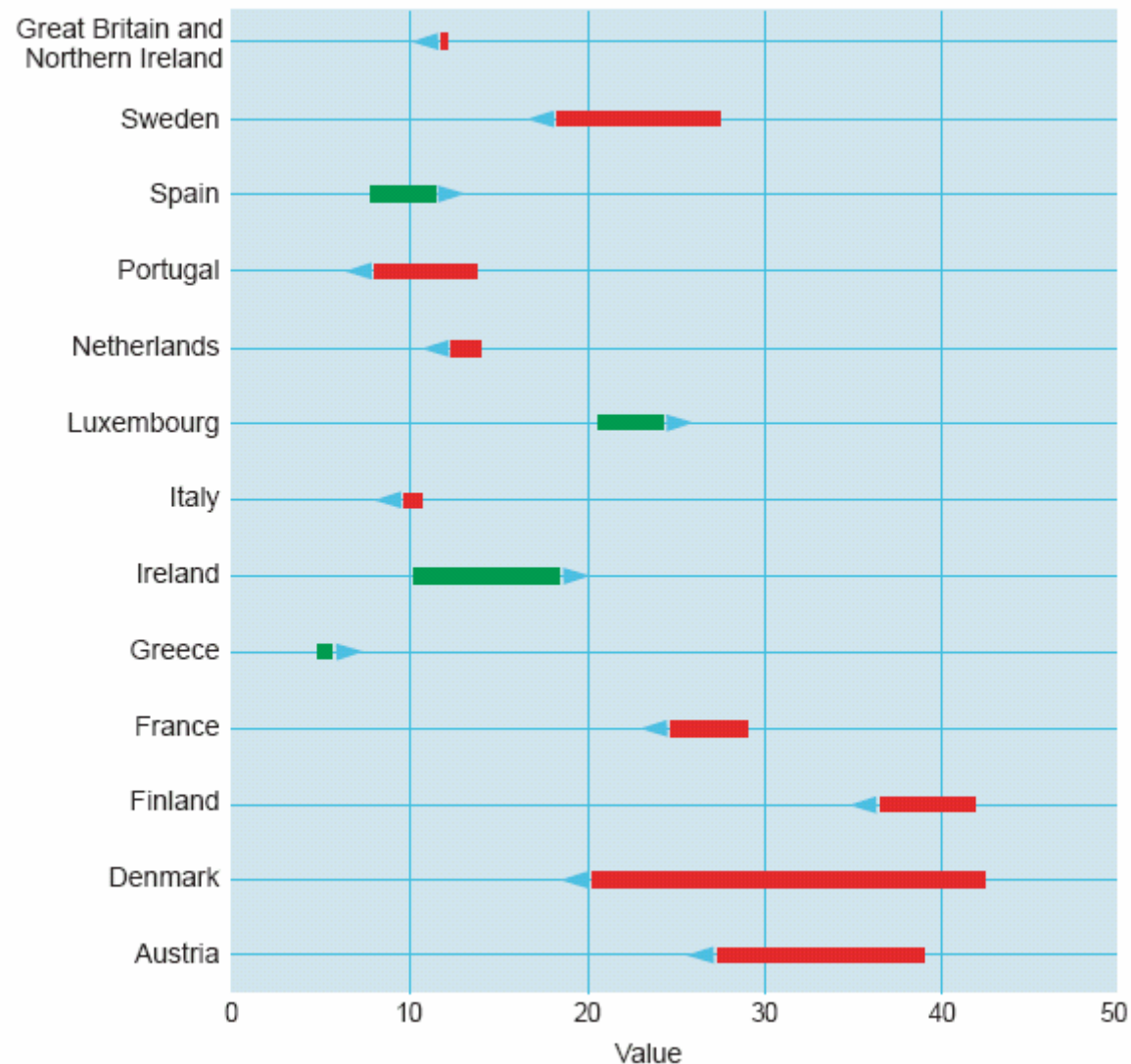
## Female deaths from suicide, events of undetermined intent and unknown and unspecified causes. 1999 by country



Source: Eurostat New Cronos

**Trends in male suicide by country.  
Standardised death rates, suicide and self inflicted injury,  
males all ages per 100,000, 1980-1999.**

