

#### Rome Cardiology Forum 2014

# Update on life-style and cardiovascular prevention

The dimension of the problem

Rome Cardiology Forum January 29, 2014



## Mortality – EU (latest available year)

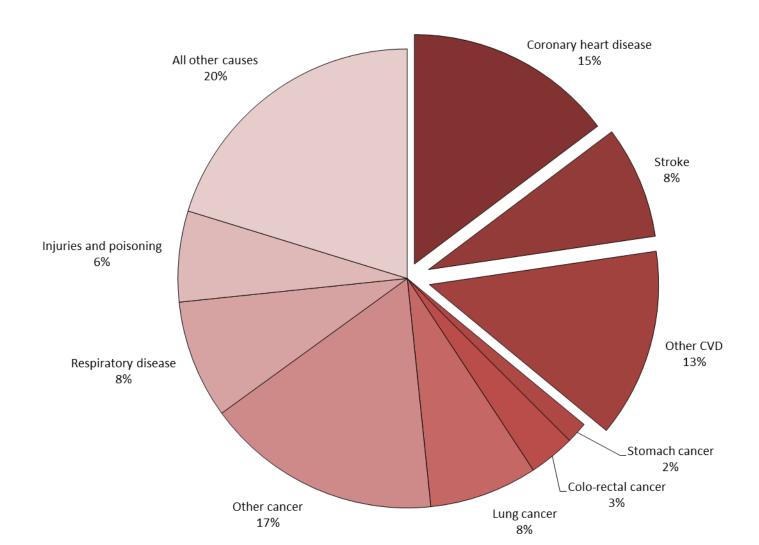
#### Cardiovascular disease 1 910 854 40%

Cancer	1 247 433	26%
Respiratory disease	378 305	8%
Injuries and poisoning	234 789	5%
All other causes	1 064 451	22%

