European Society of Cardiology: the 2023 Atlas of Cardiovascular Disease Statistics

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The ESC Atlas of Cardiology

- The ESC Atlas of Cardiology is a unique data set containing a plethora of descriptive and quantitative data for the 55 ESC's member countries.

- The data are collected from a survey undertaken by the ESC together with the National Cardiac Societies as well as external sources.

- The purpose of the ESC Atlas is to map the status of European healthcare systems, from a cardiovascular medicine perspective, and to provide evidence that may improve decision making in cardiology.

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Cardiovascular Healthcare Delivery

Cardiologists (females) (% of cardiologists, total), 2022

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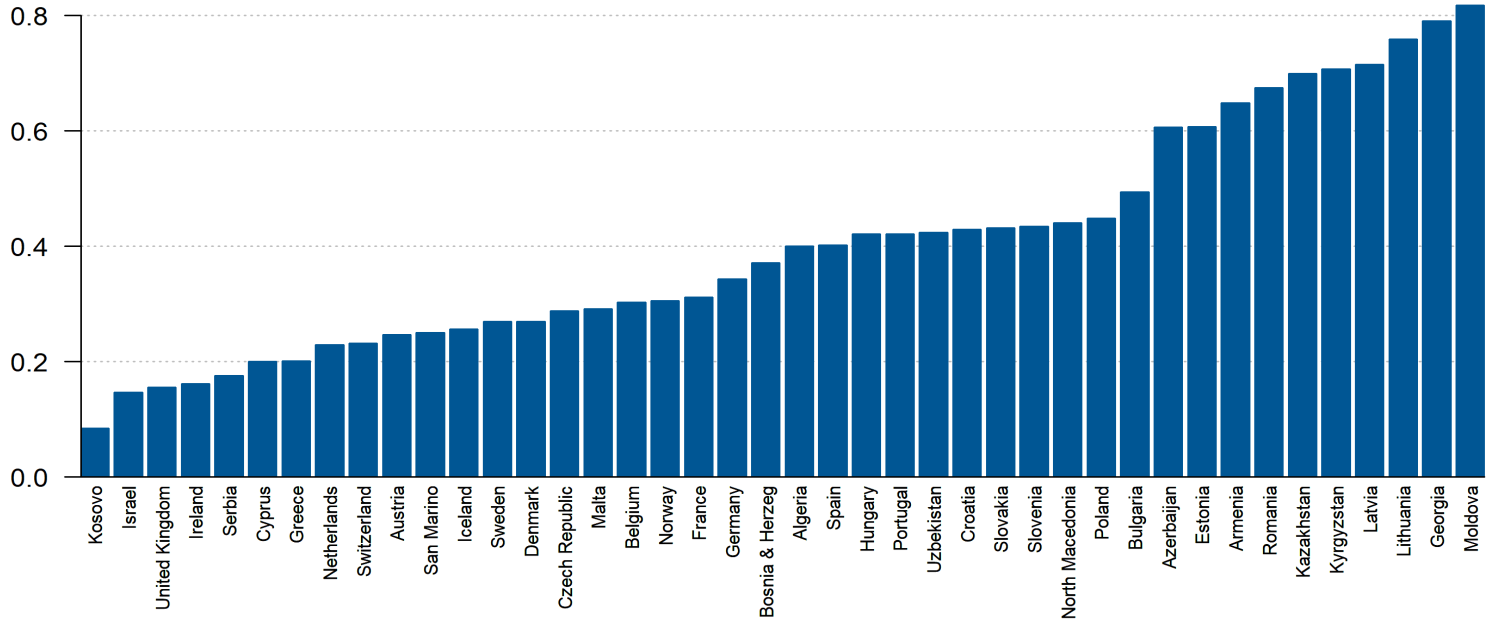
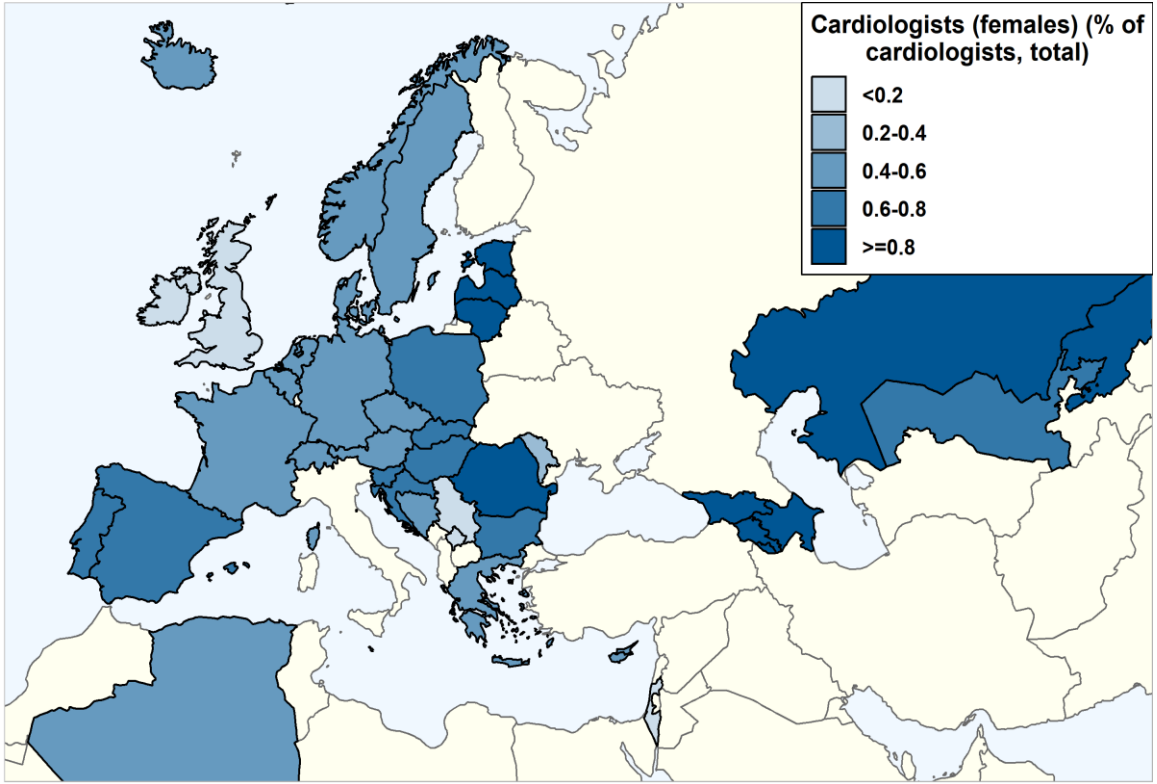


Source: ESC survey. Missing : Albania, Egypt, Finland, Italy, Lebanon, Libya, Luxembourg, Montenegro, Morocco, Syria, Tunisia, Turkiye, Ukraine
https://eatlas.escardio.org/

Cardiologists (females) (% of cardiologists, total), 2022



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Cardiologists (total) (per million people), 2022

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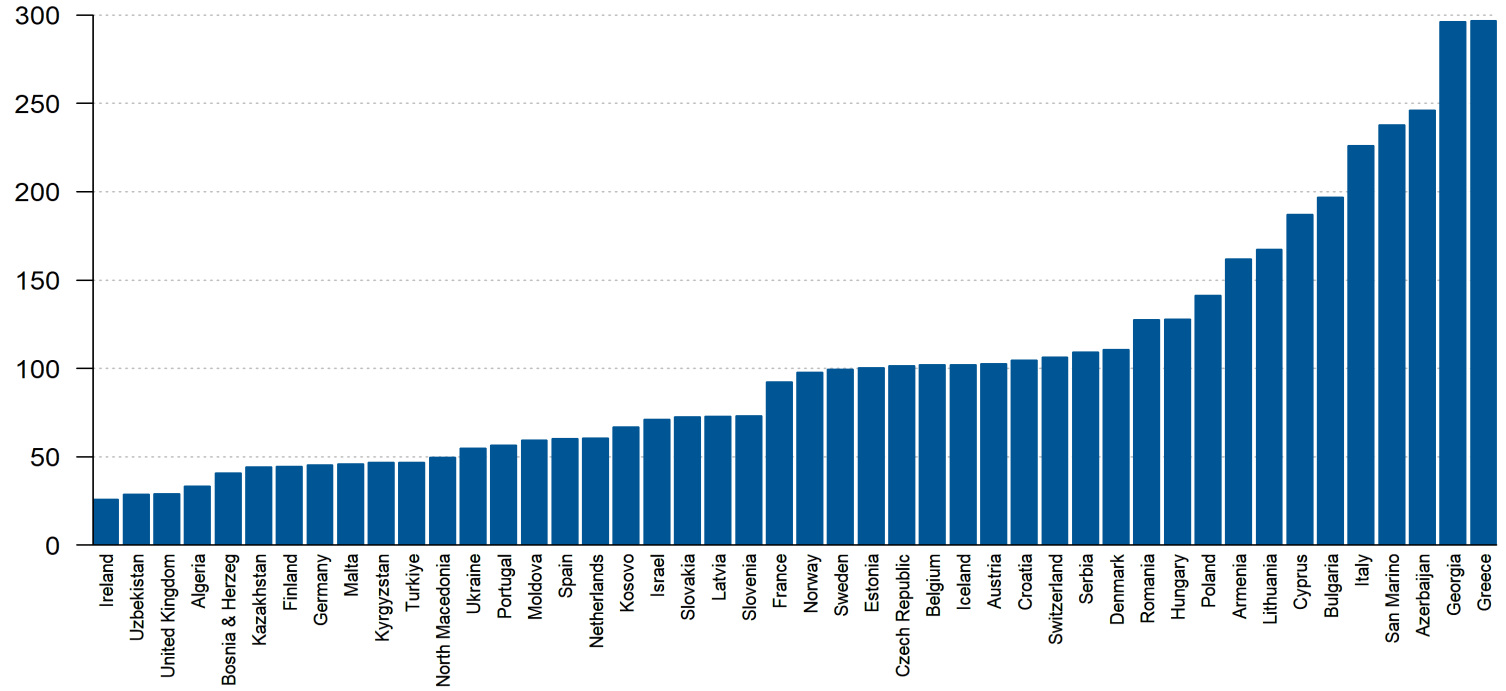

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Cardiologists (total) (per million people), 2022

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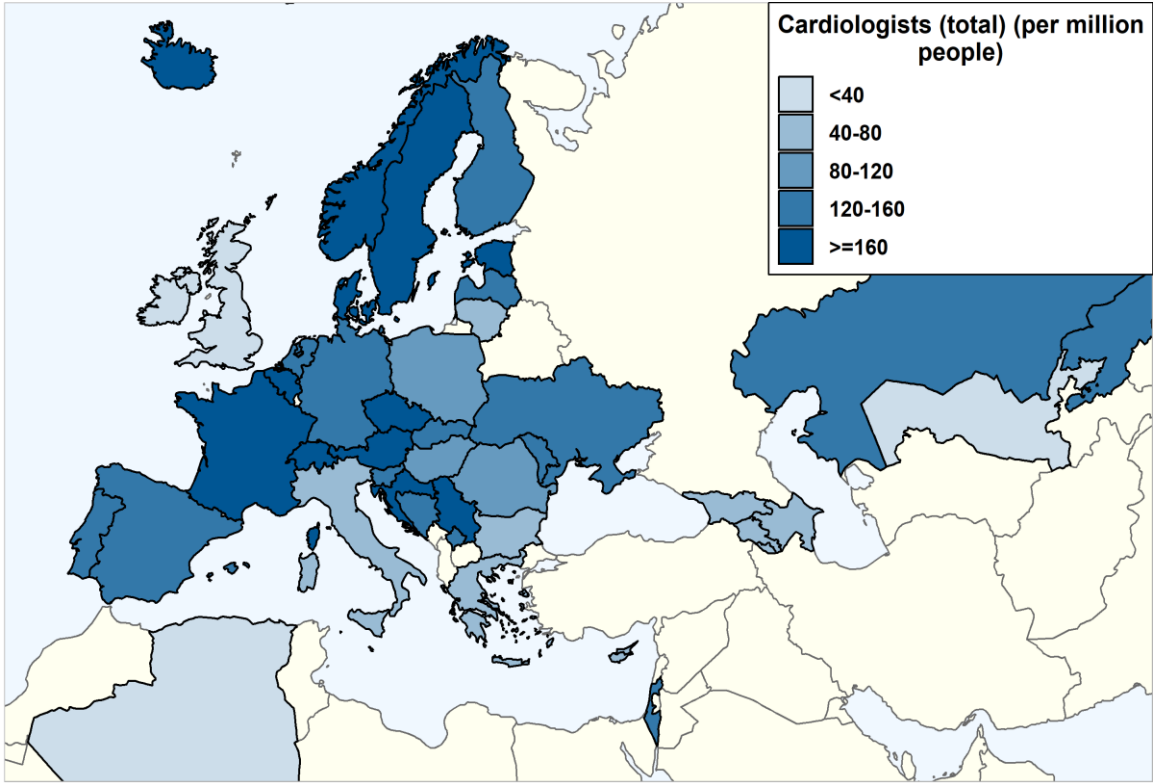

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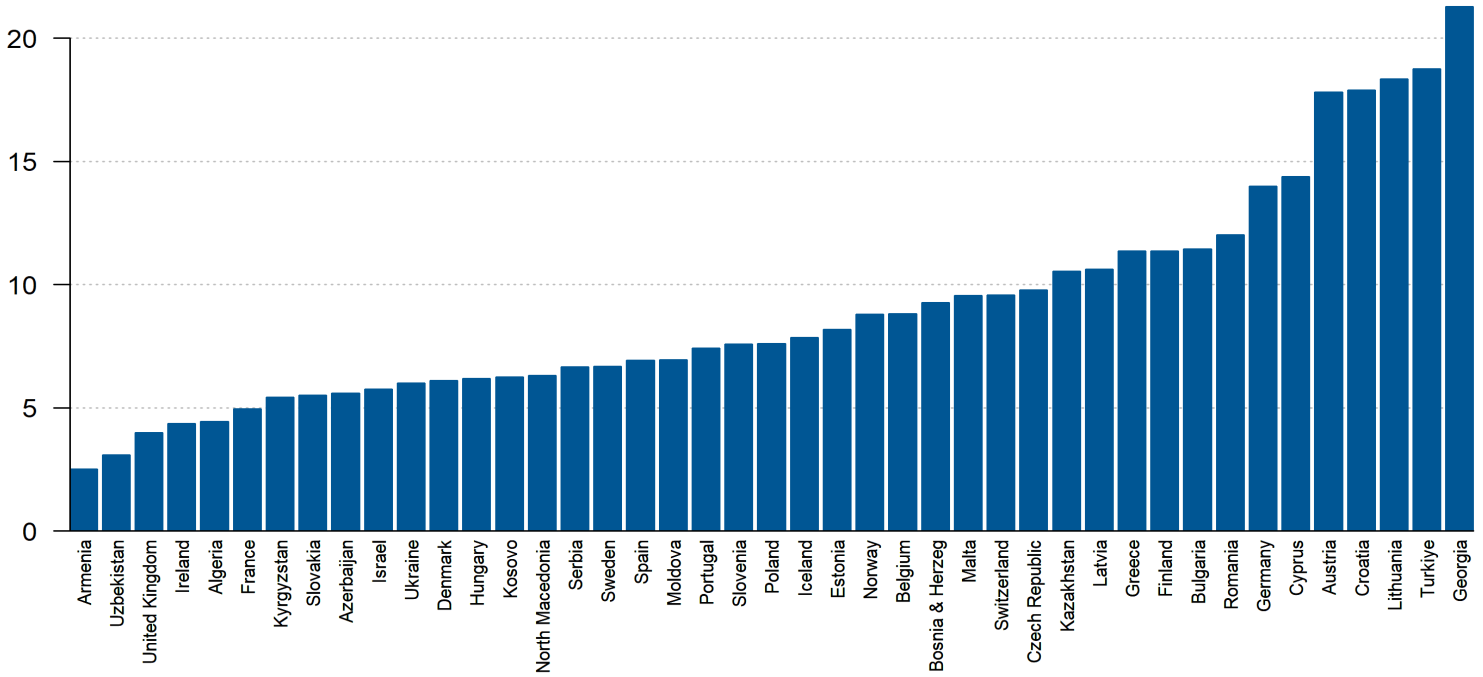
Cardiac surgeons (per million people), 2022



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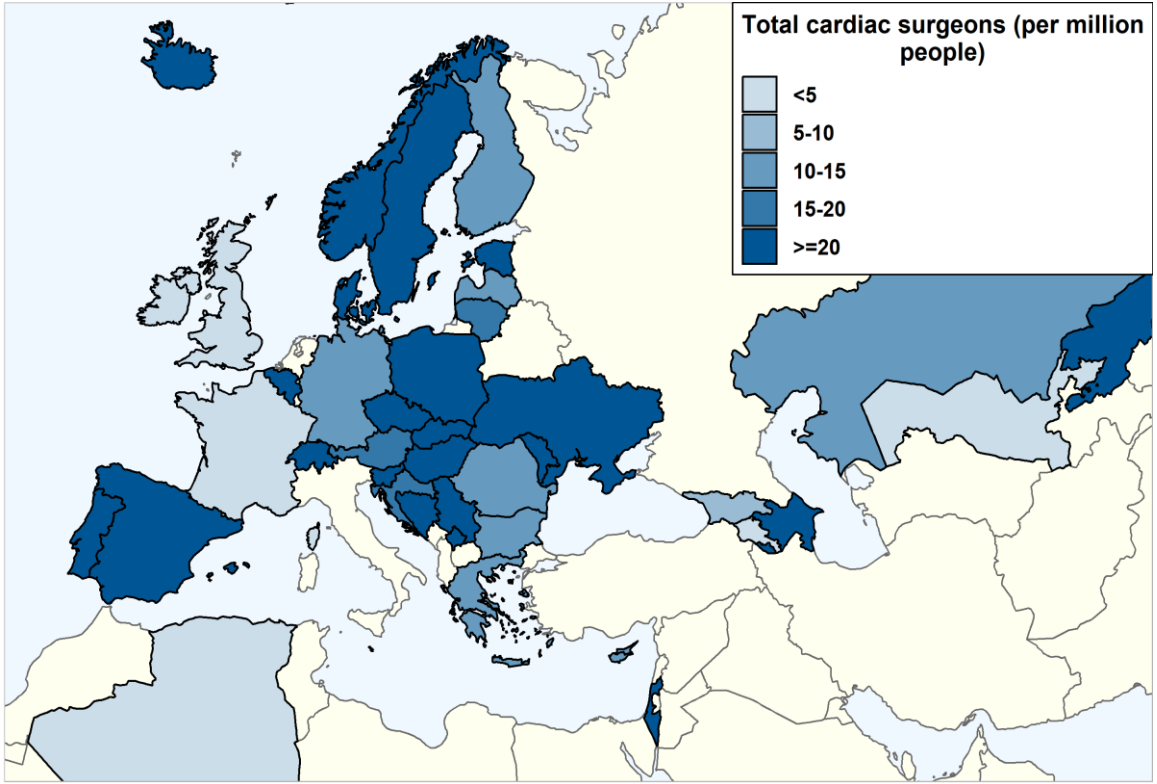

Source: ESC survey. Missing: Albania, Egypt, Italy, Lebanon, Libya, Luxembourg, Montenegro, Morocco, Netherlands, Syria, Tunisia. Zero: San Marino.
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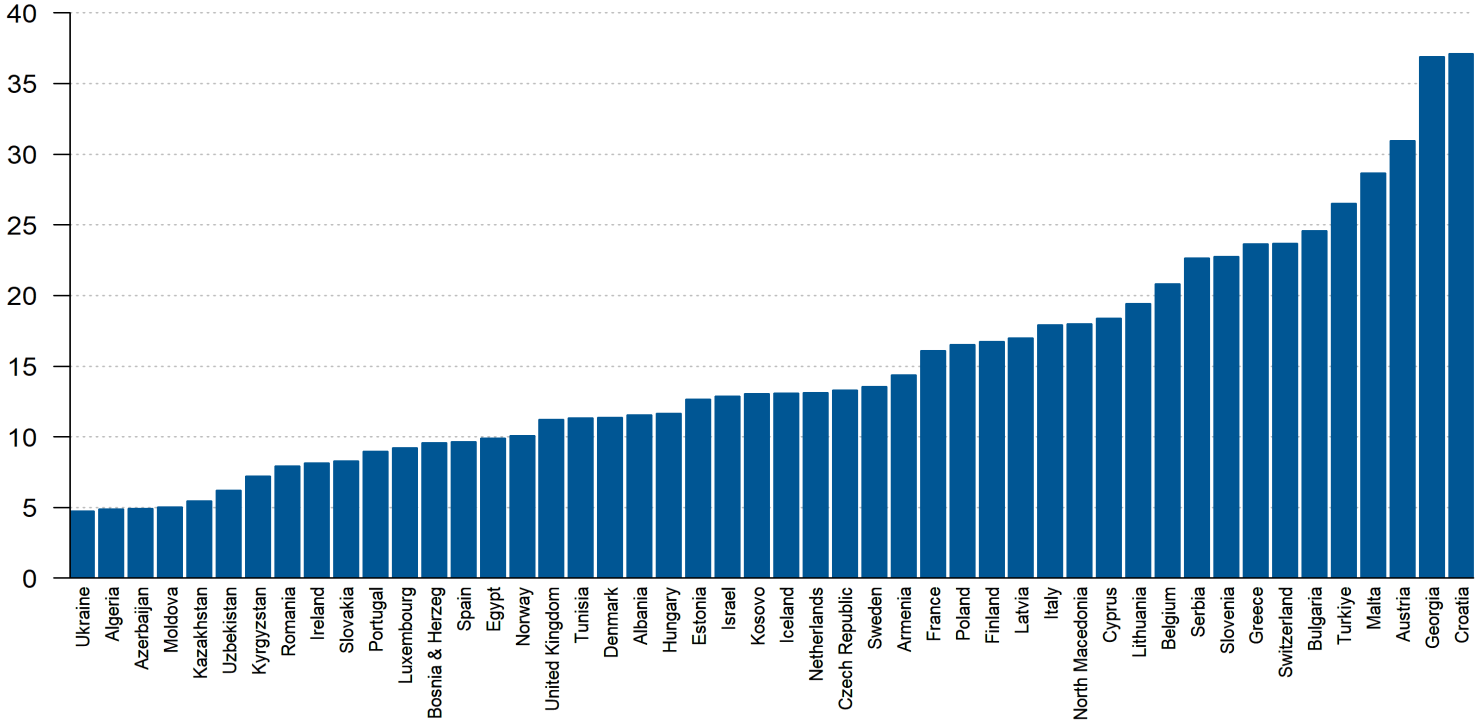
Total interventional cardiologists (per million people), 2022



Sources: ESC survey, EAPCI Survey. Missing: Germany, Lebanon, Libya, Montenegro, Morocco, Syria. Zero: San Marino
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Total interventional cardiologists (per million people), 2022

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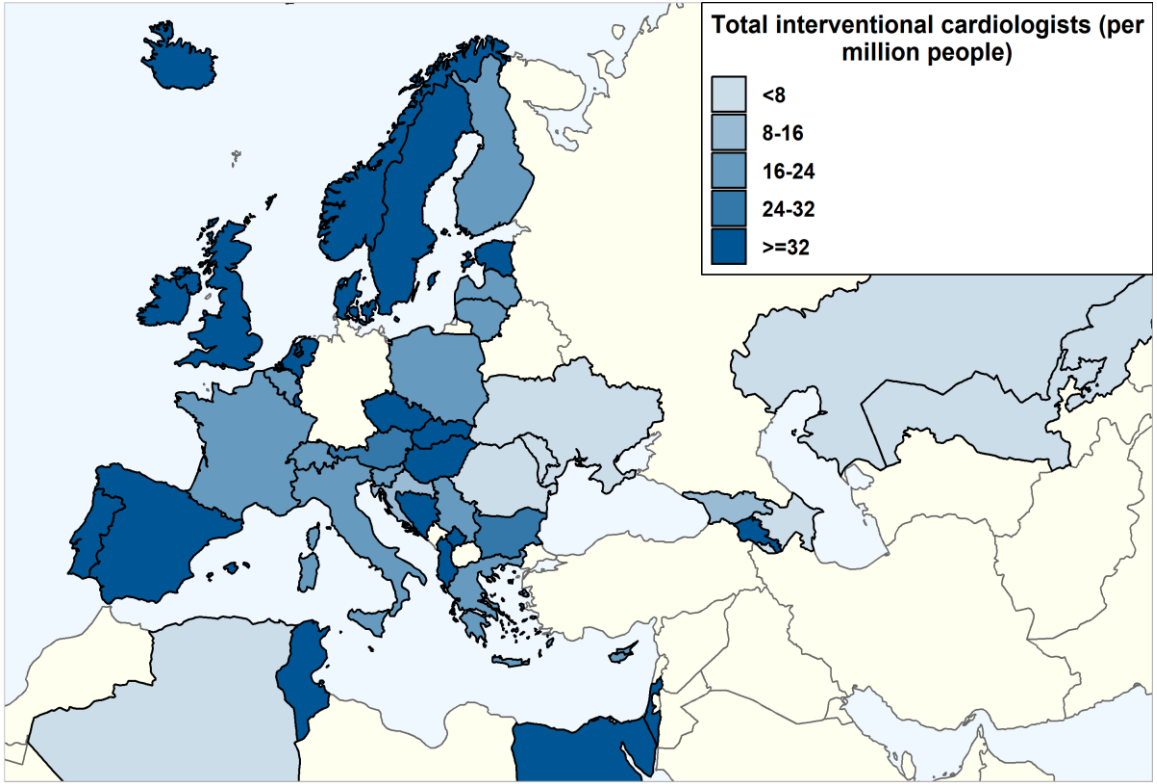

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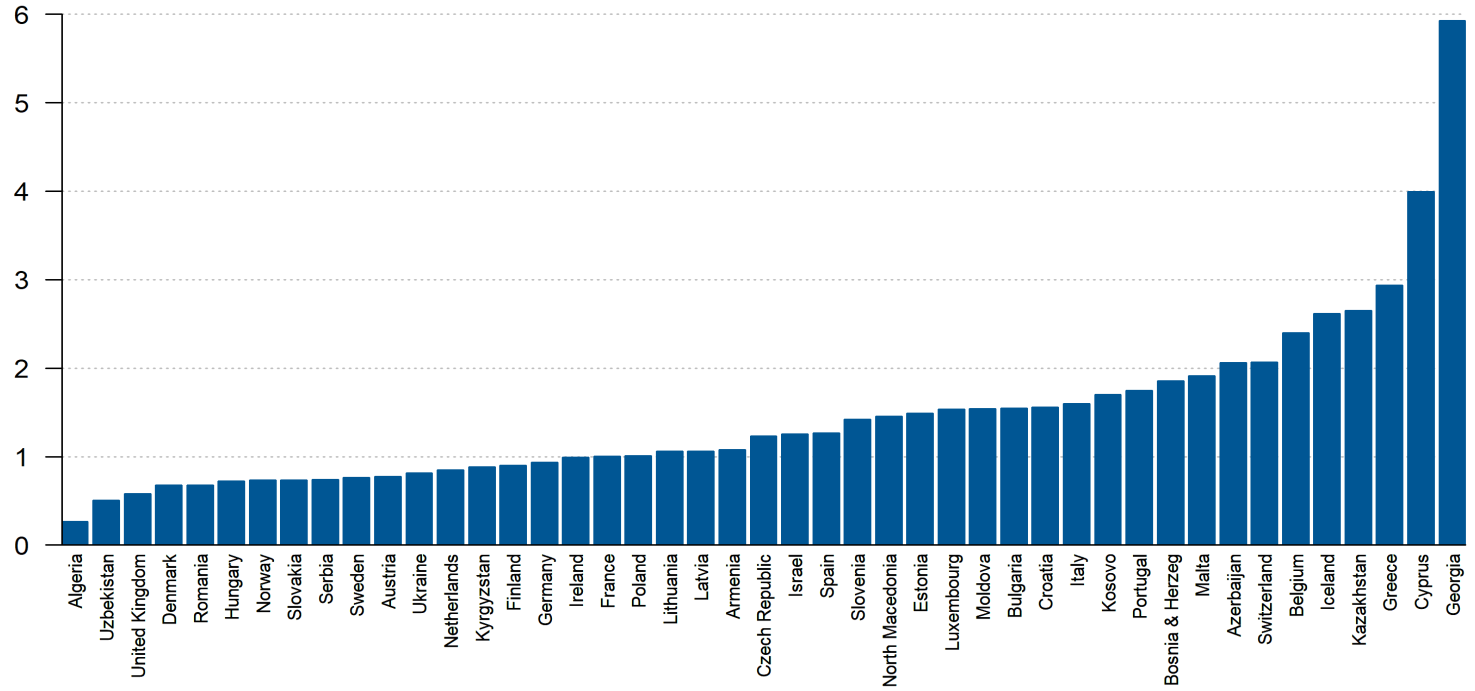
Hospitals with cardiac surgery (per million people), 2022



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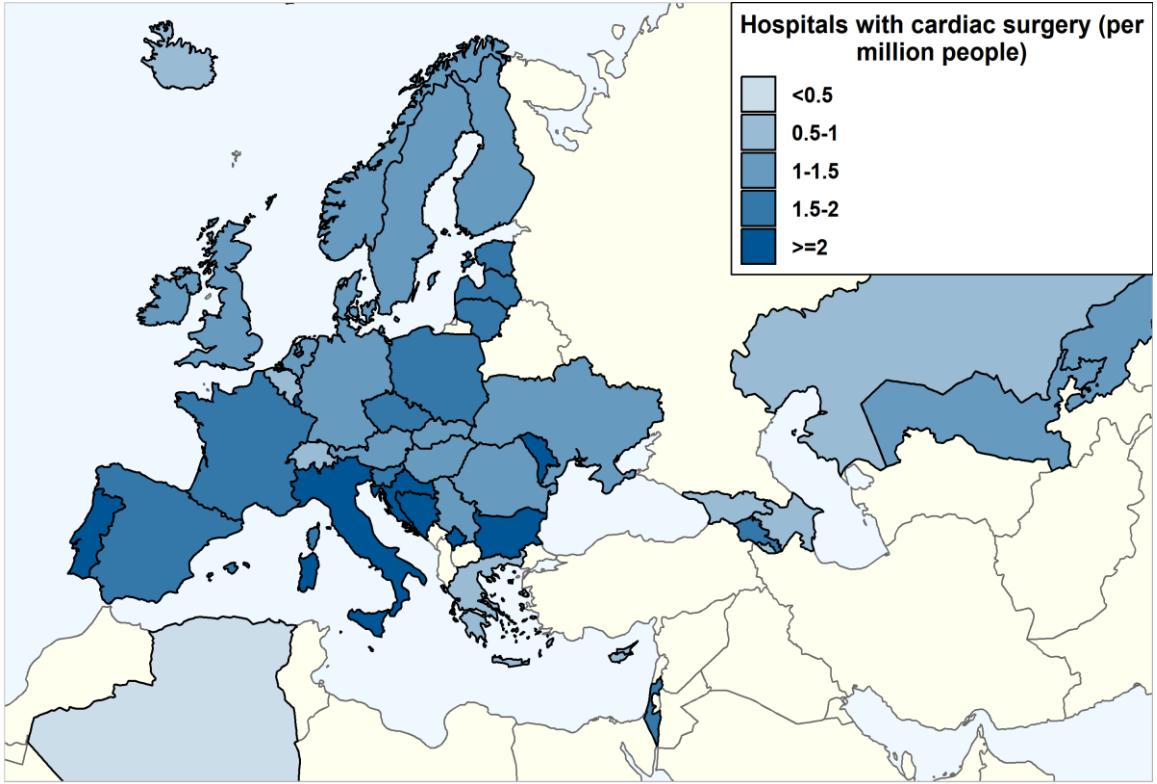

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Hospital with cath labs (per million people), 2022

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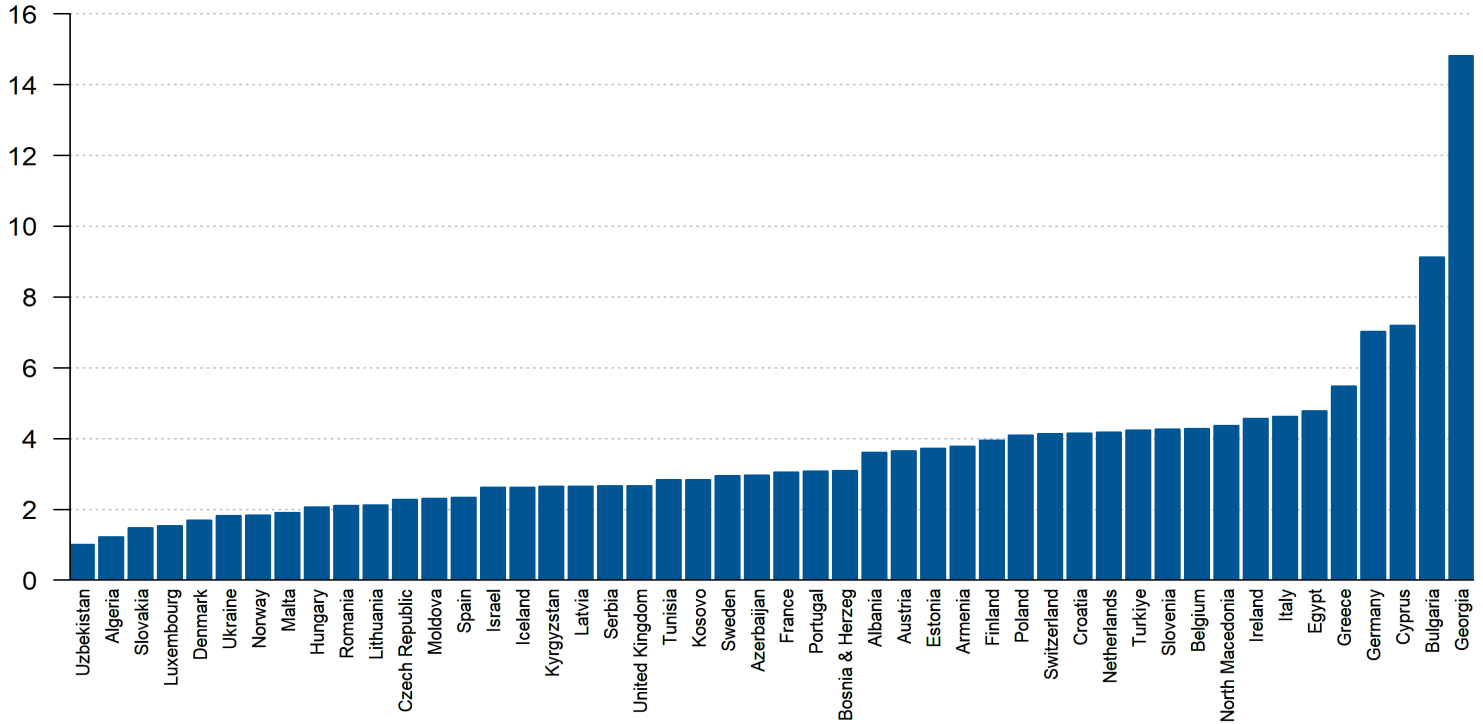

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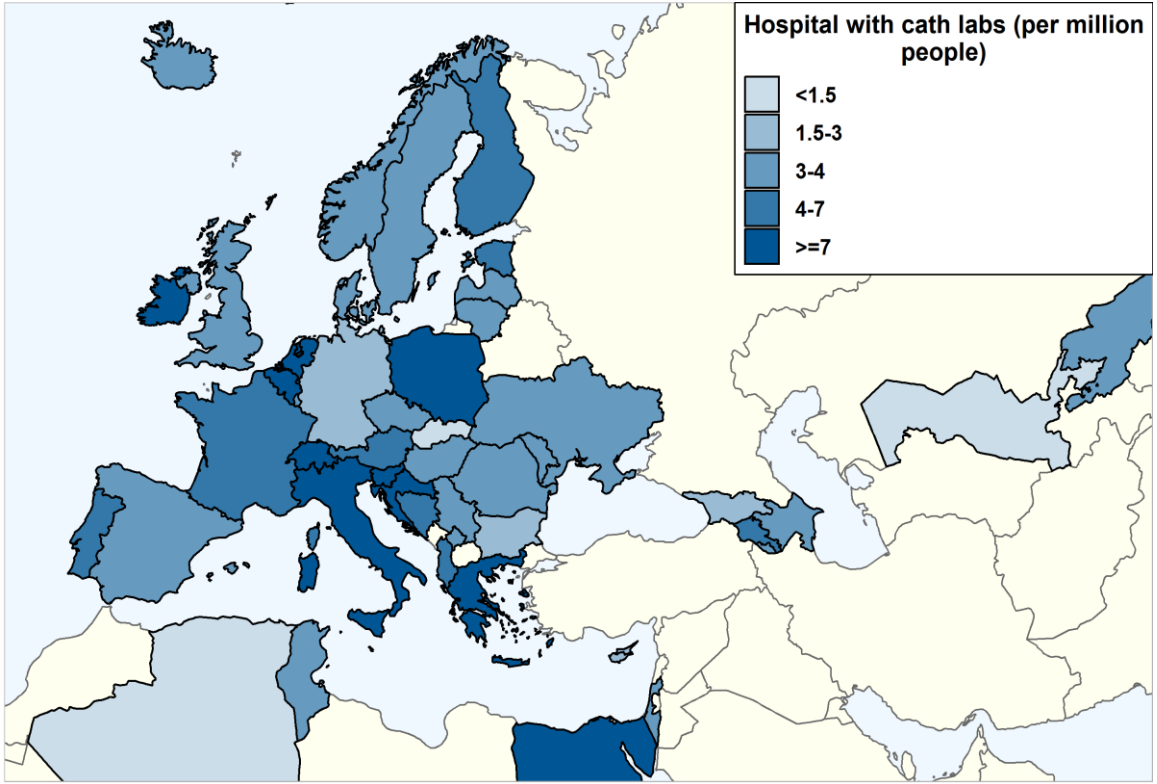
ESC Atlas

Hospital with cath labs (per million people), 2022



Sources: ESC survey, EAPCI Survey. Missing: Kazakhstan, Lebanon, Libya, Montenegro, Morocco, San Marino, Syria
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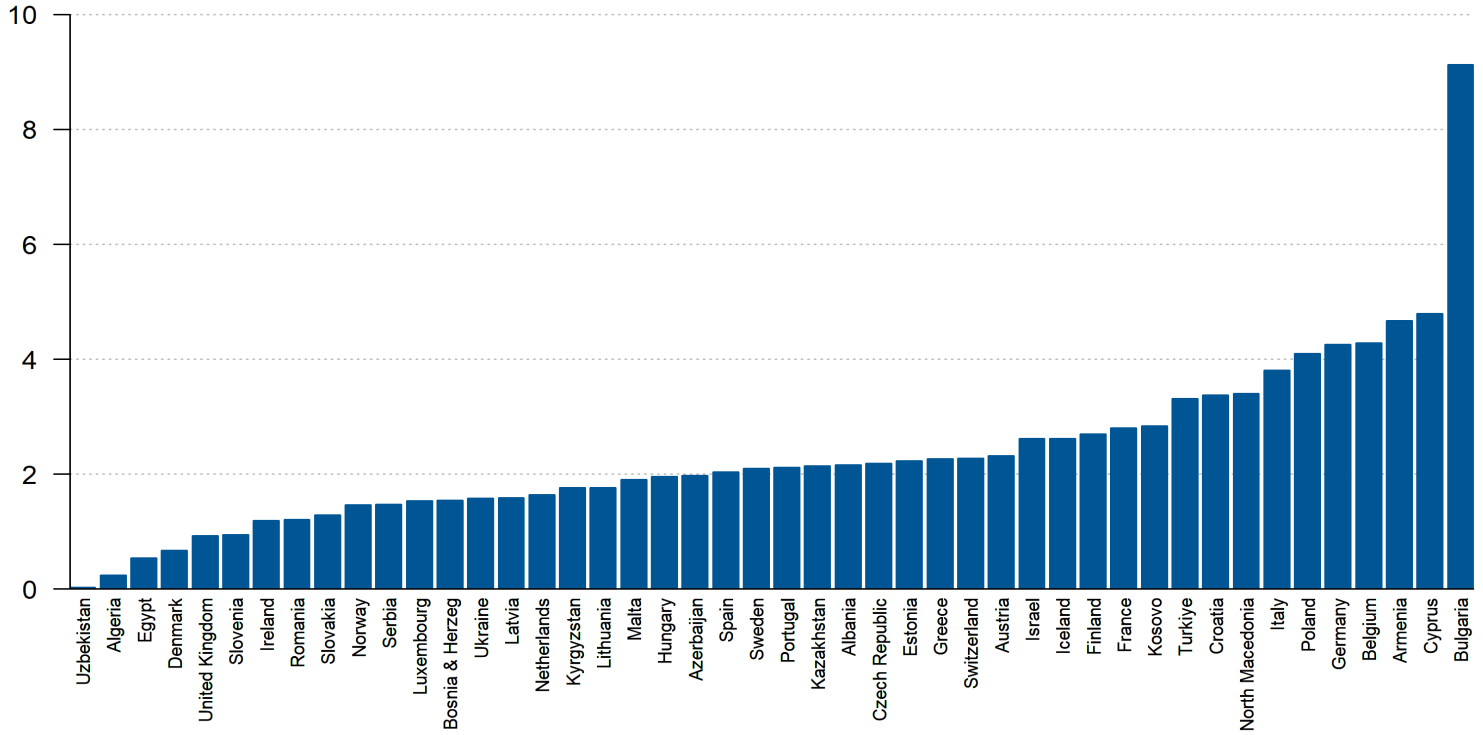
Hospitals with cath labs on 24 hours/7 days service (per million people), 2022



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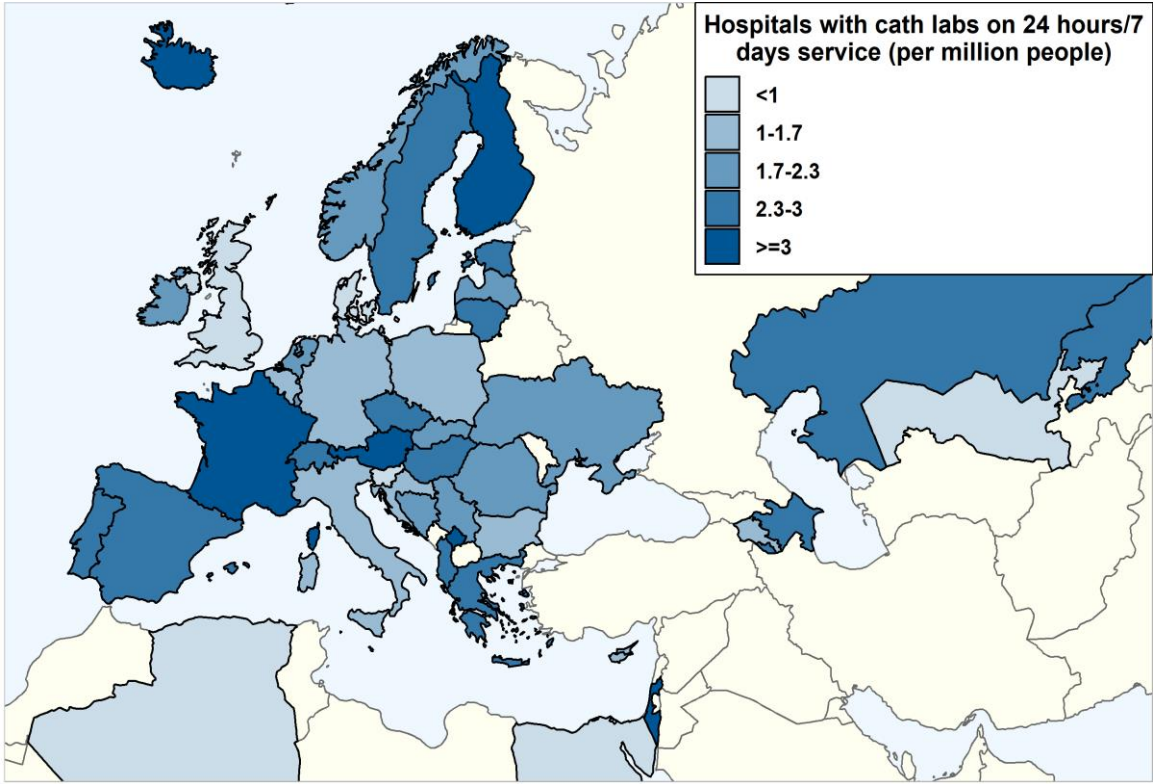

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Hospitals performing TAVI (per million people), 2022