**Green  
lines  
represent  
an  
increase**

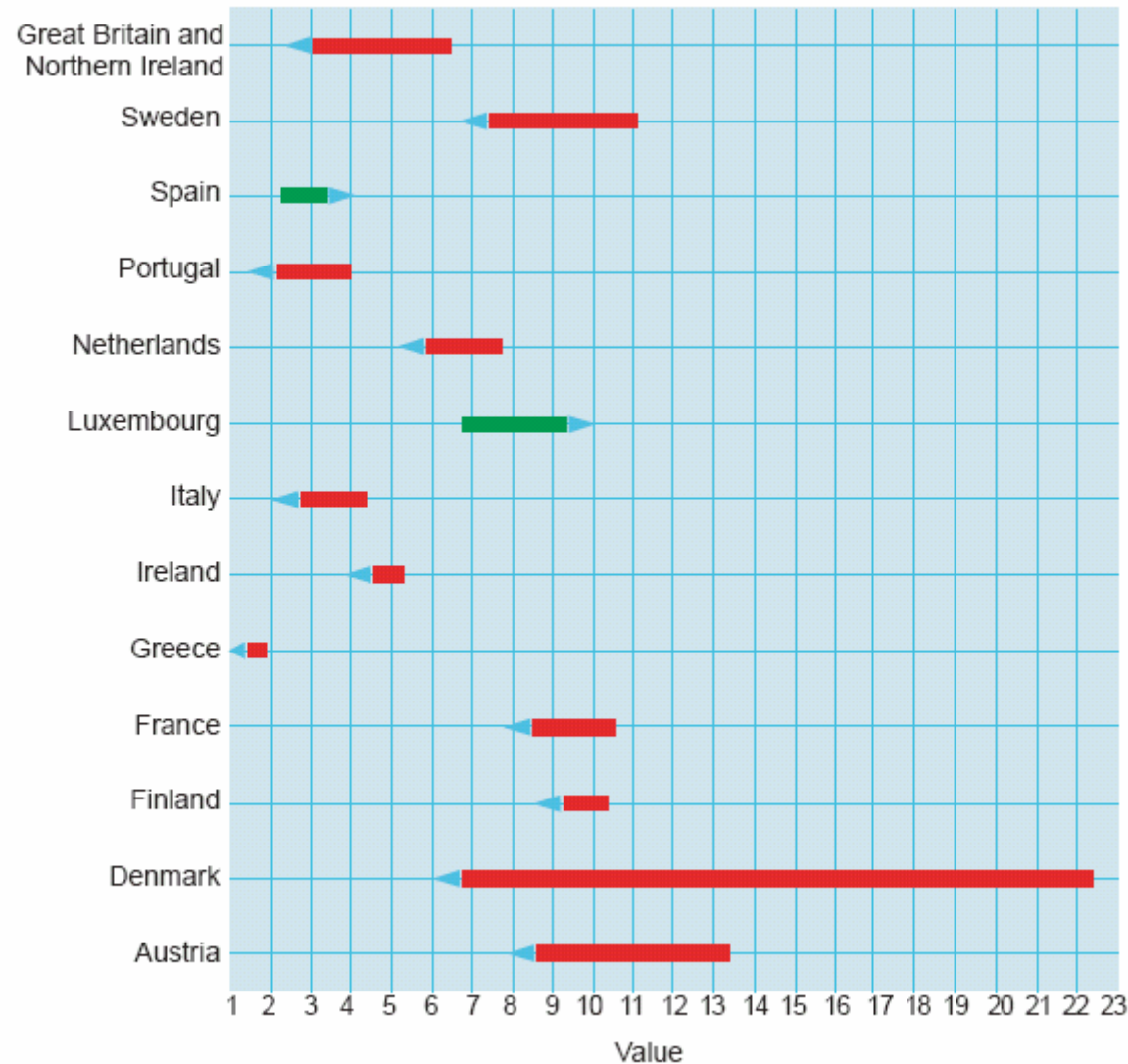


**Red lines  
indicate a  
decrease**

*Source: WHO Health for All Database*

# Trends in female suicide by country. Standardised death rates, suicide and self inflicted injury, females all ages per 100,000, 1980-1999

**Green  
lines  
represent  
an  
increase**



**Red lines  
indicate a  
decrease**

Source: WHO Health for All Database



# Trends of events of undetermined intent in EU in the 90thies

## MALE (EUROSTAT, COD 0.65)

Country	Rate/100,000; 1999 or last	Trend/year, 1995/2000
EU 15	3.5	=
AUS	0.8	-2.5%
BEL	2.7 <sup>o</sup>	-1.2%
FNL	2.9	-21.3%
DNK	3.8 <sup>oo</sup>	-28.9%
FRA	4.5	-8.0%
GER	3.3	-1.8%
GRE	1.0	+18%
IRE	2.4	+14.1%
ITA	1.7	+14.1%
LUX	0.5	-34%
NED	0.5	-8%
NOR	0.4	-20%
POR	20.2	+6%
SPA	0.5	=
SWE	4.1	-9.7%
UK	0.4	-20%

**\*\*1995, <sup>oo</sup>1996, <sup>o</sup>1997, \*1998, §1999, #2000**

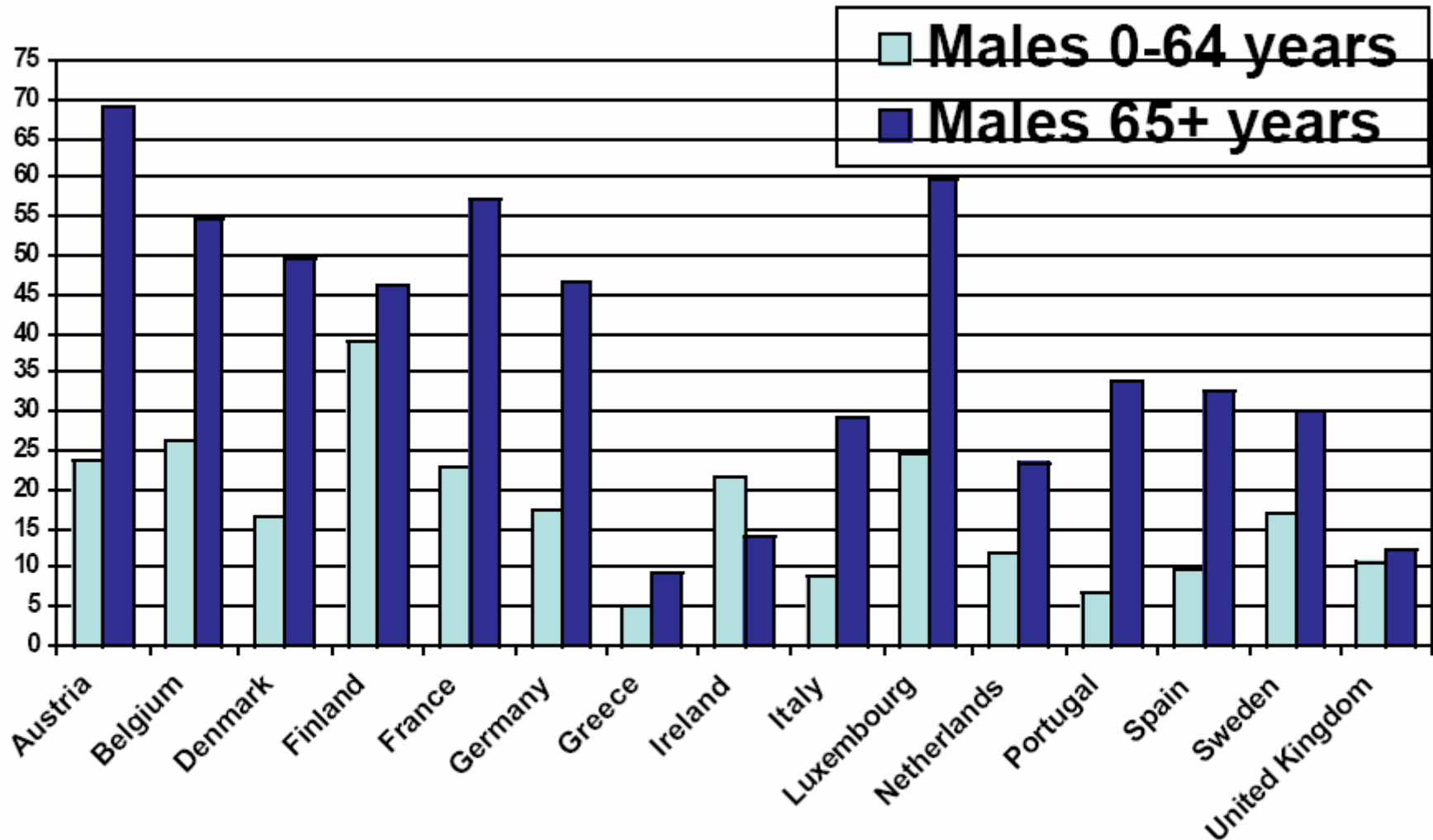
## Trends of events of undetermined intent in EU in the 90thies