Total 4 835 832

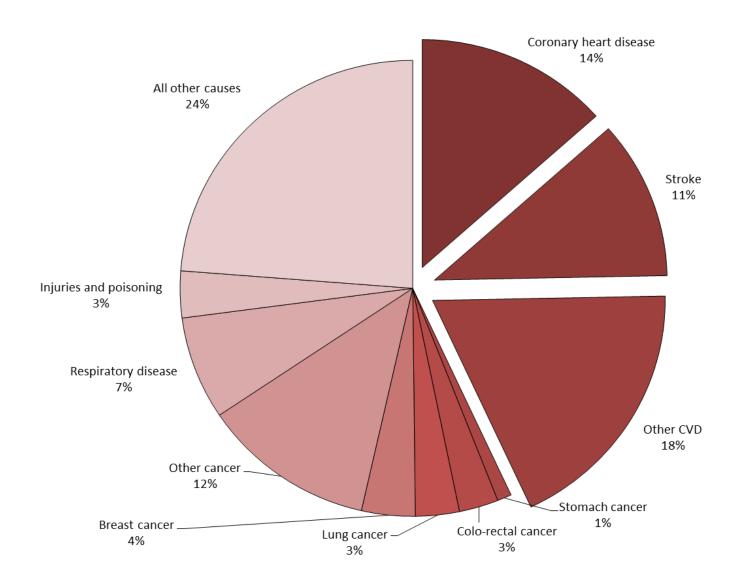


#### Deaths by cause, men, latest available year, EU





#### Deaths by cause, women, latest available year, EU



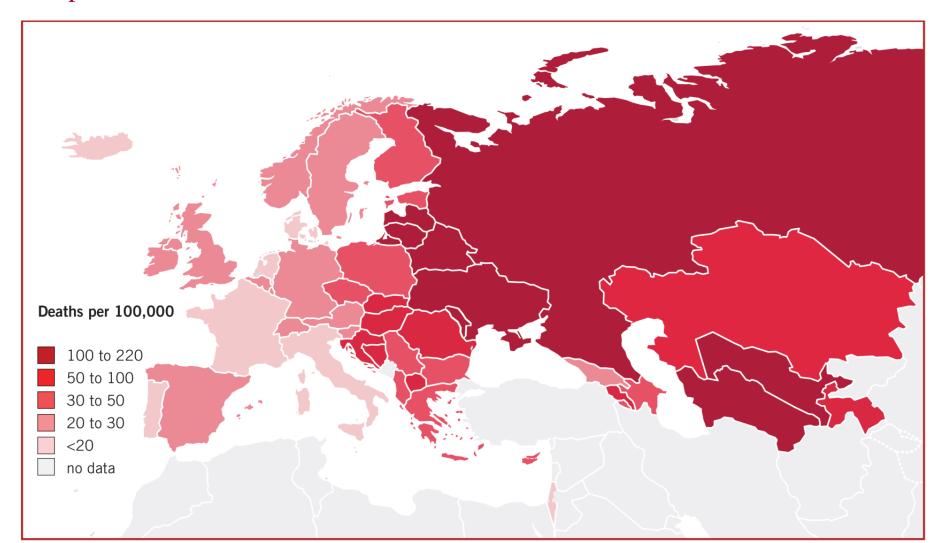


## Cardiovascular diseases (CVD) cause annually:

- Over 4 million deaths in Europe
- Over 1.9 million deaths in the EU
- 47% of all deaths in Europe
- 40% of all deaths in the EU
- 29% of all deaths before age 65 in Europe
- 22% of all deaths before age 65 in the EU

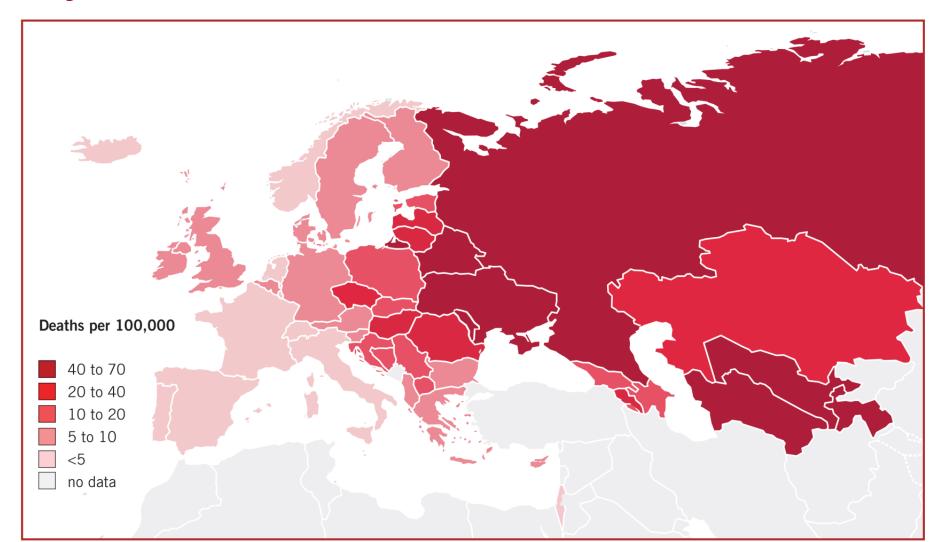


Age-standardised death rates from **CHD**, <u>men</u> aged under 65, latest available year, Europe



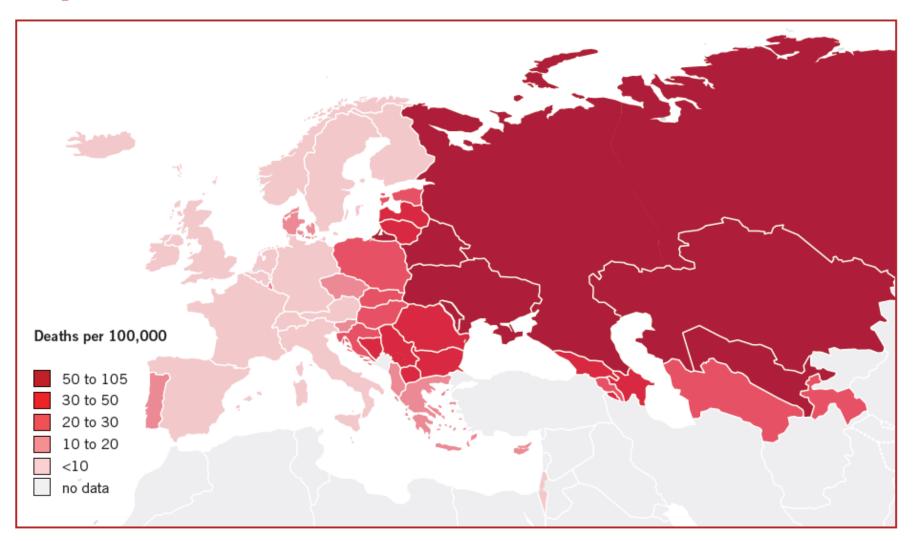


Age-standardised death rates from **CHD**, <u>women</u> aged under 65, latest available year, Europe