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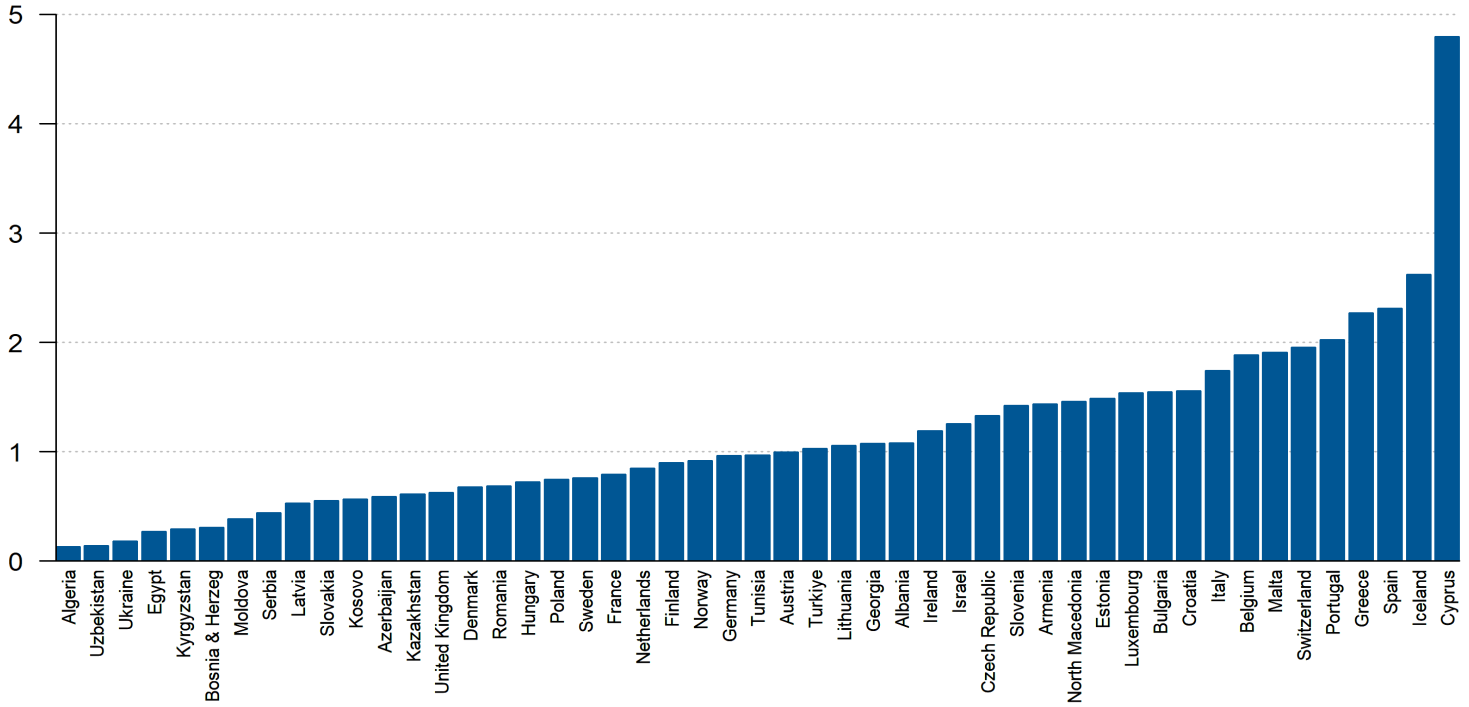

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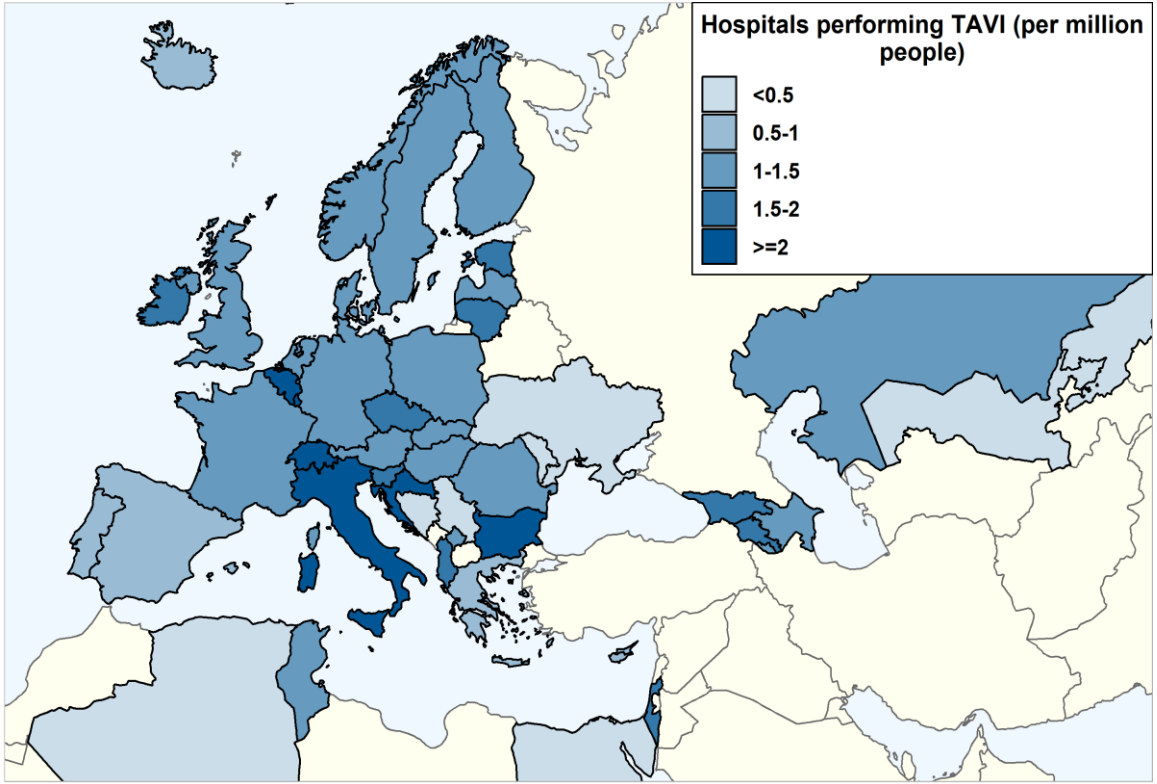

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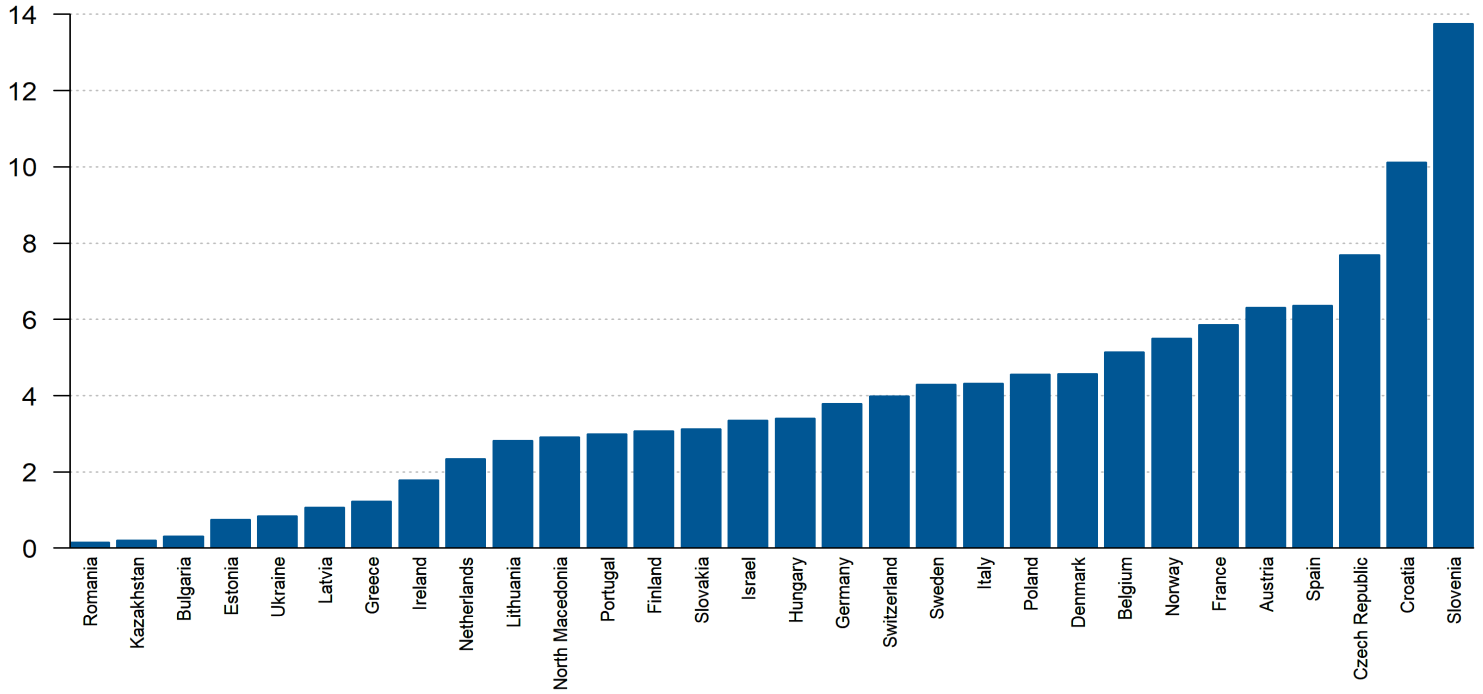
Heart transplantations (per million people), 2022



Source: ESC survey. Missing: Albania, Egypt, Lebanon, Libya, Montenegro, Morocco, Serbia, Syria, Tunisia, Turkiye, United Kingdom. Zero: Algeria, Armenia, Azerbaijan, Bosnia and Herzegovina, Cyprus, Georgia, Iceland, Kosovo, Kyrgyzstan, Luxembourg, Malta, Moldova, San Marino, Uzbekistan.
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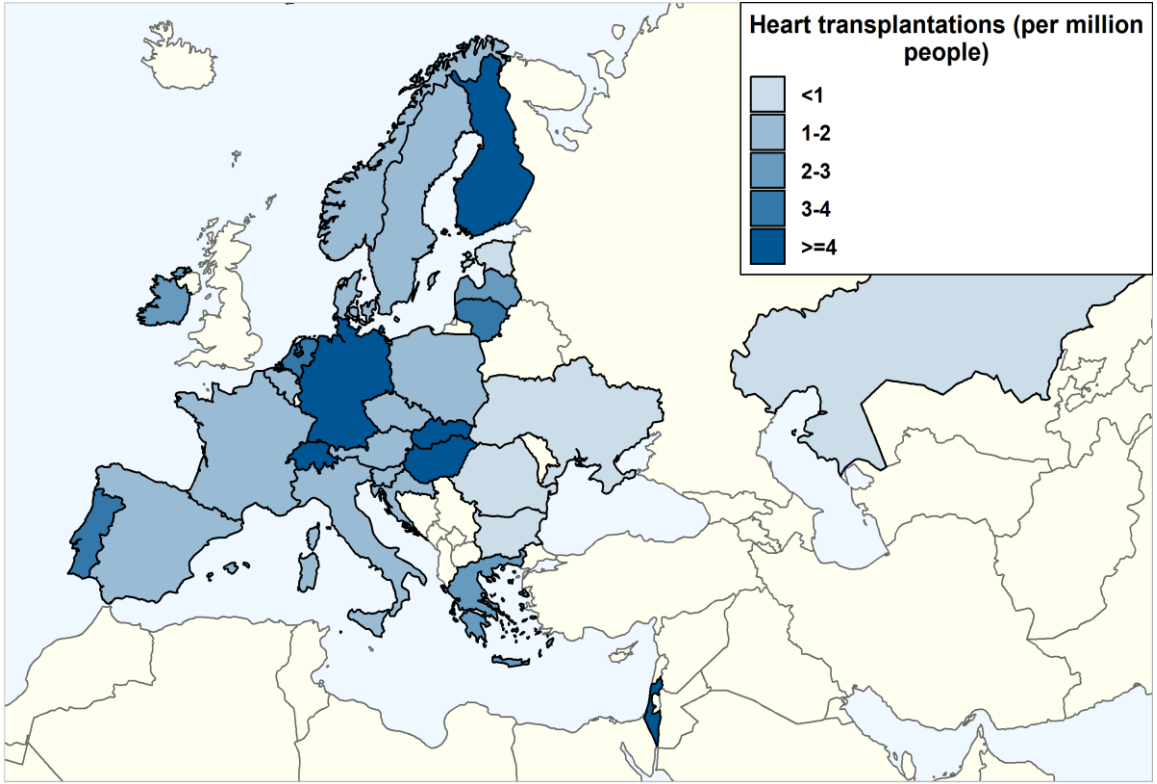

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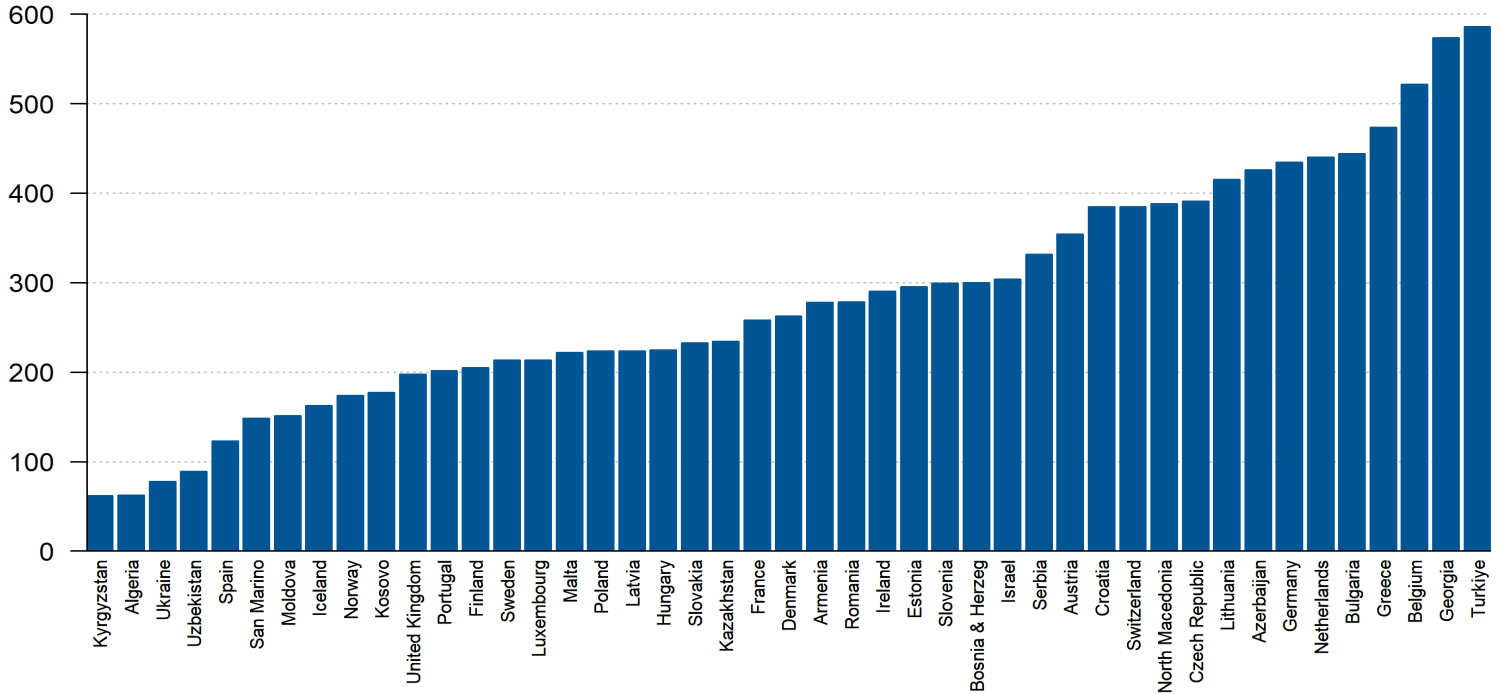
Coronary artery bypass graft surgery (CABG) (per million people), 2022



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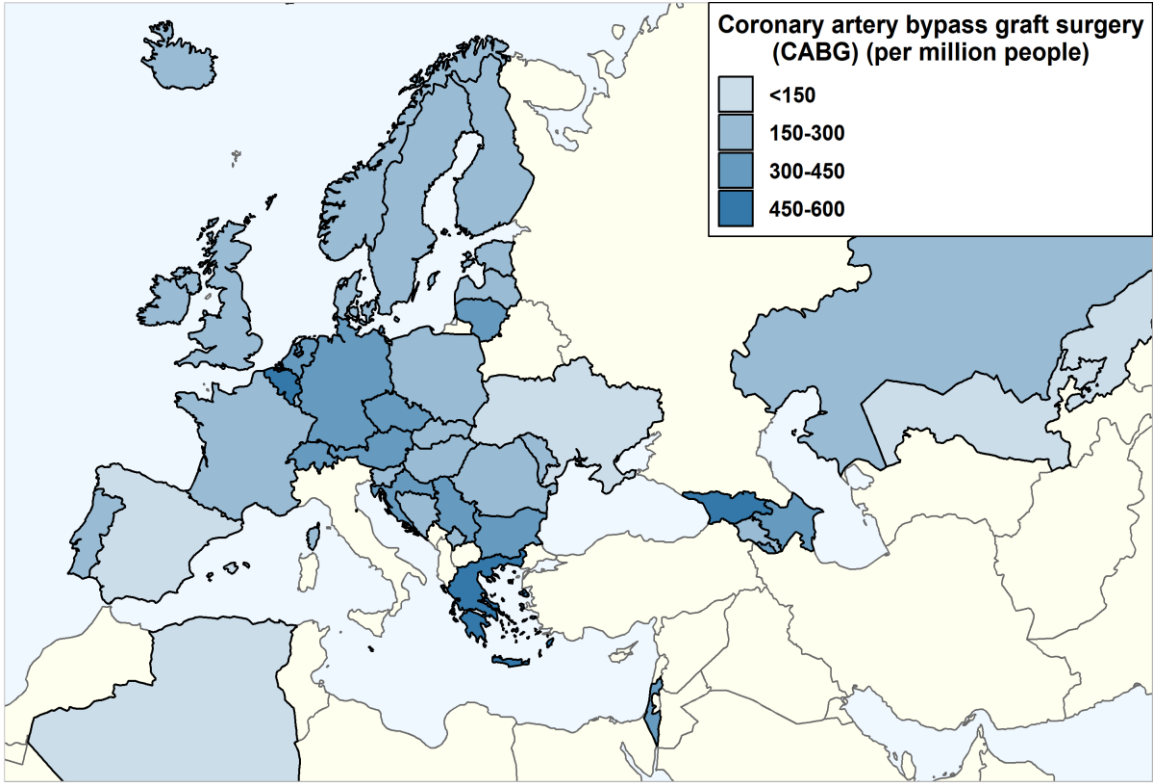

Source: ESC survey. Missing: Albania, Cyprus, Egypt, Italy, Lebanon, Libya, Montenegro, Morocco, Syria, Tunisia.
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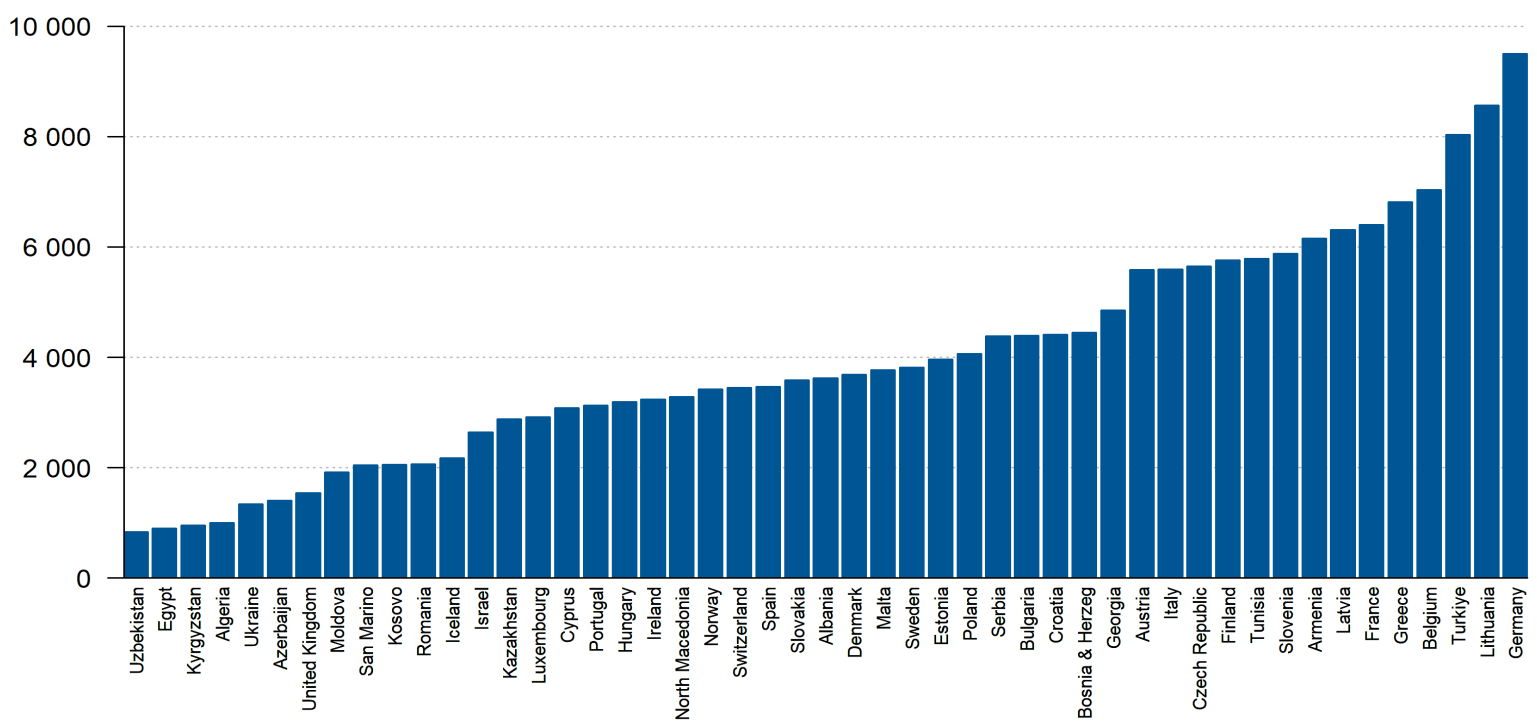
Invasive coronary angiography and diagnostic cardiac catheterization (per million people), 2022



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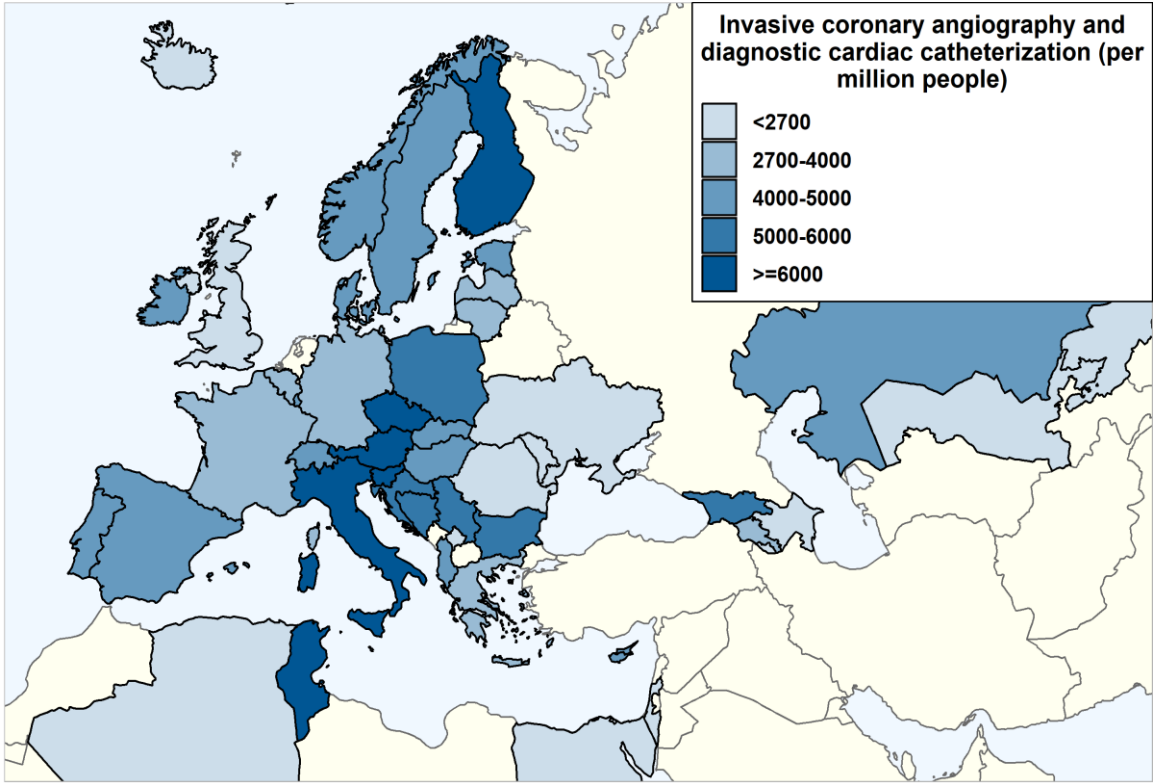

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Percutaneous coronary interventions (PCI) (per million people), 2022

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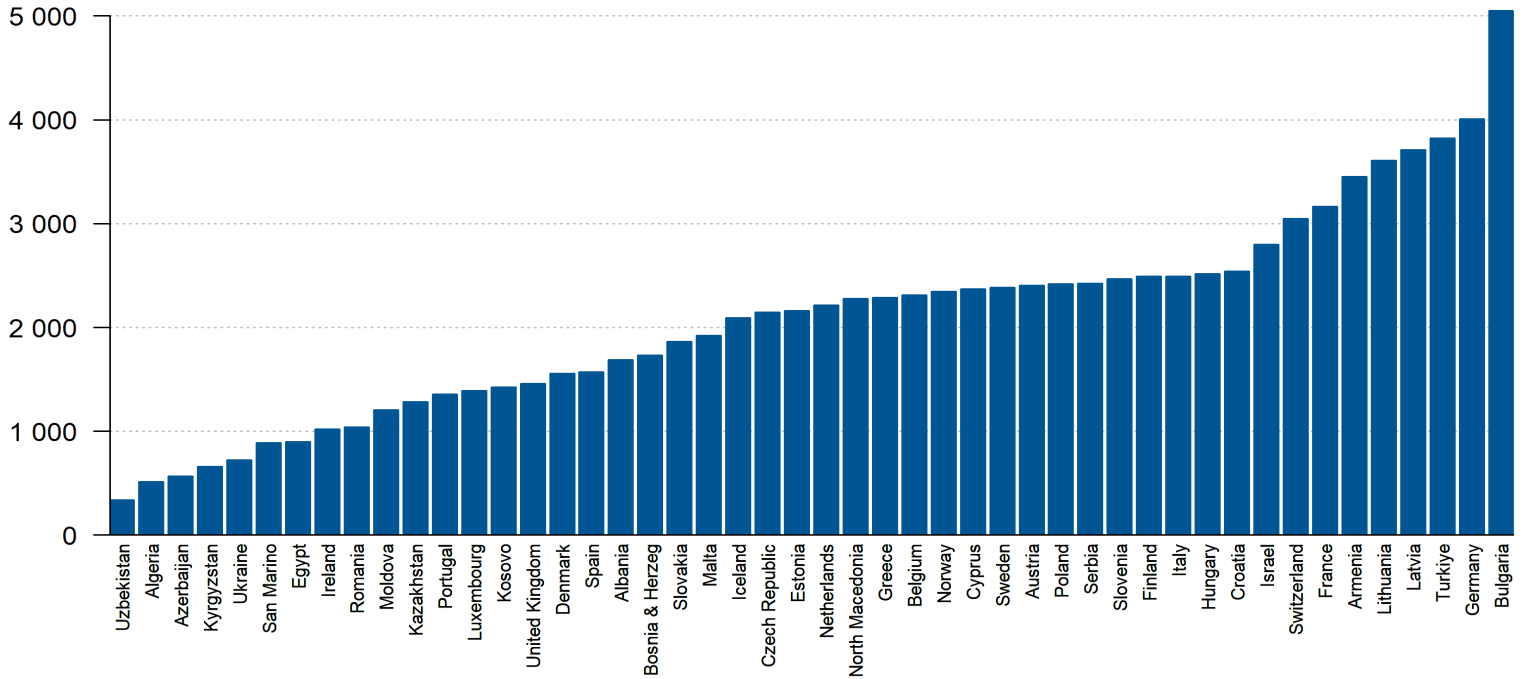

Sources: ESC survey, EAPCI Survey. Missing: Georgia, Lebanon, Libya, Montenegro, Morocco, Syria, Tunisia

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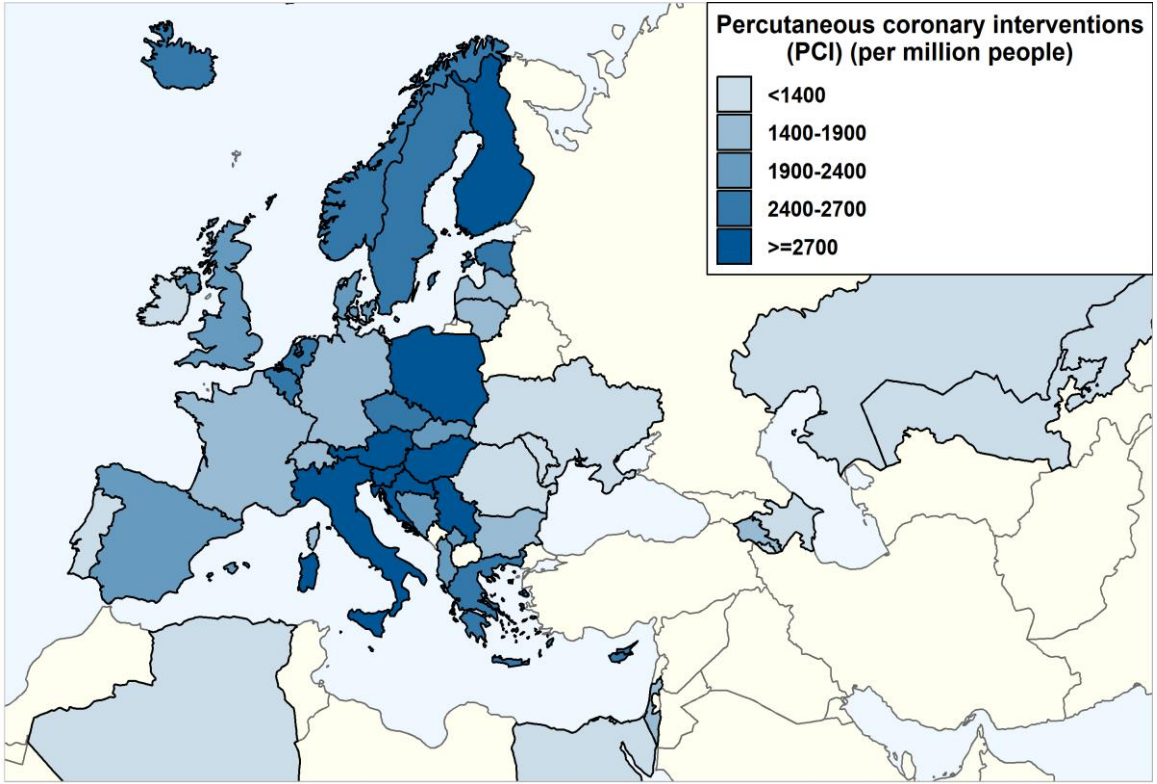
Percutaneous coronary interventions (PCI) (per million people), 2022



Sources: ESC survey, EAPCI Survey. Missing: Georgia, Lebanon, Libya, Montenegro, Morocco, Syria, Tunisia

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Primary percutaneous coronary intervention (pPCI) (per million people), 2022

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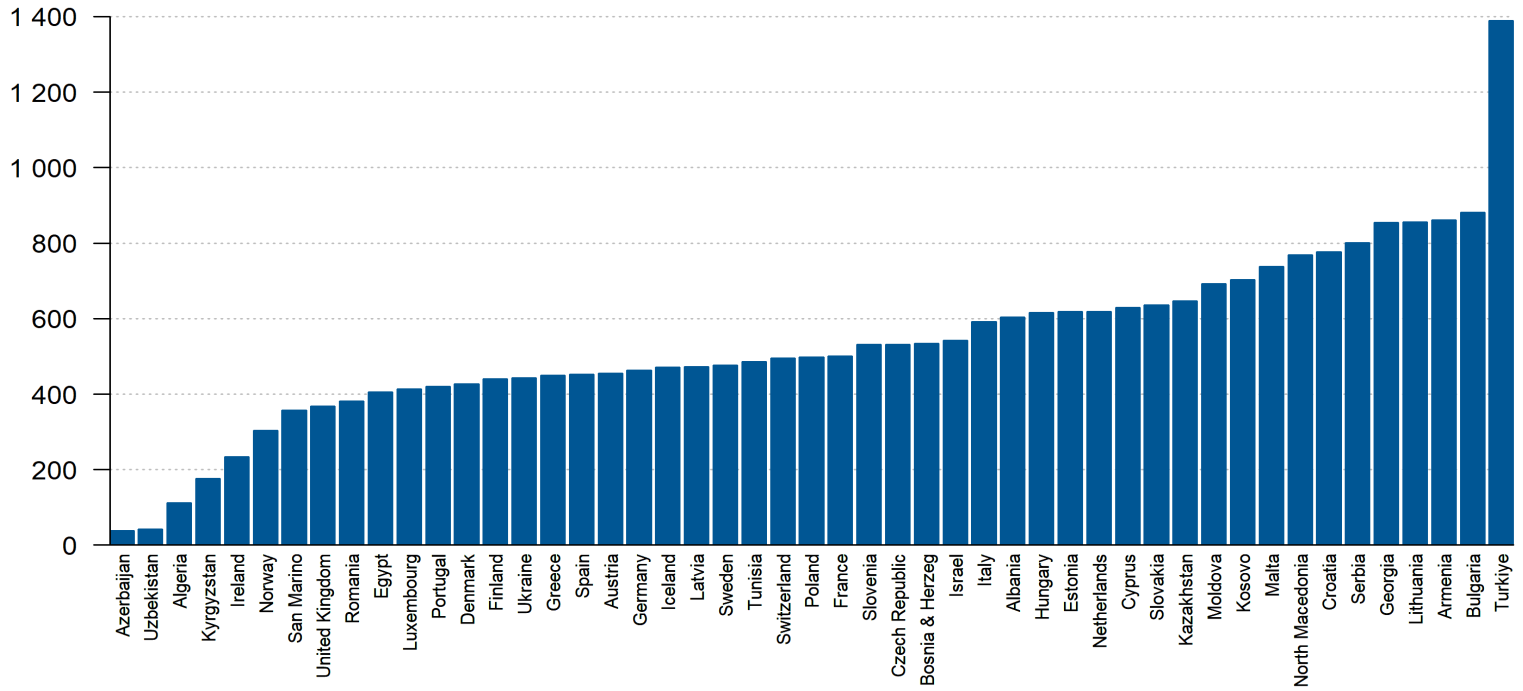

Sources: ESC survey, EAPCI Survey. Missing: Belgium, Lebanon, Libya, Montenegro, Morocco, Syria.
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Primary percutaneous coronary intervention (pPCI) (per million people), 2022

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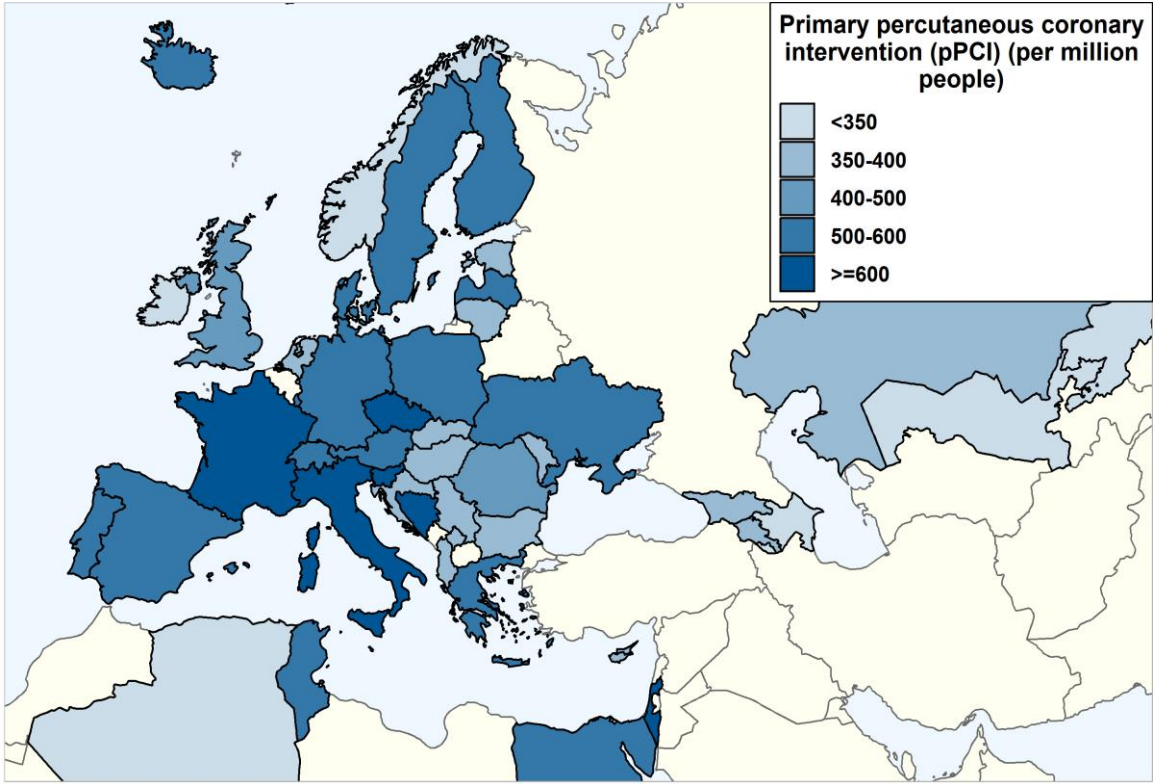

Sources: ESC survey, EAPCI Survey. Missing: Belgium, Lebanon, Libya, Montenegro, Morocco, Syria.
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Transcatheter aortic valve implantation (TAVI) (per million people), 2022

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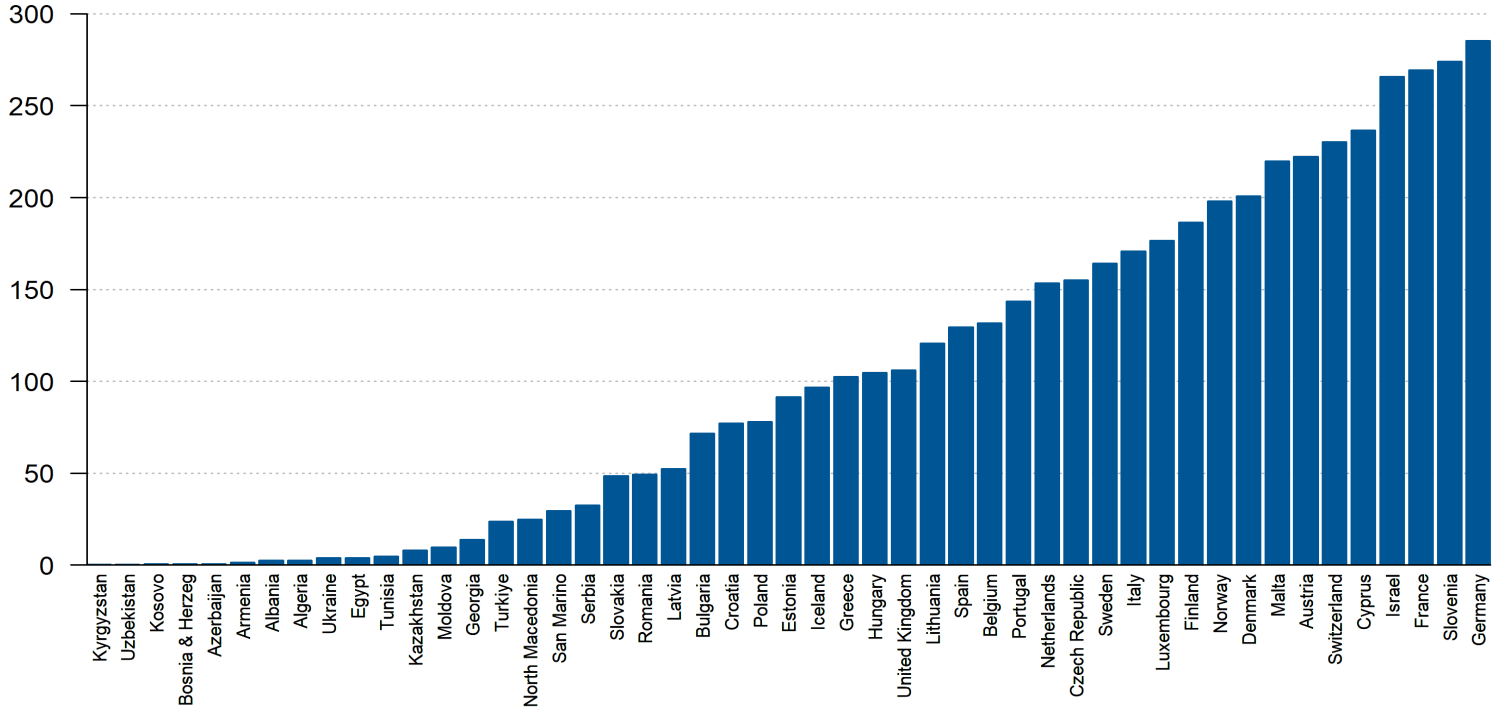

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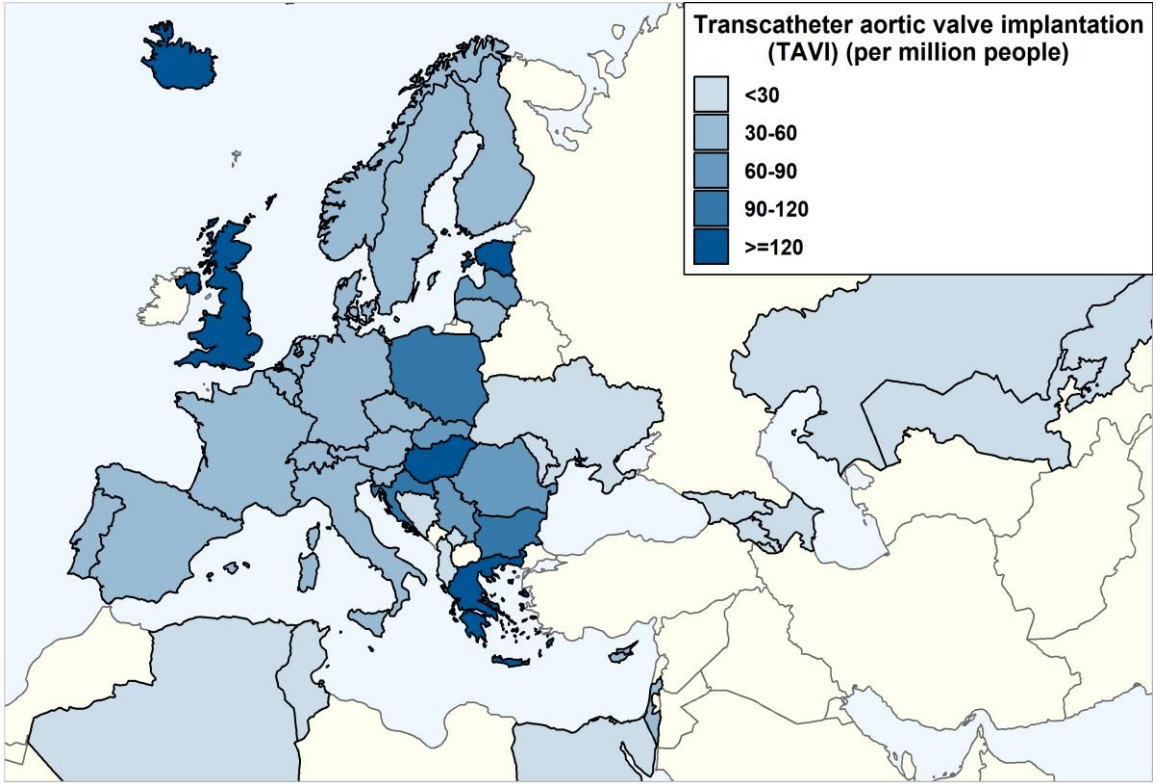
Transcatheter aortic valve implantation (TAVI) (per million people), 2022