### FEMALE (EUROSTAT, COD 0.65)

Country	Rate/100,000; 1999 or last	Trend/year, 1995/2000
EU 15	1.4	+1.4%
AUS	0.5	=
BEL	1°	-13.3%
FNL	0.8	-12.5%
DNK	2.4	-6.2%
FRA	1.7	+7.1%
GER	1.5	+4.0%
GRE	0.4	+20.0%
IRE	0.7	+14.3%
ITA	0.6	+13.4%
LUX	0.6	-13.3%
NED	0.2	=
NOR	0.2	-40.0%
POR	5.9	+5.2%
SPA	1.7	+7.1%
SWE	2.3	-2.6%
UK	2.0	=

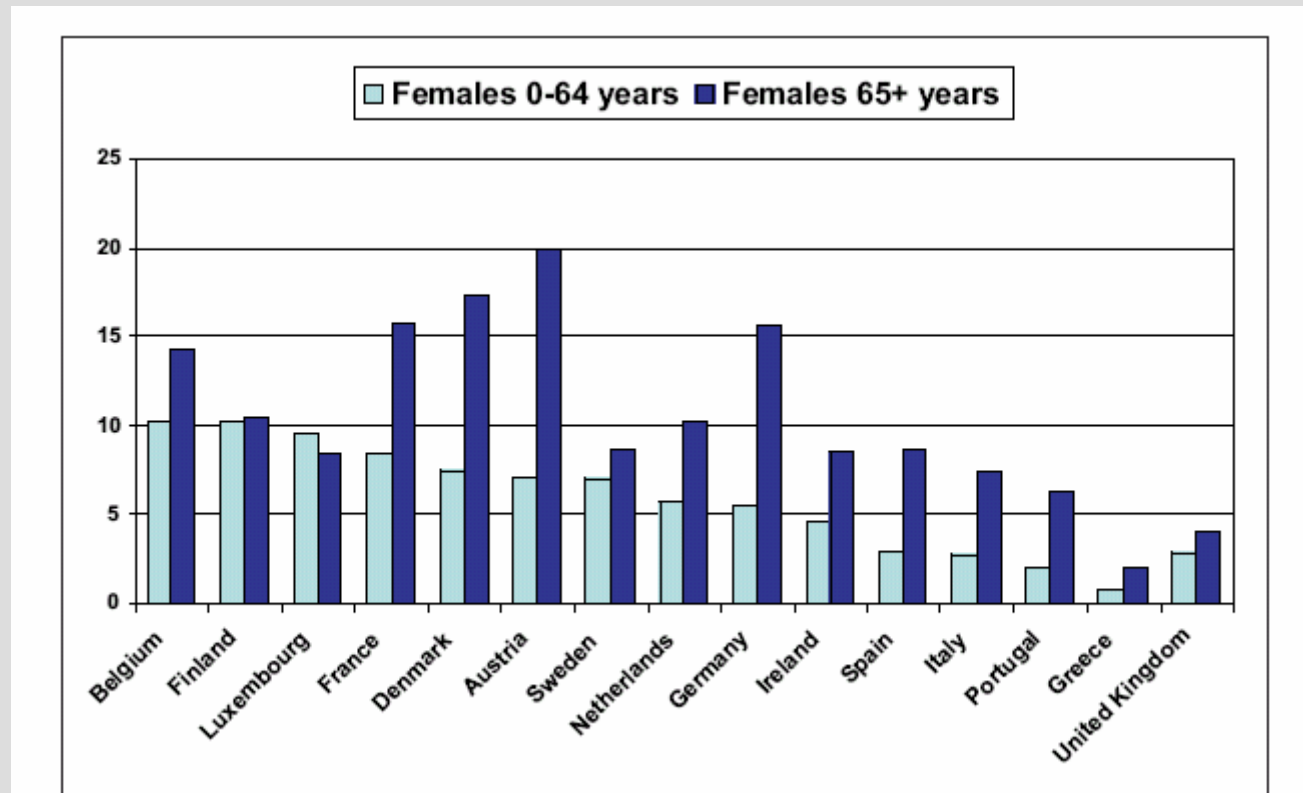
**\*\*1995,**  
**°°1996,**  
**°1997,**  
**\*1998,**  
**§1999,**  
**#2000**

**Suicide and old age in males across Europe. Standardised death rates for suicide and self-harm in males aged 0-64 years and males 65 years and over, 1997**