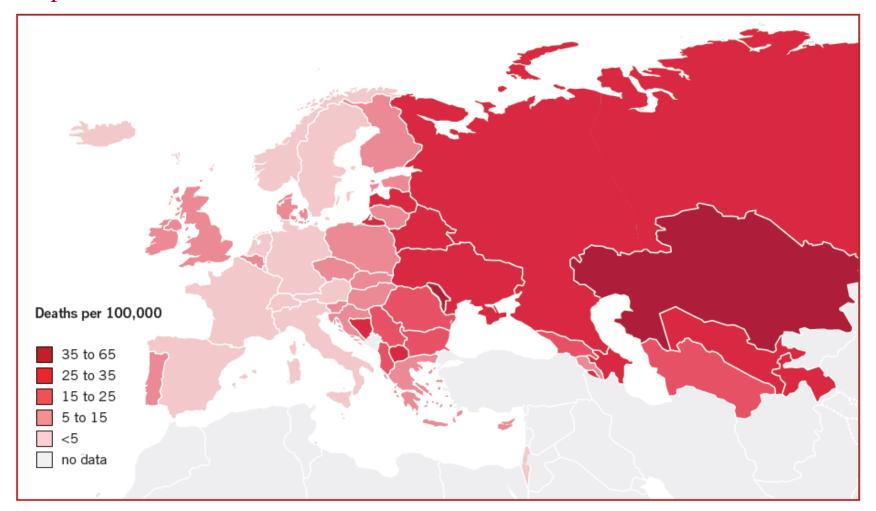


Age-standardised death rates from **stroke**, <u>men</u> aged under 65, latest available year, Europe





Age-standardised death rates from **stroke**, <u>women</u> aged under 65, latest available year, Europe





## Age standardised **CVD** death rate per 100,000 and percentage of deaths from CVD, men, all ages, EU

Country	Year	Death	% of deaths	Country	Year	Death	% of deaths
		rate				rate	
Austria	2010	252	37	Latvia	2010	675	50
Belgium	2006	224	30	Lithuania	2010	667	47
Bulgaria	2011	732	63	Luxembourg	2009	247	35
Cyprus	2010	222	36	Malta	2010	213	34
Czech Rep.	2010	424	45	Netherlands	2010	181	28
Denmark	2006	244	30	Poland	2010	440	41
Estonia	2010	567	48	Portugal	2010	210	27
Finland	2010	288	39	Romania	2010	647	54
France	2009	163	25	Slovakia	2010	552	47
Germany	2010	246	37	Slovenia	2010	269	33
Greece	2009	245	45	Spain	2010	169	27
Hungary	2009	548	45	Sweden	2010	228	39
Ireland	2010	228	34	United Kingdom	2010	210	32
Italy	2009	205	34				