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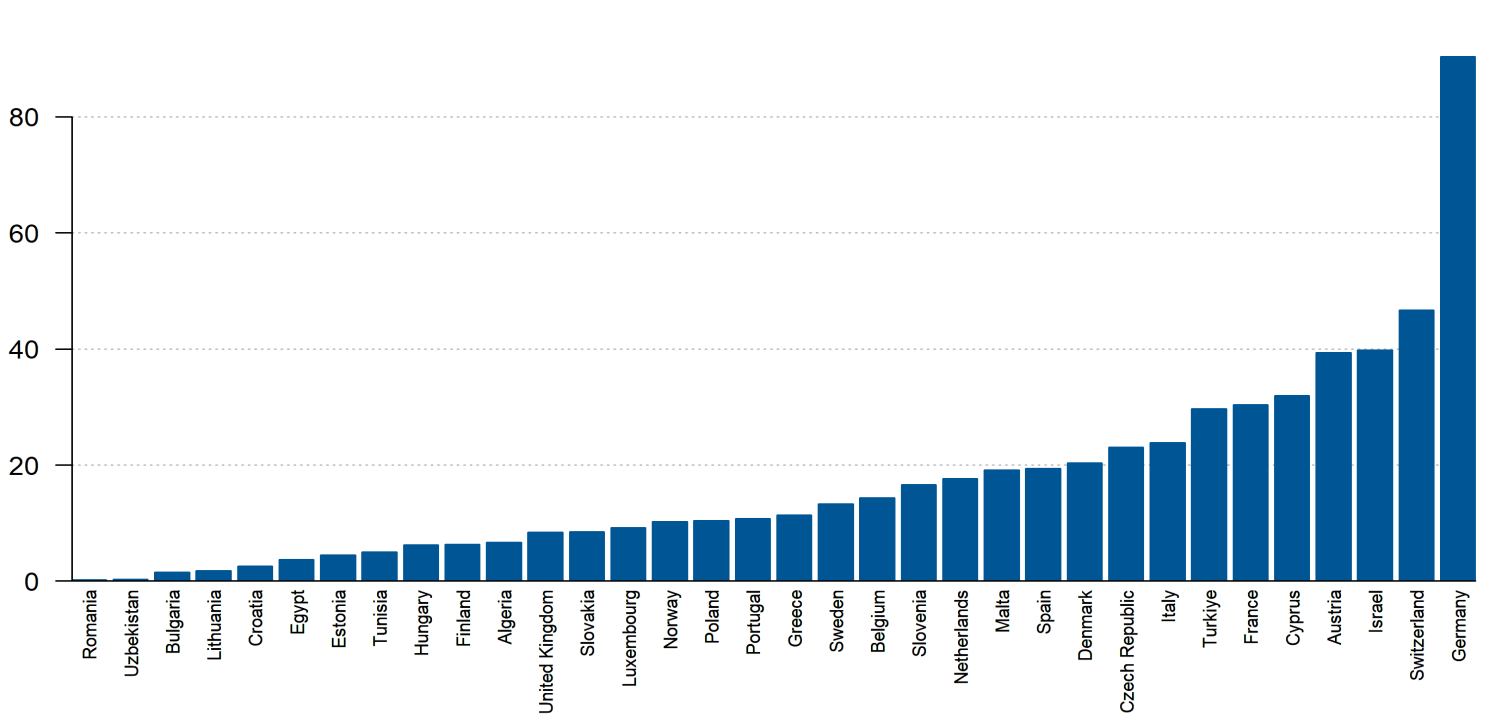
Transcatheter mitral valve interventions (per million people), 2022



Sources: ESC survey, EAPCI Survey. Missing: Azerbaijan, Ireland, Kazakhstan, Latvia, Lebanon, Libya, Montenegro, Morocco, North Macedonia, Serbia, Syria. Zero: Albania, Armenia, Bosnia and Herzegovina, Georgia, Iceland, Kosovo, Kyrgyzstan, Moldova, San Marino, Ukraine.
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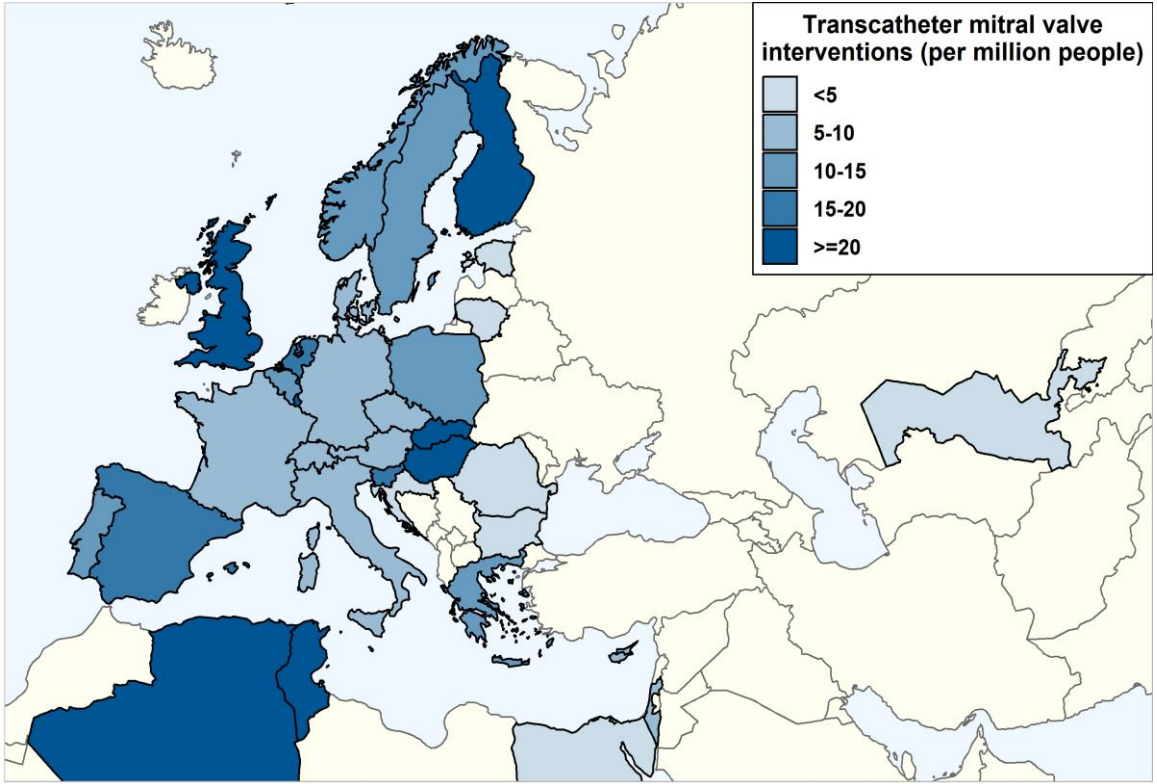
Transcatheter mitral valve interventions (per million people), 2022



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Transcatheter tricuspid valve interventions (per million people), 2022

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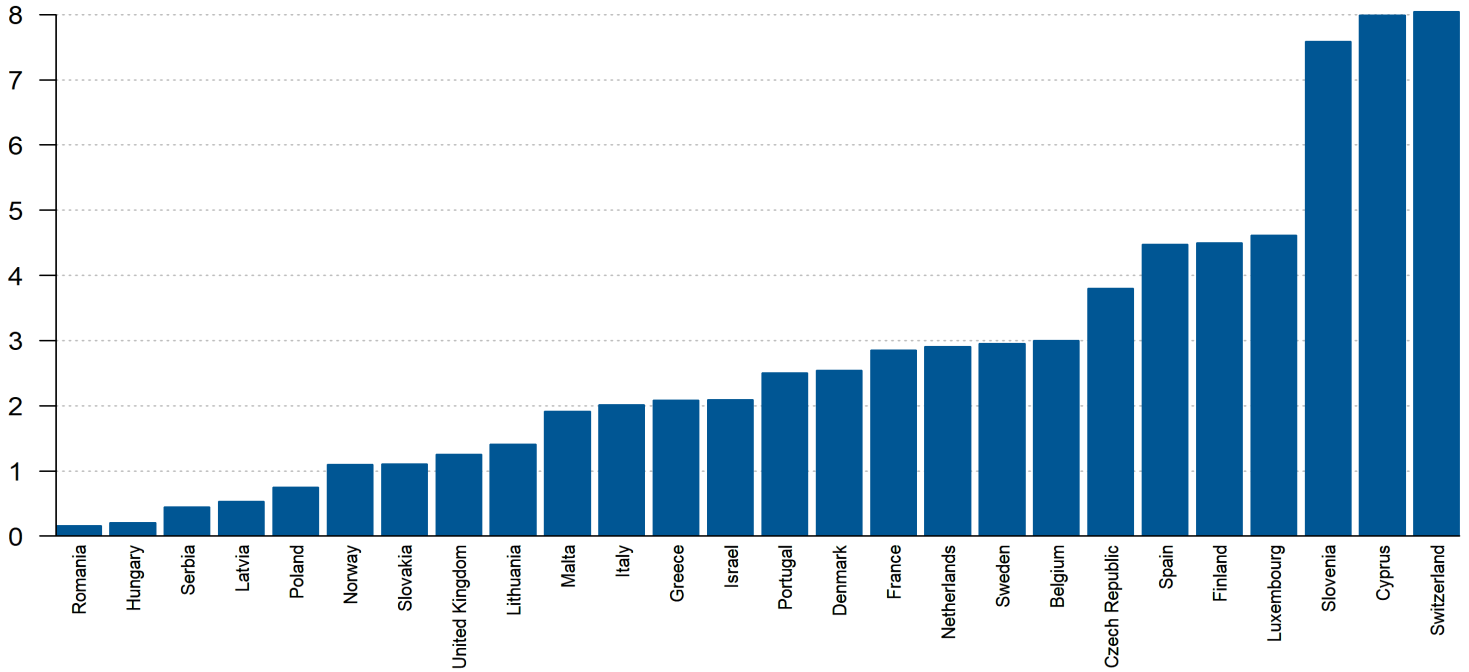

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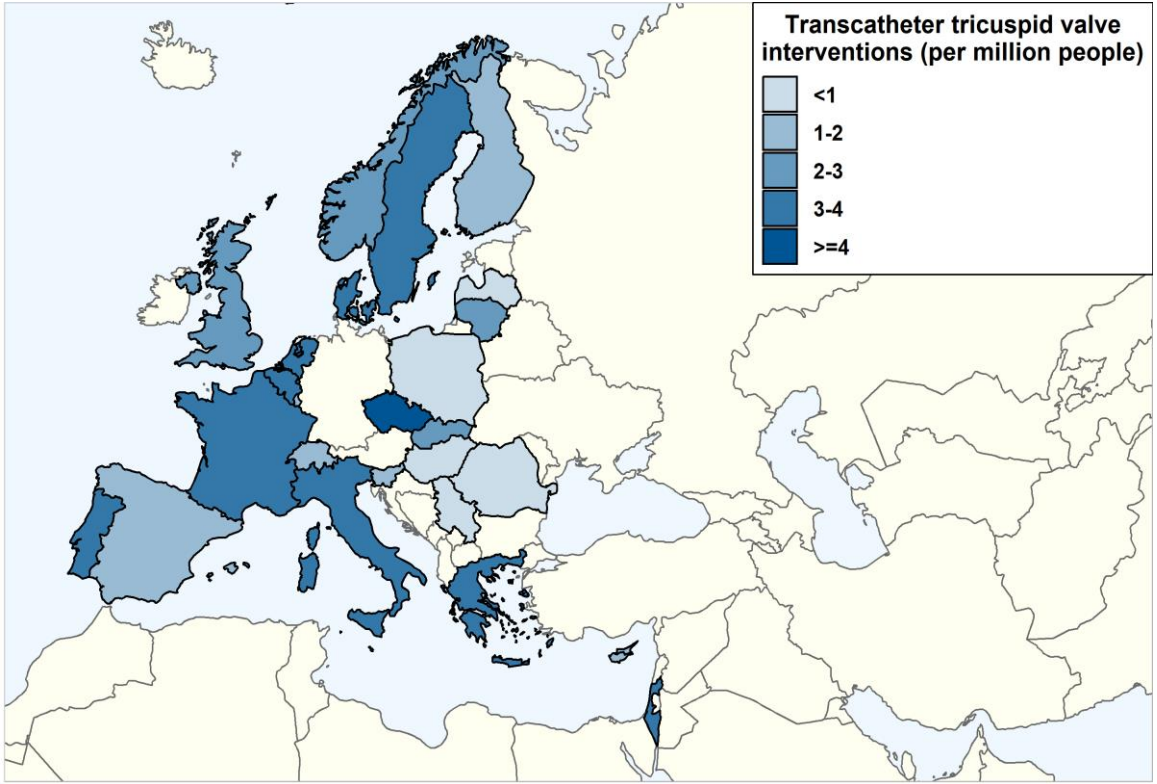
Transcatheter tricuspid valve interventions (per million people), 2022



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Implantable cardioverter defibrillator (ICD) implantations (per million people), 2022

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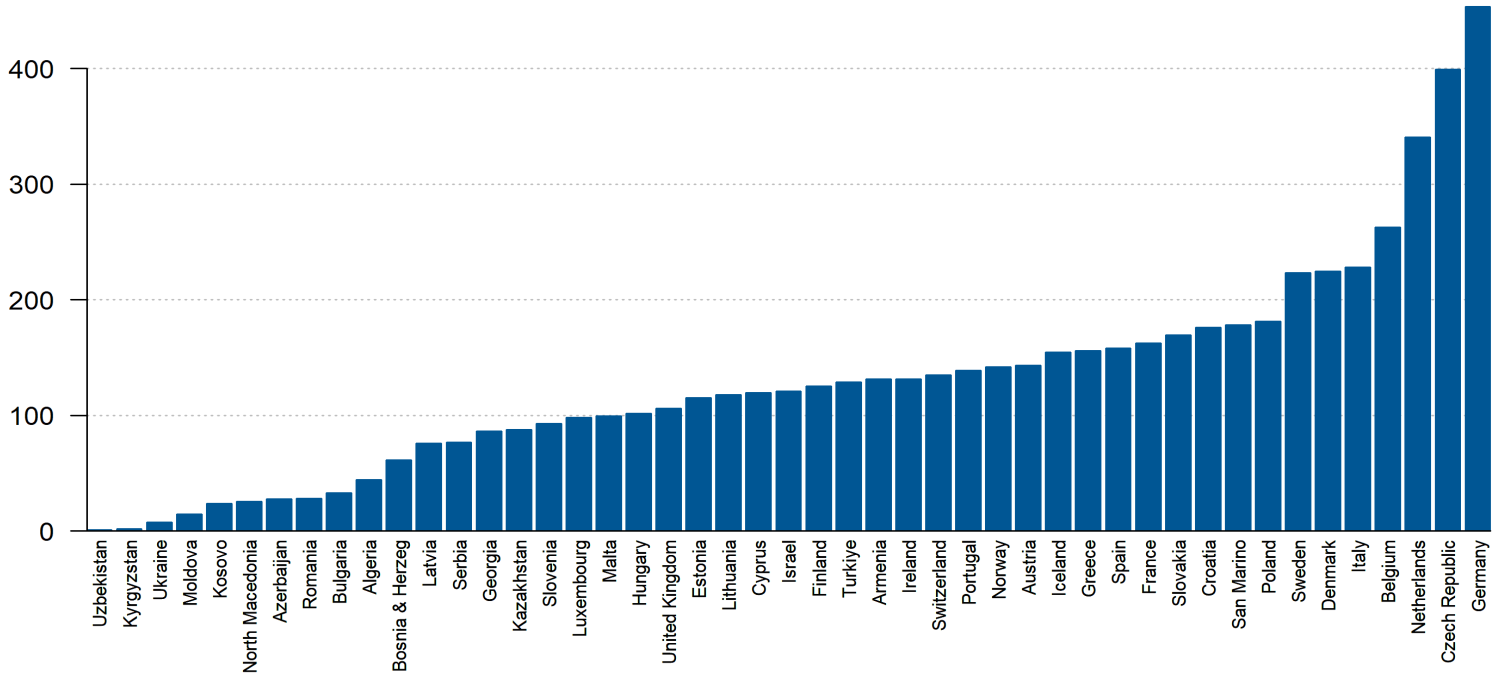

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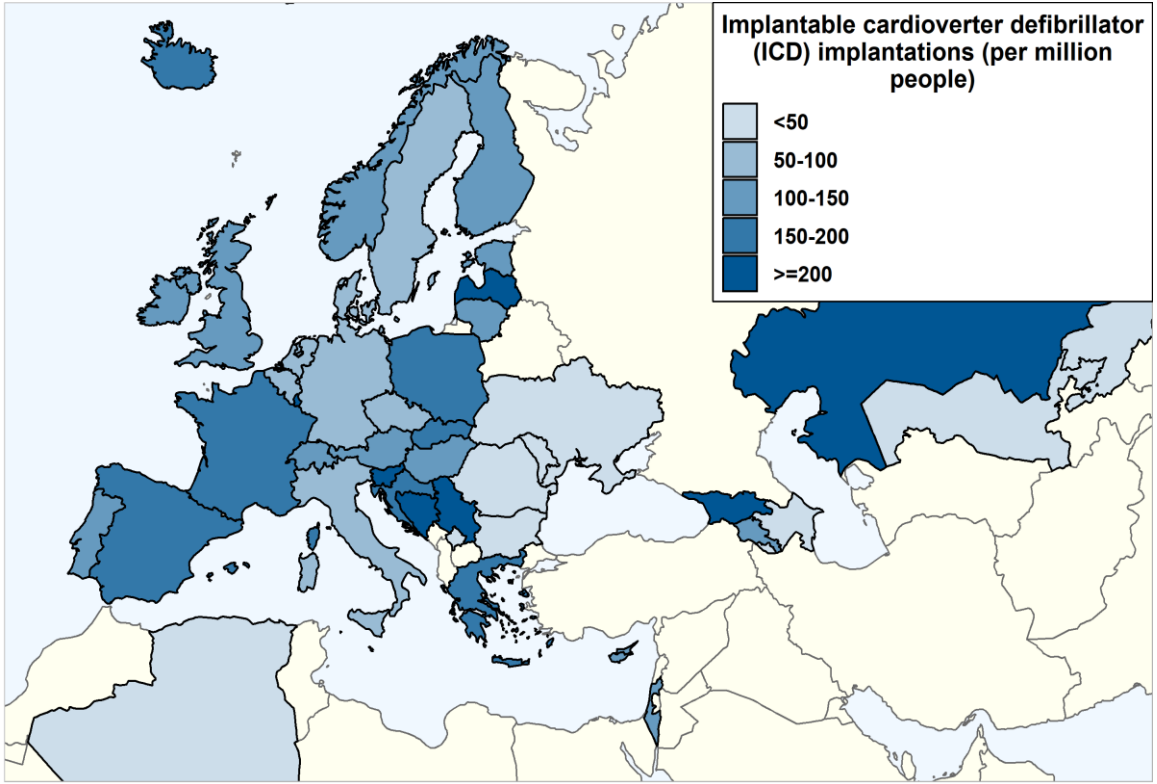

Source: ESC survey. Missing: Albania, Egypt, Lebanon, Libya, Montenegro, Morocco, Syria, Tunisia.
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Cardiac resynchronization therapy device (CRT-D and CRT-P) implantations (per million people), 2022

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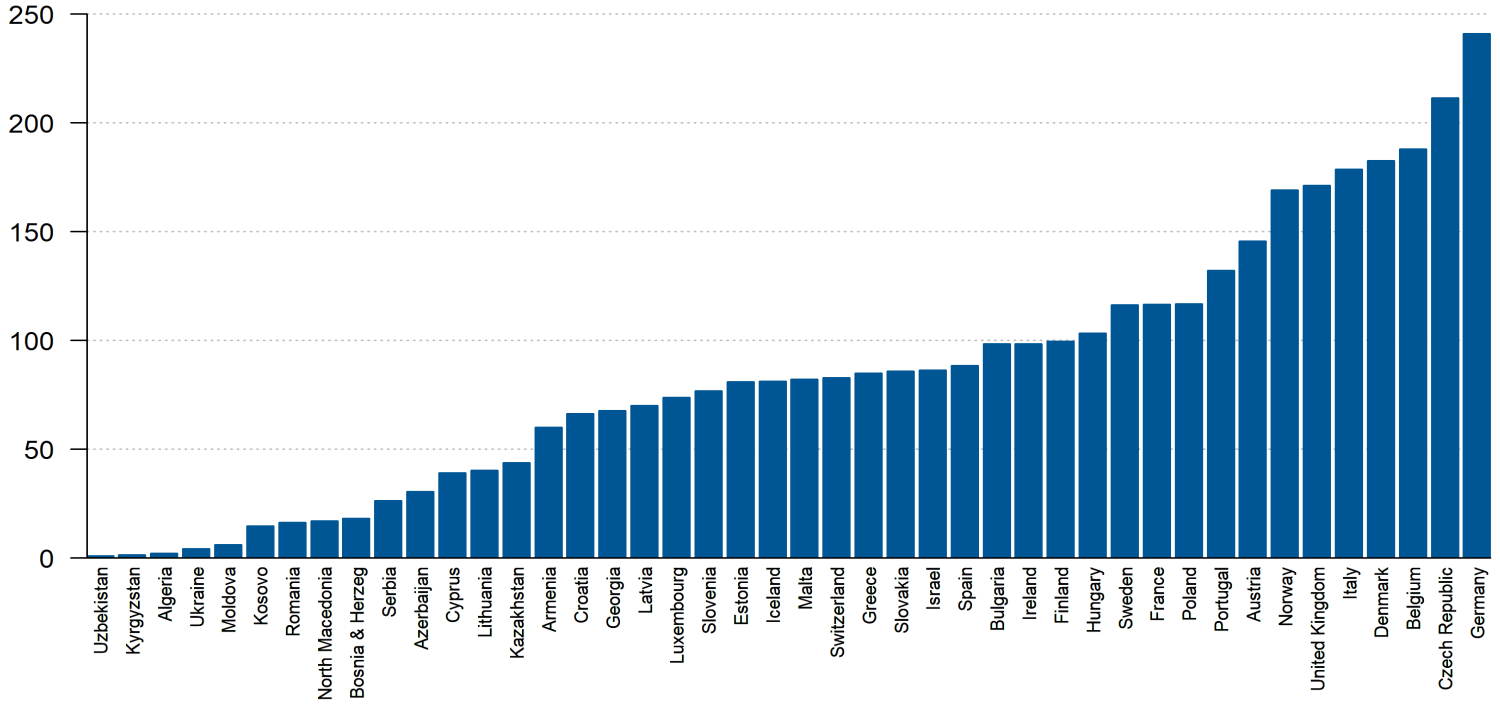

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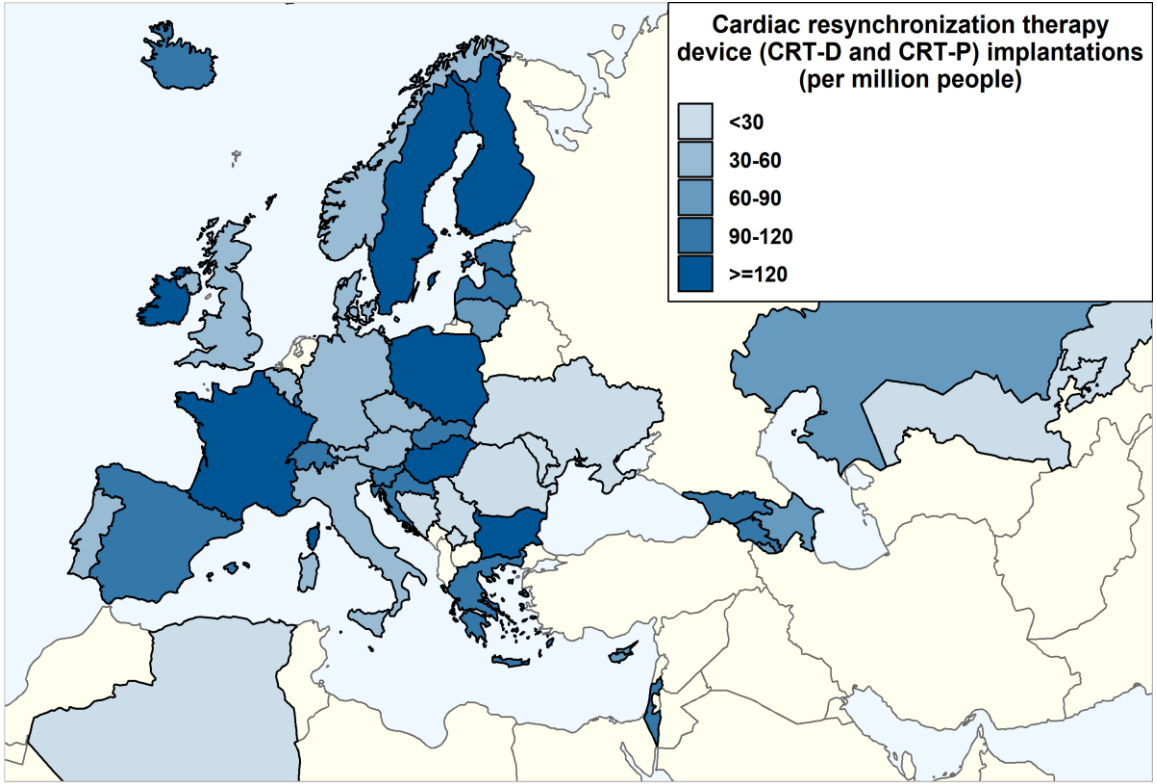

Source: ESC survey. Missing: Albania, Egypt, Lebanon, Libya, Montenegro, Morocco, Netherlands, Syria, Tunisia, Turkiye. Zero: San Marino.
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Ablations to correct heart rhythm disorders (per million people), 2022

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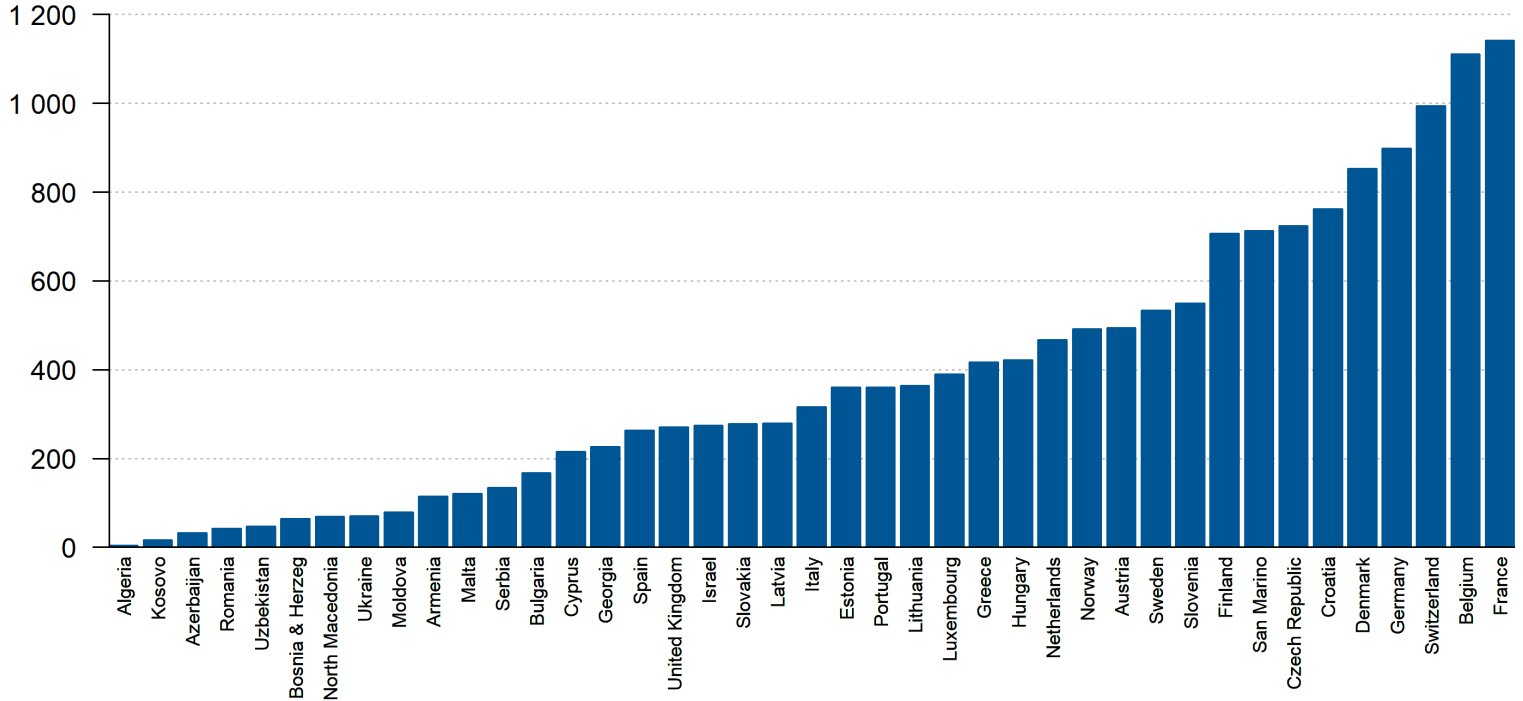

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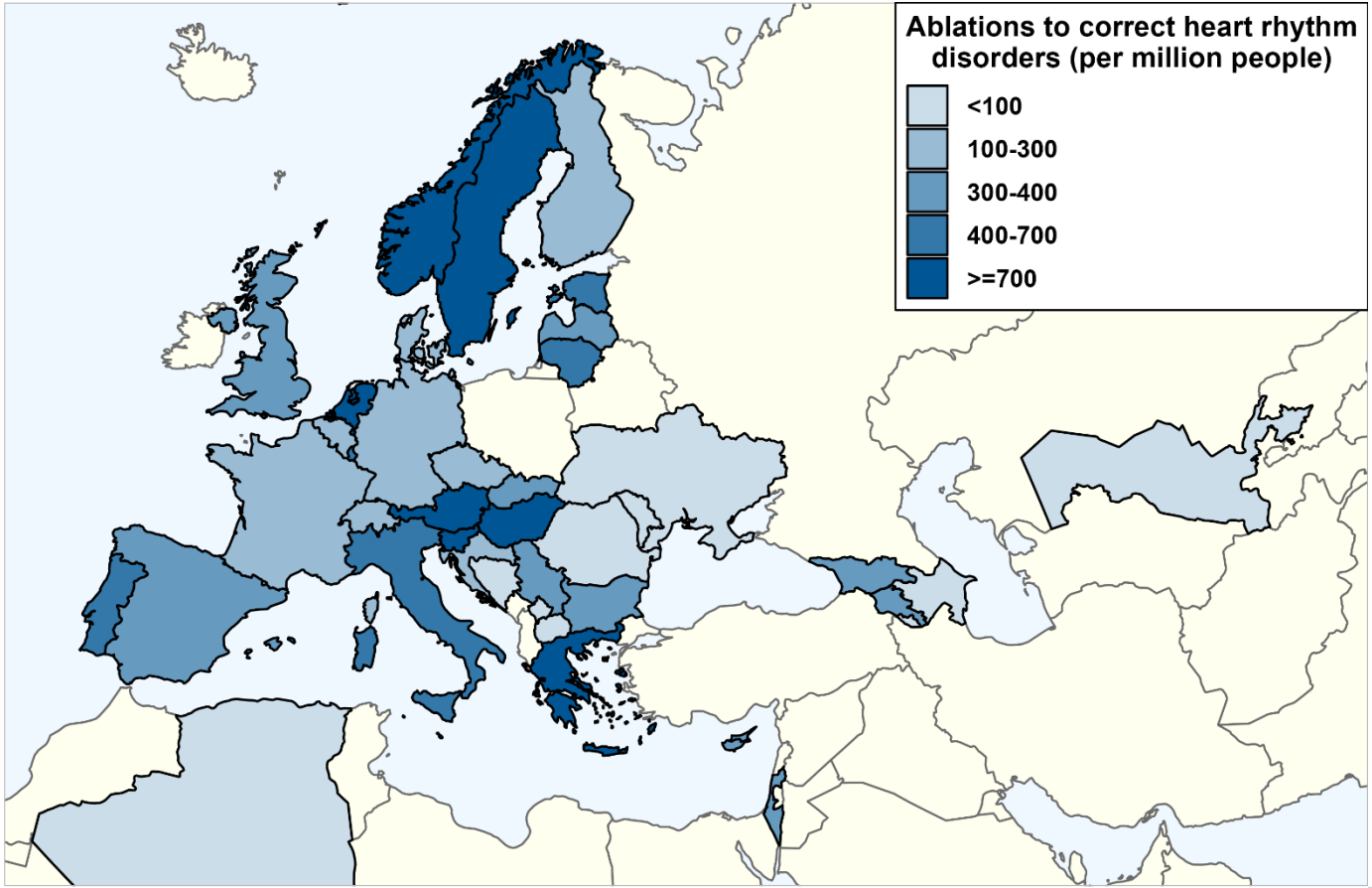

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Source: ESC survey. Missing : Albania, Egypt, Iceland, Ireland, Kazakhstan, Kyrgyzstan, Lebanon, Libya, Montenegro, Morocco, Poland, Syria, Tunisia, Turkiye
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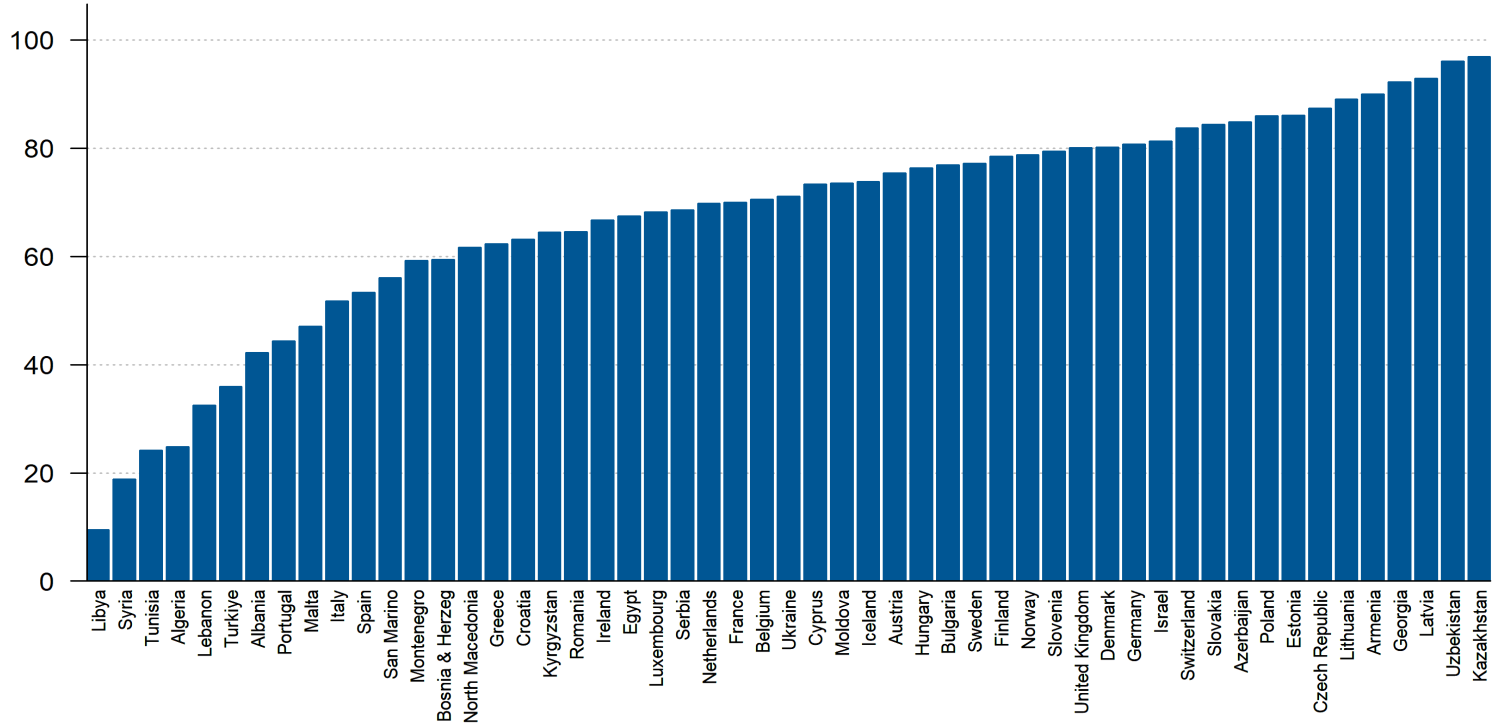
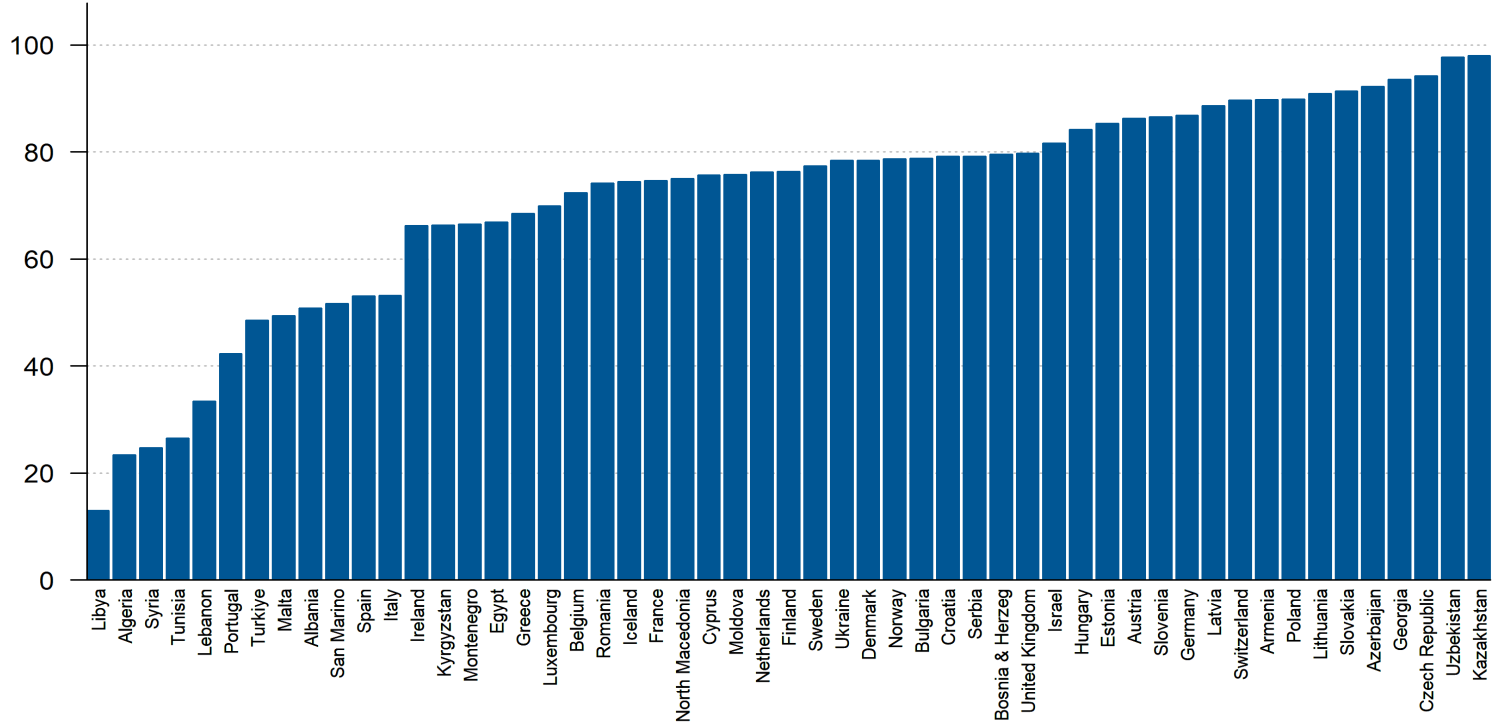
Socio-economic and Risk Factors

Educational attainment, at least completed upper secondary, population 25+, female (%) (cumulative), 2019



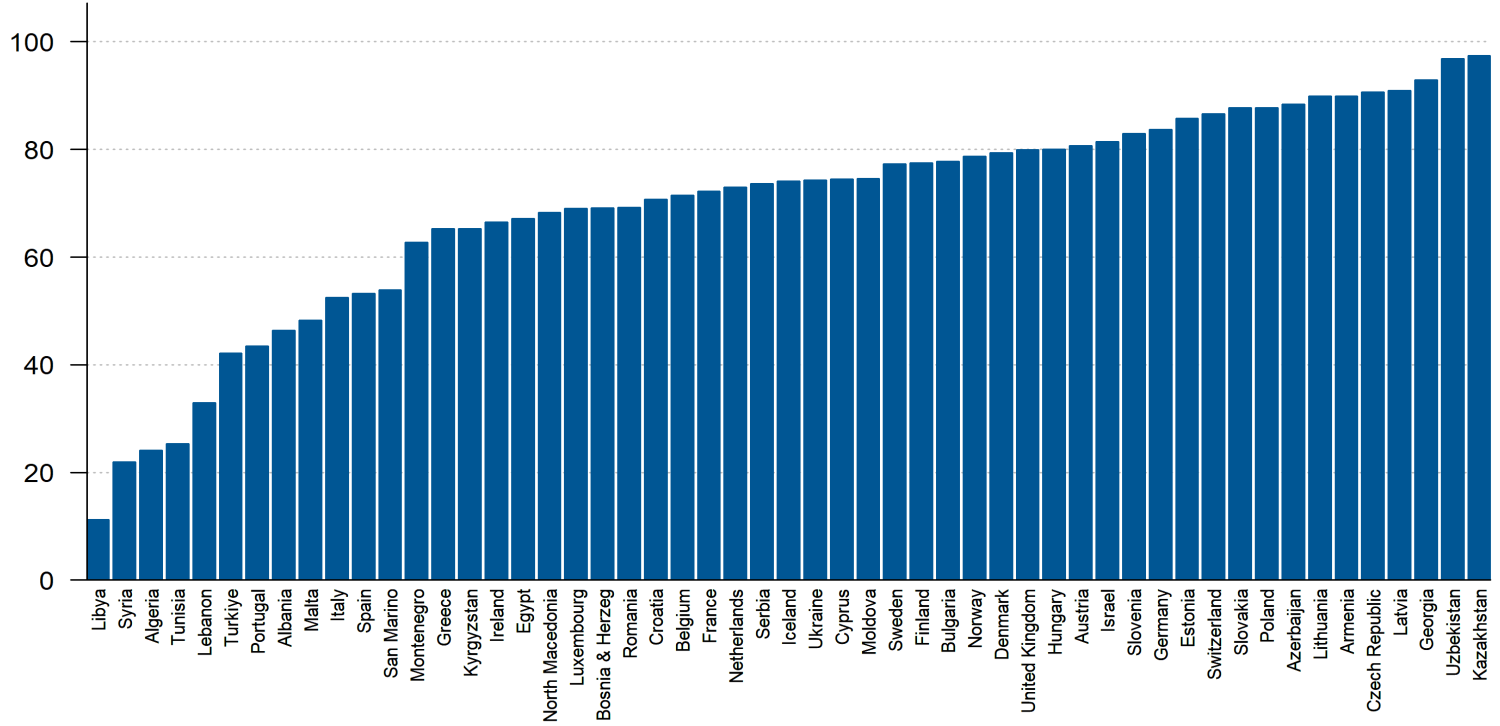
Source: World Bank.
https://eatlas.escardio.org/

Educational attainment, at least completed upper secondary, population 25+, male (%) (cumulative), 2019



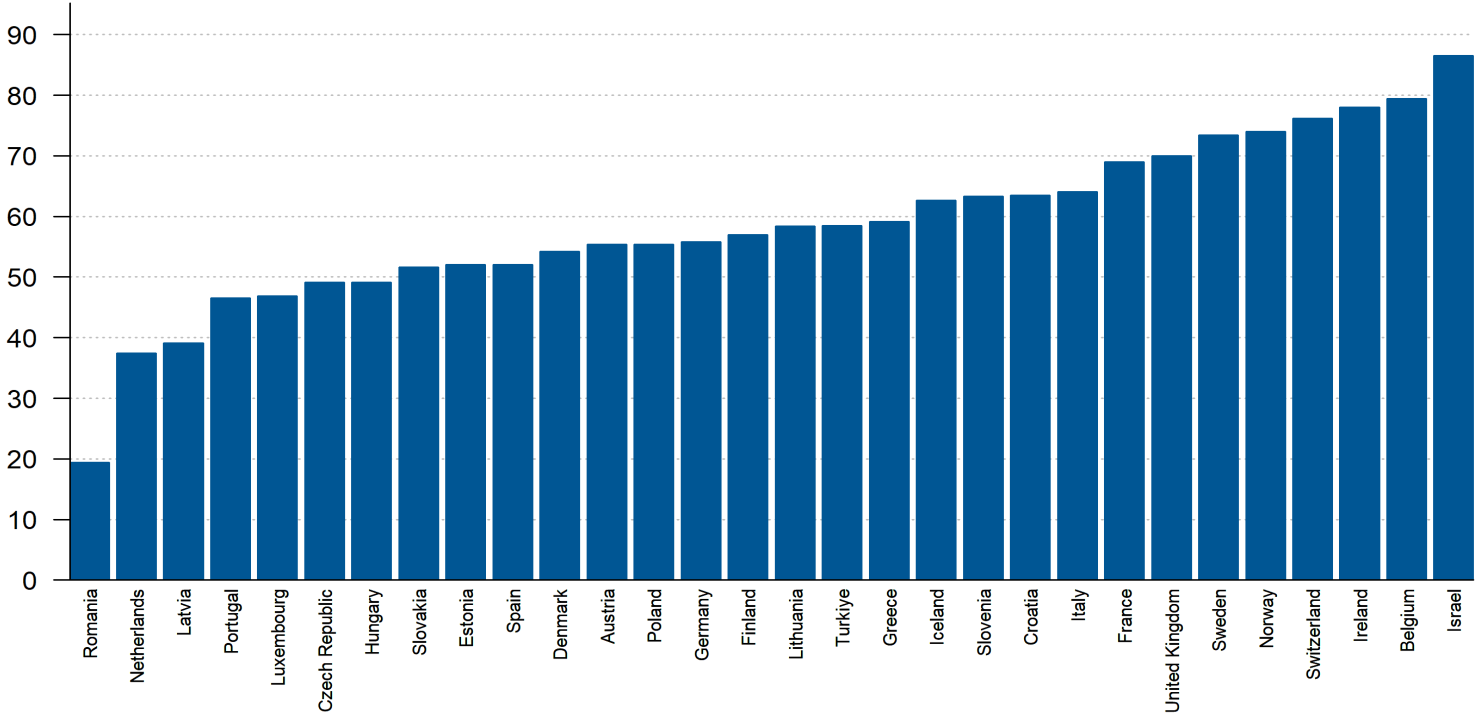
Source: World Bank.
https://eatlas.escardio.org/

Educational attainment, at least completed upper secondary, population 25+, total (%) (cumulative), 2019