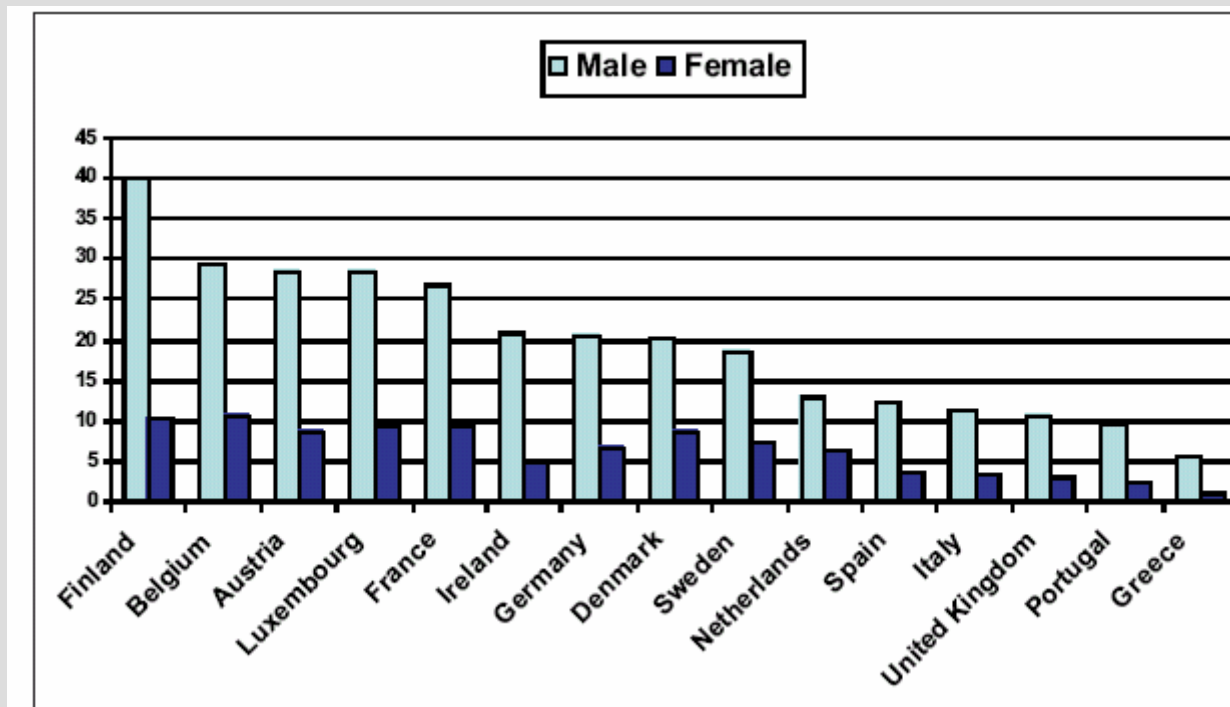
WHO Health for All Database

**Suicide and old age in females across Europe.  
Standardised death rates for suicide or intentional self harm for  
females 0-64 years and females 65 years or older, 1997.**