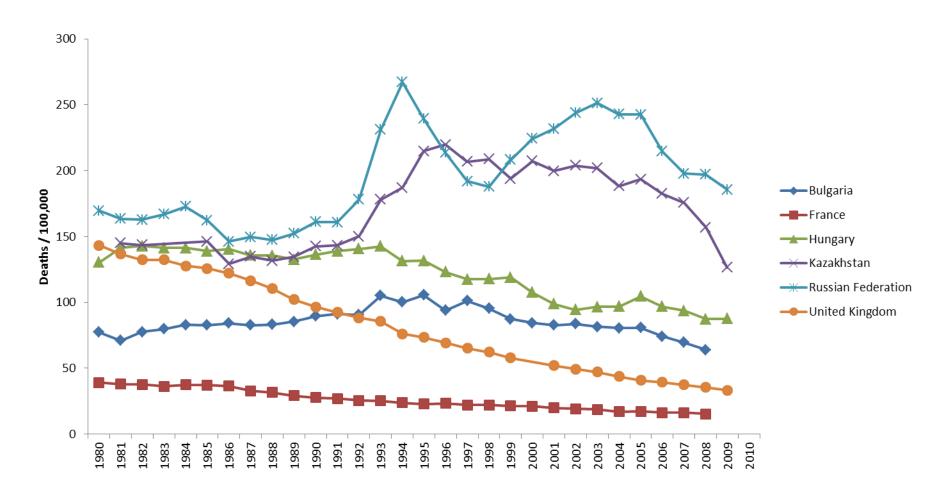


## Age standardised **CVD** death rate per 100,000 and percentage of deaths from CVD, <u>women</u>, all ages, EU

Country	Year	Death	% of deaths	Country	Year	Death	% of deaths
		rate				rate	
Austria	2010	171	48	Latvia	2010	353	58
Belgium	2006	149	36	Lithuania	2010	383	66
Bulgaria	2011	478	72	Luxembourg	2009	144	38
Cyprus	2010	153	40	Malta	2010	167	42
Czech Rep.	2010	282	56	Netherlands	2010	119	30
Denmark	2006	154	31	Poland	2010	260	52
Estonia	2010	311	63	Portugal	2010	153	36
Finland	2010	154	42	Romania	2010	454	68
France	2009	95	29	Slovakia	2010	360	61
Germany	2010	173	45	Slovenia	2010	178	46
Greece	2009	219	49	Spain	2010	110	35
Hungary	2009	331	55	Sweden	2010	145	41
Ireland	2010	142	34	United Kingdom	2010	131	31
Italy	2009	138	42				

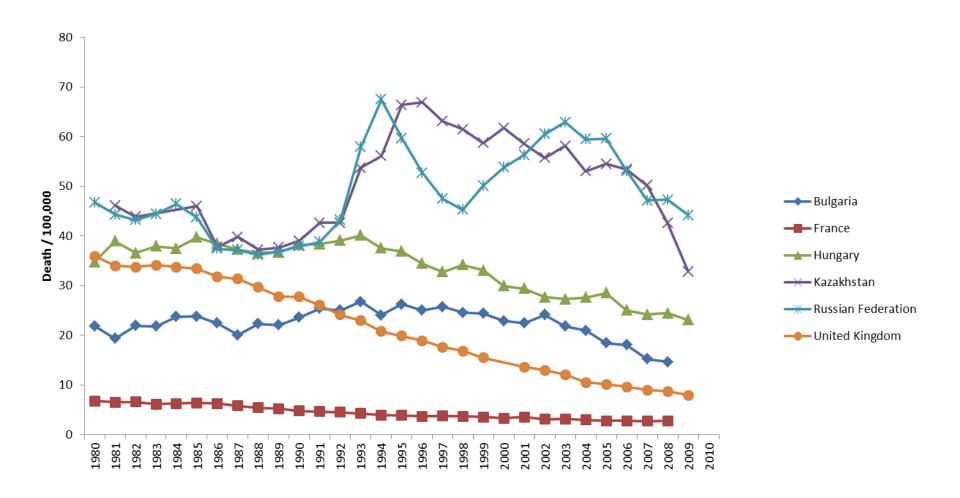


Death rates from **CHD**, men aged 0 to 64 years, 1980 to 2010, selected countries



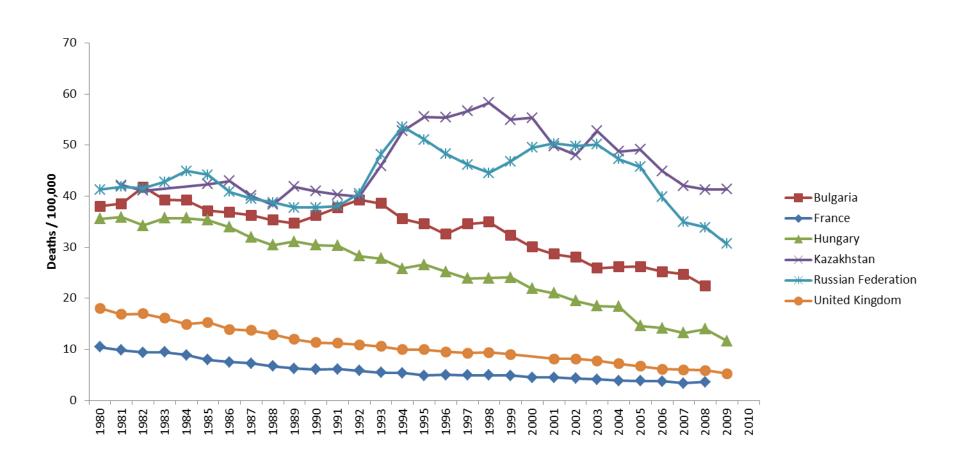


Death rates from **CHD**, <u>women</u> aged 0 to 64 years, 1980 to 2010, selected countries