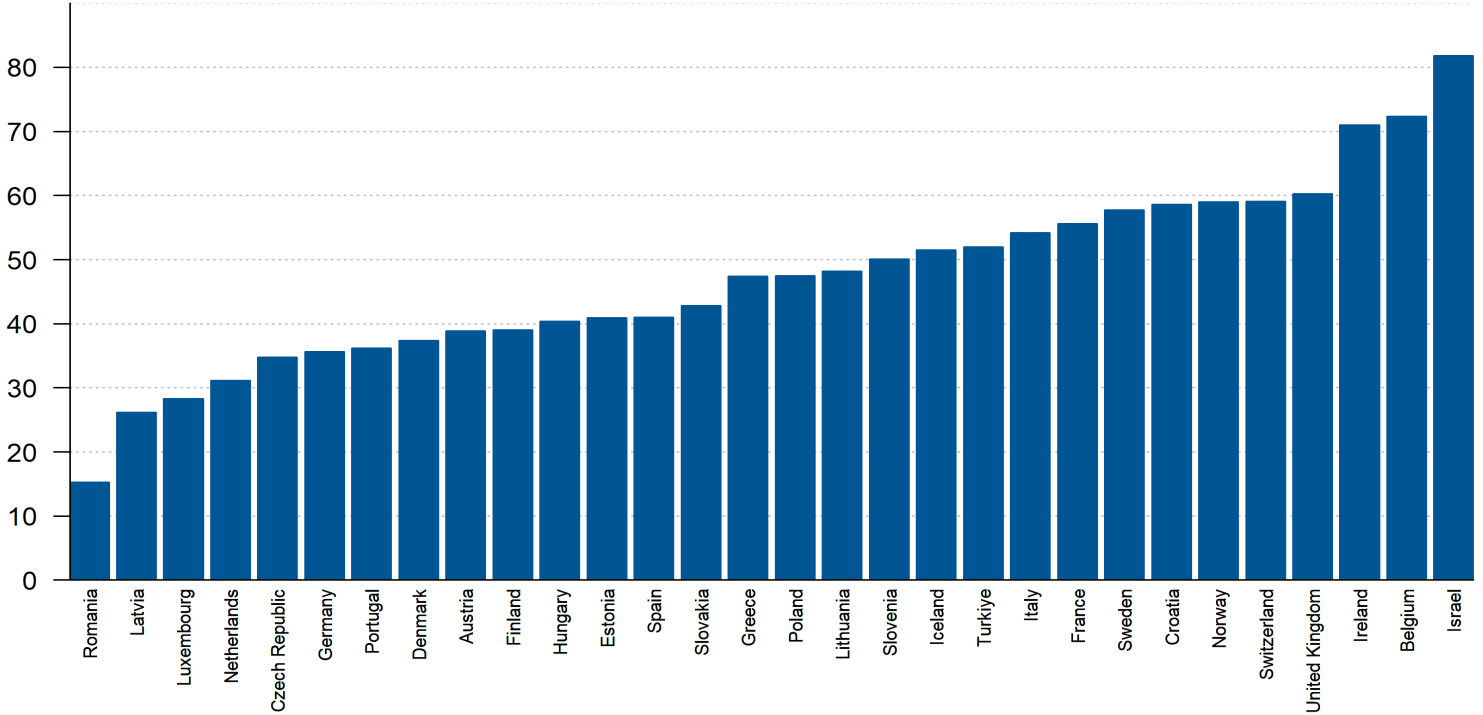
Source: World Bank.
https://eatlas.escardio.org/

Vegetables consumption, daily (survey), % of females aged 15 years old and over, 2019



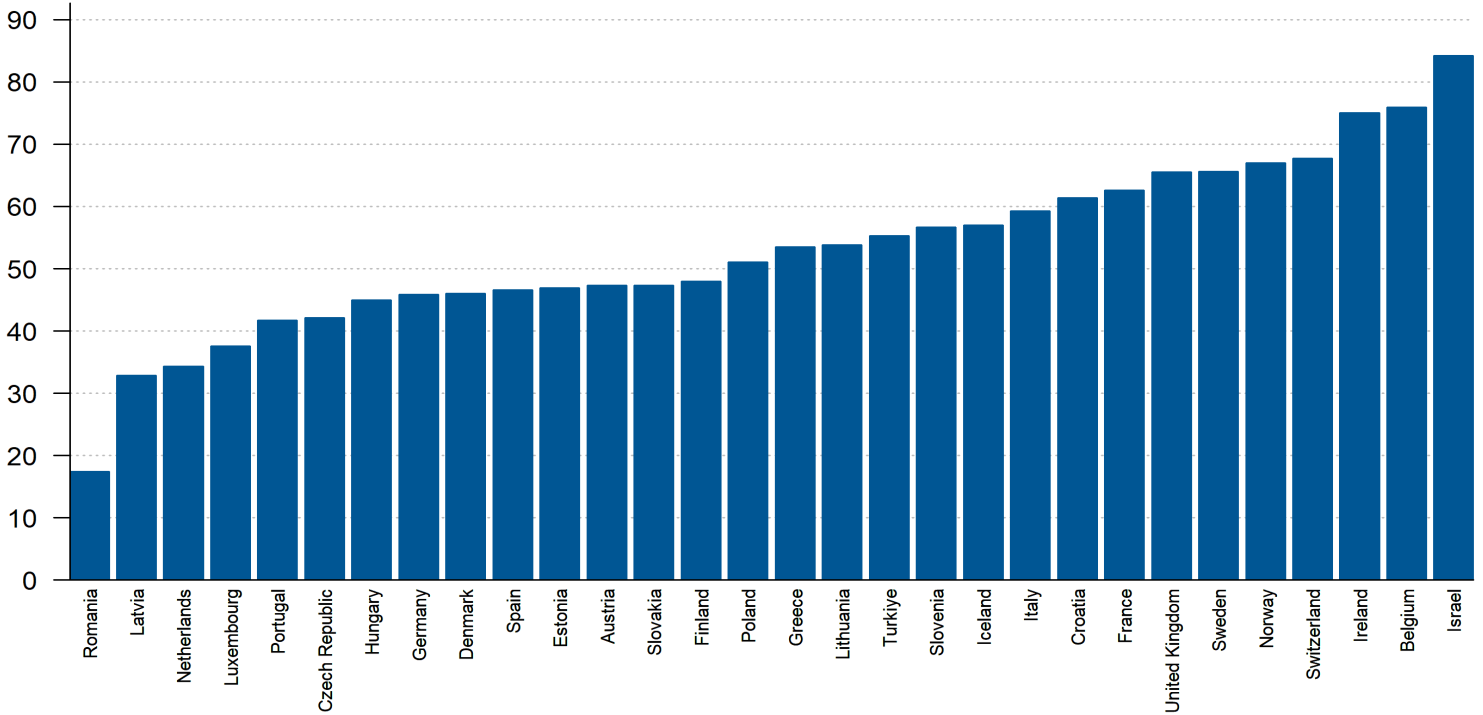
Source: FAO.
https://eatlas.escardio.org/

Vegetables consumption, daily (survey), % of males aged 15 years old and over, 2019



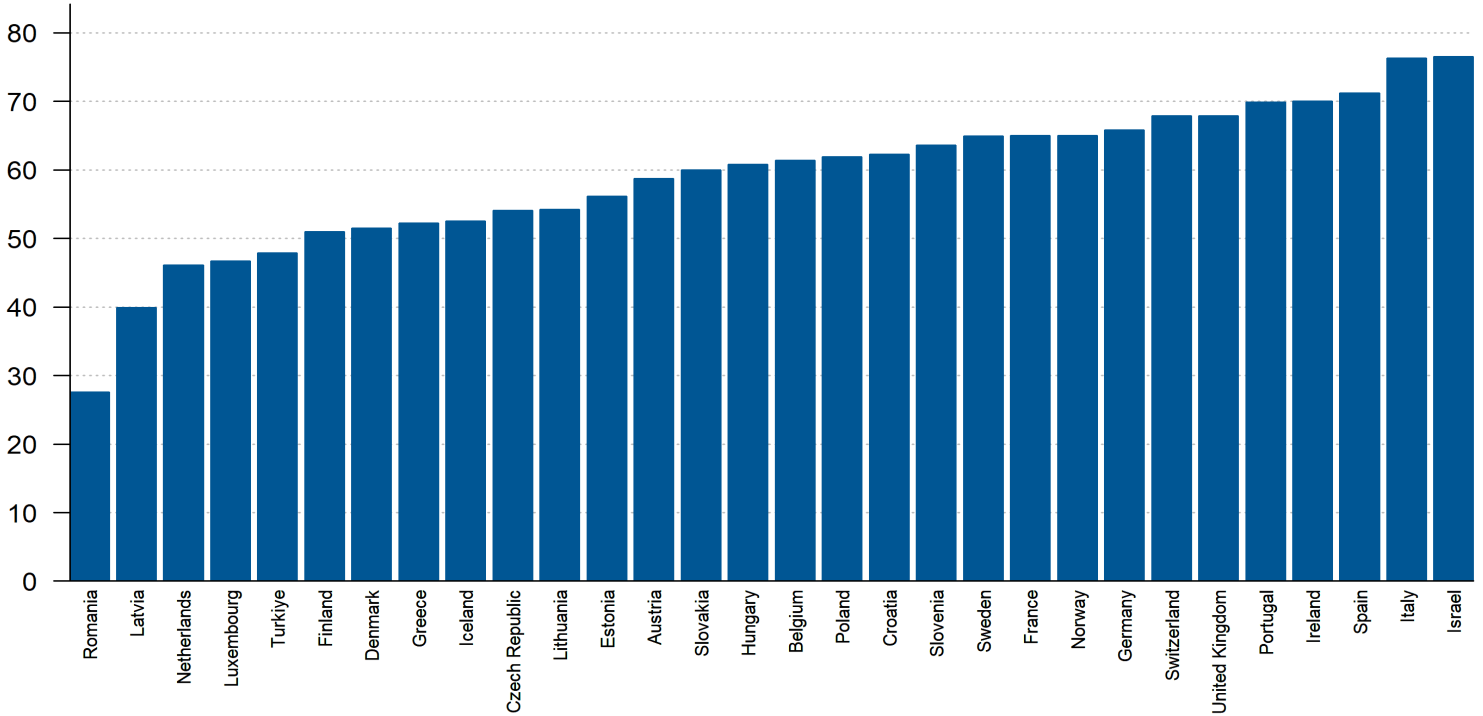
Source: FAO.
https://eatlas.escardio.org/

Vegetables consumption, daily (survey), % of population aged 15 years old and over, 2019



Source: FAO.
https://eatlas.escardio.org/

Fruits consumption, daily (survey), % of females aged 15 years old and over, 2019



Source: FAO.
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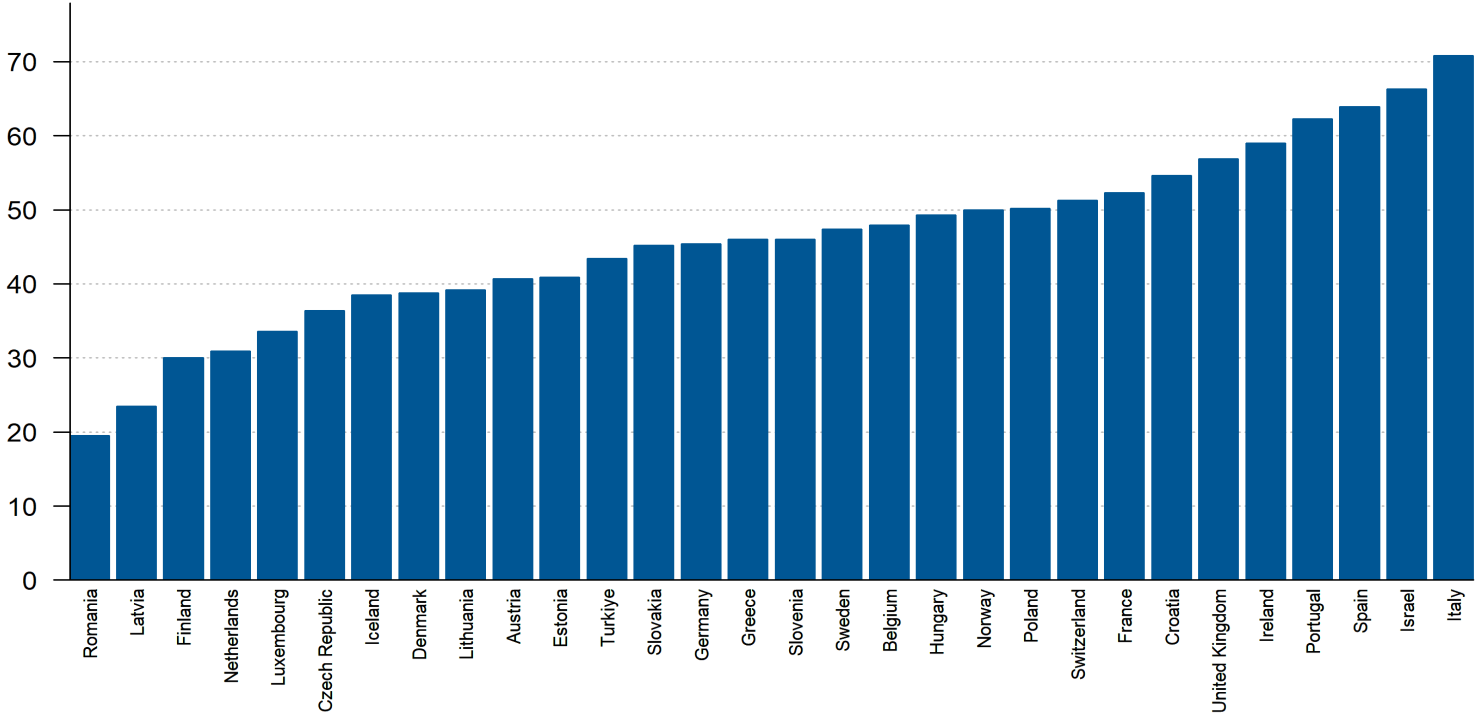
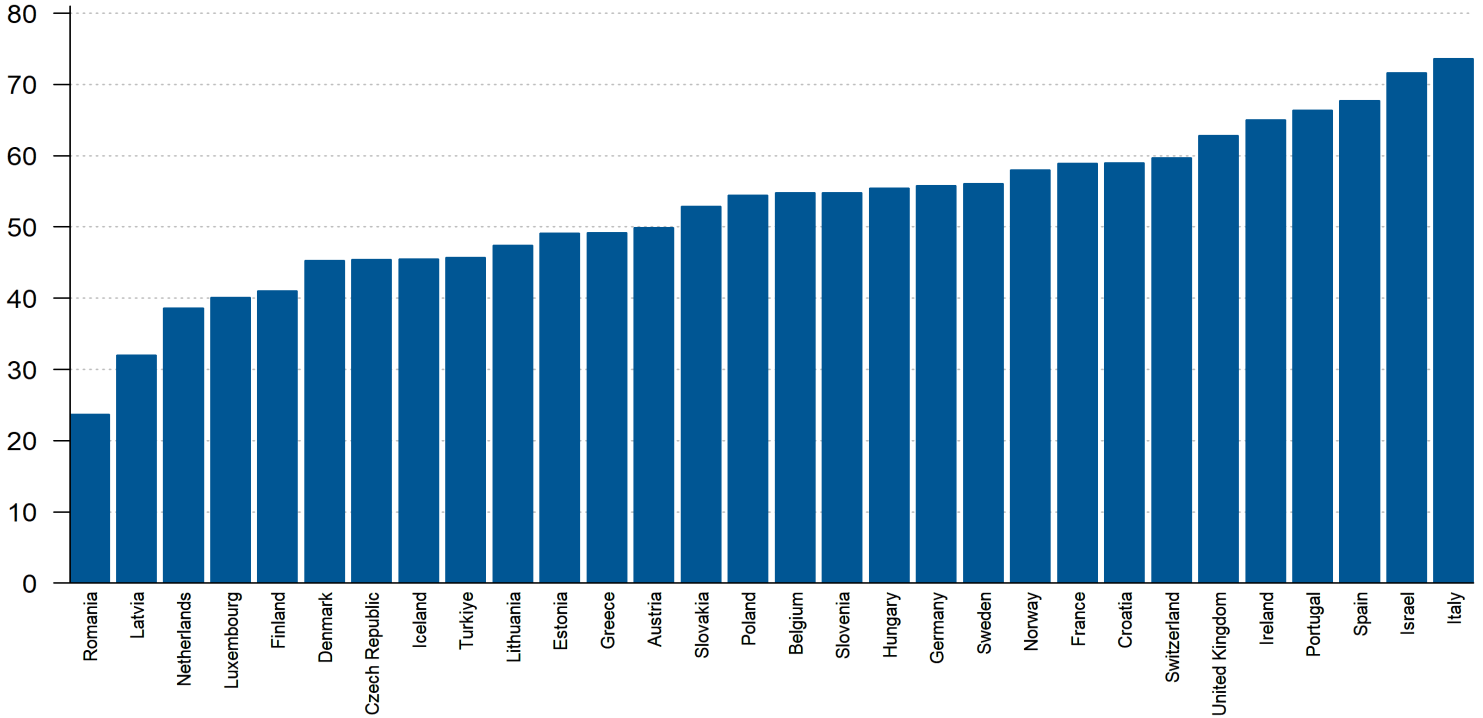
Fruits consumption, daily (survey), % of males aged 15 years old and over, 2019



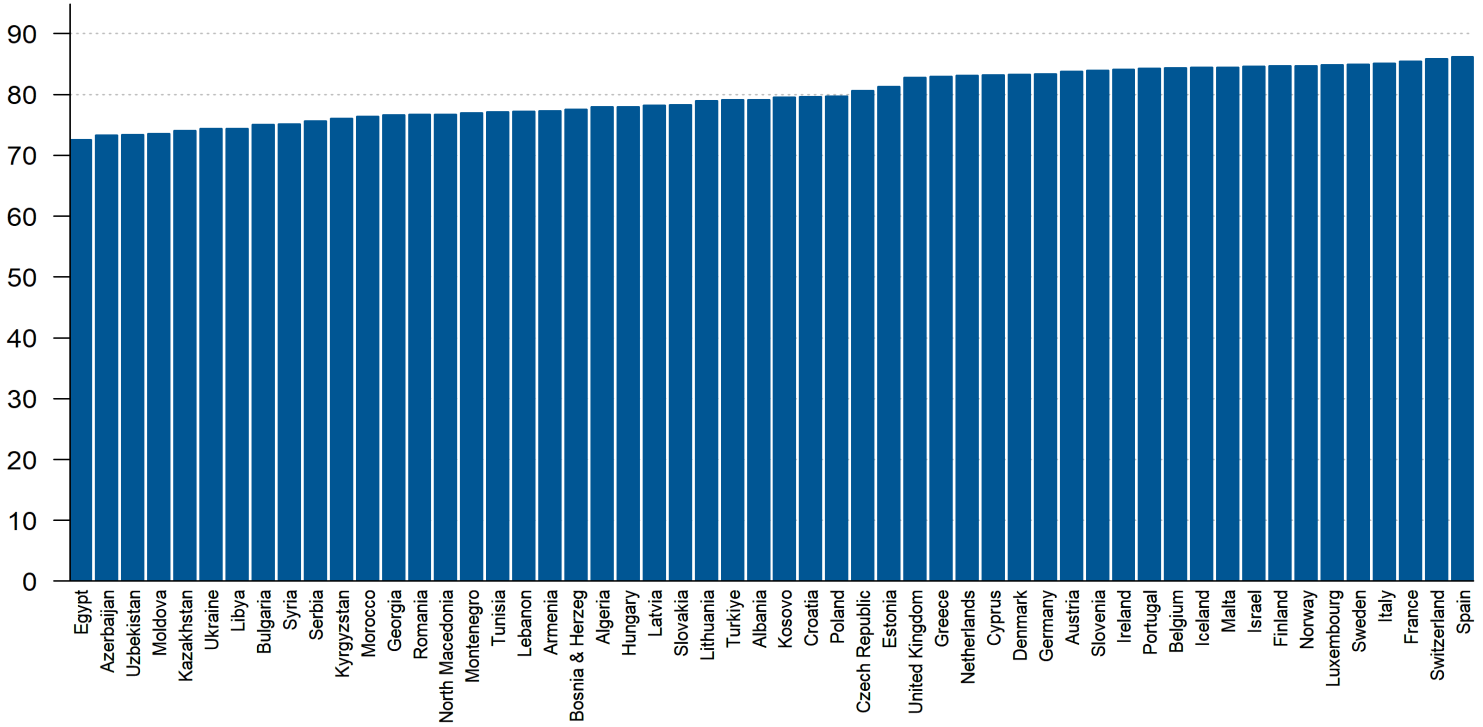
Source: FAO.
https://eatlas.escardio.org/

Fruits consumption, daily (survey), % of population aged 15 years old and over, 2019



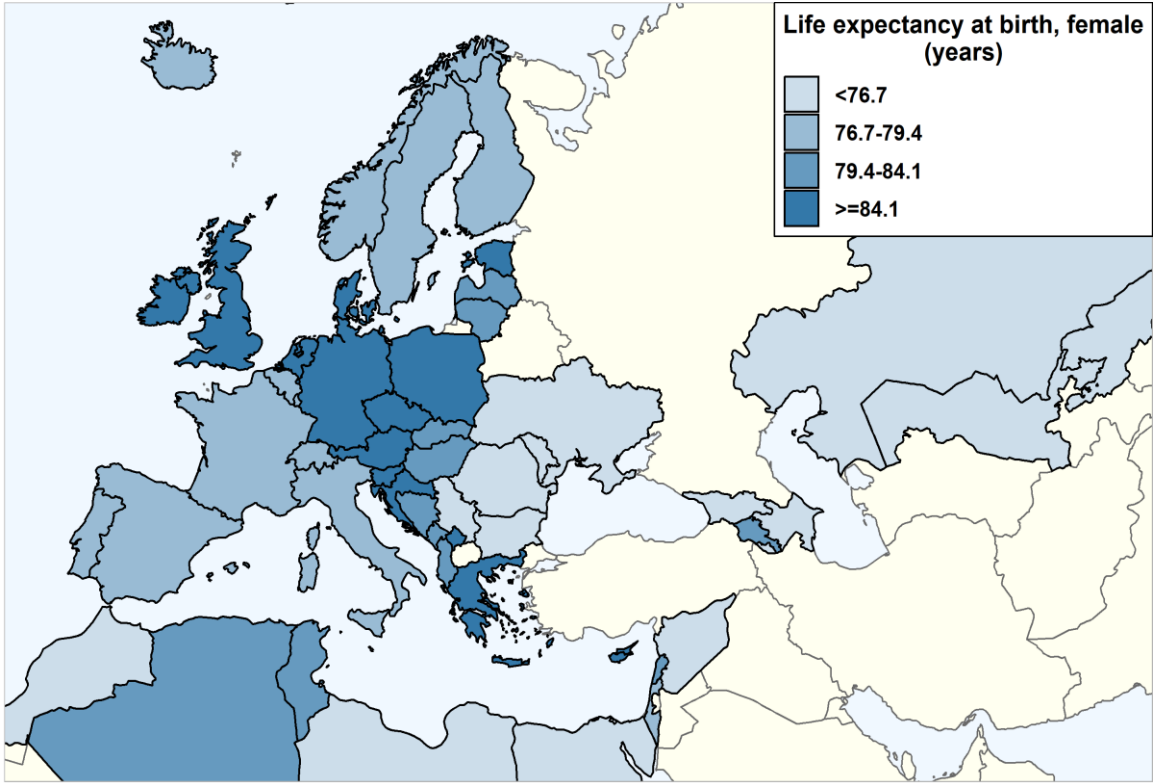
Source: FAO.
https://eatlas.escardio.org/

Life expectancy at birth, female (years), 2021



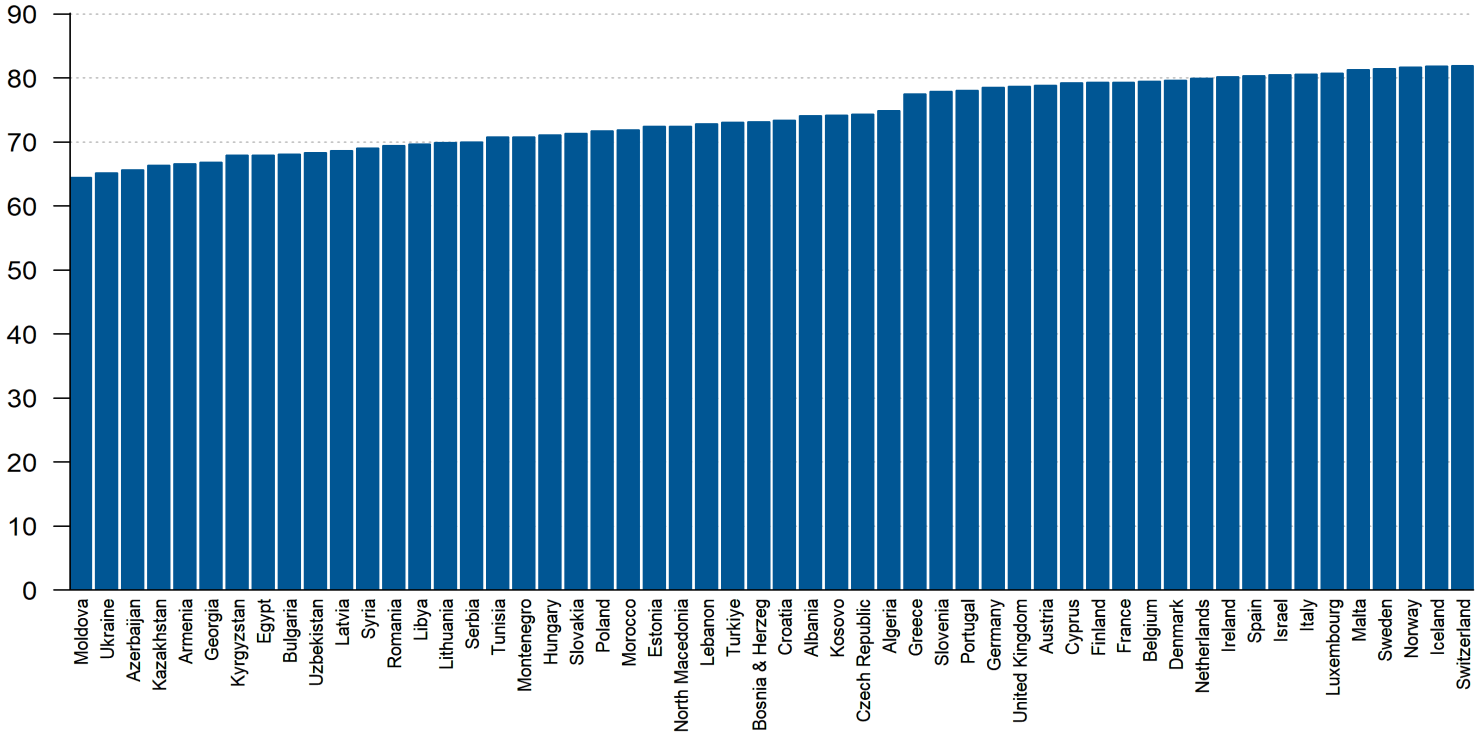
Source: World Bank.
https://eatlas.escardio.org/

Life expectancy at birth, female (years), 2021



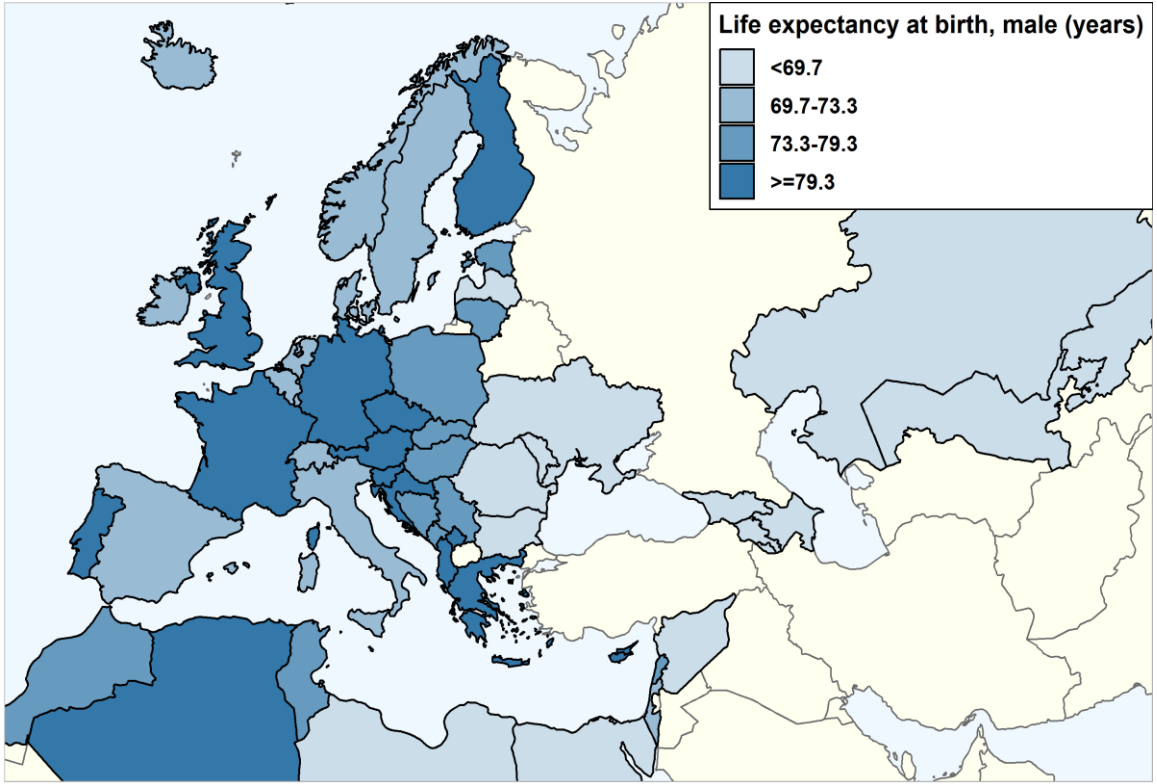
Source: World Bank.
https://eatlas.escardio.org/

Life expectancy at birth, male (years), 2021



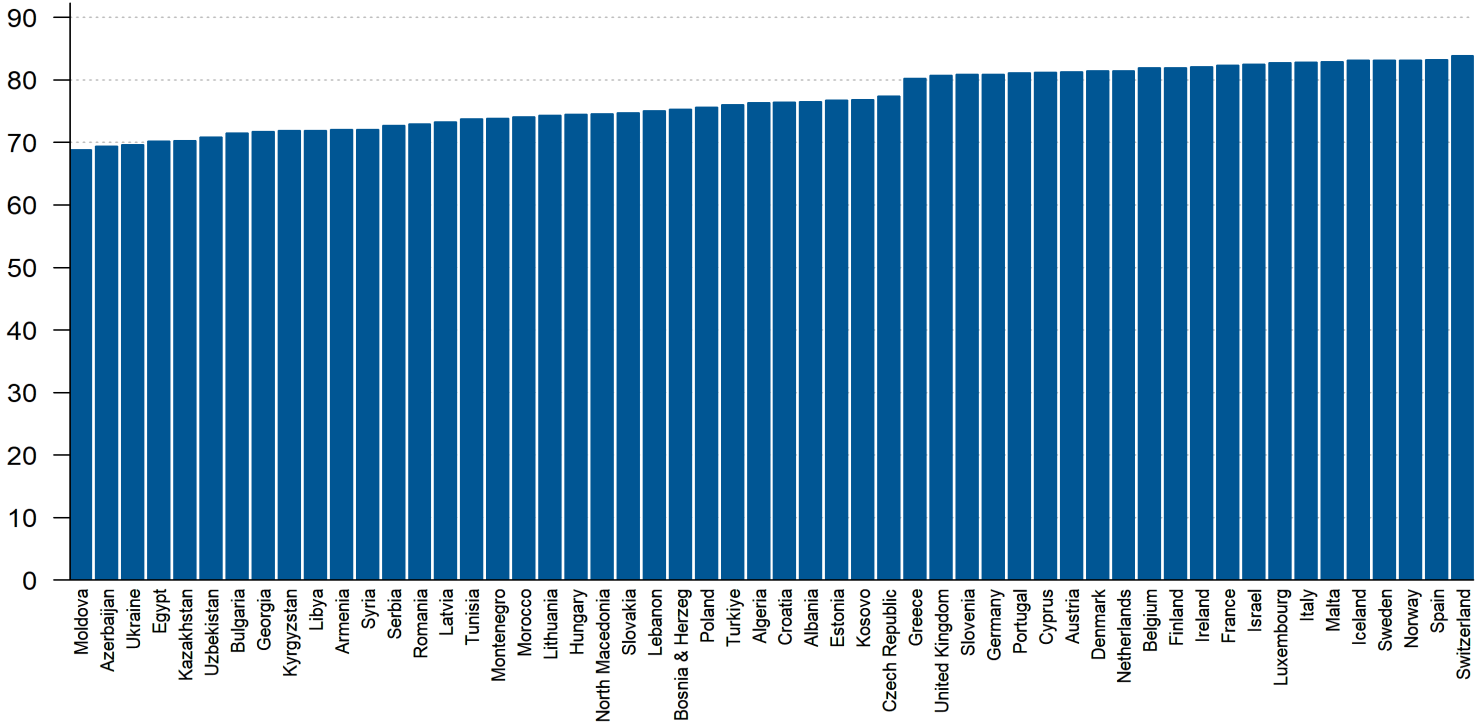
Source: World Bank.
https://eatlas.escardio.org/

Life expectancy at birth, male (years), 2021



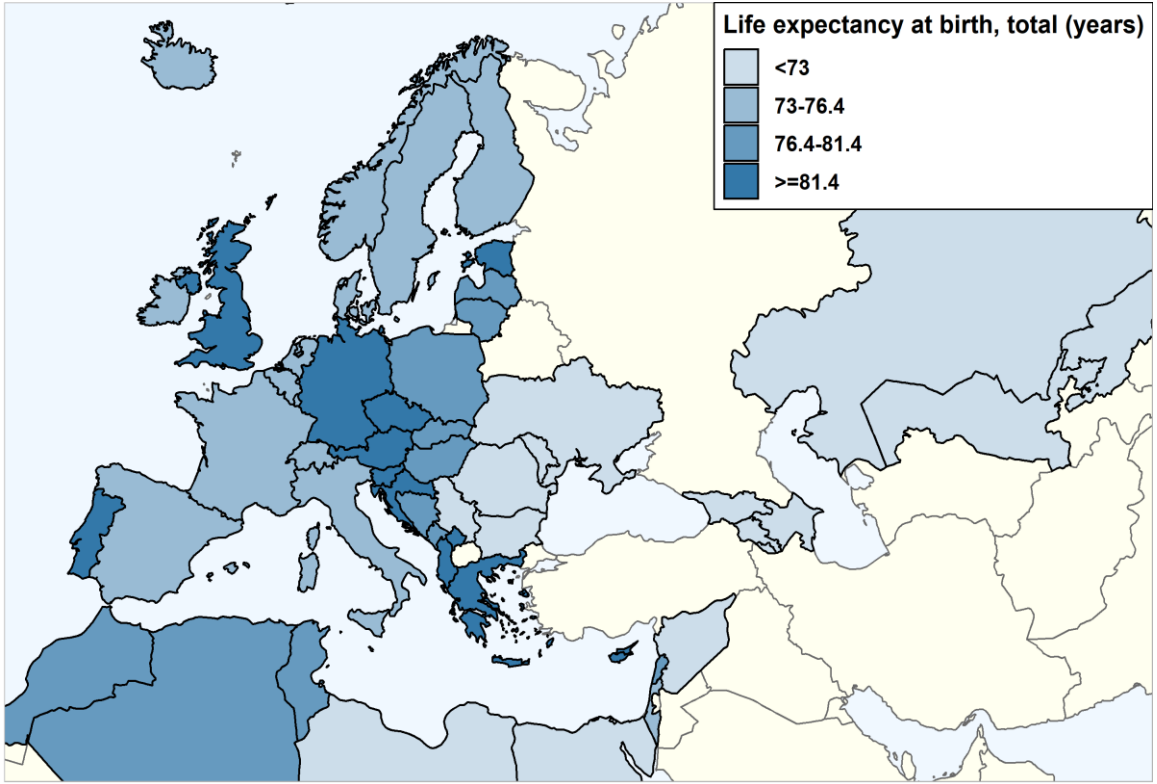
Source: World Bank.
https://eatlas.escardio.org/

Life expectancy at birth, total (years), 2021



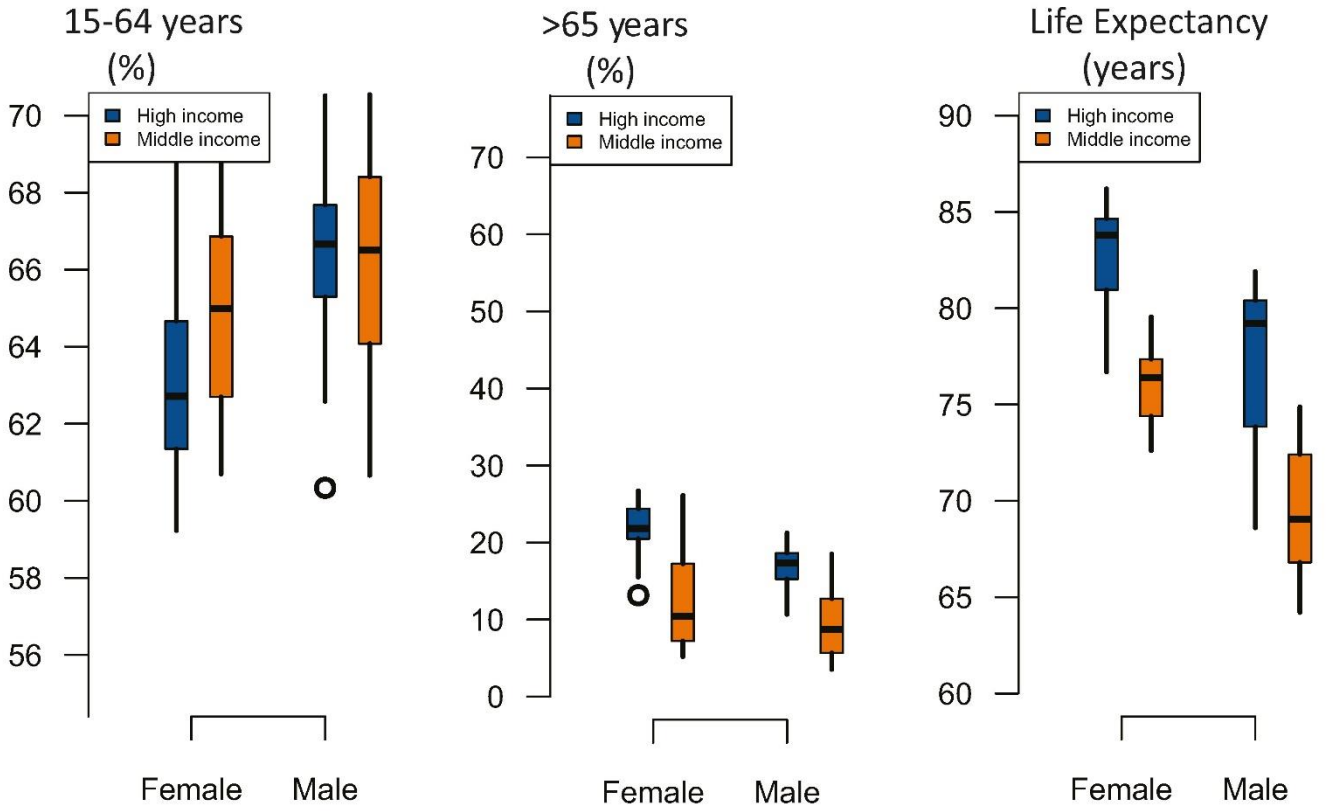
Source: World Bank.
https://eatlas.escardio.org/

Life expectancy at birth, total (years), 2021



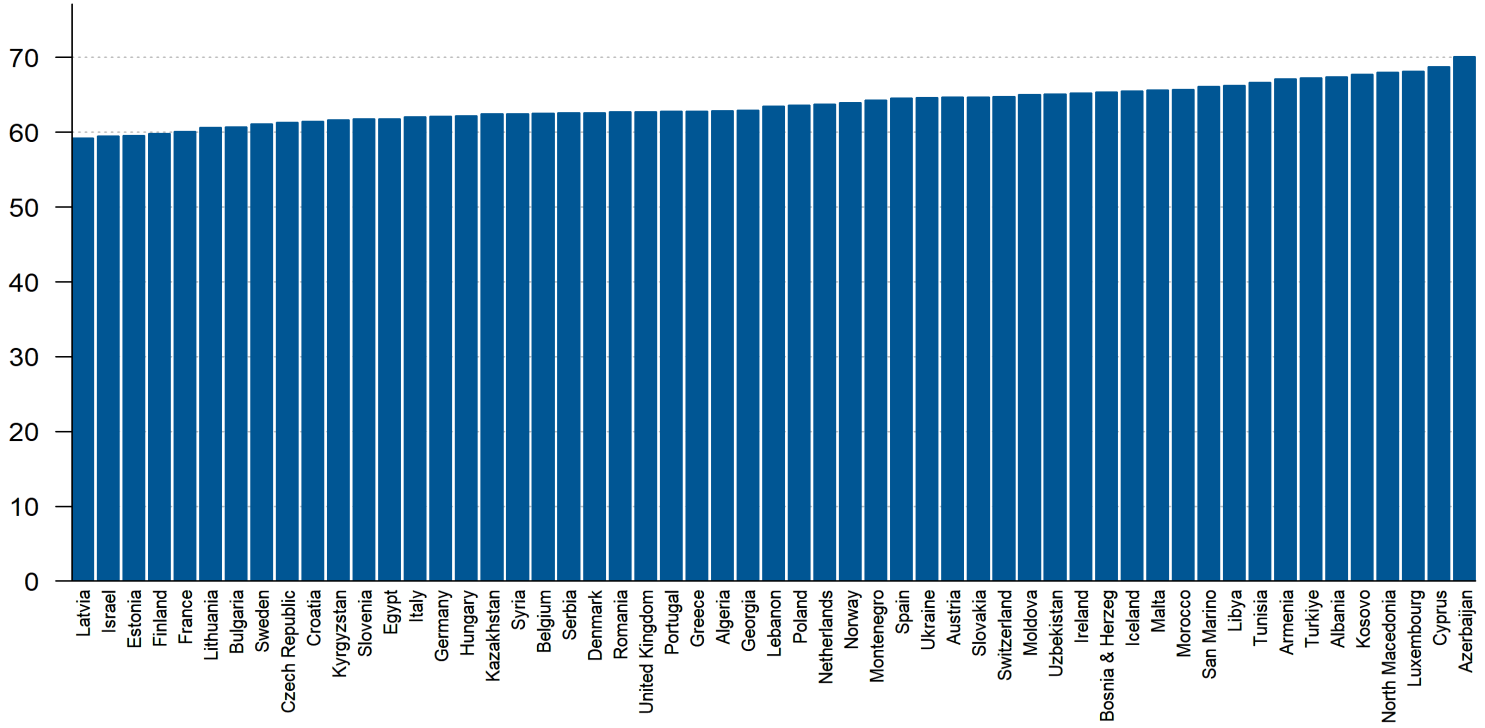
Source: World Bank.
https://eatlas.escardio.org/

Age distribution and life expectancy at birth, stratified by income status



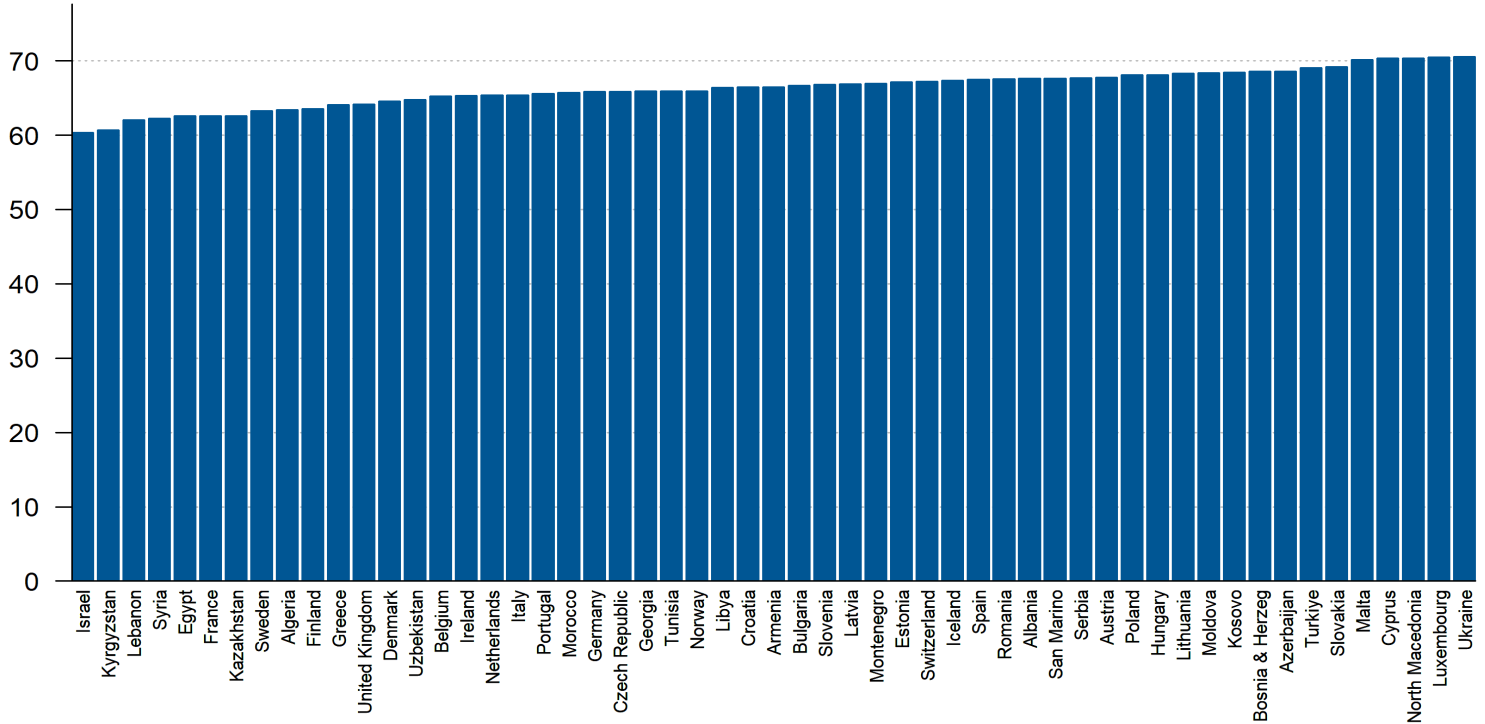
Source: Atlas survey.
https://eatlas.escardio.org/