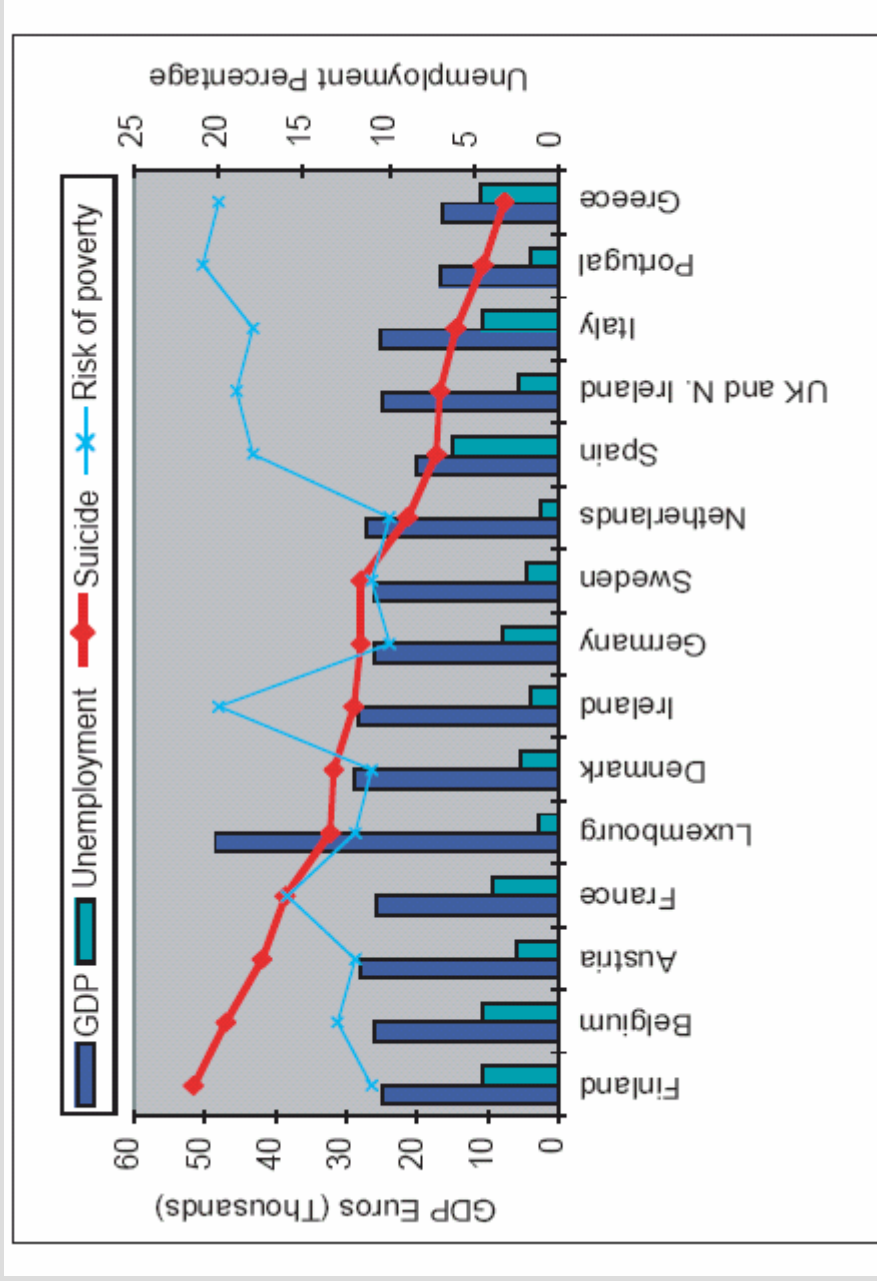
*Source: WHO Health for All Database*

**Suicides in young people across Europe.  
Standardised death rates suicide and self harm.  
Males and females aged 15-24 years, 1997.**



Source: WHO Health for All Database

## Suicide, risk of poverty and unemployment

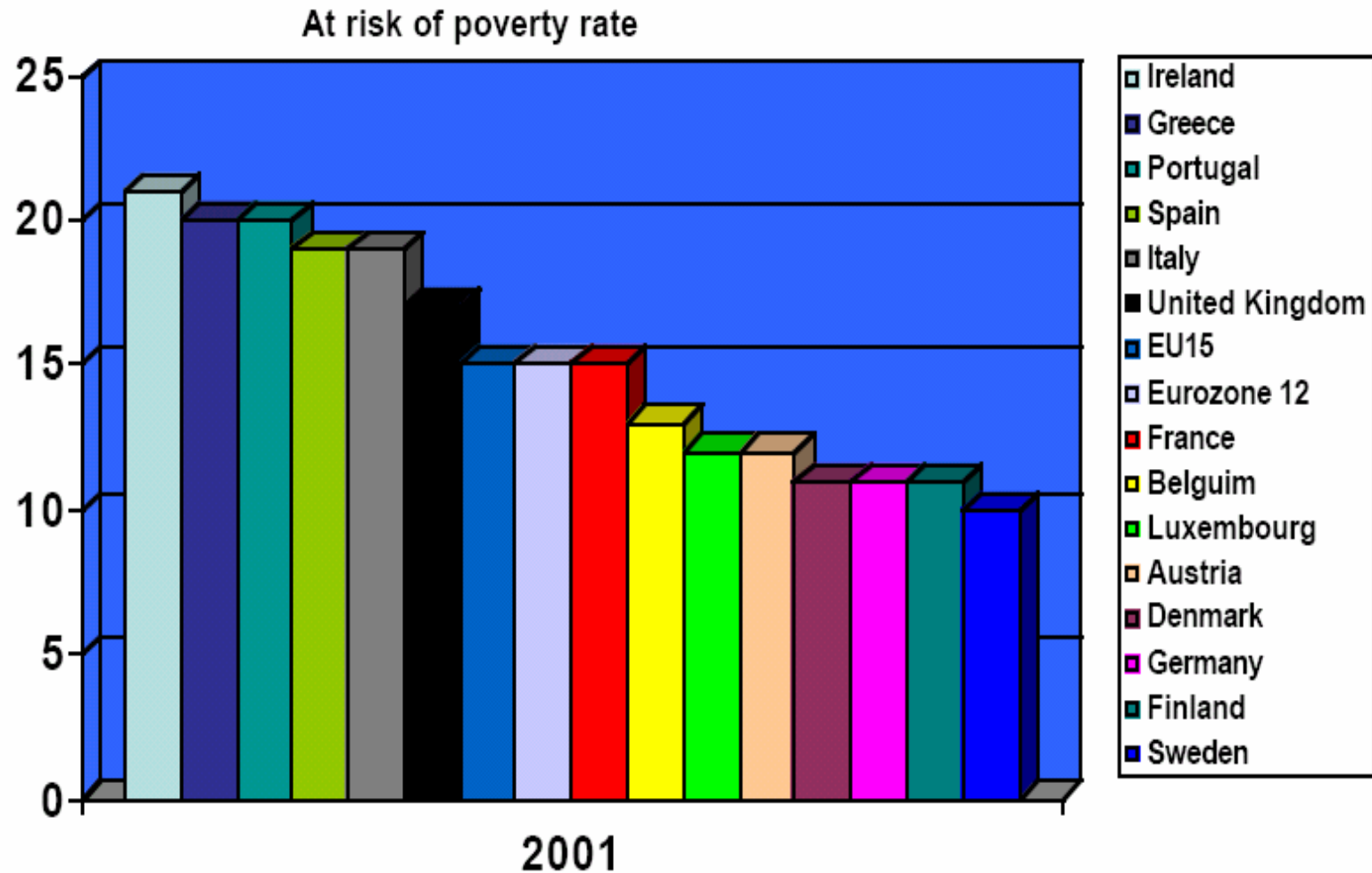


Source: Eurostat New Cronos and WHO Health for All Database

## Mean income pro capita (\$ US) trends 1980-2000

Country	2000	Trend/year %, 1980/2000 (rank difference)	
AUS	26864 (VI)	+3,2	+III
BEL	26049 (VII)	+3.1	0
DNK	29050 (IV)	+3.3	+2
FNL	25078 (X)	+3.2	+1
FRA	24847 (XI)	+2.9	-7
GER	25936 (VIII)	+3.0	-5
GRE	16950 (XVI)	+3.3	-1
IRE	29066 (III)	+3.7	+9
ITA	2506 (IX)	+3.2	+1
LUX	46960 (I)	+3.7	0
NED	27675 (V)	+3.2	+3
NOR	30195 (II)	+3.3	+1
POR	17635 (XV)	+3.5	+1
SPA	20297 (IVX)	+3.3	-1
SWE	24232 (XII)	+3.0	-8
UK	24232 (XII)	+3.2	-1