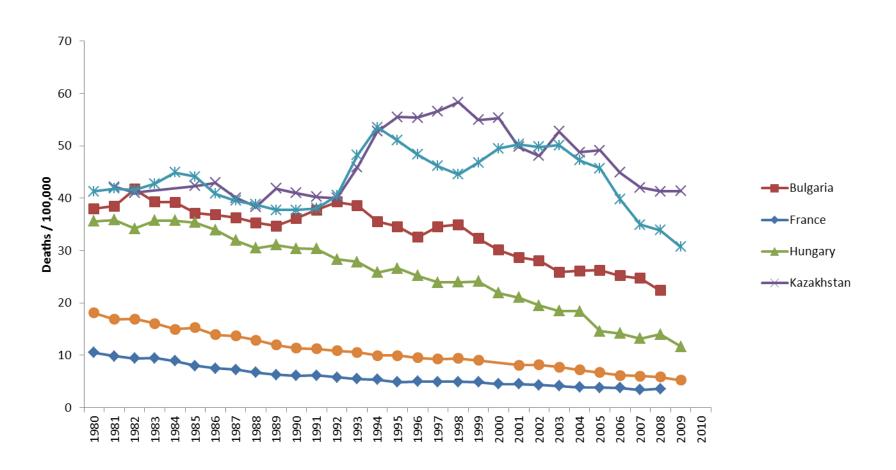


Death rates from **stroke**, men aged under 65, 1980 to 2010, selected countries





Death rates from **stroke**, <u>women</u> aged under 65, 1980 to 2010, selected countries





## Mortality – EU (latest available year)

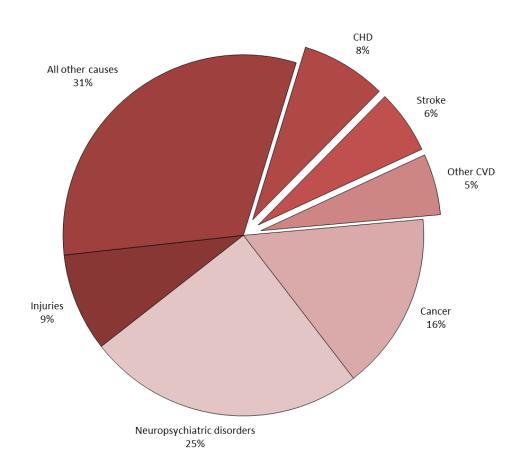
## In five EU countries CVD is <u>not</u> the first cause of death in men

- Denmark\*
- > France
- > The Netherlands
- Slovenia
- Spain



## Morbidity

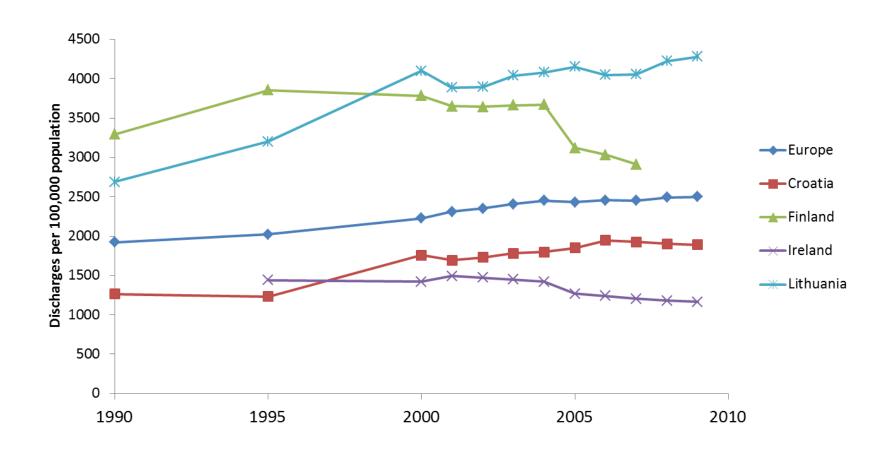
Disability-adjusted life years (DALYs) lost by cause, 2002, EU