Population ages 15-64, female (% of female population), 2021



Source: World Bank.
https://eatlas.escardio.org/

Population ages 15-64, male (% of male population), 2021



Source: World Bank.
https://eatlas.escardio.org/

Population ages 15-64 (% of total population), 2021

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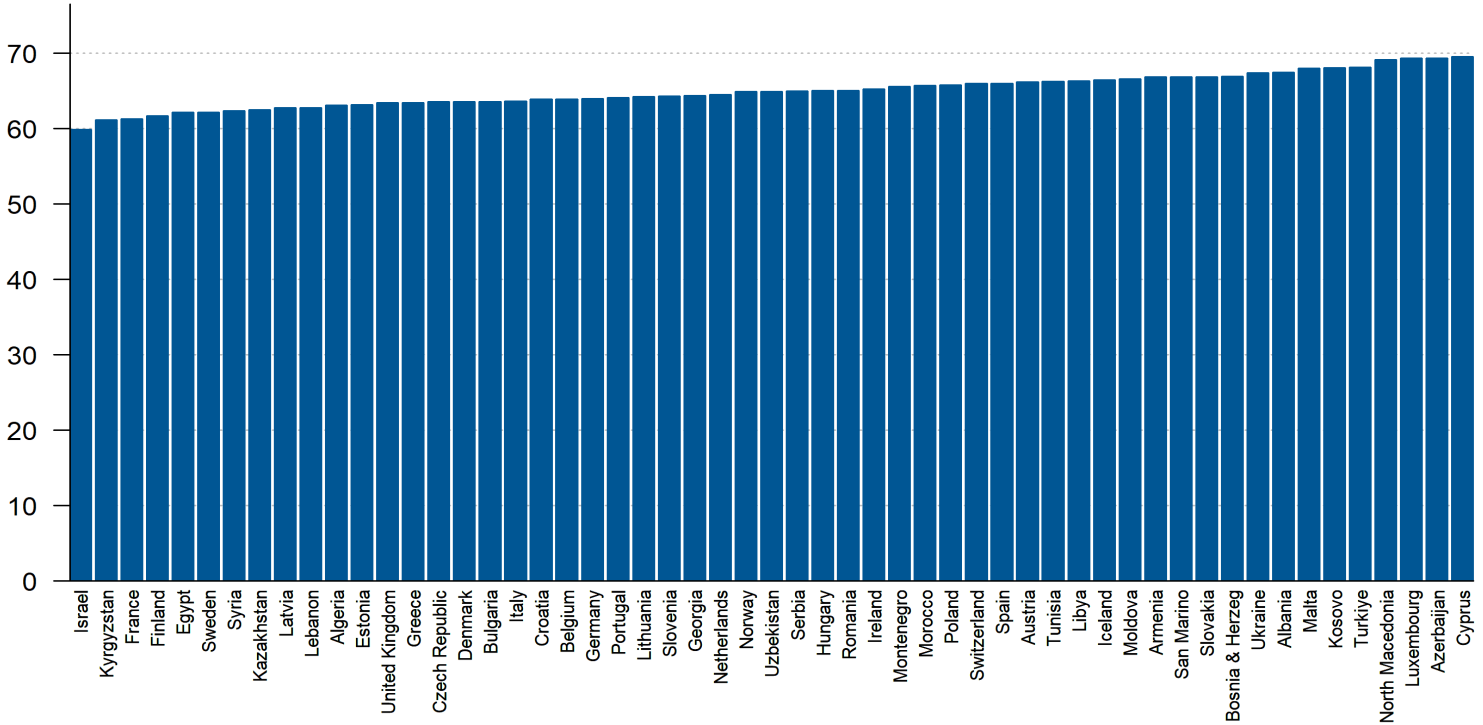
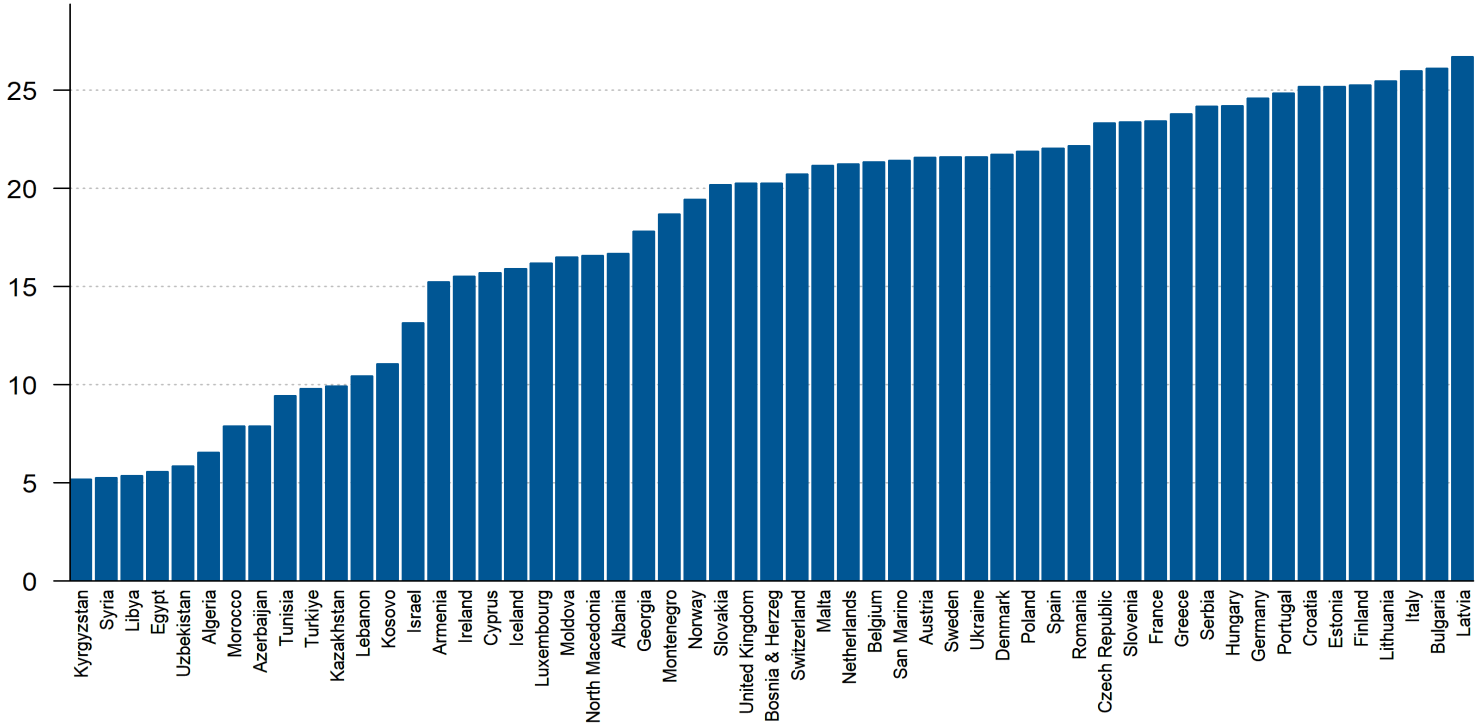


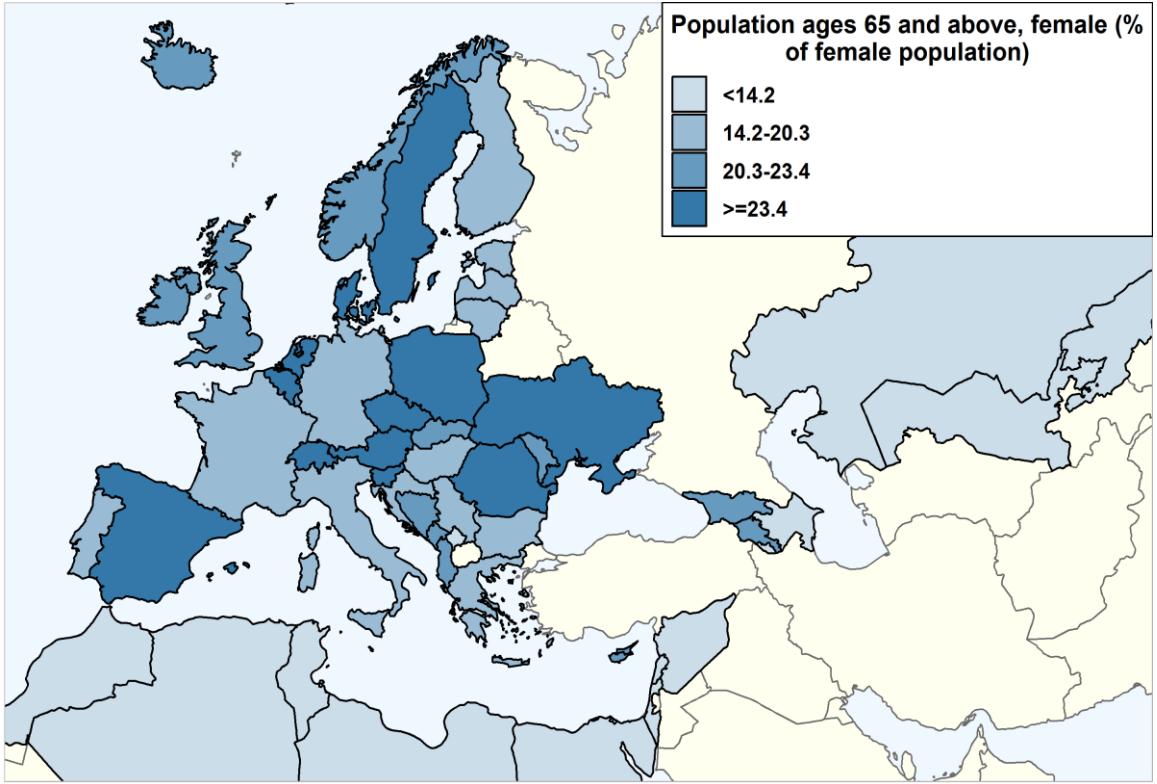
Source: World Bank.
https://eatlas.escardio.org/

Population ages 65 and above, female (% of female population), 2021



Source: World Bank.
https://eatlas.escardio.org/

Population ages 65 and above, female (% of female population), 2021



Source: World Bank.
https://eatlas.escardio.org/

Population ages 65 and above, male (% of male population), 2021

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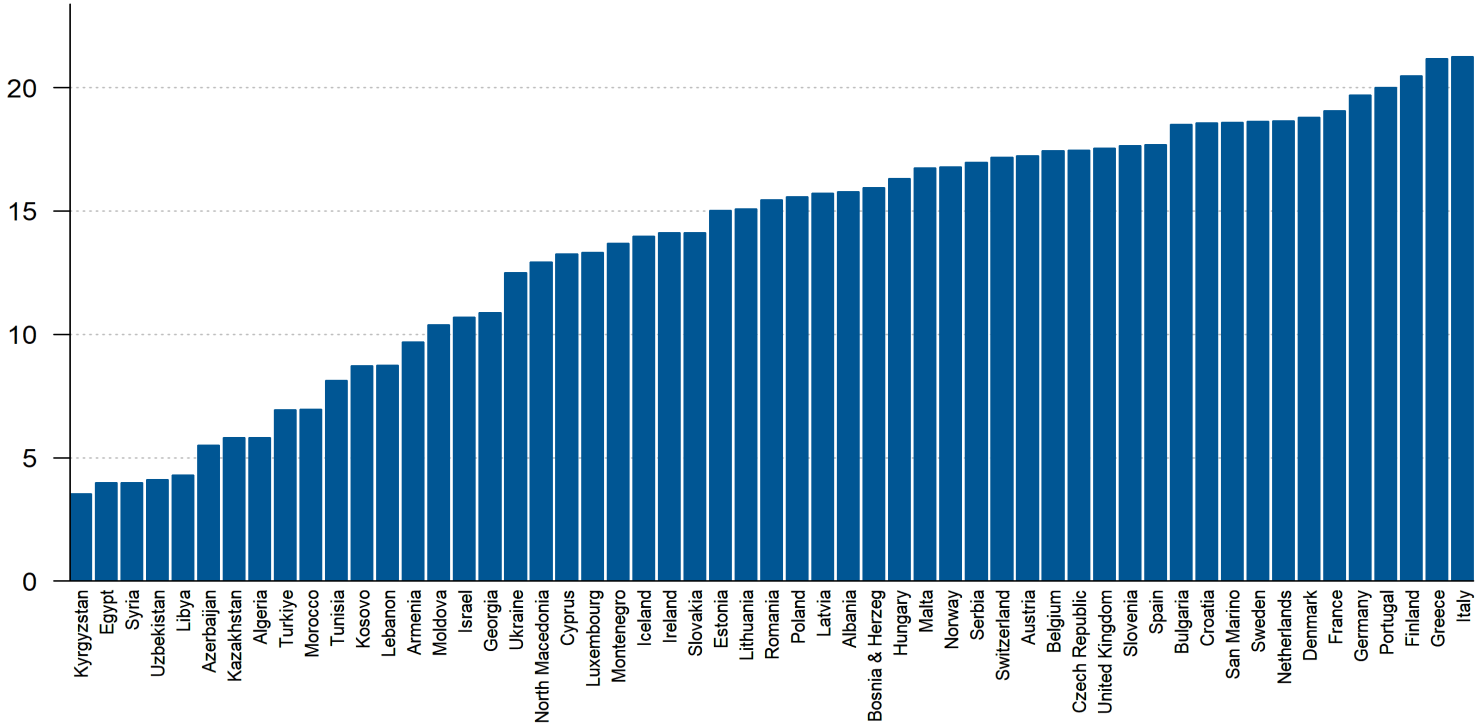
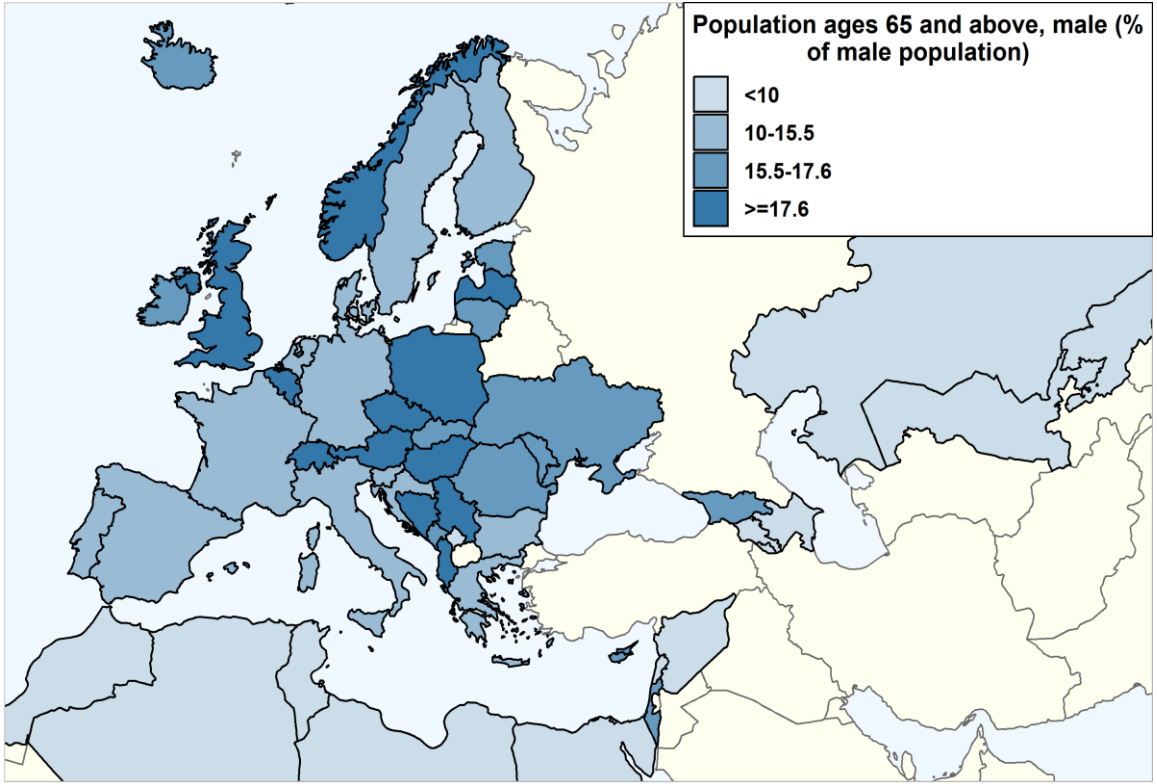


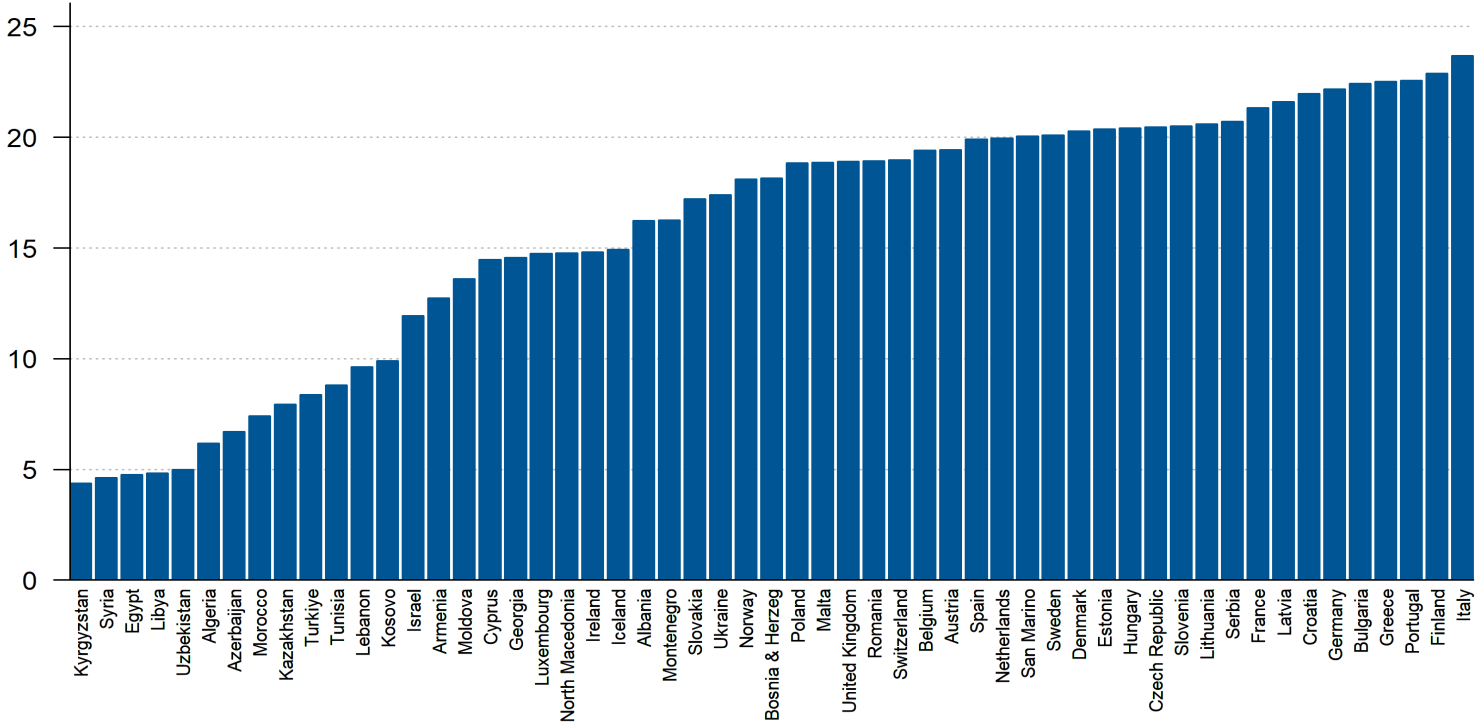
Source: World Bank.
https://eatlas.escardio.org/

Population ages 65 and above, male (% of male population), 2021



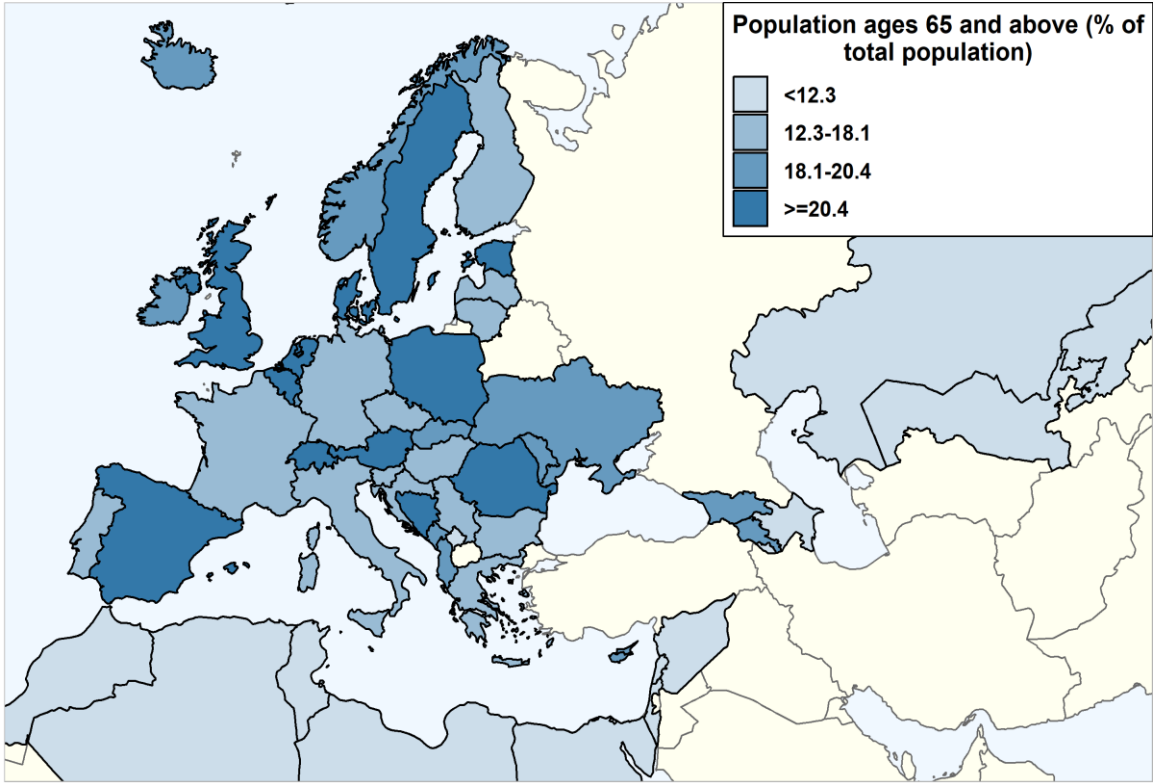
Source: World Bank.
https://eatlas.escardio.org/

Population ages 65 and above (% of total population), 2021



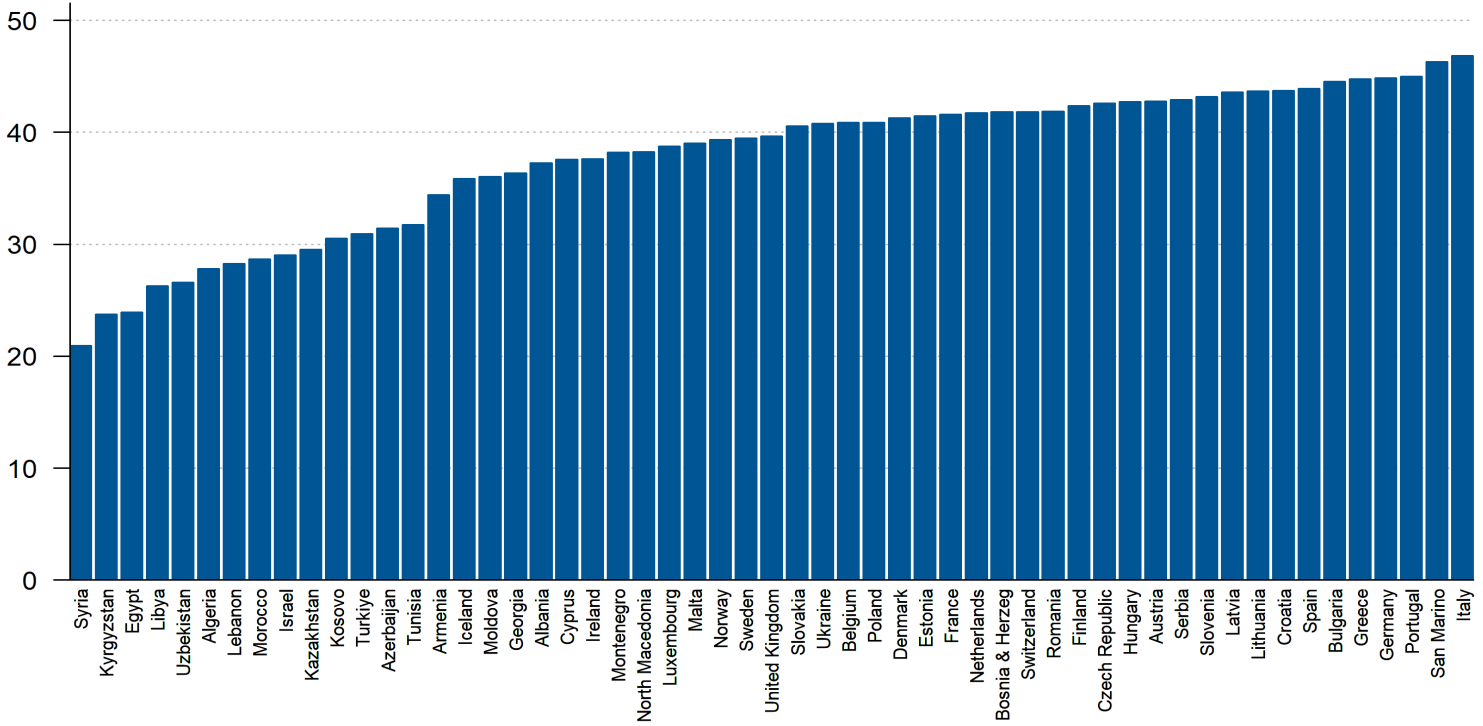
Source: World Bank.
https://eatlas.escardio.org/

Population ages 65 and above (% of total population), 2021



Source: World Bank.
https://eatlas.escardio.org/

Median Population Age, as of 1 July (years), 2021



Source: United Nations.
https://eatlas.escardio.org/

GDP per capita, PPP (current international $), 2021

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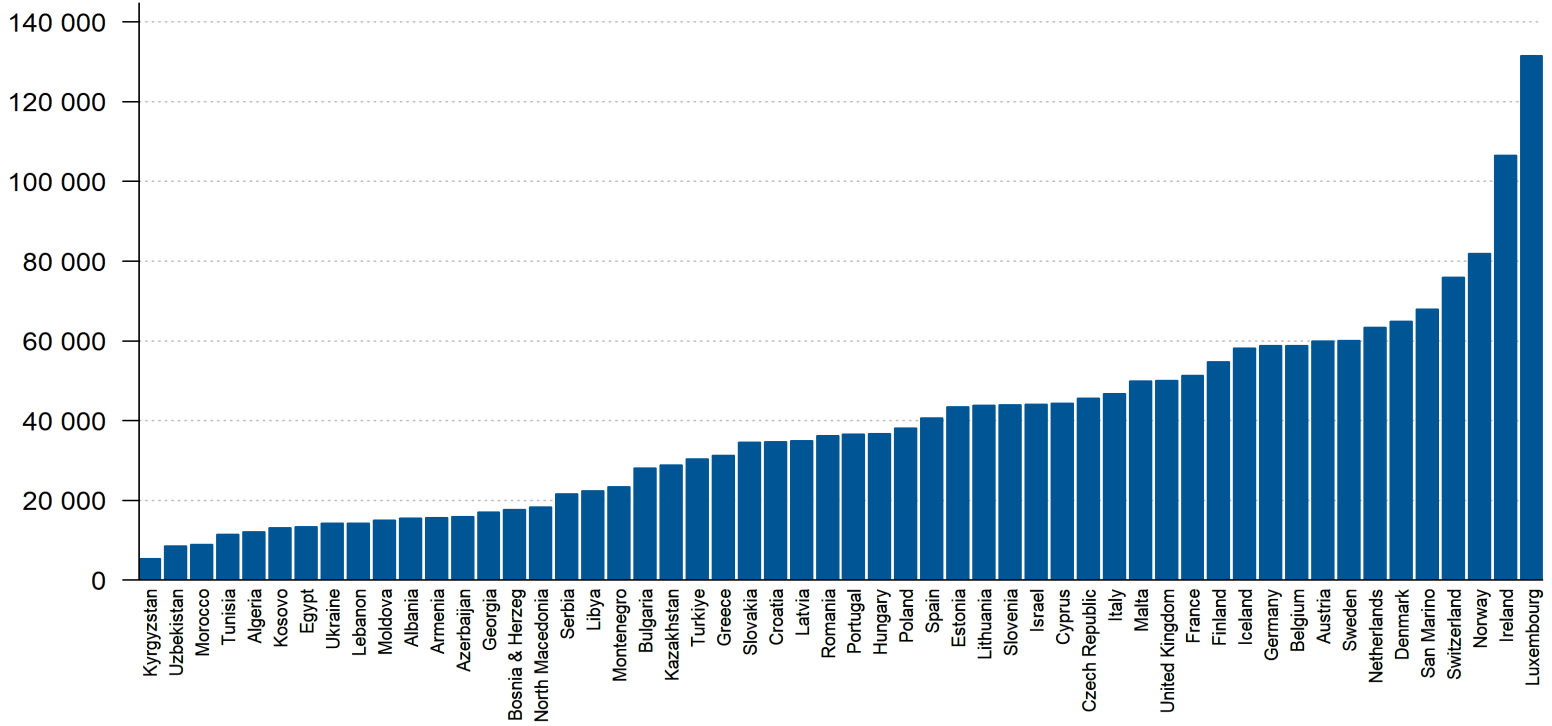
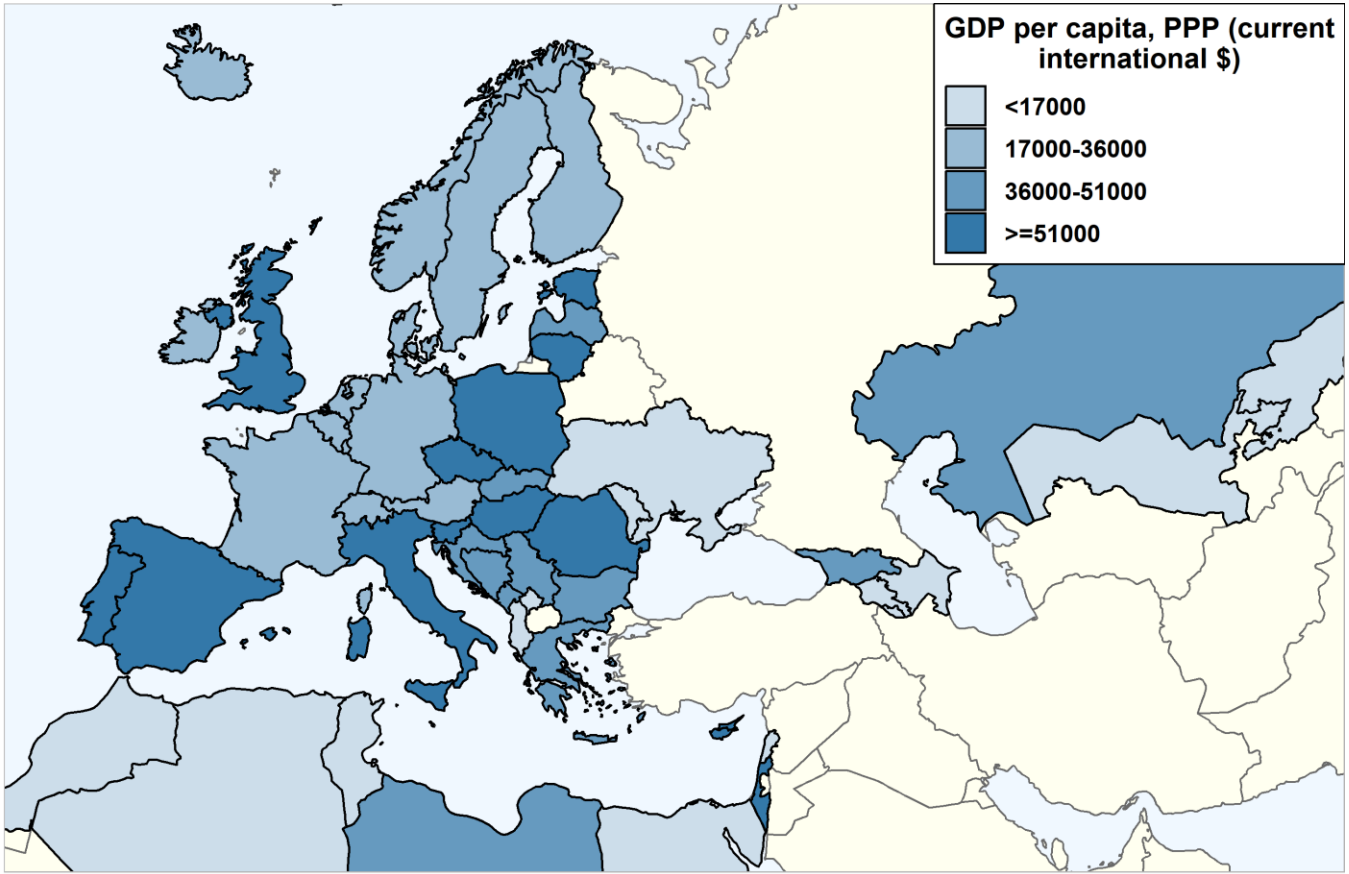


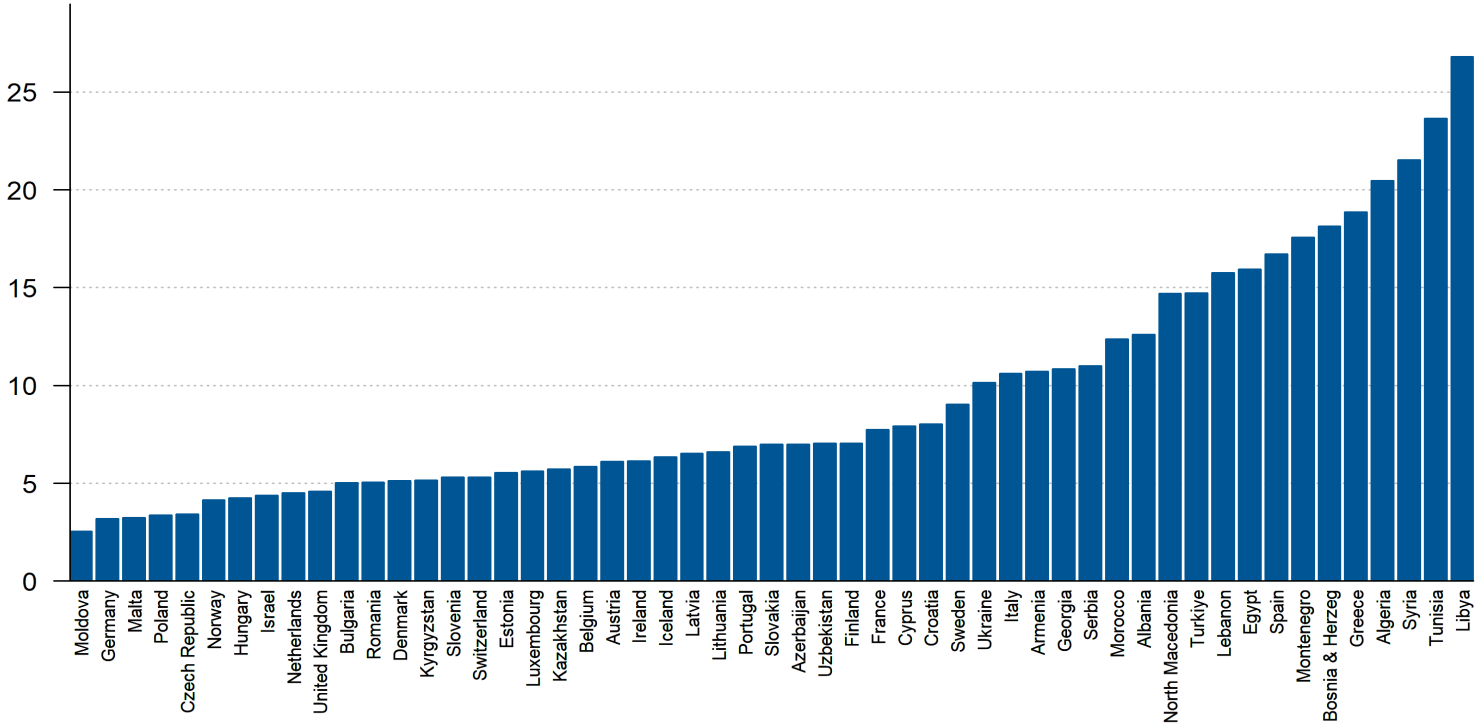
Source: World Bank.
https://eatlas.escardio.org/

GDP per capita, PPP (current international $), 2021



Source: World Bank.
https://eatlas.escardio.org/

Unemployment, female (% of female labor force) (modeled ILO estimate), 2021



Source: World Bank.
https://eatlas.escardio.org/

Unemployment, male (% of male labor force) (modeled ILO estimate), 2021

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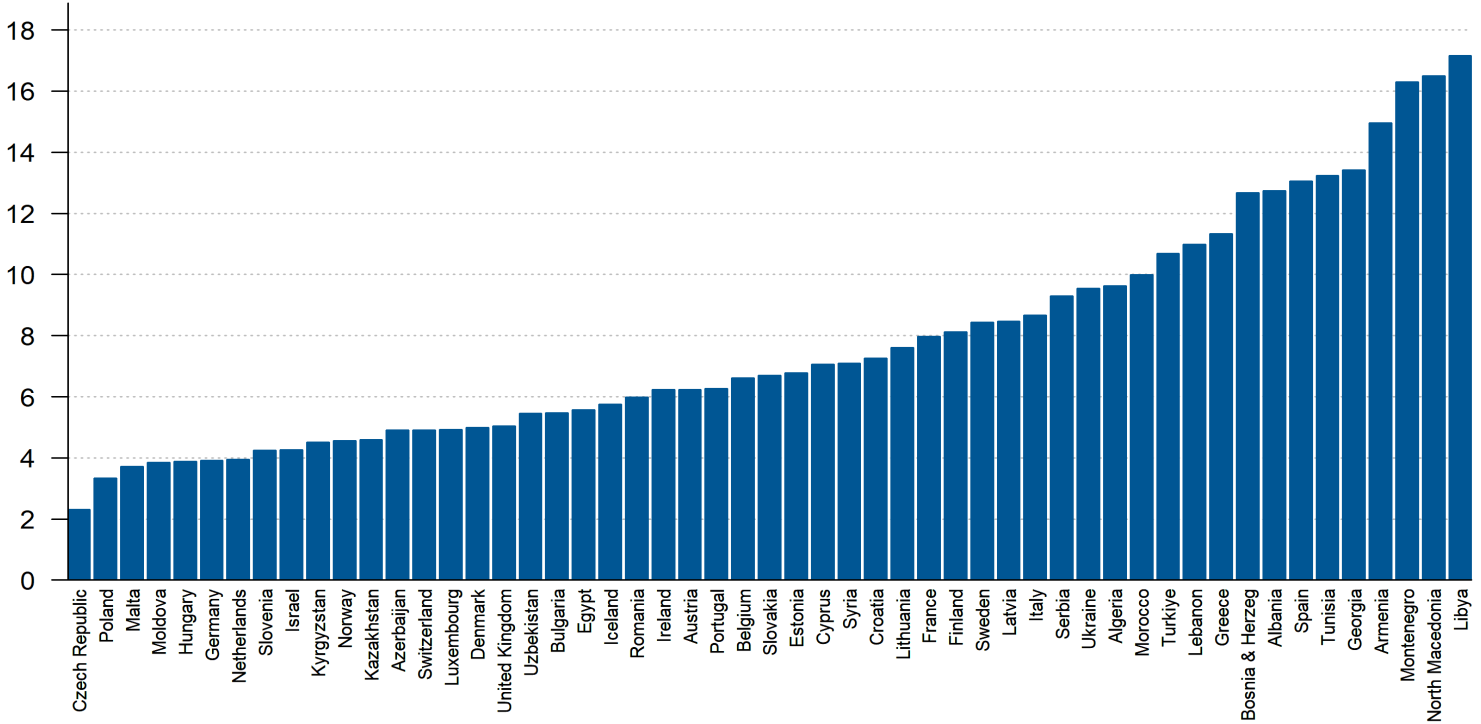
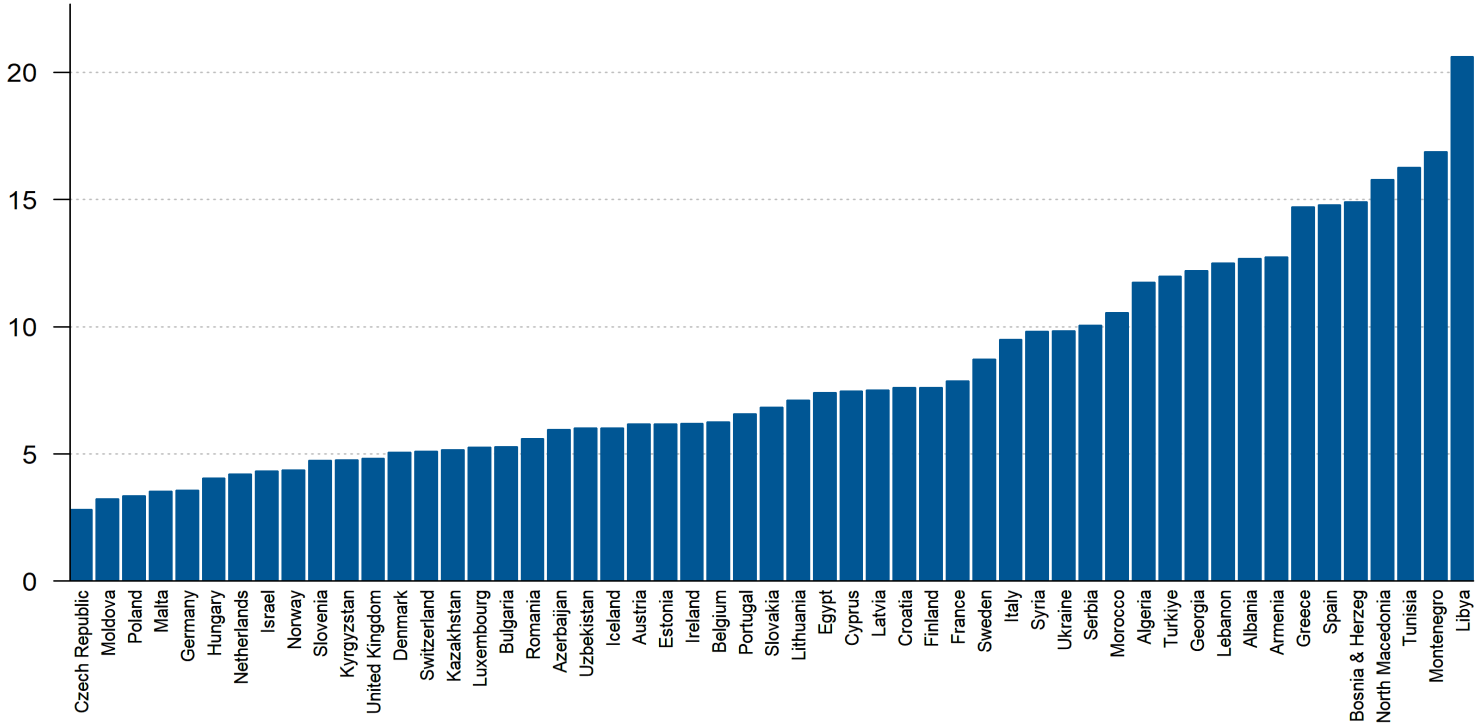