**Population at risk of poverty across Europe. Percentage of population below 60% of the median equivalised income after social transfers, 2001**



Source: European New Cronos Database



## Male suicide risk in 15 European Union countries

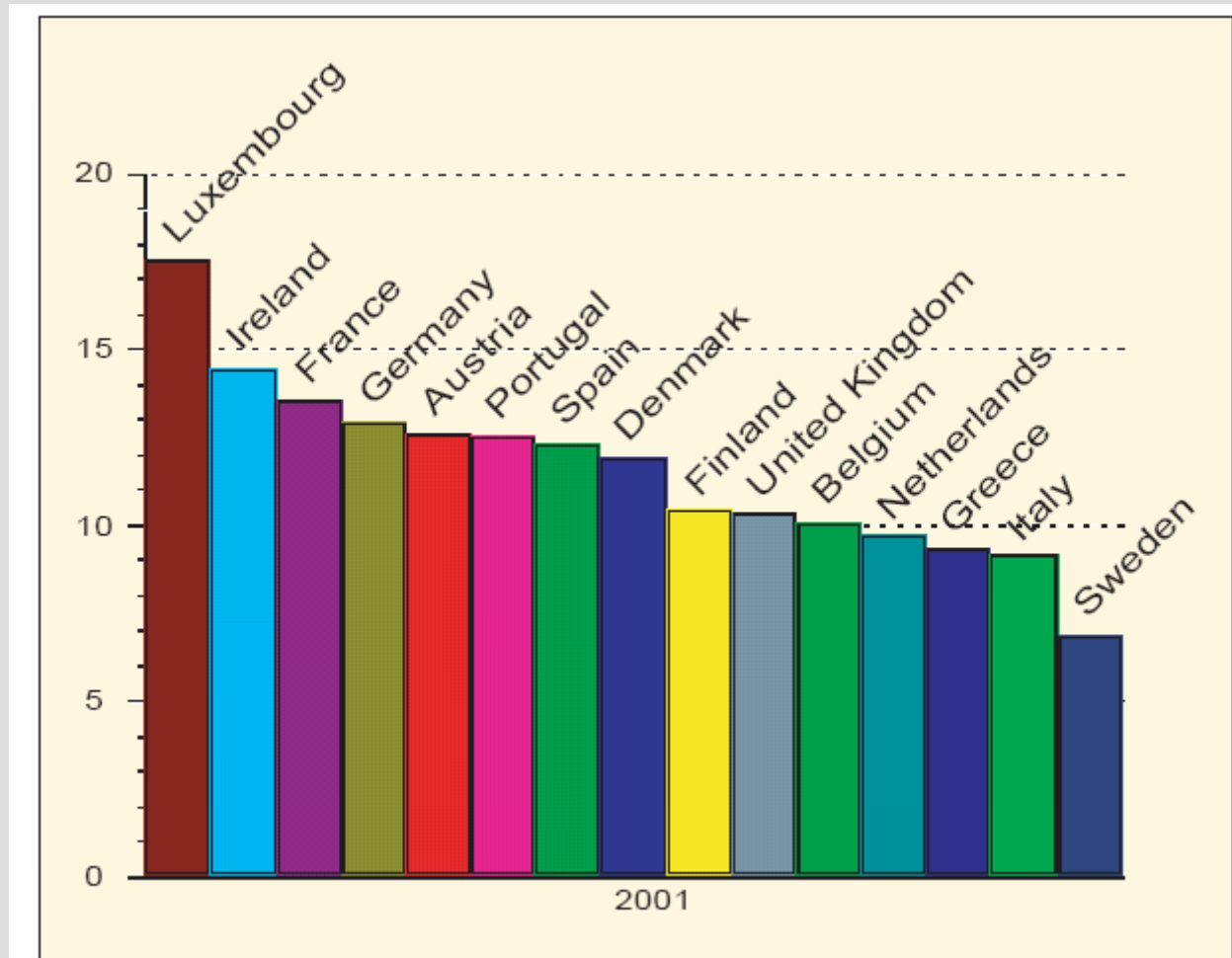
- 1. Country rank of rate of suicide mortality vs country rank of north-south geographical situation**  
 **$r=0.75$   $P<0.002$  (Spearman correlation test)**
- 2. Country rank of rate of suicide mortality vs country rank of mean income**  
 **$r=0.50$   $P<0.030$  (Spearman correlation test)**

## Male suicide + undetermined intent events in 15 European Union countries

- 1. Country rank of rate of suicide + undetermined intent events mortality vs country rank of north-south geographical situation**  
 **$r=0.60$   $P<0.029$  (Spearman correlation test)**
- 2. Country rank of rate of suicide mortality + undetermined intent events mortality vs country rank of mean income**  
 **$r=0.23$   $P<0.39$  (Spearman correlation test)**