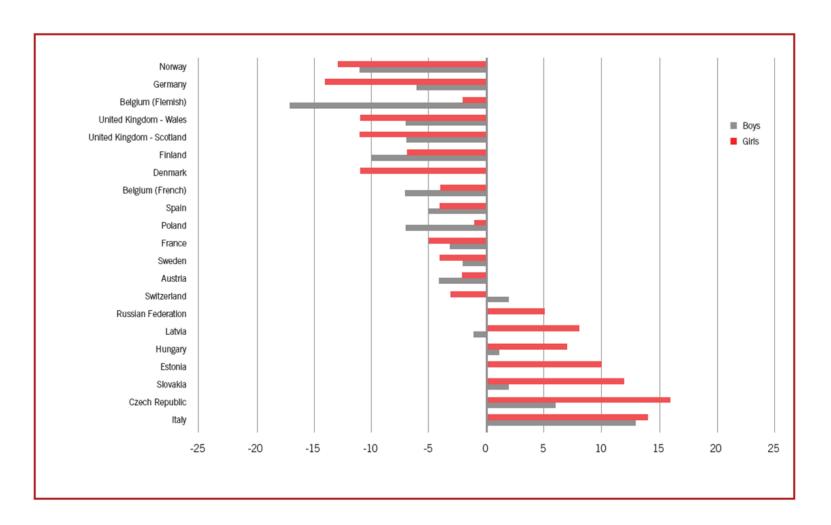
## Morbidity

Rates of hospital discharge from CVD 1990-2010, Europe and selected countries



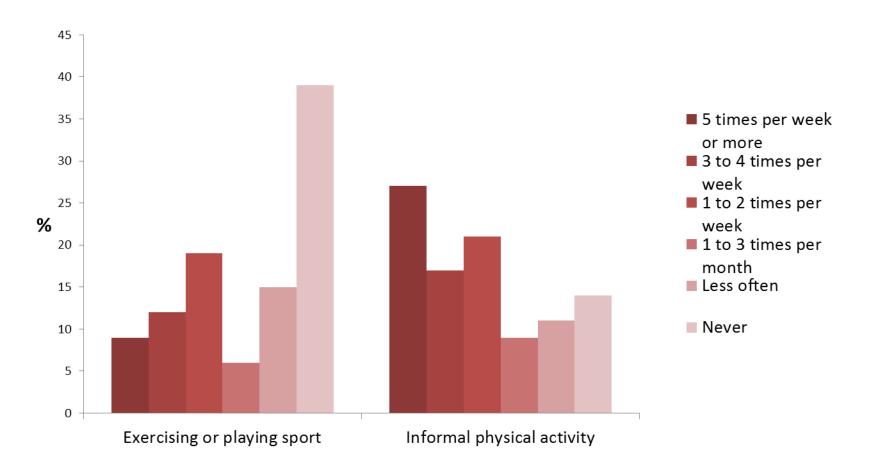


Change in smoking rates among 15 year olds, between 1993/94 and 2009/10



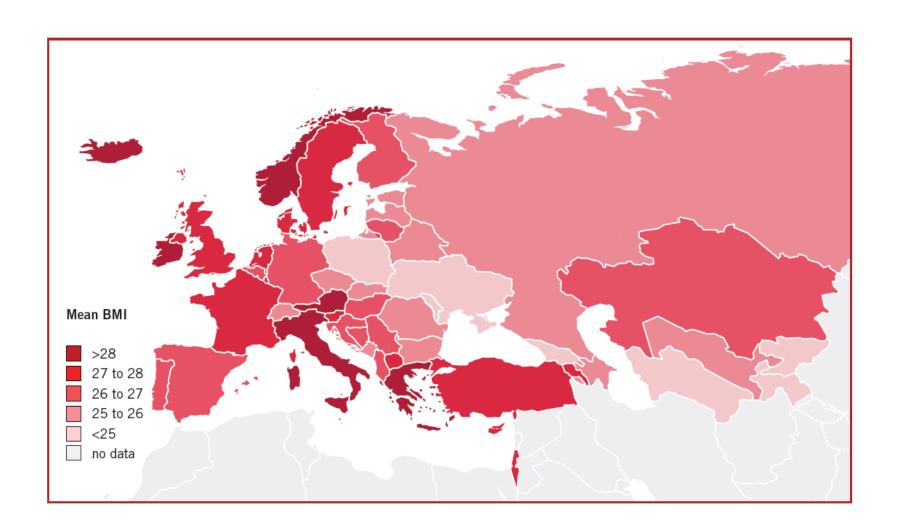


Frequency of formal and informal physical activity among EU adults (EU, 2009)