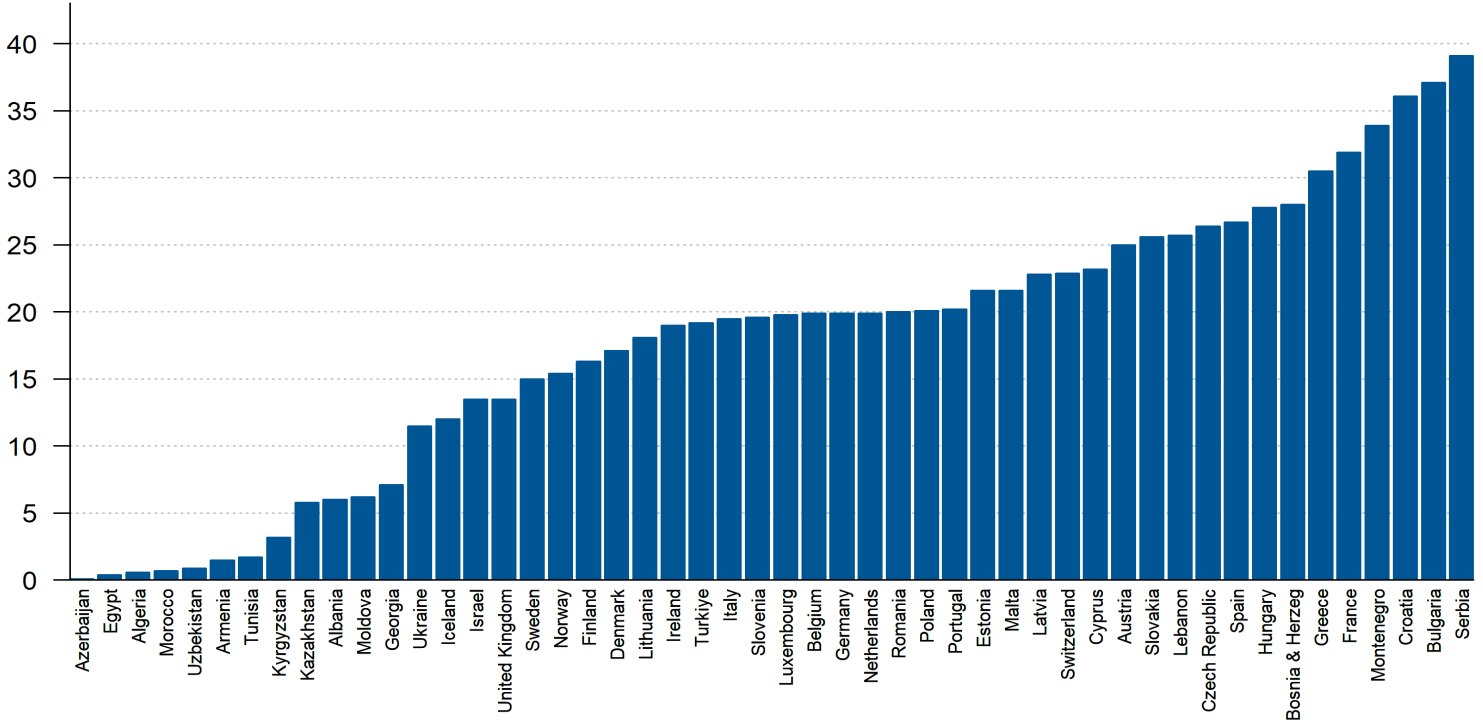
Source: World Bank.
https://eatlas.escardio.org/

Unemployment, total (% of total labor force) (modeled ILO estimate), 2021



Source: World Bank.
https://eatlas.escardio.org/

Estimate of current tobacco smoking prevalence (%) for females (age-standardized rate), 2020



Source: WHO
https://eatlas.escardio.org/

Estimate of current tobacco smoking prevalence (%) for males (age-standardized rate), 2020

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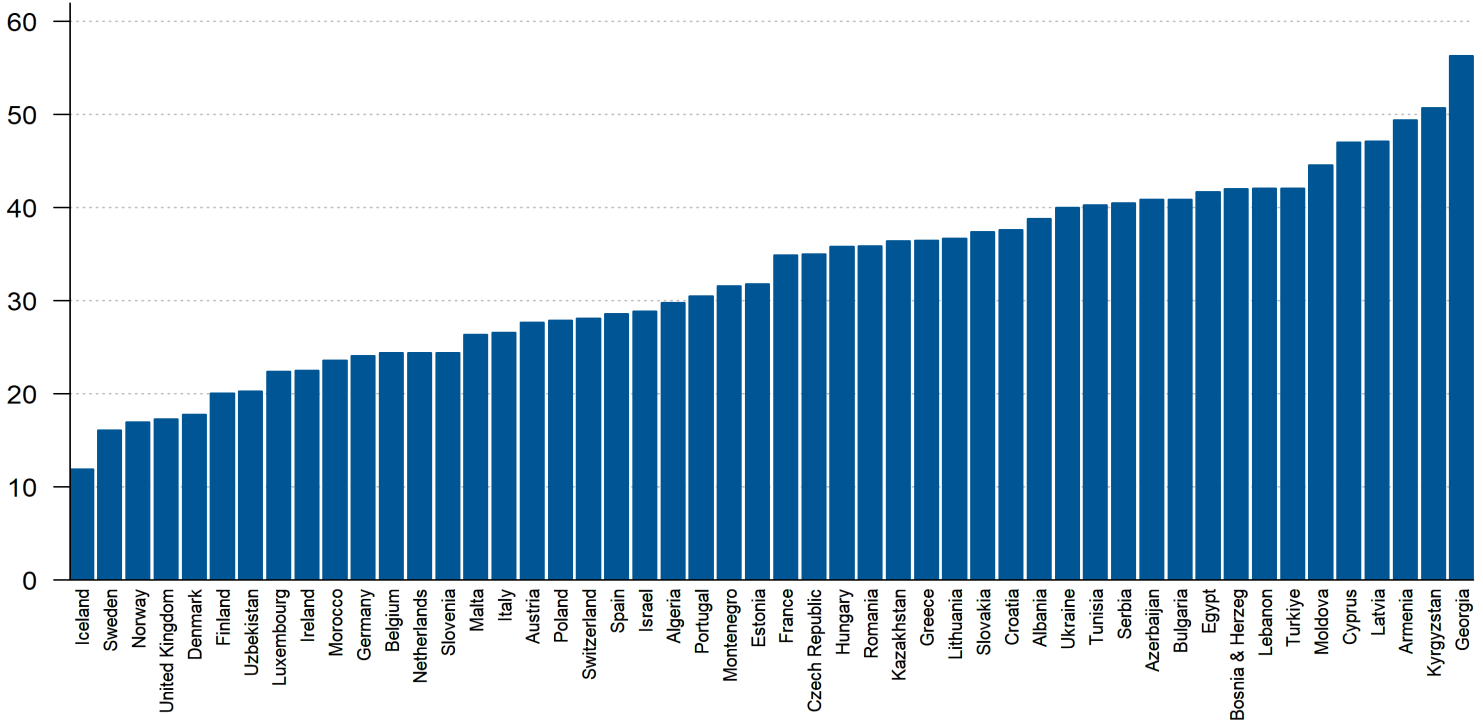
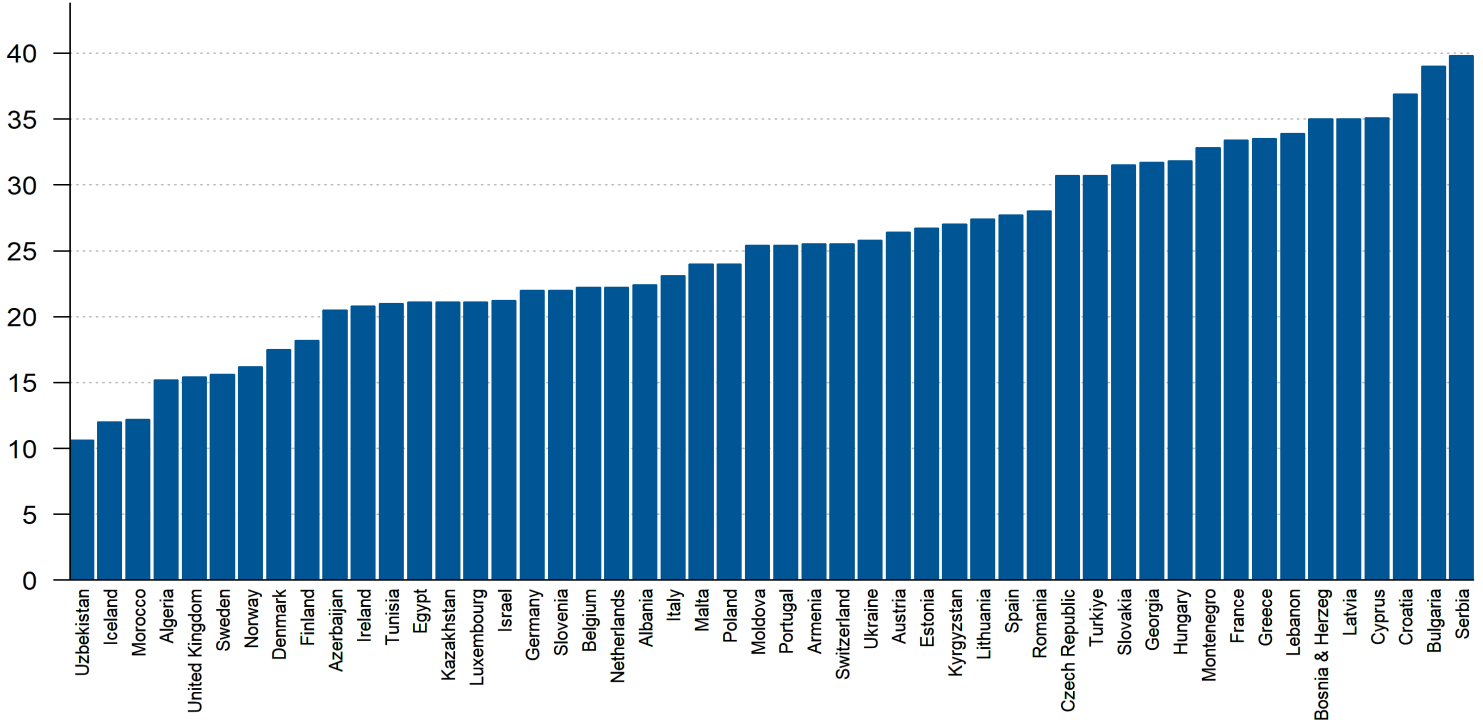


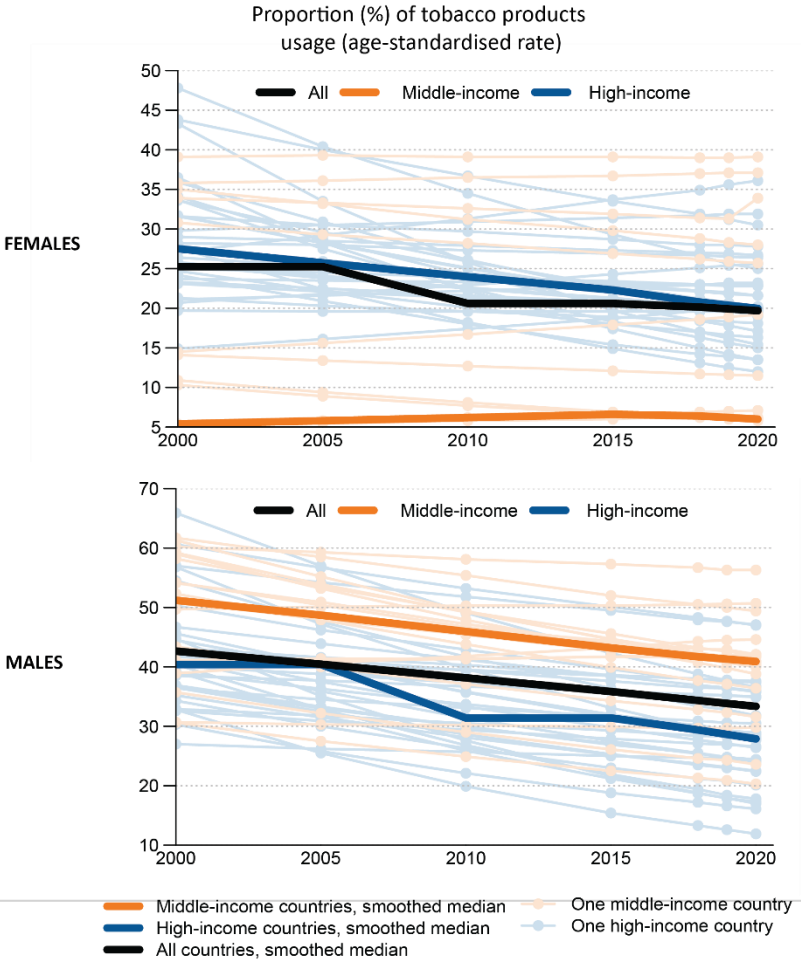
Source: WHO
https://eatlas.escardio.org/

Estimate of current tobacco smoking prevalence (%) total (age-standardized rate), 2020



Source: WHO
https://eatlas.escardio.org/

Proportion (%) of tobacco products usage (age-standardized rate)



Source: WHO
https://eatlas.escardio.org/

Pure alcohol consumption, litres per capita, age 15+ (litres per capita), 2019

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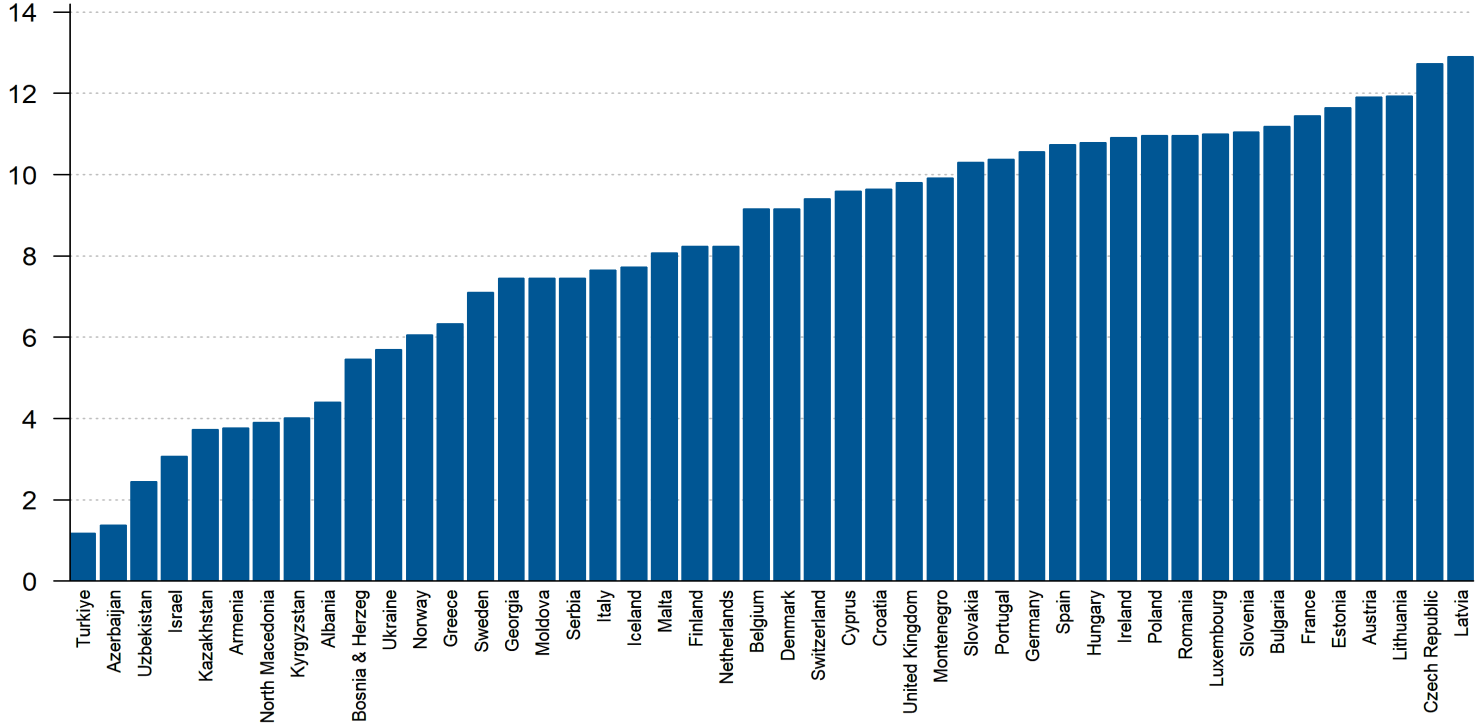

Source: WHO
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Pure alcohol consumption, litres per capita, age 15+ (litres per capita), 2019

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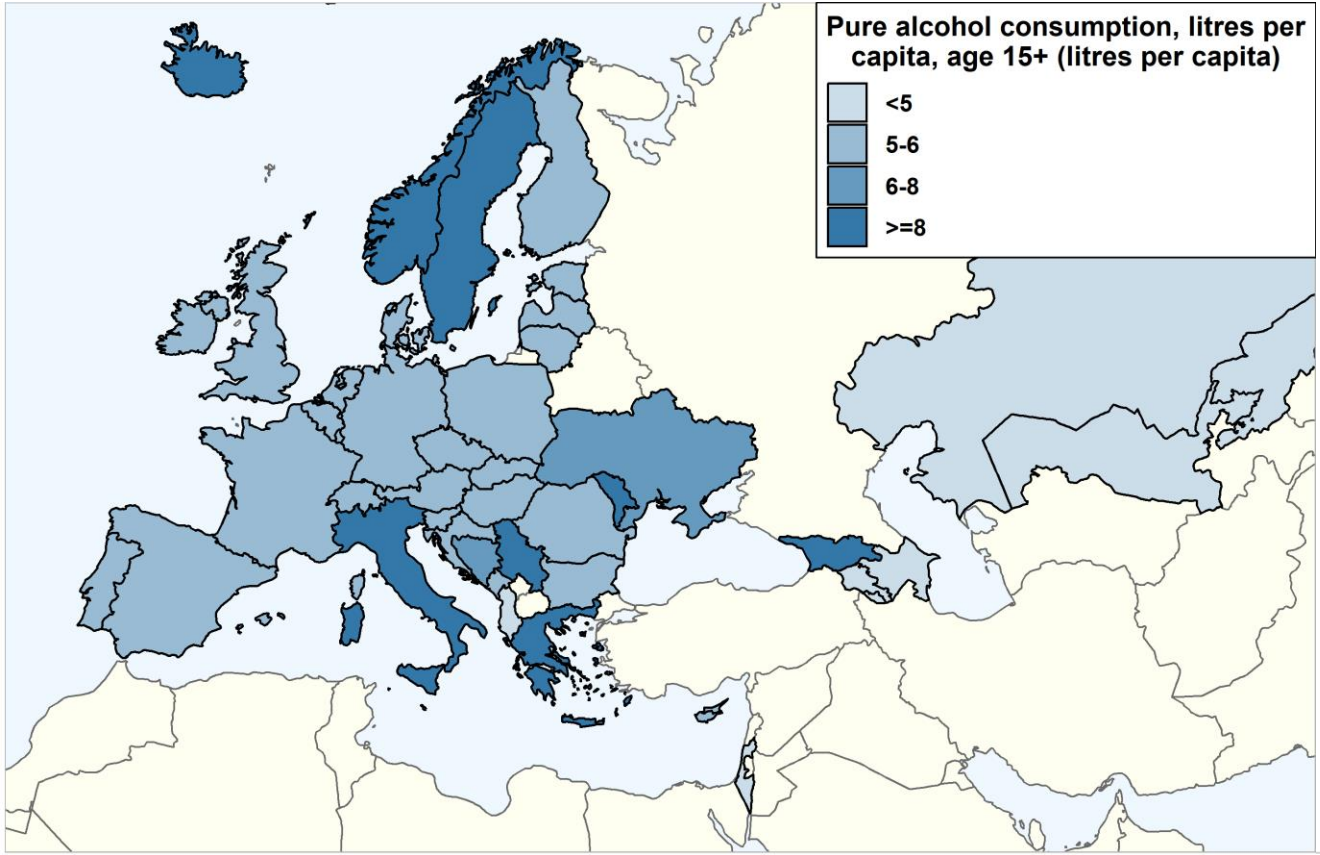

Source: WHO
https://eatlas.escardio.org/

DALYs (Disability-Adjusted Life Years) of Low physical activity in 1990-2019 for males (Rate, Age-standardized), 2019

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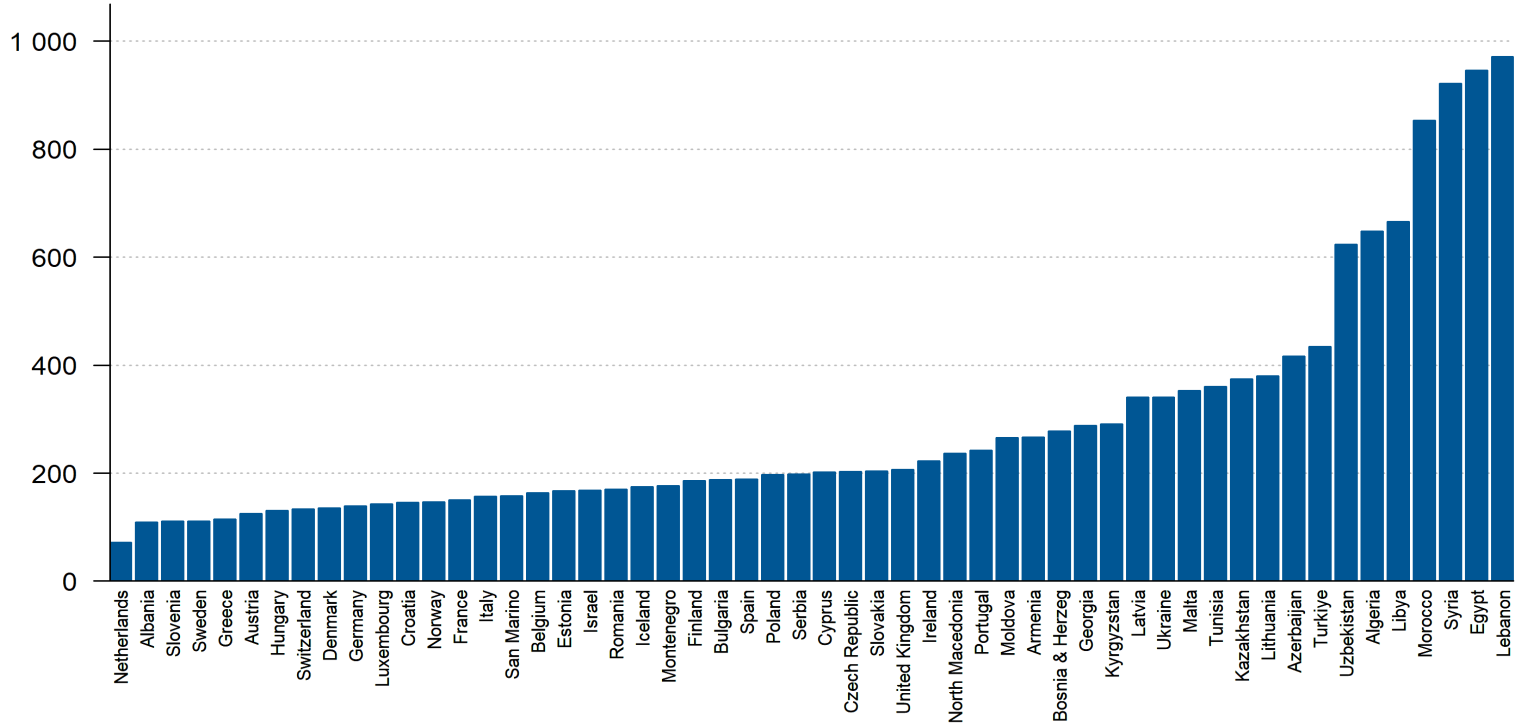
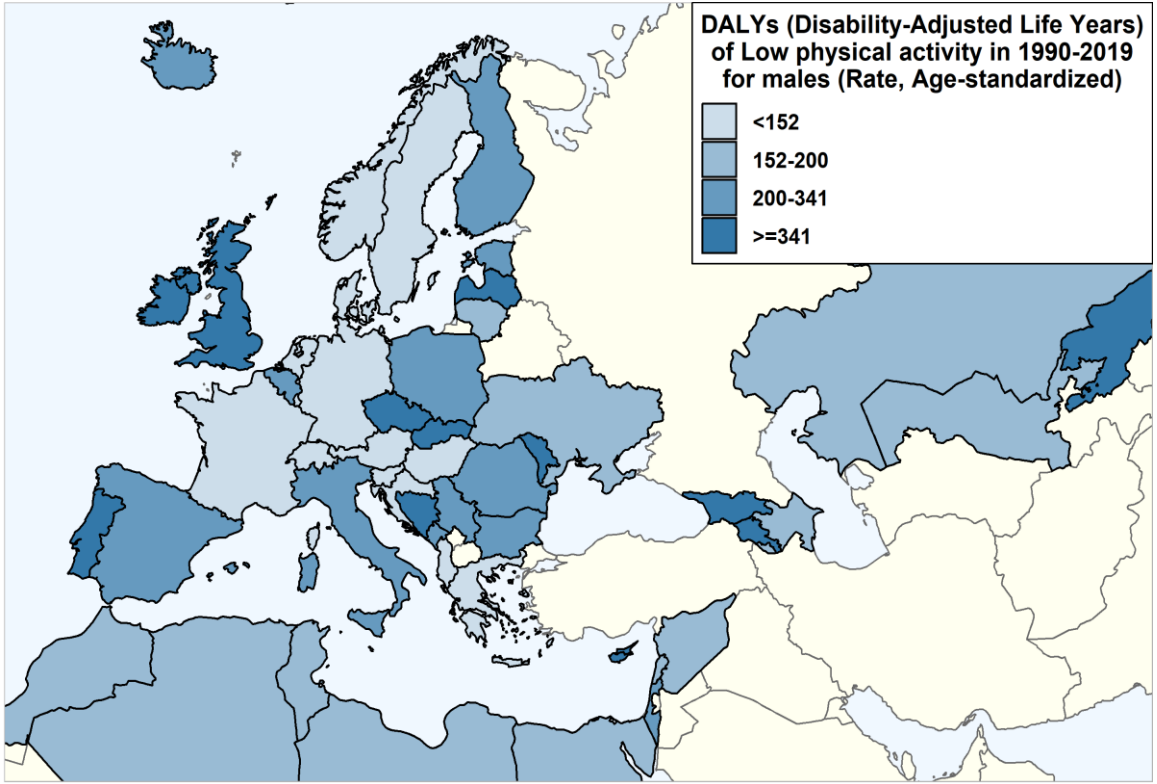


Source: IHME.
https://eatlas.escardio.org/

DALYs (Disability-Adjusted Life Years) of Low physical activity in 1990-2019 for males (Rate, Age-standardized), 2019

ESC European Society of Cardiology



Source: IHME.
https://eatlas.escardio.org/

DALYs (Disability-Adjusted Life Years) of Low physical activity in 1990-2019 for females (Rate, Age-standardized), 2019

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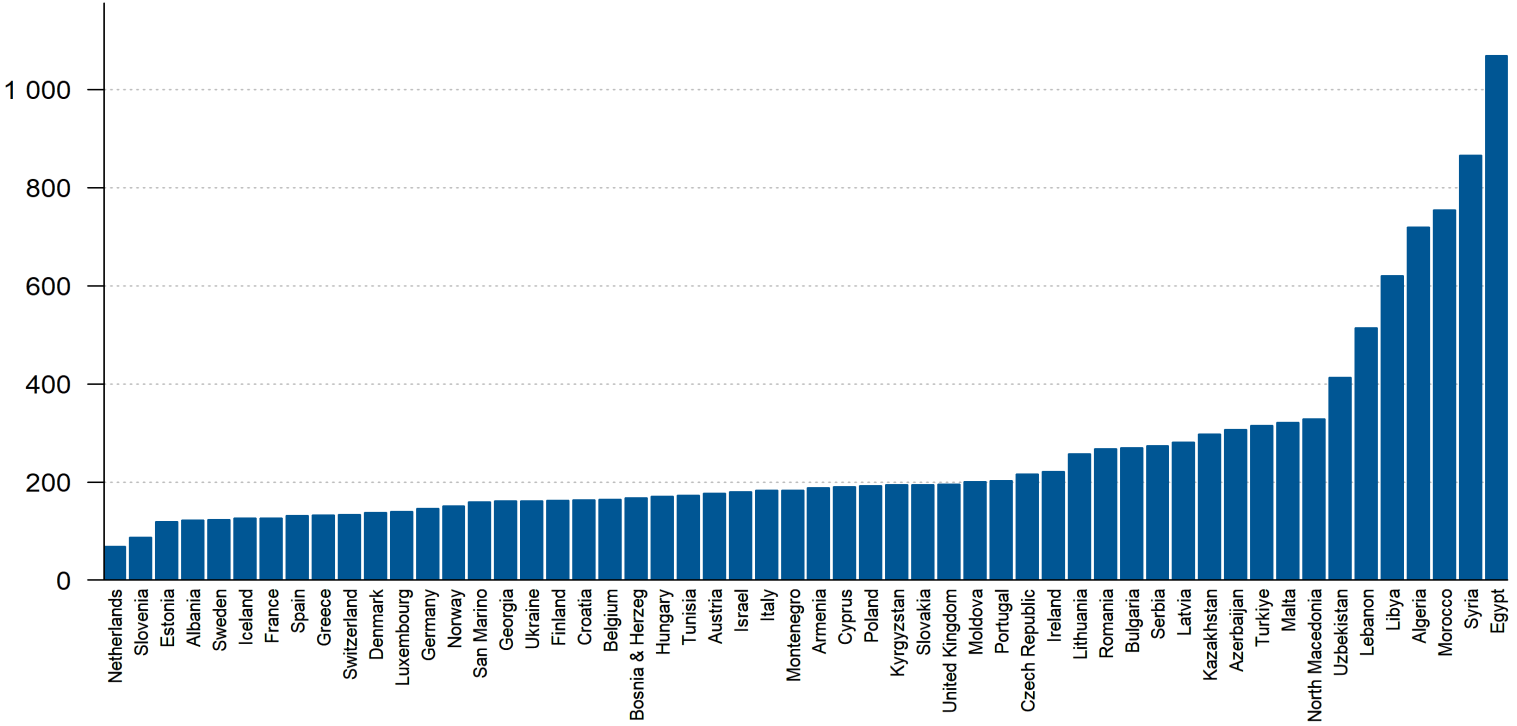
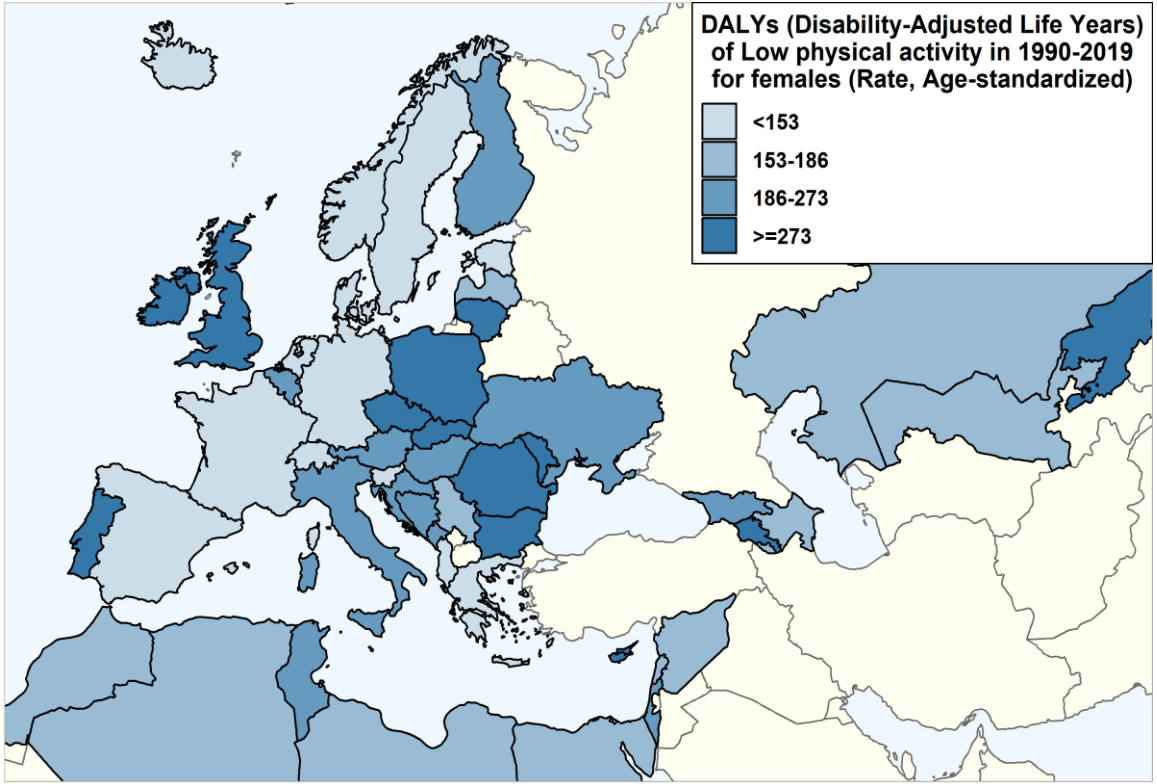


Source: IHME.
https://eatlas.escardio.org/

DALYs (Disability-Adjusted Life Years) of Low physical activity in 1990-2019 for females (Rate, Age-standardized), 2019



Source: IHME.
https://eatlas.escardio.org/

DALYs (Disability-Adjusted Life Years) of Low physical activity in 1990-2019 for both (Rate, Age-standardized), 2019

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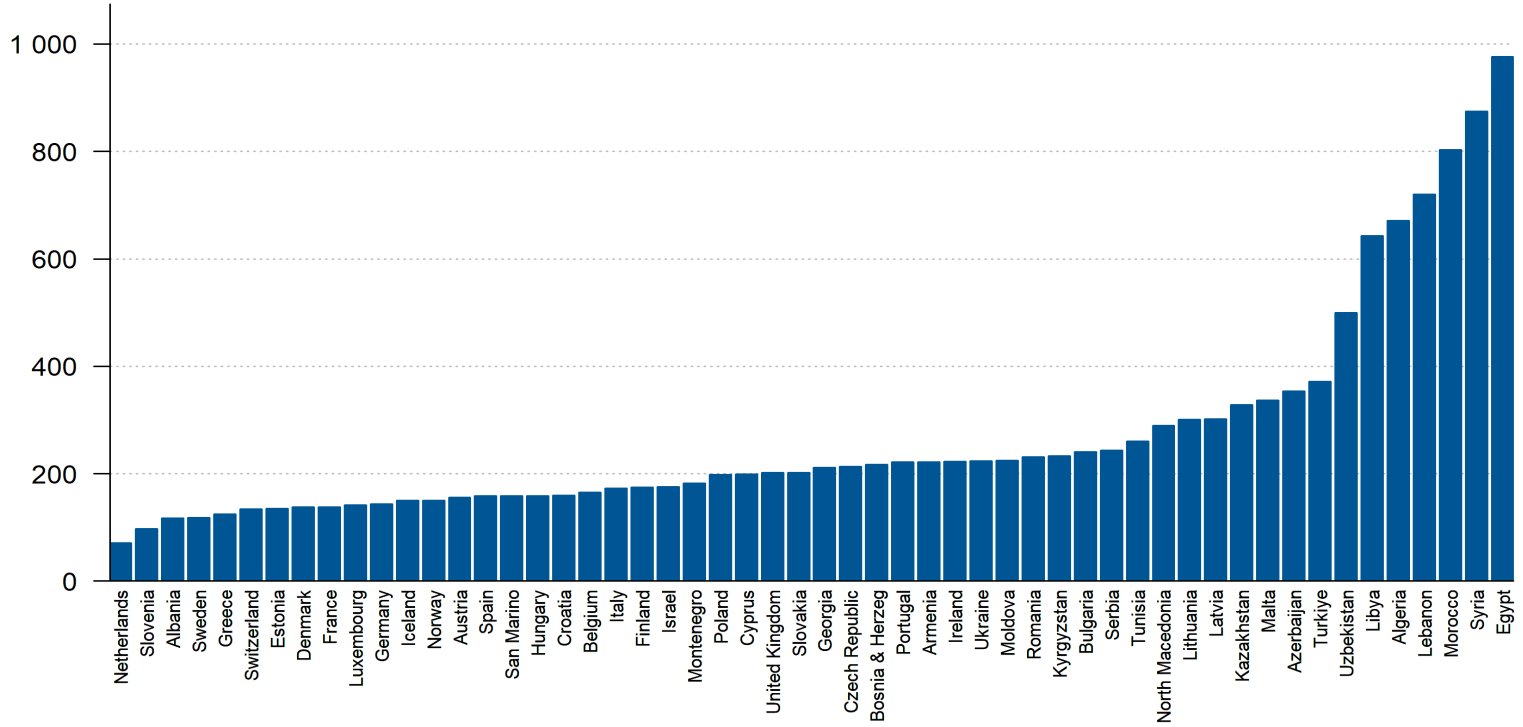
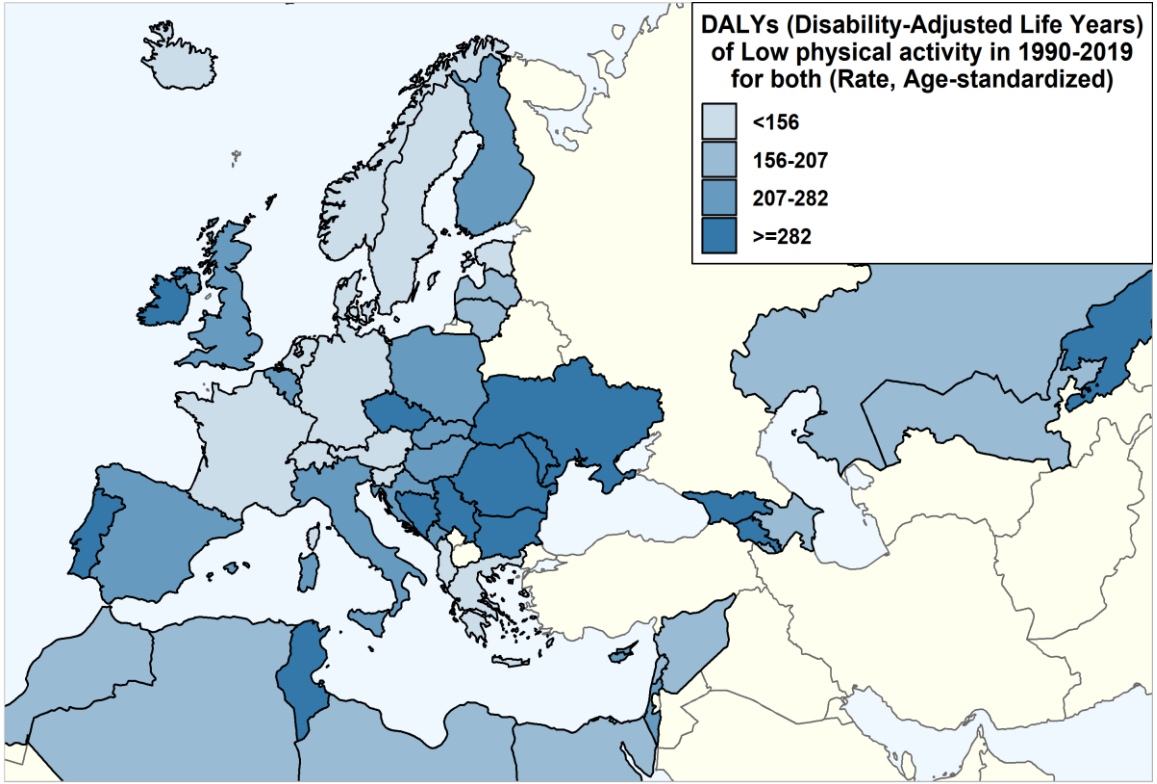
European Society of Cardiology



Source: IHME.
https://eatlas.escardio.org/

DALYs (Disability-Adjusted Life Years) of Low physical activity in 1990-2019 for both (Rate, Age-standardized), 2019

ESC European Society of Cardiology



Source: IHME.
https://eatlas.escardio.org/

Food Balances: Animal fats supply (kcal/capita/day), 2020

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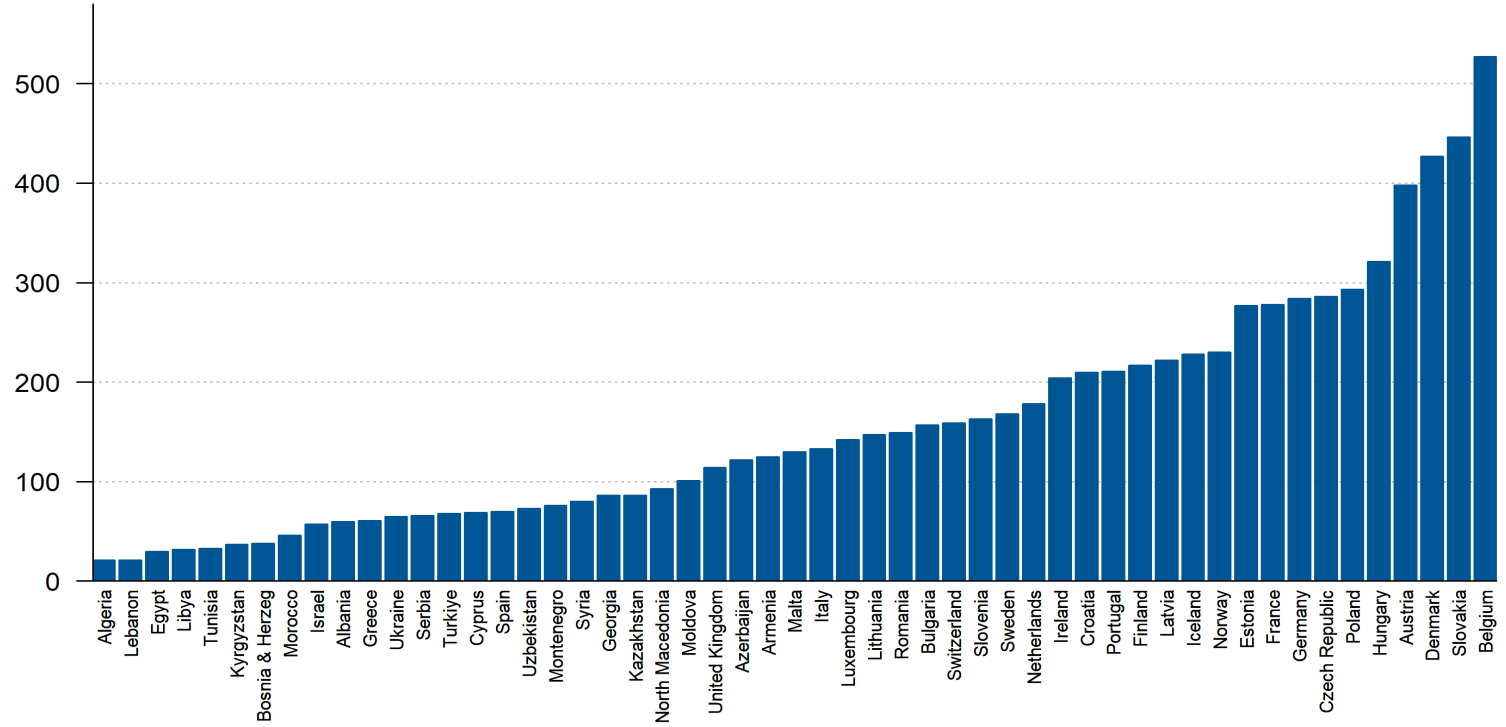