# Alcohol consumption across Europe.

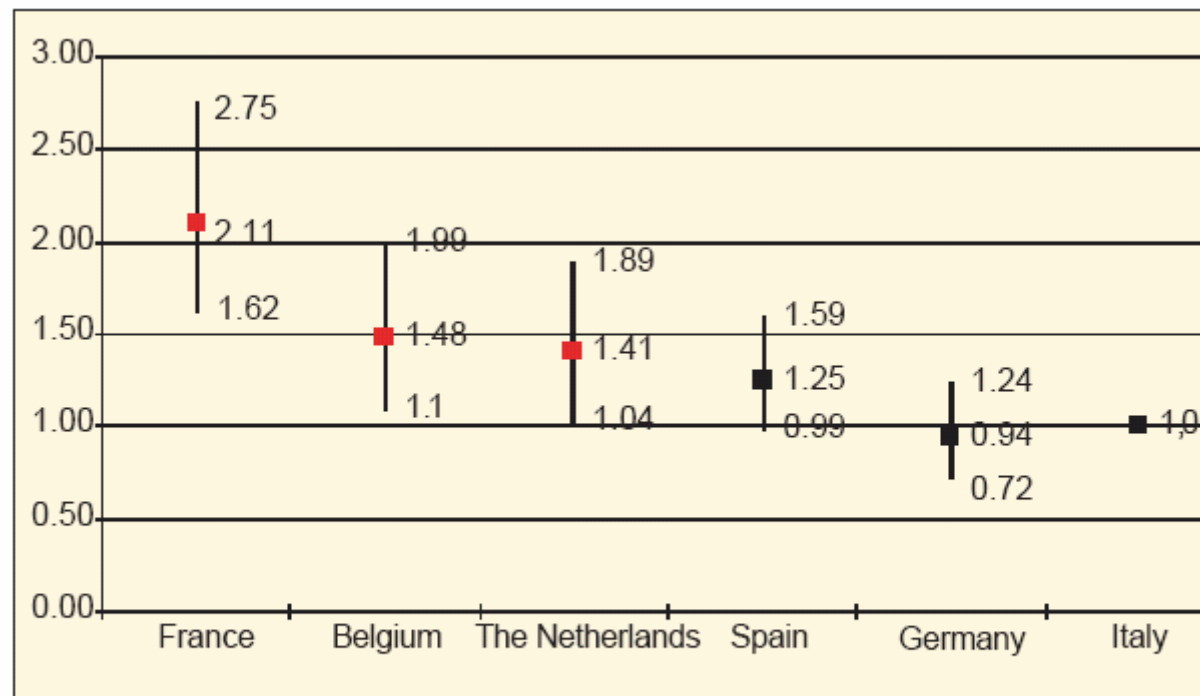
## Litres of pure alcohol per person aged 15 years or over per year, 2001



Source: WHO Health for All Database

## Relative risk of any mood disorder in the last 12 months

*Odds ratio for any mood disorder in the last 12 months, using Italy as a base. Standardised for sex, age, living arrangements and urban/rural*



*Data from ESEMED 2000 study*

## Sale of antidepressants (STAKES)

**Antidepressants as defined by the ATC classification system by WHO (Class N06A includes SSRIs, tricyclic and tetracyclic agents, triazolopyridines, aminoketons, MAO inhibitors, and other new antidepressants like mirtazapine, reboxetine, venlafaxine, nefazodone, etc.)**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Number of 'defined daily doses' (DDD = assumed average dose per day for each drug) per 1,000 inhabitants per 365 days.**

Country	Antidepressants	Trend/Year
AUS	6.2 (X)	...
BEL	---	...
DNK	30.3 (IV)	+0.2
FNL	35.5 (III)	+2.4
FRA	49,3(I)?	...
GER	12.6 (VII)	+0.7
GRE	---	...
IRE	10.4 (VIII)	...
ITA*	9.7 (IX)	...
LUX	---	...
NED	----	...
NOR	41.4 (II)	+2.1
POR	----	...
SPA°	19.4° (VI)	+1.1°
SWE	48.8 (I)	+2.8
UK	22.0 (V)	...

**\*1999, °Packages**

## Sale of anxiolytics and hypnotics (STAKES)

**Anxiolytics** as defined by the ATC classification system by WHO (Class N05B includes benzodiazepines, barbiturates and others like buspirone, hydroxyzinehydrochloride etc.).

**Hypnotics** as defined by the ATC classification system by WHO (Class N05C includes benzodiazepines -short acting-, zopiclone, zaleplone, zolpidem etc.).

Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.

Number of 'defined daily doses'  
(DDD = assumed average dose  
per day for each drug)  
per 1,000 inhabitants per 365 days.

Country	Anxiolytics and hypnotics	Trend/Year
AUS	4.8 (VIII)	...
BEL	----	...
DNK	53,1 (III)	-2.3
FNL	81.7 (I)	+2.4
FRA	<b>121 (I?)</b>	...
GER	5.5 (VII)	+0.4
GRE	---	...
IRE	13.5 (VI)	...
ITA*	0.3 (IX)	...
LUX	---	...
NED	---	+1.2
NOR	50.8(IV)	...
POR	---	+1.3°
SPA°	---	----
SWE	62.6 (II)	+0.3
UK	31.8 (V)	...

\*1999

## Sale of antipsychotics (STAKES)

**Antipsychotics as defined by the ATC classification system by WHO (Class N05A includes phenothiazines, thioxanthenes, dibenzoxazepines, dihydroindoles, butyrophenones, diphenylbutylpiperidines, benzamines and atypical neuroleptics like clozapine, risperidone, olanzapine etc.).**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Number of 'defined daily doses' (DDD = assumed average dose per day for each drug) per 1,000 inhabitants per 365 days.**

Country	Antipsychotics	Trend/Year
AUS	3.1 (XI)	...
BEL	8.9 (V)	+0.2
DNK	8.0 (VII)	+0.3
FNL	15.3 (II)	+0.02
FRA	---	...
GER	4.6 (VIII)	-0.6
GRE	---	...
IRE	19.3 (I)	...
ITA*	3.5 (X)	...
LUX	---	...
NED	----	...
NOR	9.0 (IV)	+0.1
POR	---	...
SPA°	11.7 (III)	-0.04°
SWE	8.6 (VI)	-0.1
UK	4.2 (IX)	...