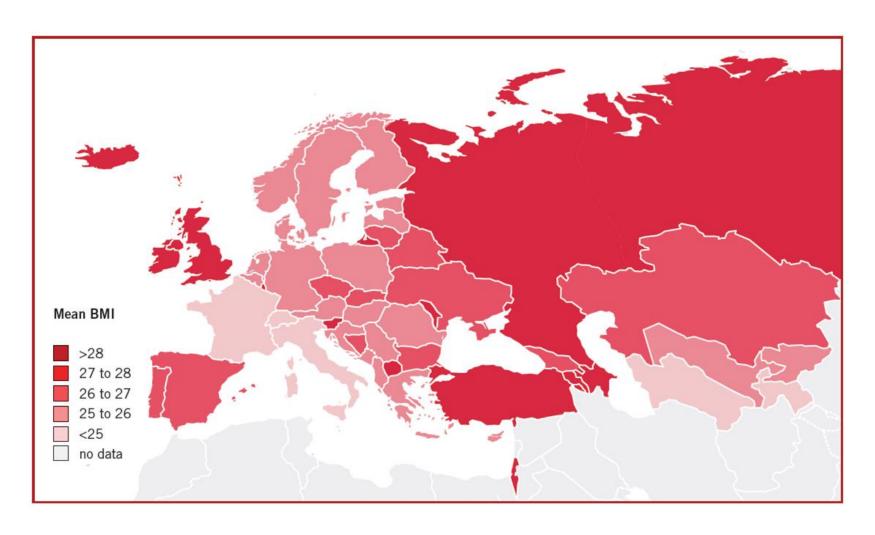


Mean BMI, men aged 20 years and over



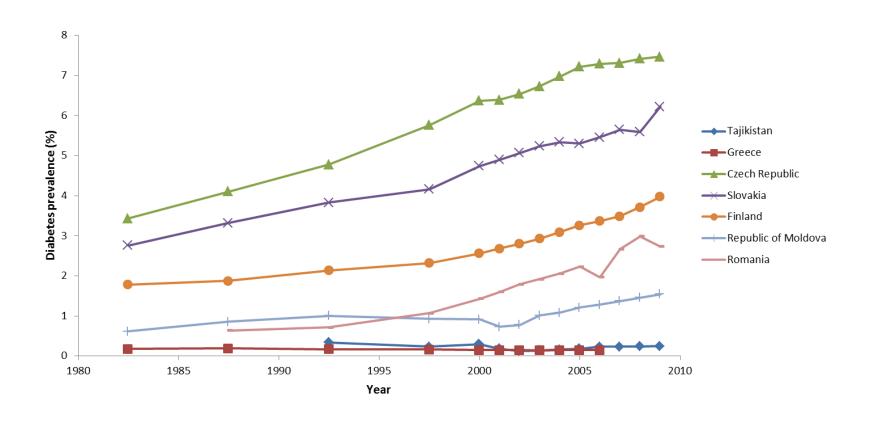


Mean BMI, women aged 20 years and over





Prevalence of diabetes, 1980 to 2009, selected countries





## Trends in age-specific coronary heart disease mortality in the European Union over three decades: 1980–2009

It was hypothesised that observed reductions in CHD mortality had occurred largely within older age groups, and that rates in younger groups may be plateauing or increasing as the gains from reduced smoking rates are increasingly cancelled out by increasing rates of obesity and diabetes

#### Conclusions:

- There is limited evidence to support the hypothesis that CHD mortality rates in younger age groups are plateauing in the EU as a whole. However, in a small number of countries there was evidence of recent plateauing in some age groups
- > Two EU Member States Greece and Lithuania have recorded a net increase in agestandardised CHD mortality rates for those less than 45 years of age
- > Substantial inequalities persist between EU Member States



## Acknowledgements and links

- Thank you to the European Union for its financial support for the statistics and trends' studies in the context of the Euro Heart II project
- European CVD statistics 2012 edition
  - http://www.ehnheart.org/cvd-statistics.html
- Trends in age-specific coronary heart disease mortality in the European Union over three decades: 1980–2009
  - http://eurheartj.oxfordjournals.org/content/early/2013/06/11
    /eurheartj.eht159.full?sid=50433ca5-729d-42cf-bf92-060105874055