Source: FAO.
https://eatlas.escardio.org/

Food Balances: Vegetables Oils supply (kcal/capita/day), 2020

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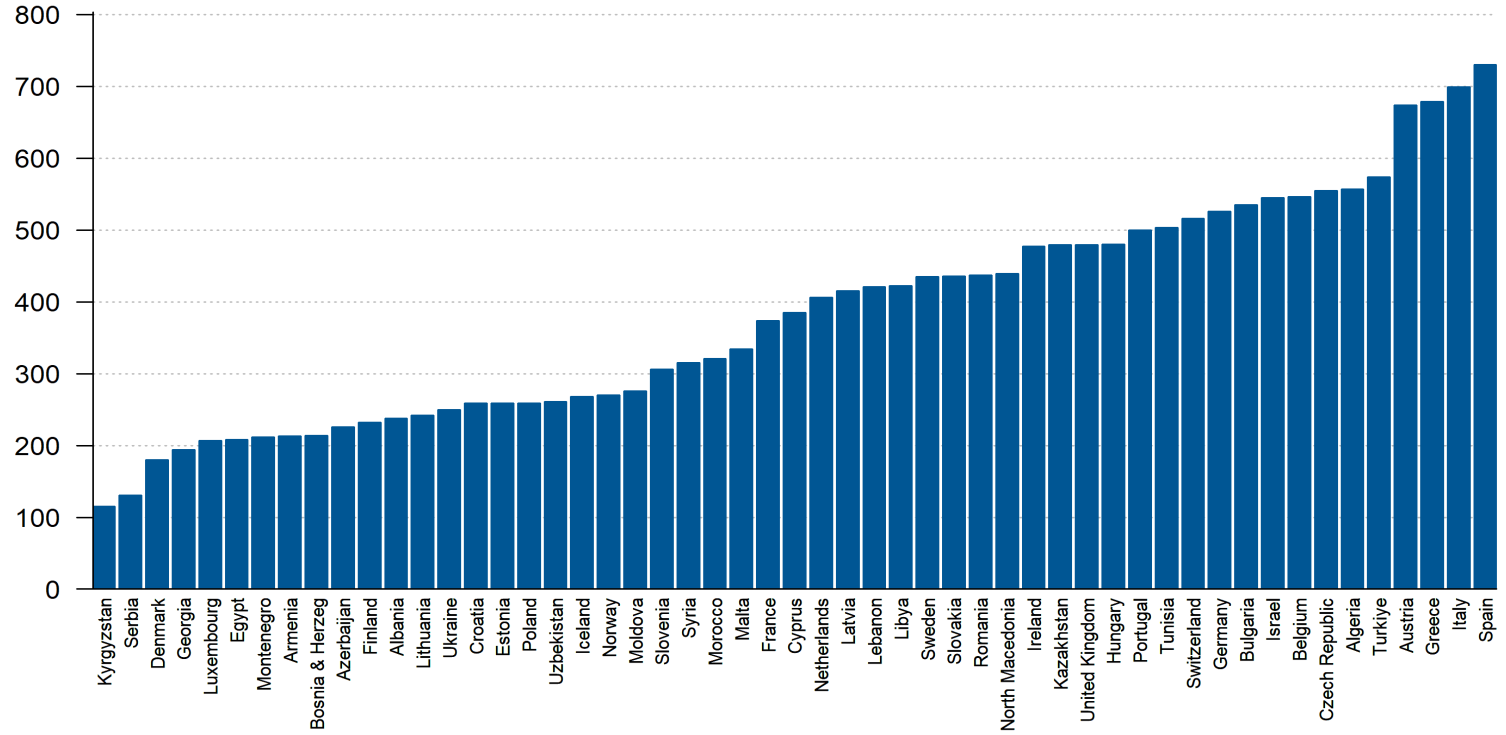
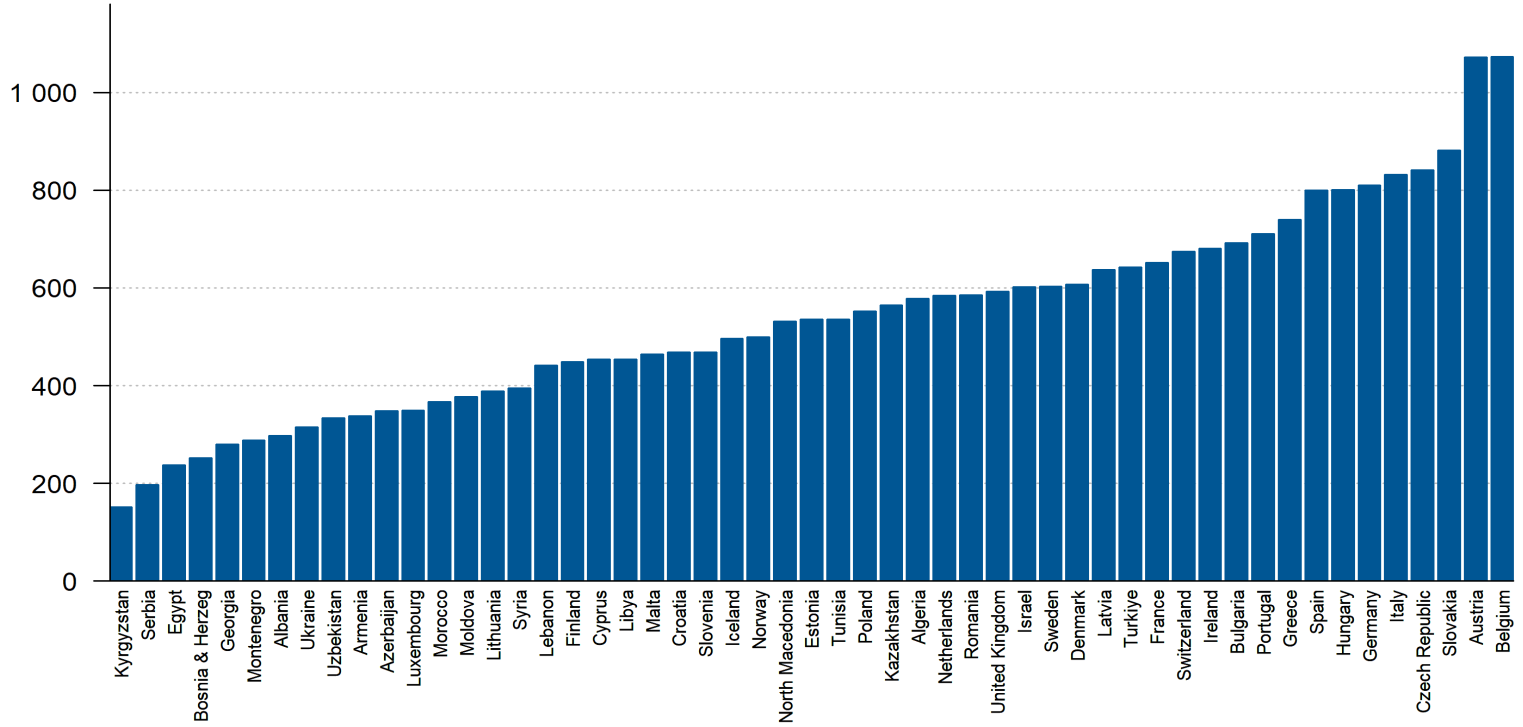


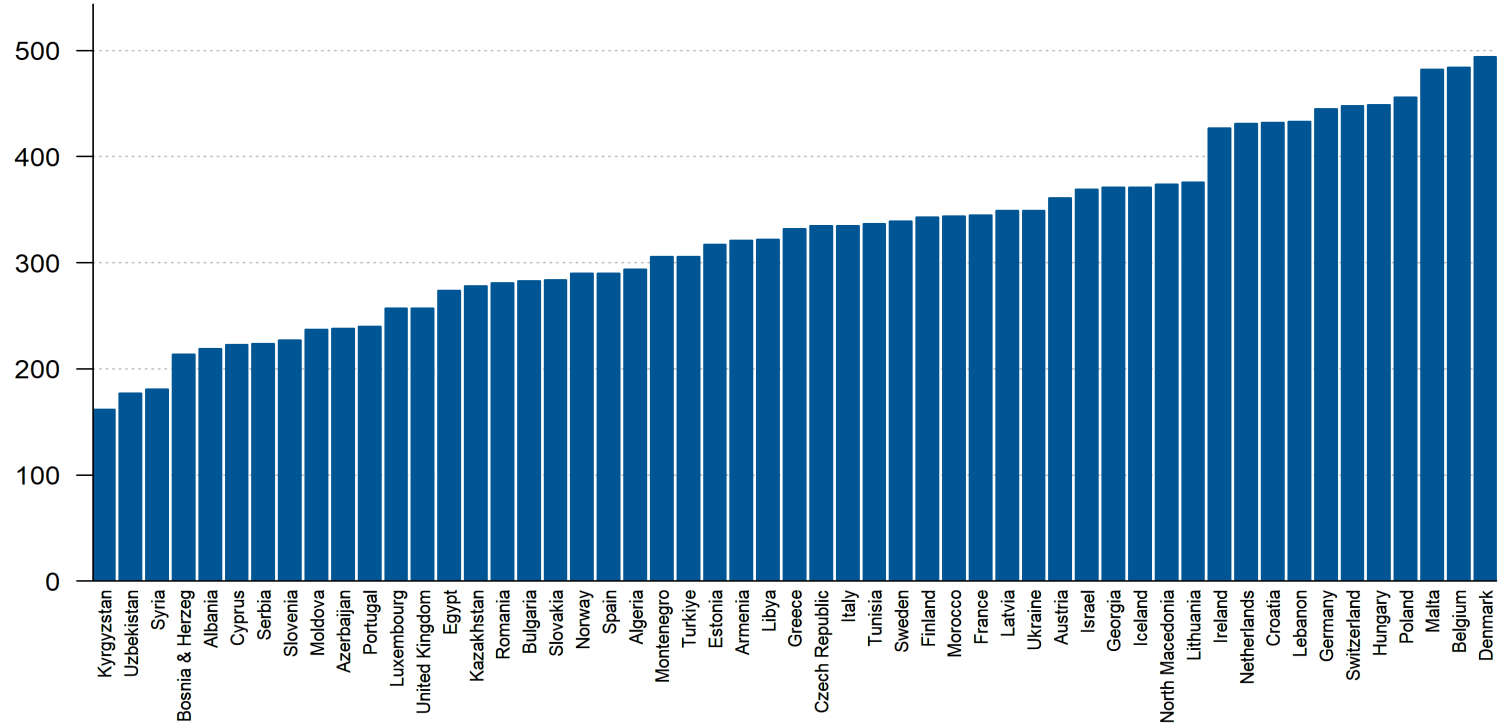
Source: FAO.
https://eatlas.escardio.org/

Food Balances: Oils and fats supply (kcal/capita/day), 2020



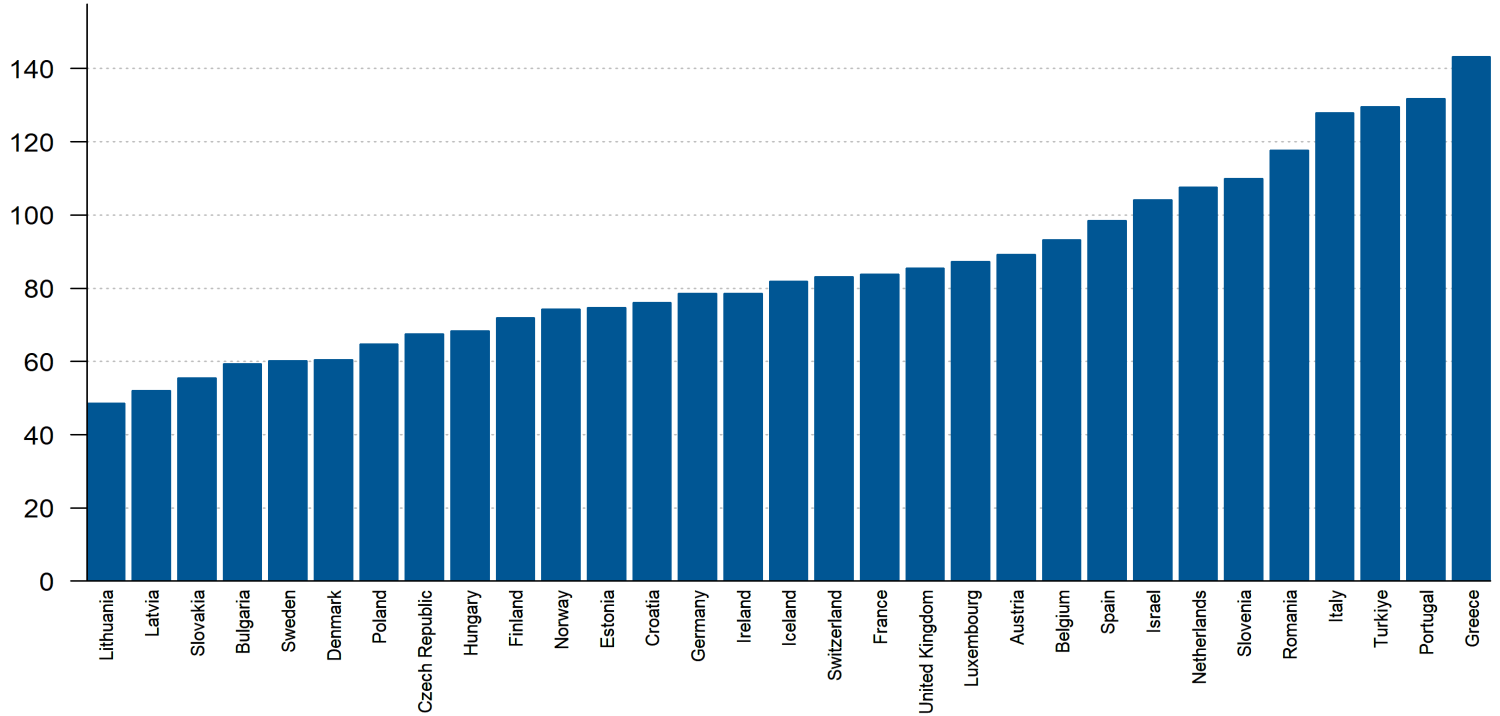
Source: FAO.
https://eatlas.escardio.org/

Food Balances: Sugar and sweeteners supply (kcal/capita/day), 2020



Source: FAO.
https://eatlas.escardio.org/

Fruits supply, Kilos per capita per year, 2020



Source: FAO.
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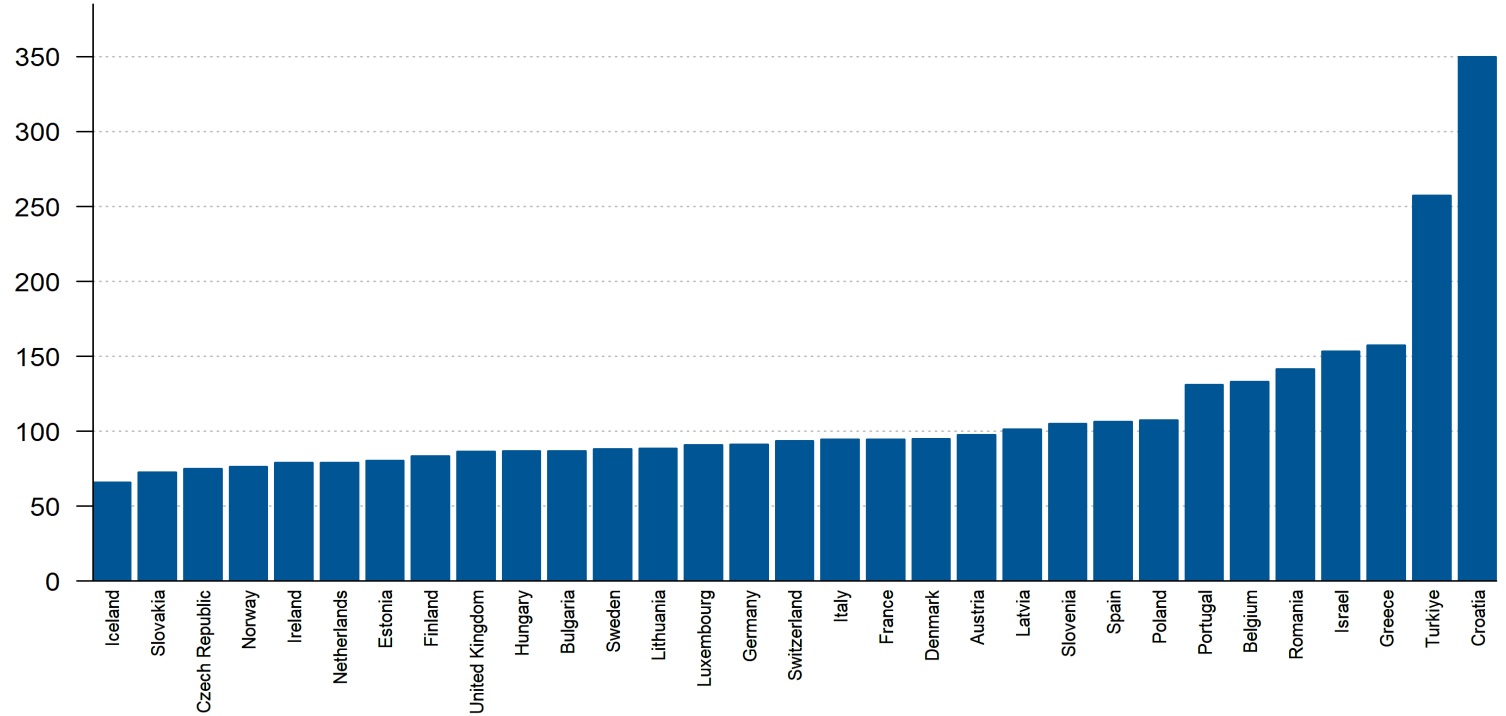
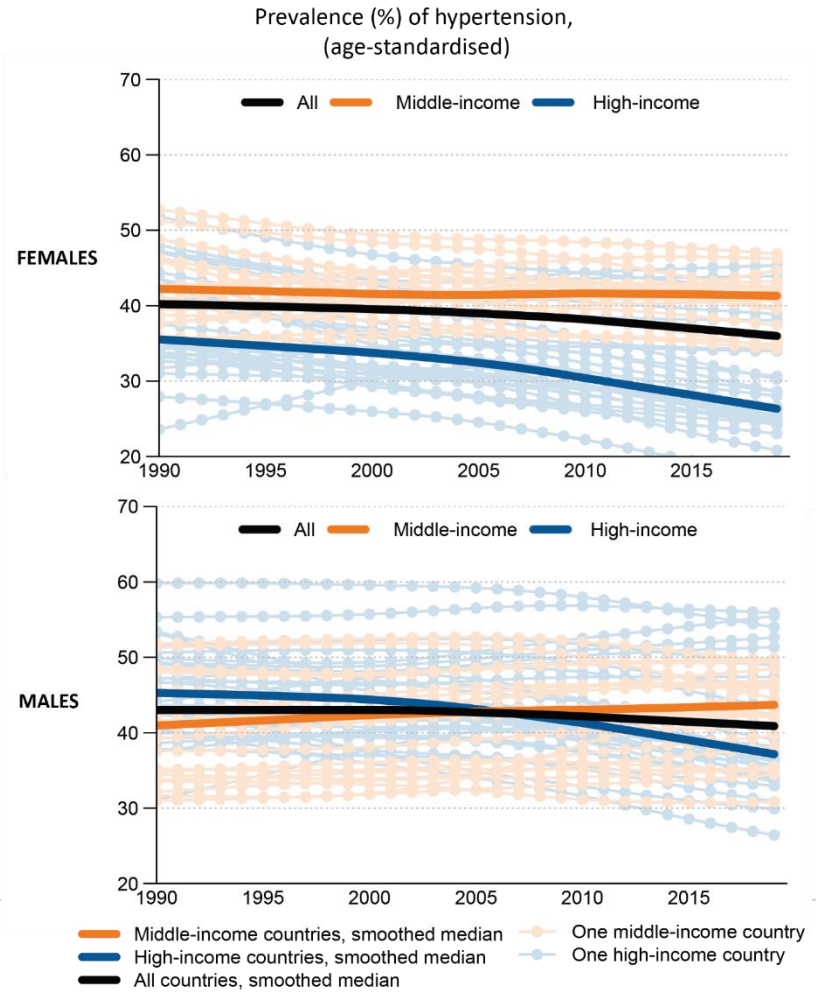
Vegetables supply, Kilos per capita per year, 2020



Source: FAO.
https://eatlas.escardio.org/

Prevalence (%) of hypertension, age-standardized



Source: NCD.
https://eatlas.escardio.org/

Prevalence of hypertension for females, age-standardized (30-79 years), 2019

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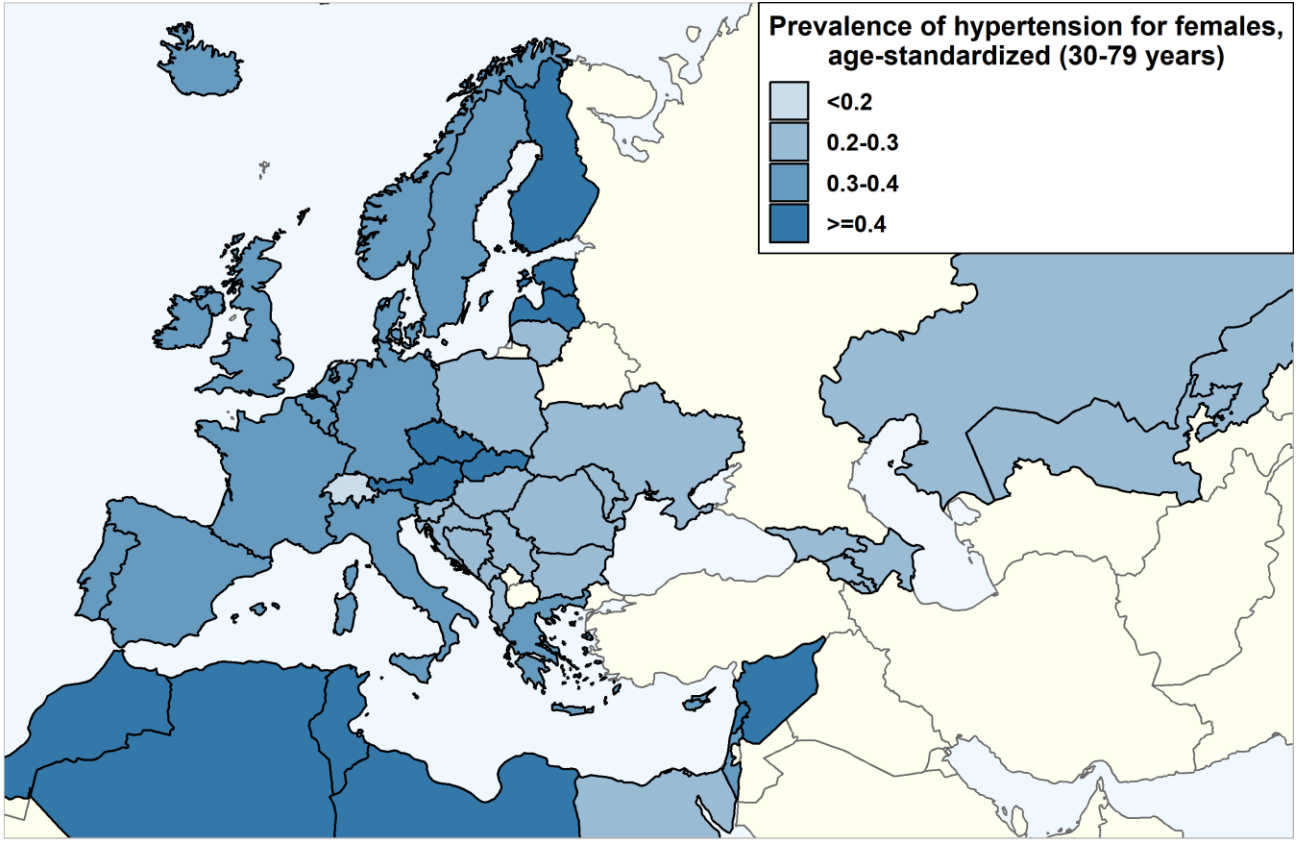
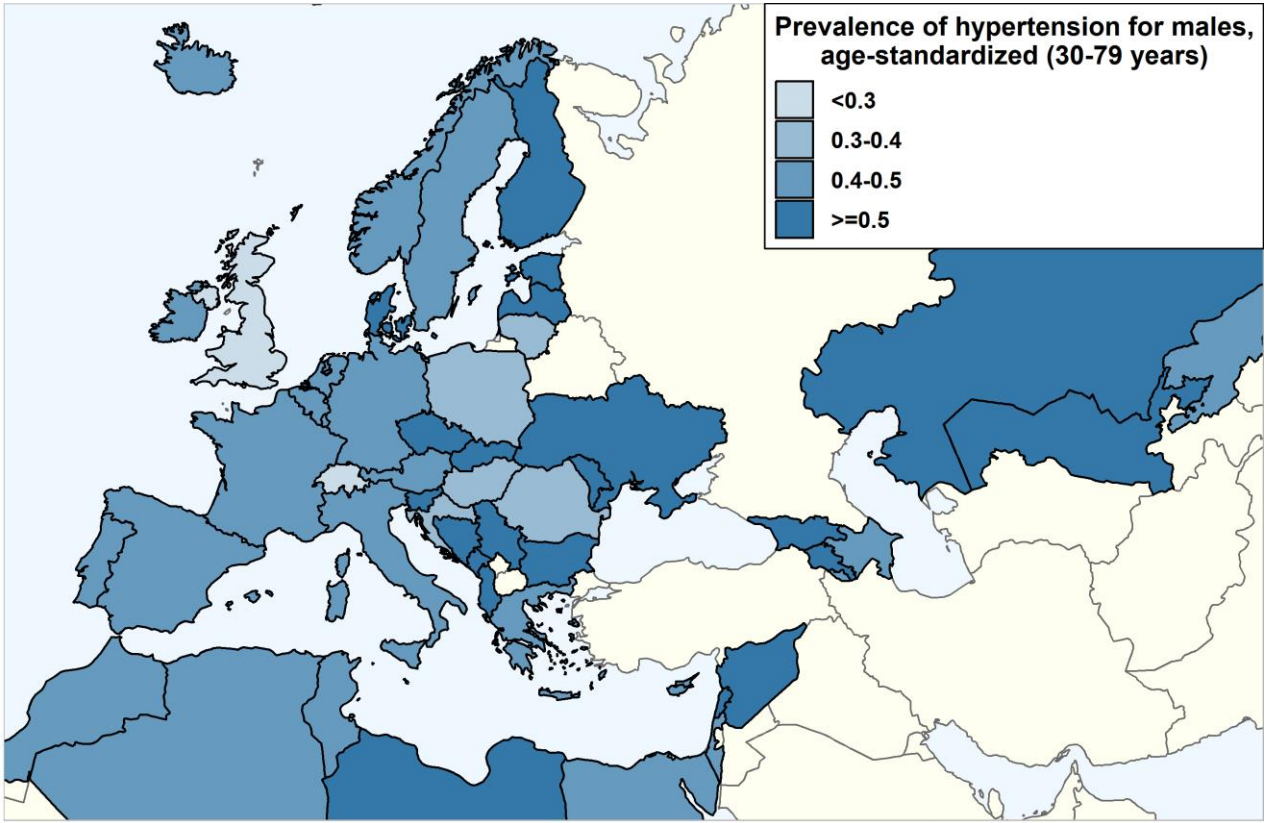


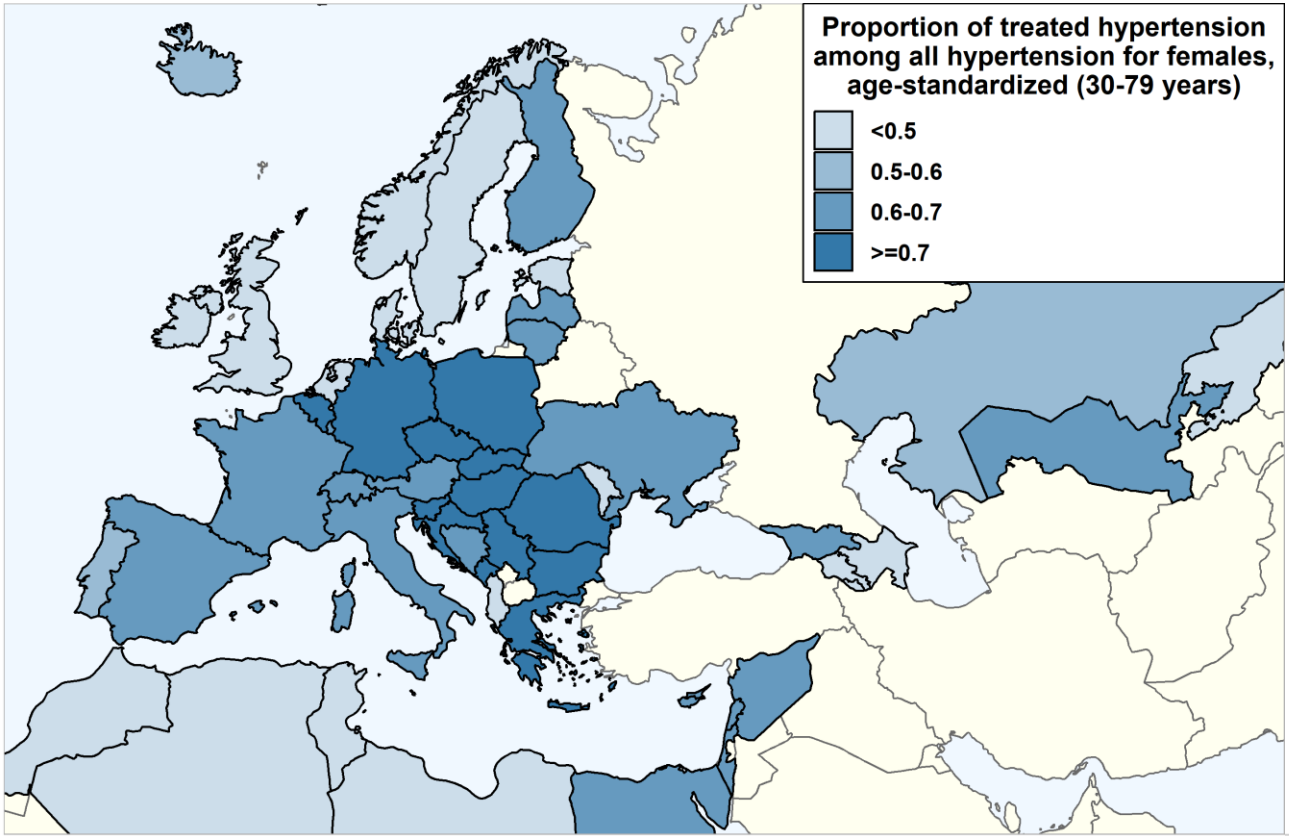
Source: NCD.
https://eatlas.escardio.org/

Prevalence of hypertension for males, age-standardized (30-79 years), 2019



Source: NCD.
https://eatlas.escardio.org/

Proportion of treated hypertension among all hypertension for females, age-standardized (30-79 years), 2019



Source: NCD.
https://eatlas.escardio.org/

Proportion of treated hypertension among all hypertension for males, age-standardized (30-79 years), 2019

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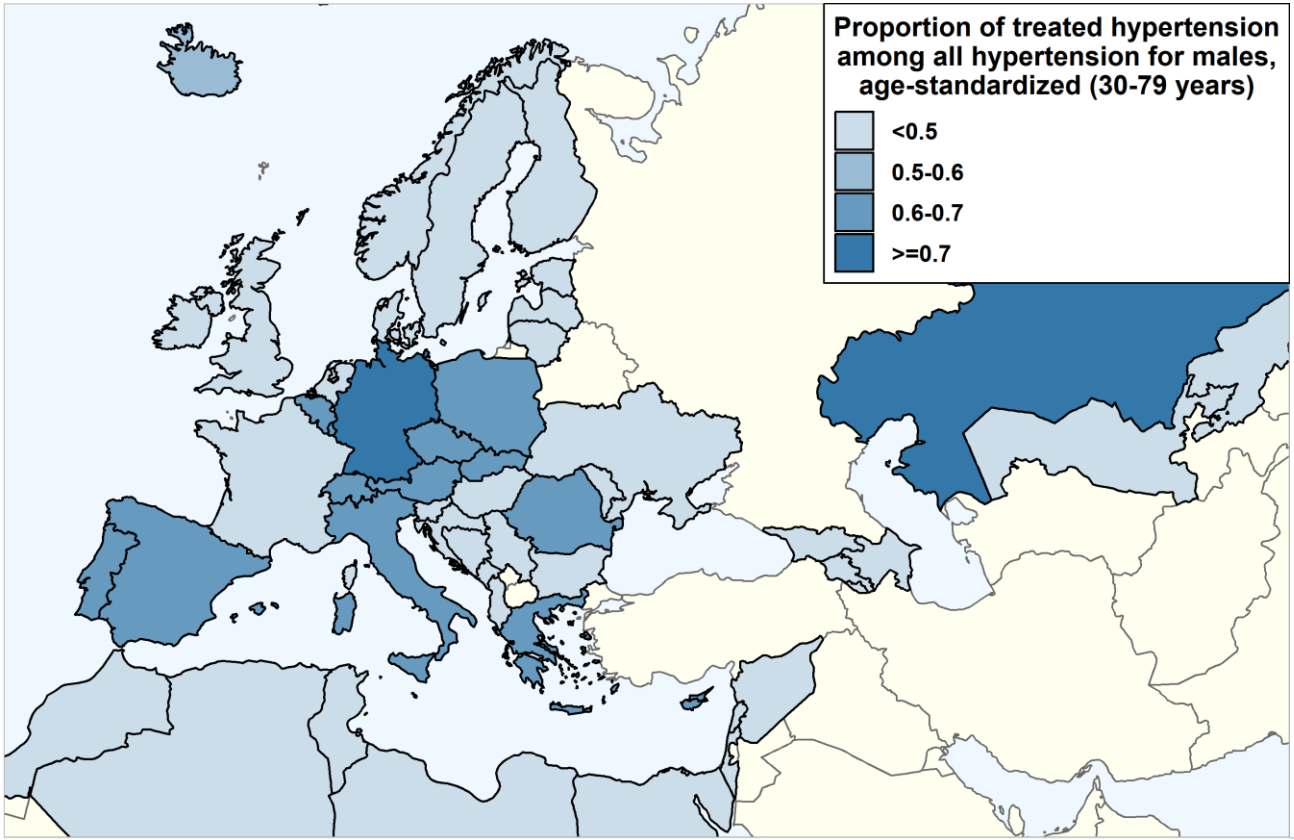
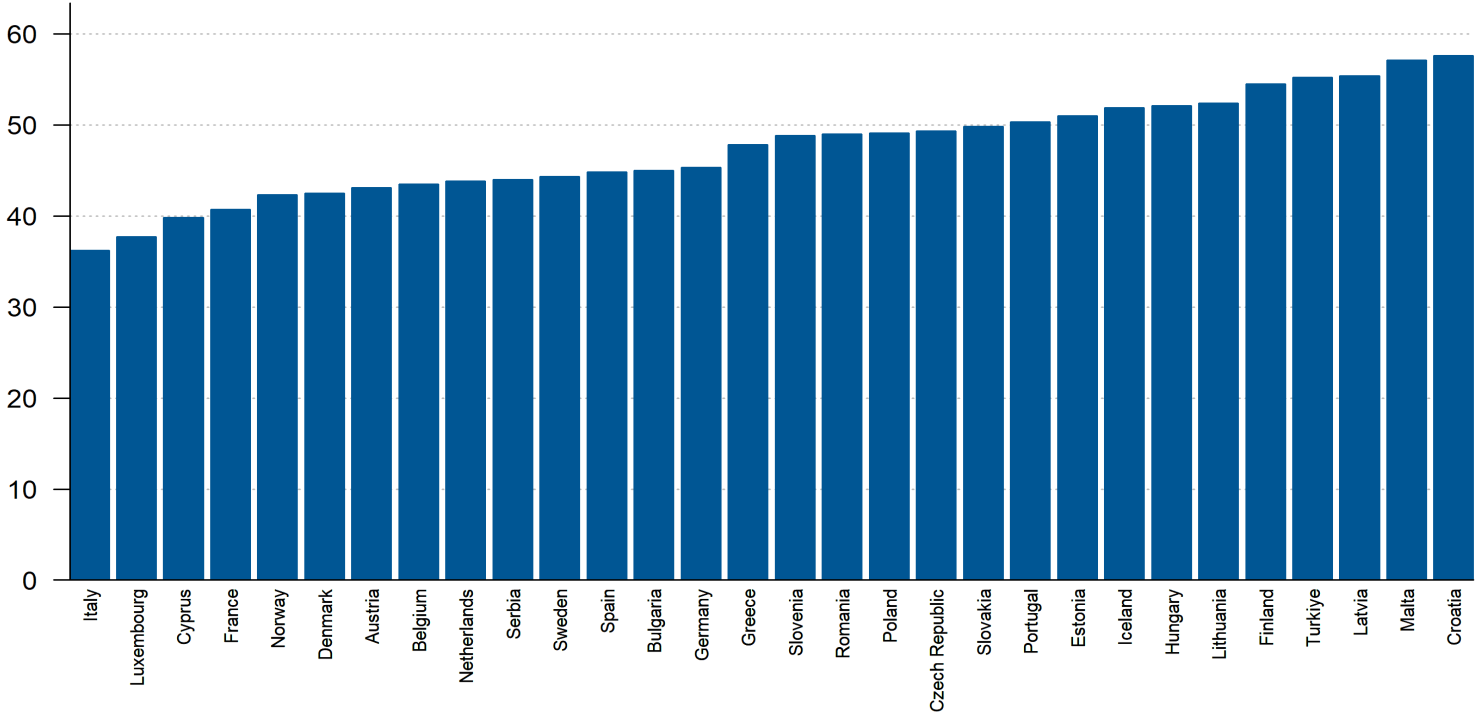


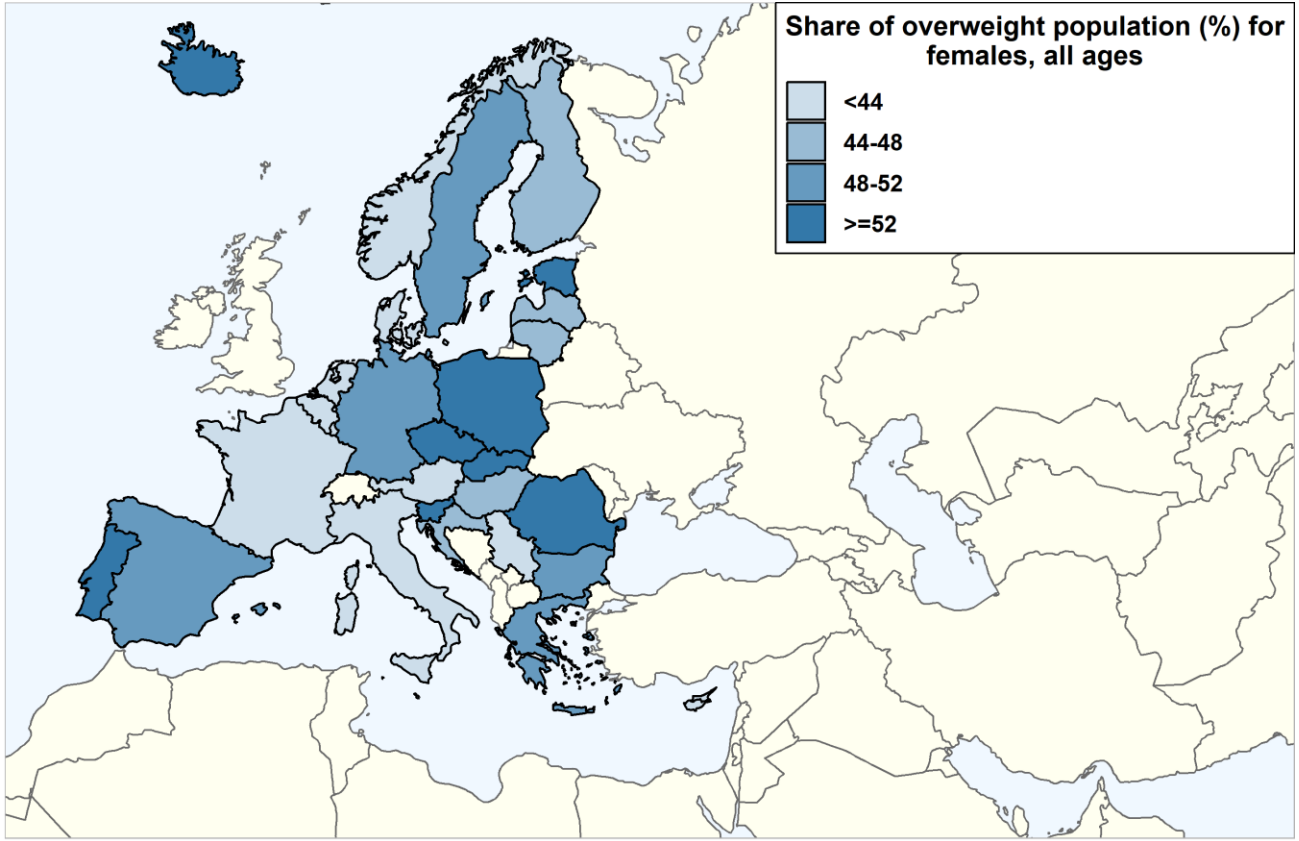
Source: NCD.
https://eatlas.escardio.org/

Share of overweight population (%) for females, all ages, 2019



Source: Eurostat.
https://eatlas.escardio.org/

Share of overweight population (%) for females, all ages, 2019



Source: Eurostat.
https://eatlas.escardio.org/

Share of overweight population (%) for males, all ages, 2019

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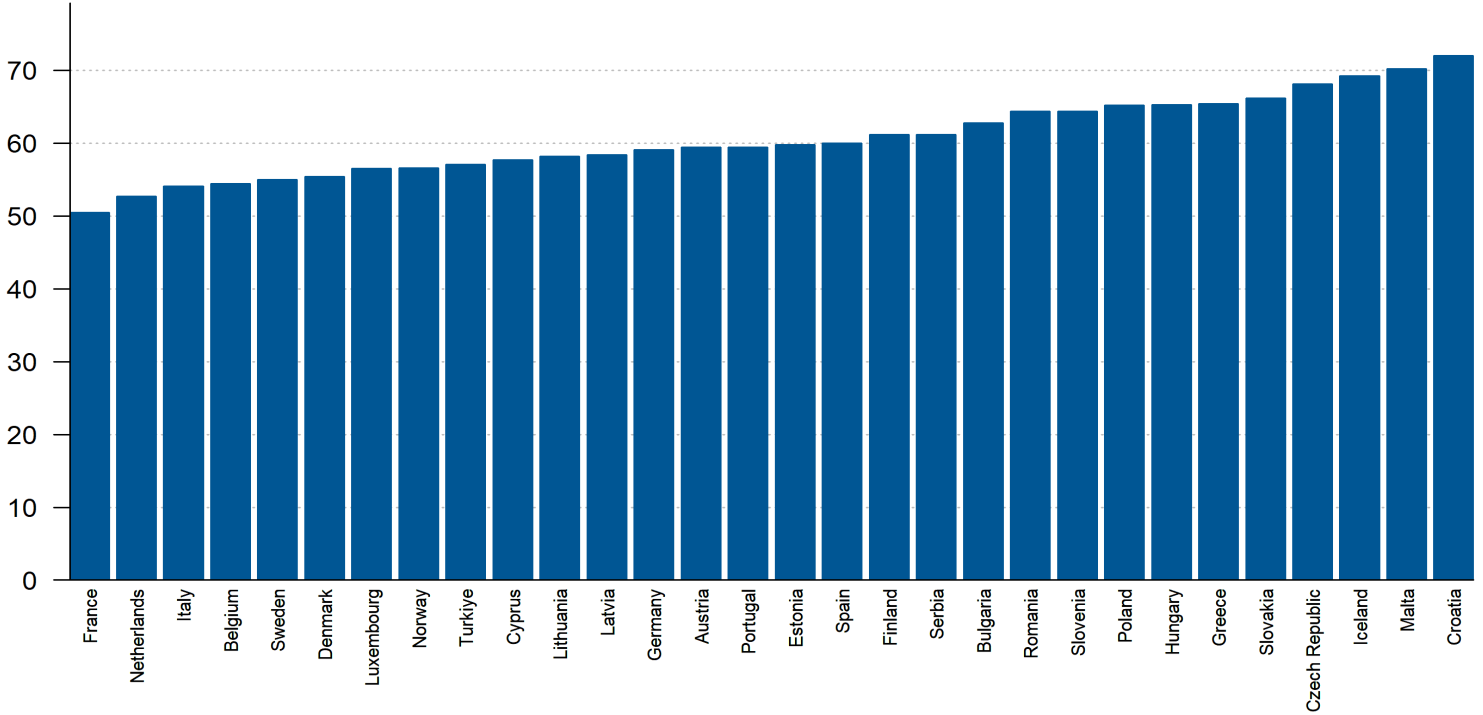