**\*1999, °Packages**

## Sale of Antidepressants (IMS)

**Antidepressants as defined by the ATC classification system by WHO (Class N06A includes SSRIs, tricyclic and tetracyclic agents, triazolopyridines, aminoketons, MAO inhibitors, and other new antidepressants like mirtazapine, reboxetine, venlafaxine, nefazodone, etc.)**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Euro per number of inhabitants**

Country	2002 Antidepressants	Trend/Year
AUS	...	...
BEL	7,90 (III)	+8.7%
DNK	...	...
FNL	...	...
FRA	6,02 (VI)	+7.8 %
GER	3,32 (X)	+12.6%
GRE	...	...
IRE	9,04 (II)	+15.5%
ITA	3,55 (IX)	+28.2%
LUX	...	...
NED	5,33 (VIII)	+12.5%
NOR	...	...
POR	5, 48 (VII)	+16.6%
SPA	6,33 (V)	+17.8%
SWE	10, 70 (I)	+10.1%
UK	6, 77 (IV)	+5.6%

## Sale of Antipsychotics (IMS).

**Antipsychotics as defined by the ATC classification system by WHO (Class N05A includes phenothiazines, thioxanthenes, dibenzoxazepines, dihydroindoles, butyrophenones, diphenylbutylpiperidines, benzamines and atypical neuroleptics like clozapine, risperidone, olanzapine etc.).**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Euro per inhabitants.**

Country	2002 Antipsychotics	Trend/Year
AUS	----	...
BEL	3,02 (VII)	+20.4%
DNK	----	...
FNL	5, 21 (I)	+21.0%
FRA	2,90 (VIII)	+10.6%
GER	3, 15 (VI)	+21.1%
GRE	3, 22 (V)	+27.2%
IRE	4,50 (II)	+23.7%
ITA	2, 11 (X)	+21.8%
LUX	----	...
NED	2, 39 (IX)	+15.6%
NOR	----	...
POR	----	...
SPA	3,75 (IV)	+27.1%
SWE	...	...
UK	4, 38 (III)	+36.0%



## Sale of Anxiolytics (IMS).

**Anxiolytics as defined by the ATC classification system by WHO (Class N05B includes benzodiazepines, barbiturates and others like buspirone, hydroxyzinehydrochloride etc.).**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Euro per inhabitants.**

Country	2002 Anxiolytics	Trend/Year
AUS	----	...
BEL	2,24 (iV)	-4.0%
DNK	----	...
FNL	-----	...
FRA	1,70 (V)	-0.4%
GER	0,41 (IX)	-7.4%
GRE	0,75 (VII)	+7.2%
IRE	2.45 (III)	+11.0%
ITA	2,87 (I)	+3.2%
LUX	----	...
NED	0,56 (VIII)	+0.2%
NOR	----	...
POR	2,84 (II)	+1.8%
SPA	1,26 (VI)	+1.0%
SWE	-----	...
UK	0,30 (X)	+6.0%

# PRESCRIPTIONS of Antidepressants (IMS)

**Antidepressants as defined by the ATC classification system by WHO (Class N06A includes SSRIs, tricyclic and tetracyclic agents, triazolopyridines, aminoketons, MAO inhibitors, and other new antidepressants like mirtazapine, reboxetine, venlafaxine, nefazodone, etc.)**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Prescriptions by physicians per number of inhabitants per year**

Country	2002 Antidepressants	Trend/Year 2000-2002
AUS	...	...
BEL	0.501 (I)	+4.72%
DNK	...	...
FNL	...	...
FRA	0.35 (V)	+8.6 %
GER	0.24 (VII)	+1.8%
GRE	...	...
IRE	...	...
ITA	0.24 (VII)	+8.8%
LUX	...	...
NED	0.30 (VI)	+2.1%
NOR	...	...
POR	0.42 (III)	+10.6%
SPA	0.41 (IV)	+4.2%
SWE	-----	-----
UK	0.50 (II)	+9.2%

# PRESCRIPTIONS of Antipsychotics (IMS)

**Antipsychotics as defined by the ATC classification system by WHO (Class N05A includes phenothiazines, thioxanthenes, dibenzoxazepines, dihydroindoles, butyrophenones, diphenylbutylpiperidines, benzamines and atypical neuroleptics like clozapine, risperidone, olanzapine etc.).**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Prescriptions by physicians per number of inhabitants per year**

Country	2002 Antipsychotics	Trend/Year
AUS	----	...
BEL	0.19 (I)	-3.1%%
DNK	----	...
FNL	-----	-----
FRA	0.08 (IV)	+1.6%
GER	0.16 (II)	+3.1%
GRE	-----	-----
IRE	----	...
ITA	0.09 (III)	-0.5%
LUX	----	...
NED	0.07 (V)	-3.1%%
NOR	----	...
POR	----	...
SPA	0.19 (I)	+2.4%
SWE	...	...
UK	0.09 (III)	-0.7%

# Prescriptions of Anxiolytics (IMS)

**Anxiolytics as defined by the ATC classification system by WHO (Class N05B includes benzodiazepines, barbiturates and others like buspirone, hydroxyzinehydrochloride etc.).**

**Calculation is based on the volume of sales to pharmacies and hospitals by wholesalers.**

**Prescriptions by physicians per number of inhabitants per year**

Country	2002 Anxiolytics	Trend/Year
AUS	----	...
BEL	0.53 (II)	-5.5%
DNK	----	...
FNL	-----	...
FRA	0.38 (IV)	+3.4%
GER	0,16 (VII)	-3.7%
GRE	-----	-----
IRE	----	...
ITA	0.20 (VI)	-6.2%
LUX	----	...
NED	0,27 (V)	-1.2%
NOR	----	...
POR	0.61 (I)	+1.0%
SPA	0.51 (III)	+0.6%
SWE	-----	...
UK	0,10 (VIII)	+2.1%

# **CONCLUSIONS**

**Suicide, Sale of Psychotropic drugs**

**Useful macro-indicators but not sufficient  
and reliable data for monitoring in E.U.**

**Needs for improvement in the quality of data**

**This paper was produced for a meeting organized by Health & Consumer Protection DG and represents the views of its author on the subject. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or Health & Consumer Protection DG's views. The European Commission does not guarantee the accuracy of the data included in this paper, nor does it accept responsibility for any use made thereof.**