Source: Eurostat.
https://eatlas.escardio.org/

Share of overweight population (%) for males, all ages, 2019

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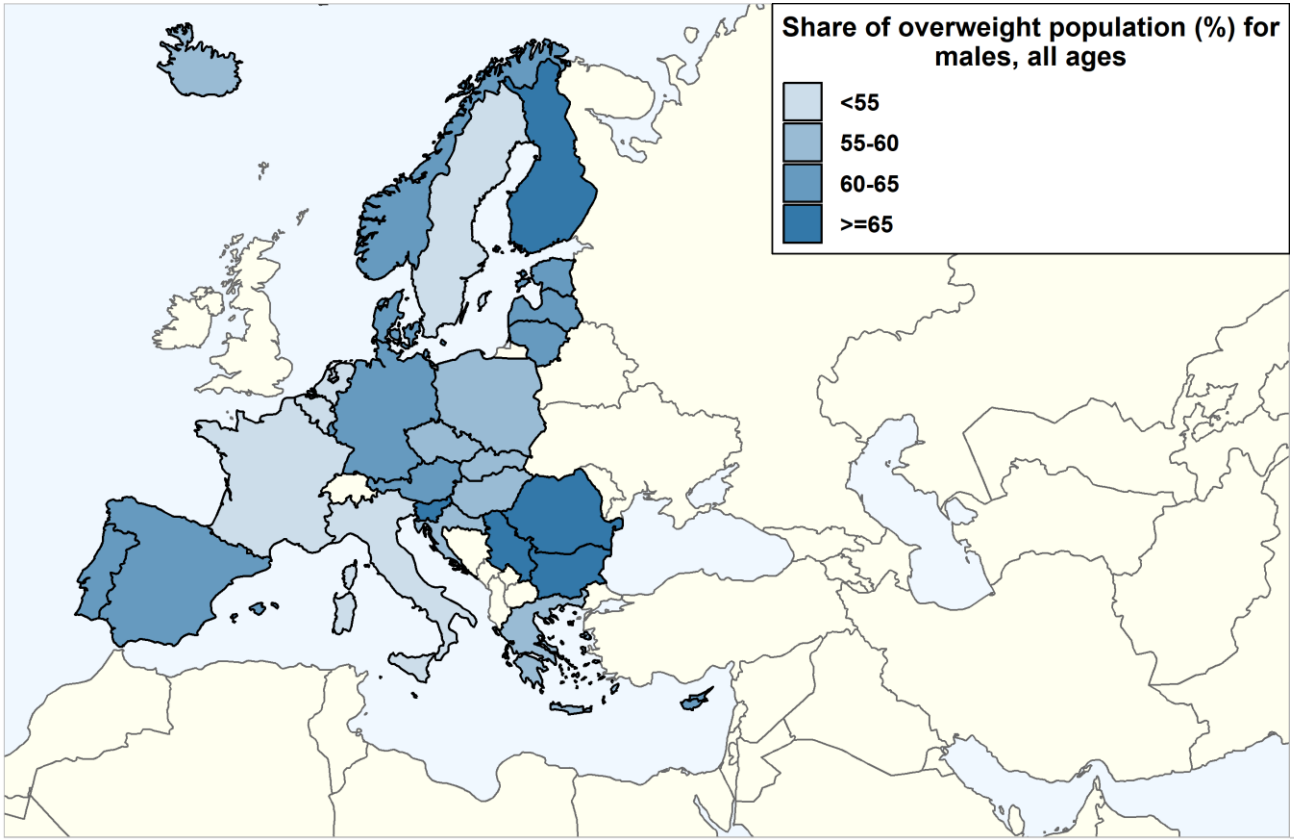
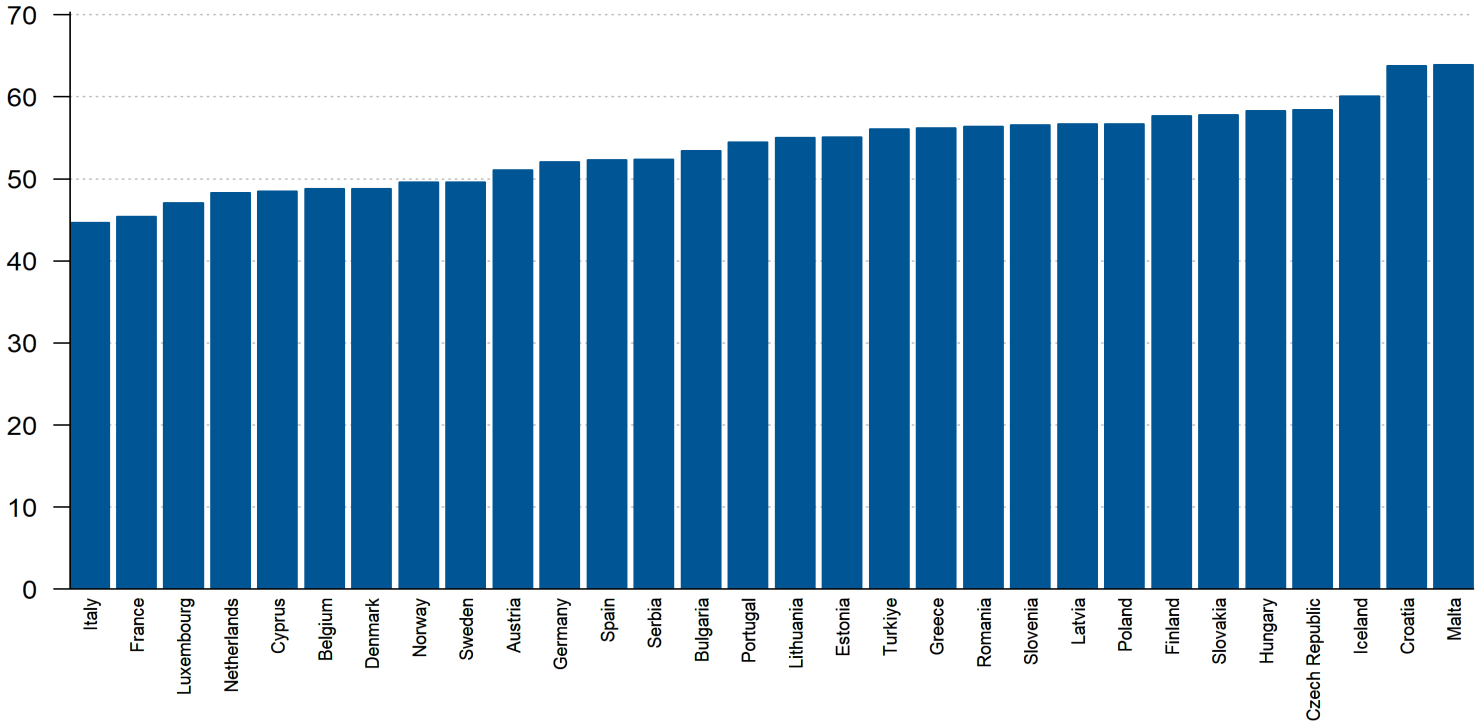


Source: Eurostat.
https://eatlas.escardio.org/

Share of overweight population (%) total, all ages, 2019



Source: Atlas survey.
https://eatlas.escardio.org/

Share of overweight population (%) total, all ages, 2019

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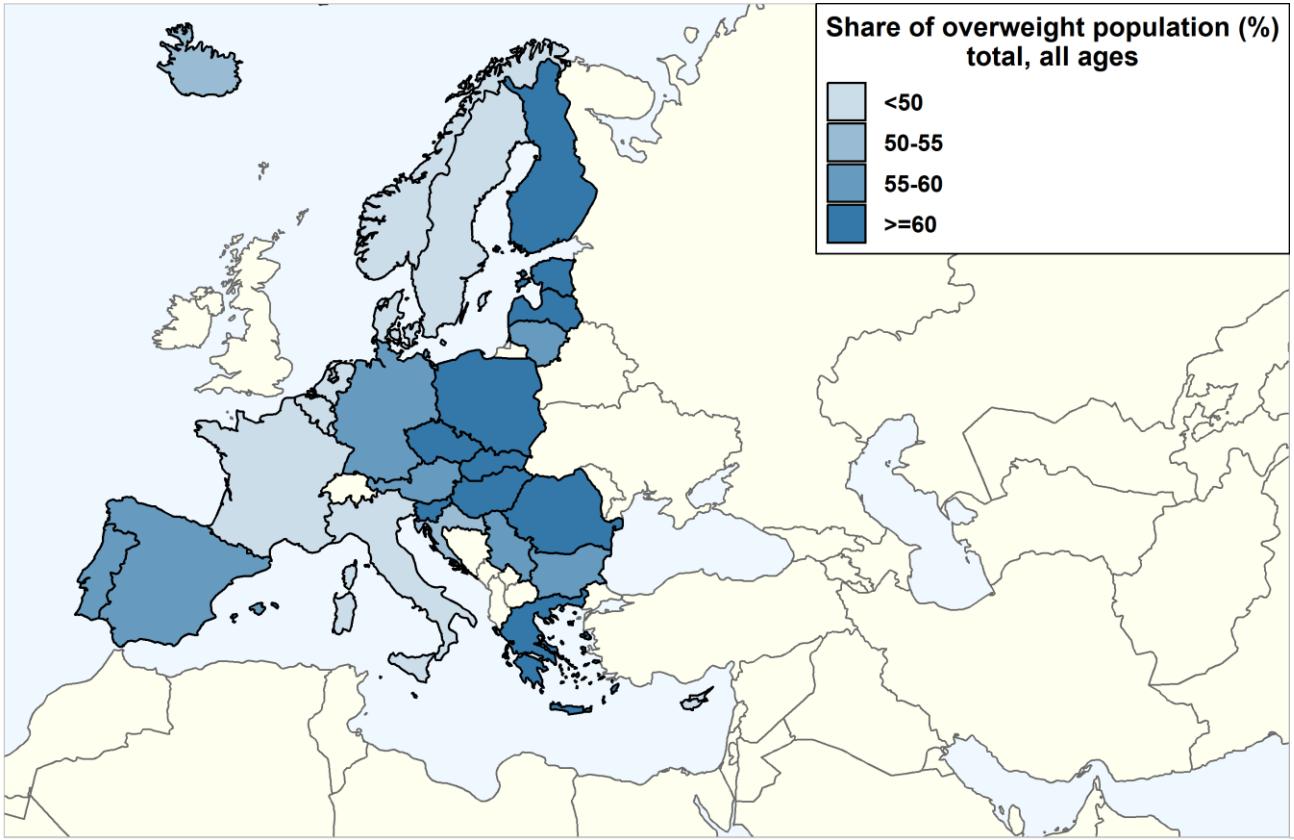

Source: Eurostat.
https://eatlas.escardio.org/

Share of obese population (%) for females, all ages, 2019

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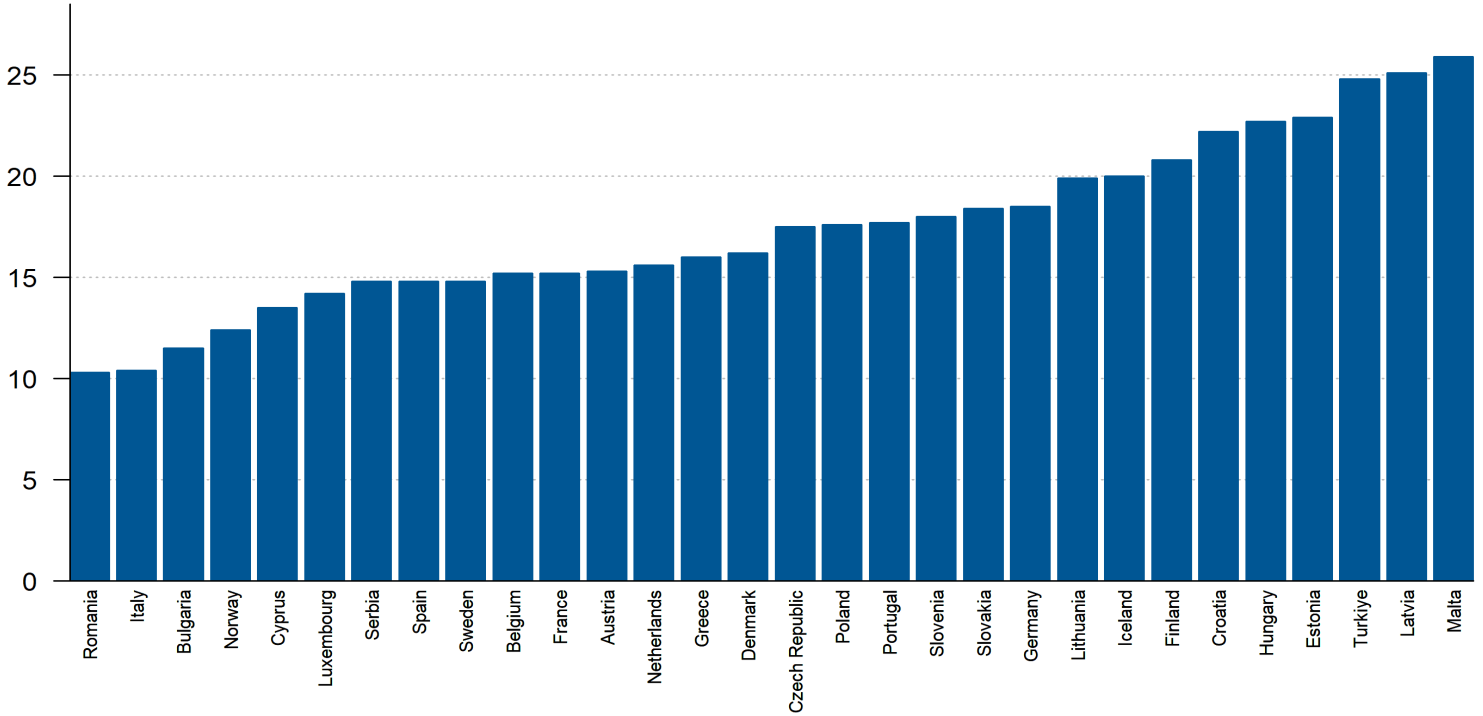

Source: Eurostat.
https://eatlas.escardio.org/

Share of obese population (%) for females, all ages, 2019

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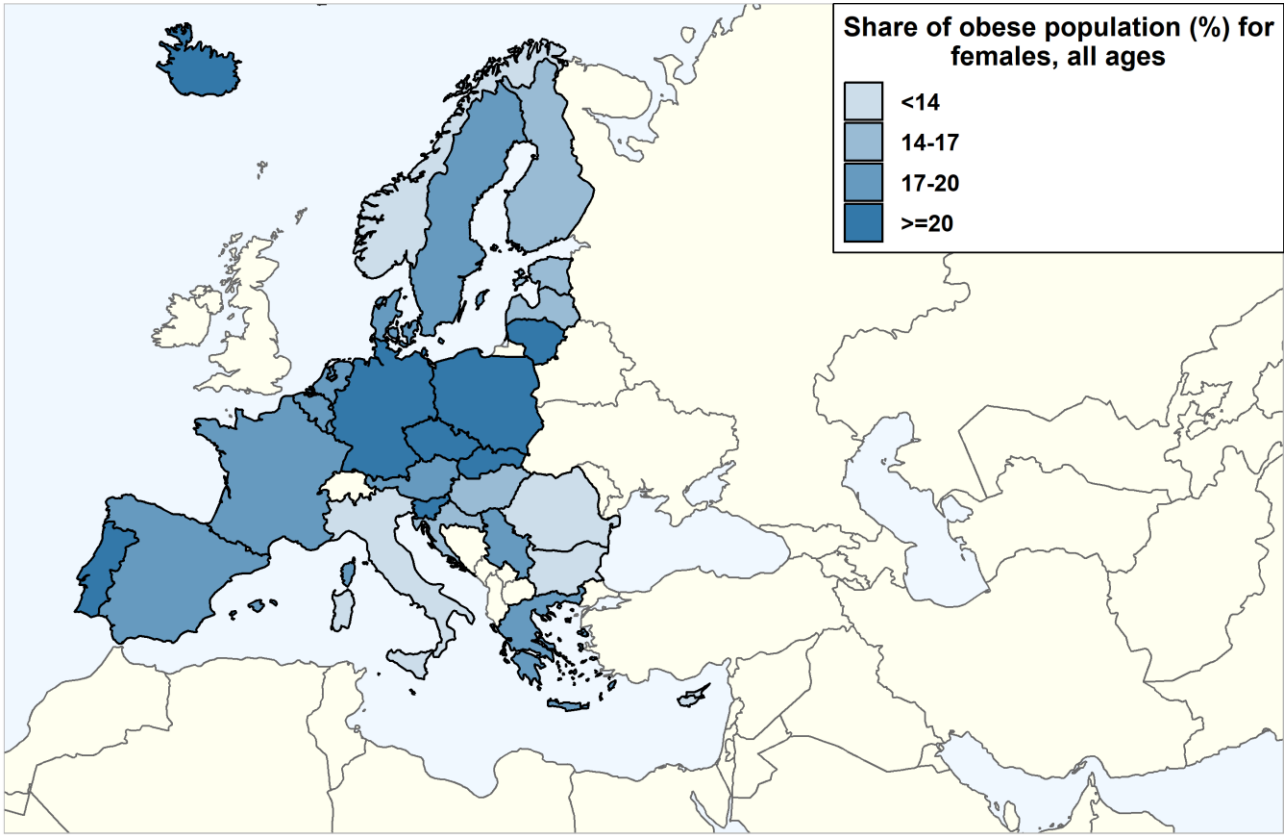
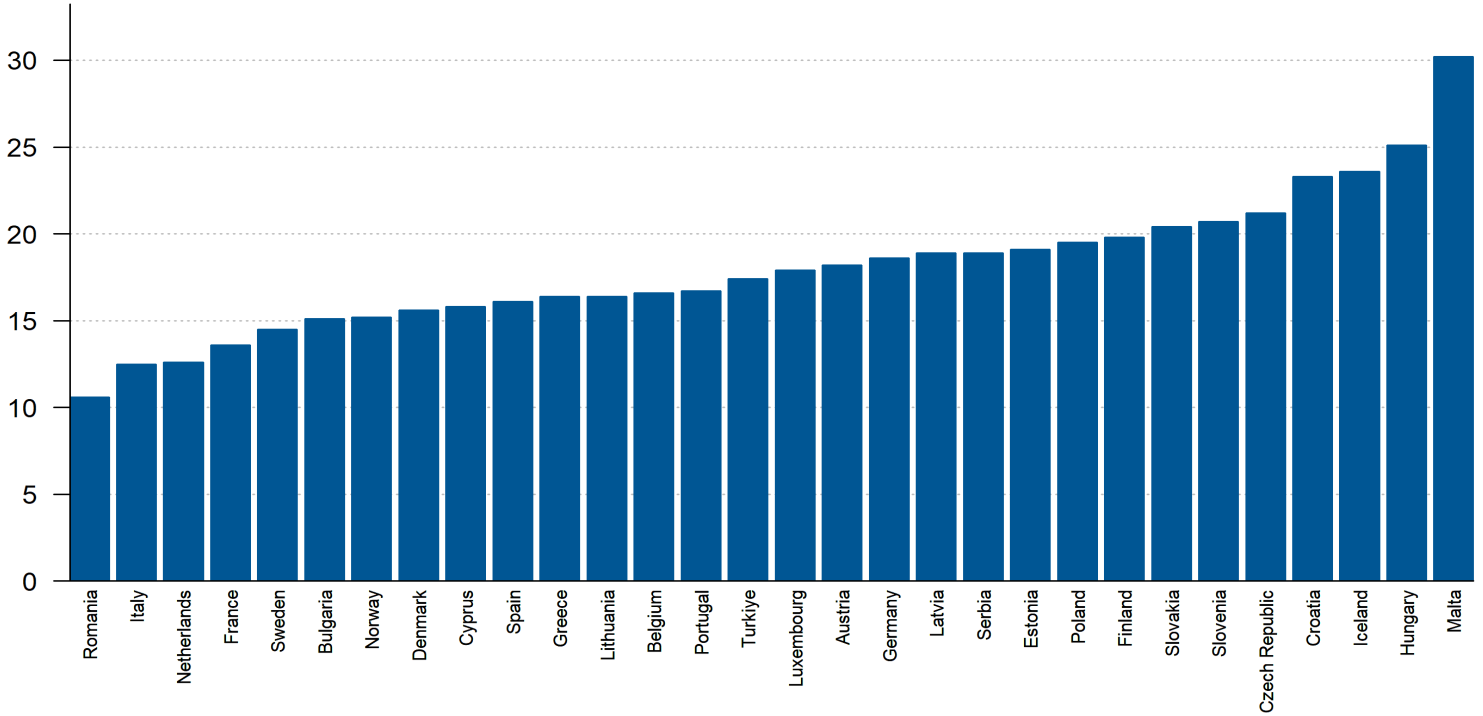


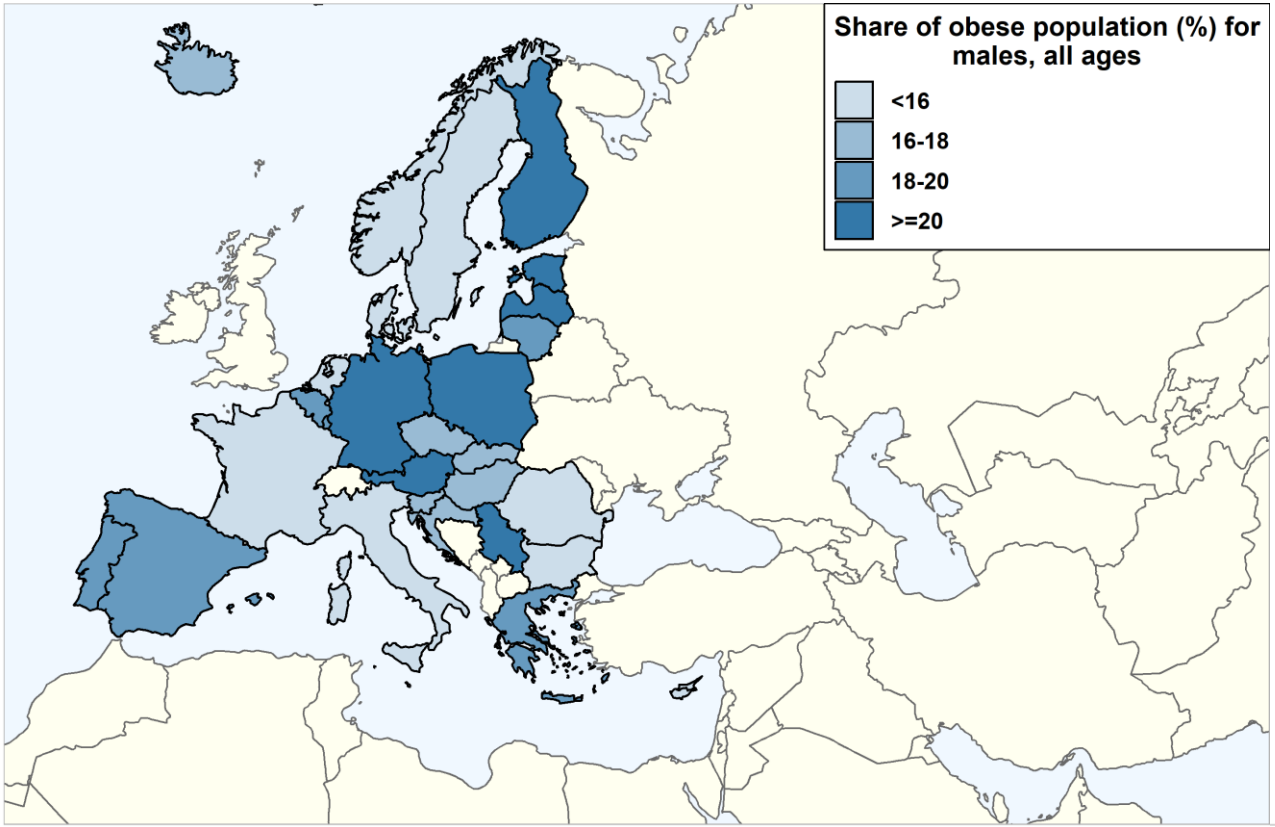
Source: Eurostat.
https://eatlas.escardio.org/

Share of obese population (%) for males, all ages, 2019



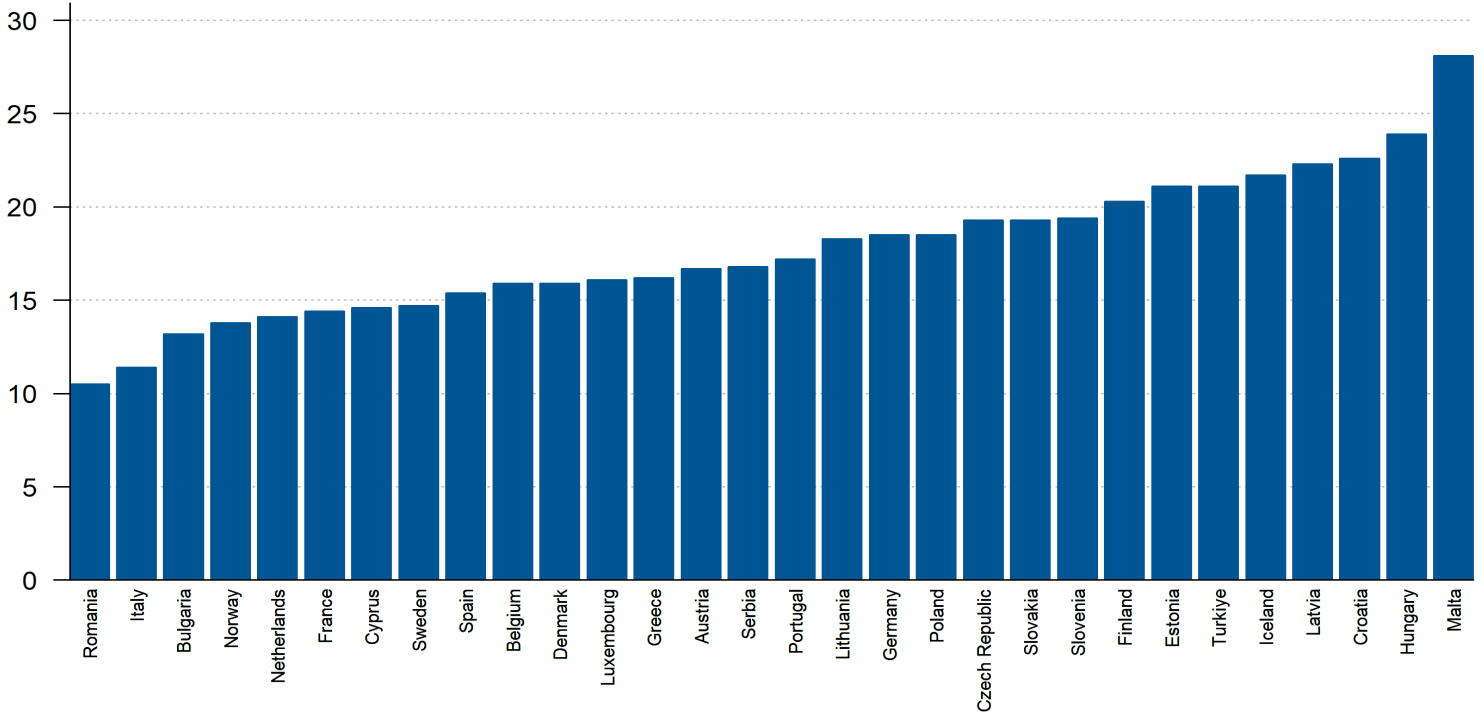
Source: Eurostat.
https://eatlas.escardio.org/

Share of obese population (%) for males, all ages, 2019



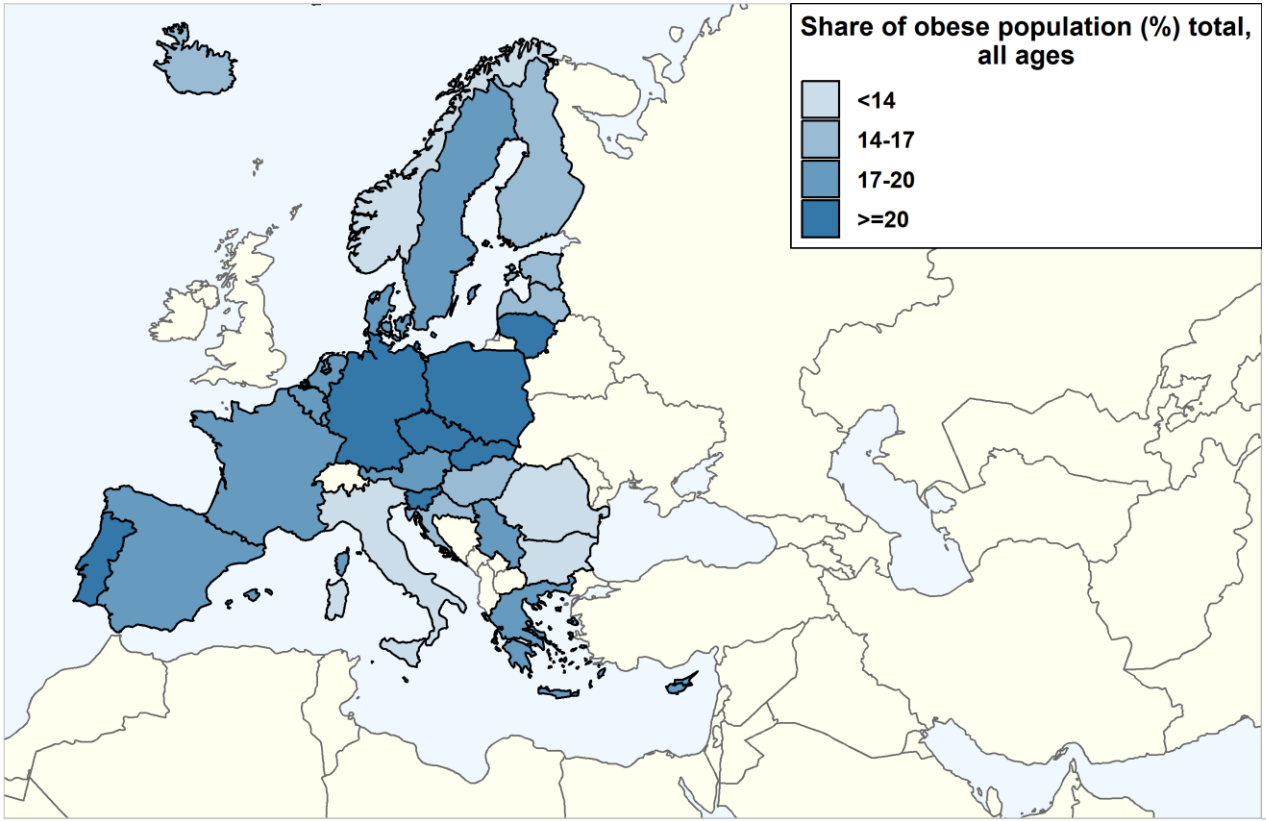
Source: Eurostat.
https://eatlas.escardio.org/

Share of obese population (%) total, all ages, 2019



Source: Eurostat.
https://eatlas.escardio.org/

Share of obese population (%) total, all ages, 2019



Source: Eurostat.
https://eatlas.escardio.org/

Diabetes prevalence (% of population ages 20 to 79) , 2021

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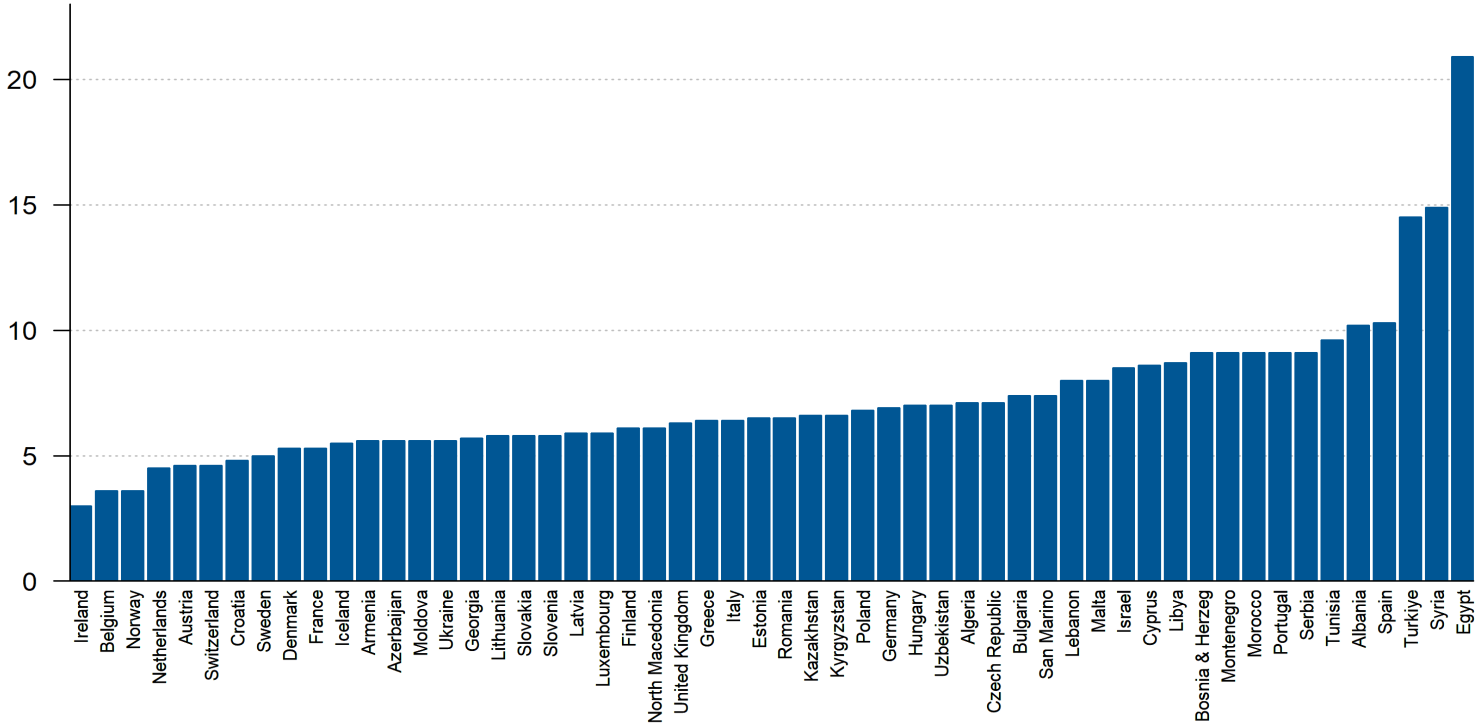
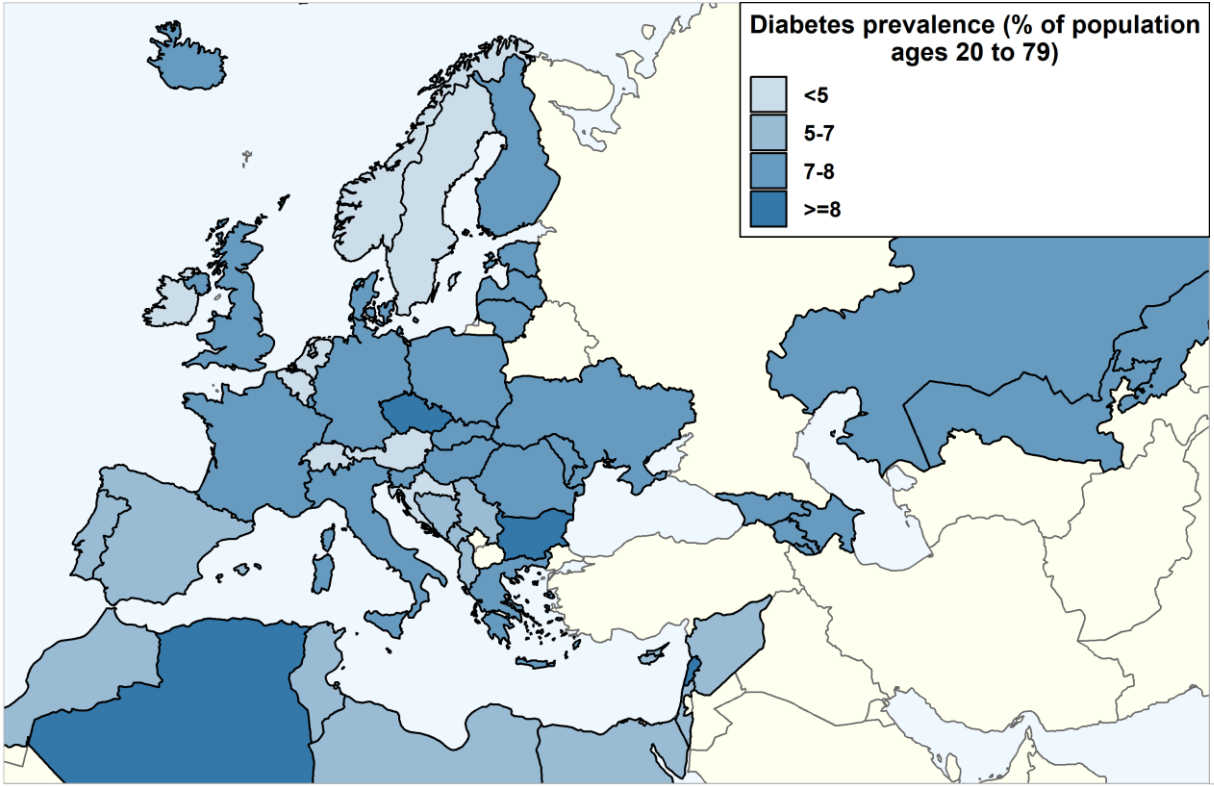


Source: World Bank.
https://eatlas.escardio.org/

Diabetes prevalence (% of population ages 20 to 79), 2021



Source: World Bank.
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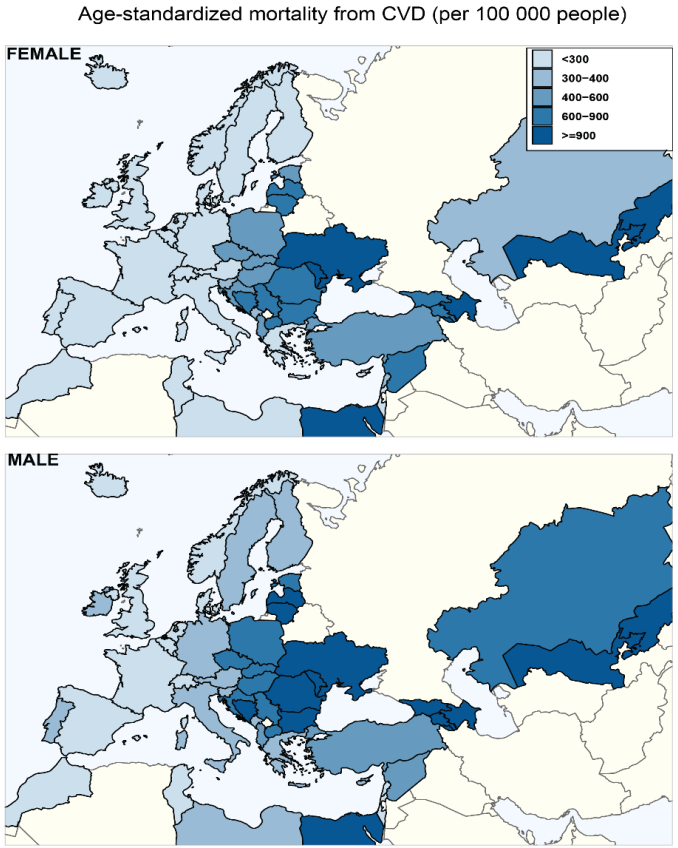
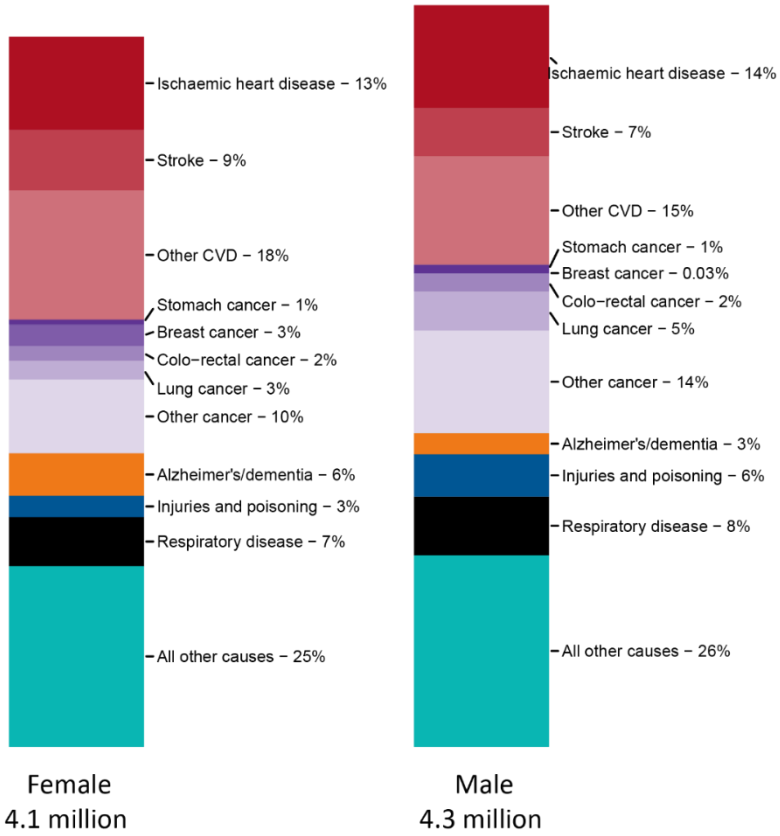
CVD Mortality

Age-standardized CVD mortality per 100,000



Source: Based on raw detailed mortality data from the WHO Mortality Database.
https://eatlas.escardio.org/

Causes of death in females and males



Source: Based on raw detailed mortality data from the WHO Mortality Database.
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Age-standardized mortality rate per 100 000 due to cardiovascular disease (CVD), ischaemic heart disease (IHD) and stroke stratified by sex and national income status.

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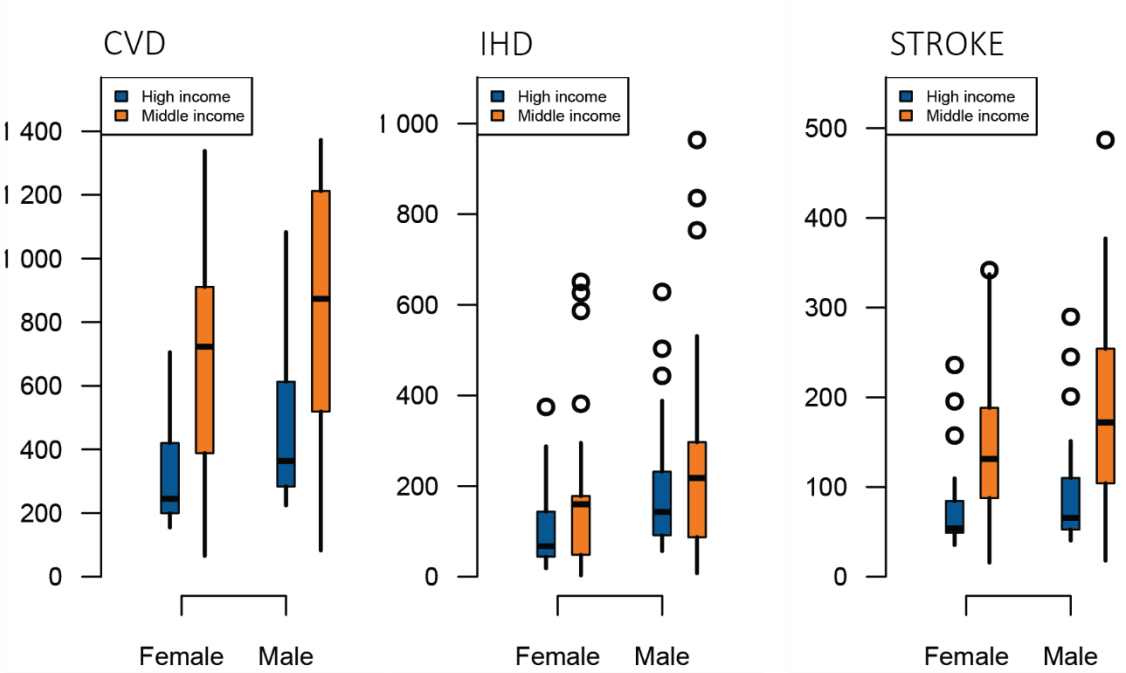
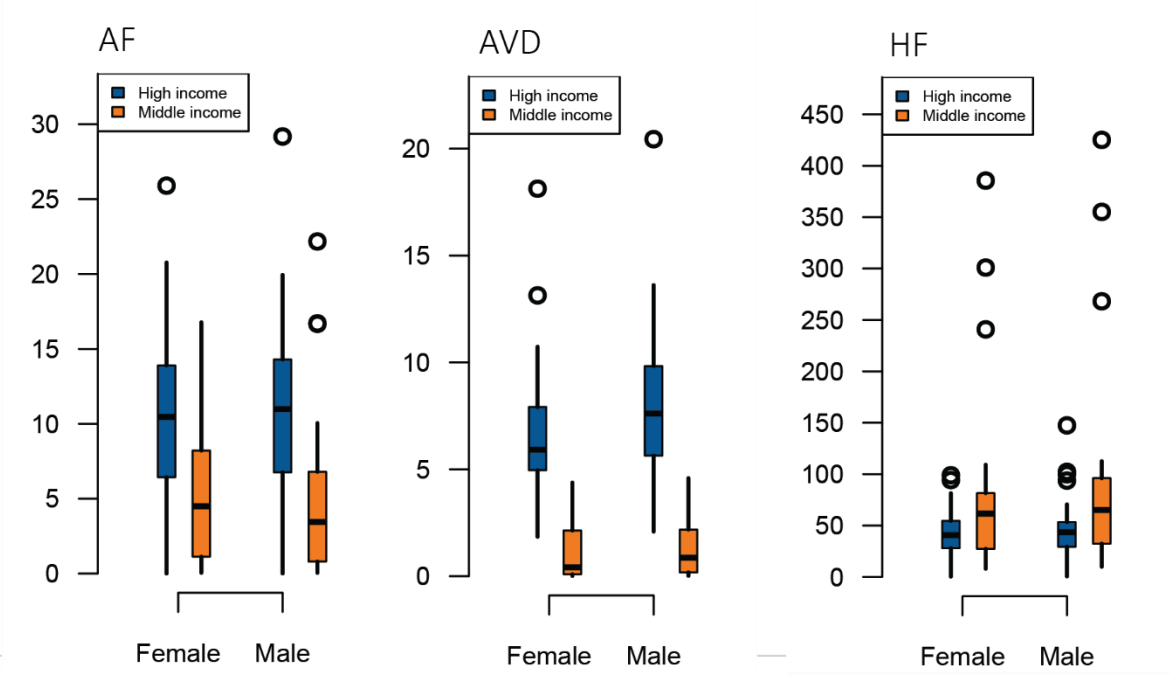


Source: Based on raw detailed mortality data from the WHO Mortality Database.
https://eatlas.escardio.org/

Age-standardized mortality rate per 100 000 due to atrial fibrillation (AF), non-rheumatic calcific aortic valve disease (AVD), and heart failure (HF) stratified by sex and national income status.



Source: Based on raw detailed mortality data from the WHO Mortality Database.
https://eatlas.escardio.org/

Legal Mentions

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- Use of the data from the Institute of Health Metrics and Evaluation (IHME).

The IHME data is made available under : http://ghdx.healthdata.org/gbd-results-tool

- Use of the data from the Organization for Economic Co-operation and Development (OECD).

The OECD data is made available under the : https://stats.oecd.org/index.aspx?DataSetCode

Abbreviations

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Abbreviations

BMI	Body Mass Index
CT	Computed Tomography
CHE	Current health expenditure
CHI	Compulsory Health Insurance
DALY	Disability-Adjusted Life Years
ESC	European Society of Cardiology
EP	Electrophysiology Procedures
GGHE-D	Domestic General Government Health Expenditure
GDP	Gross domestic product
ICD	Implantable Cardioverter Defibrillator
LVAD	Left Ventricular Assist Devices
OOPs	Out-of-pocket payments
MRI	Magnetic Resonance Imaging
YLL	Years of life lost
YLD	Years lived with disability