



The State of the World's Heart

Presented by: **Sean Taylor**

2023

World Heart Federation: Who we are

The World Heart Federation is an umbrella organization representing the **global cardiovascular community**.



To **connect, lead and inspire** the cardiovascular community



To **translate science into policy** to influence agencies & governments



To **stimulate the exchange** of information to achieve **heart health for all**



Working together for improved cardiovascular policies



We unite **+200 Members**, including heart foundations, patient groups and scientific societies, from **+100 countries**.

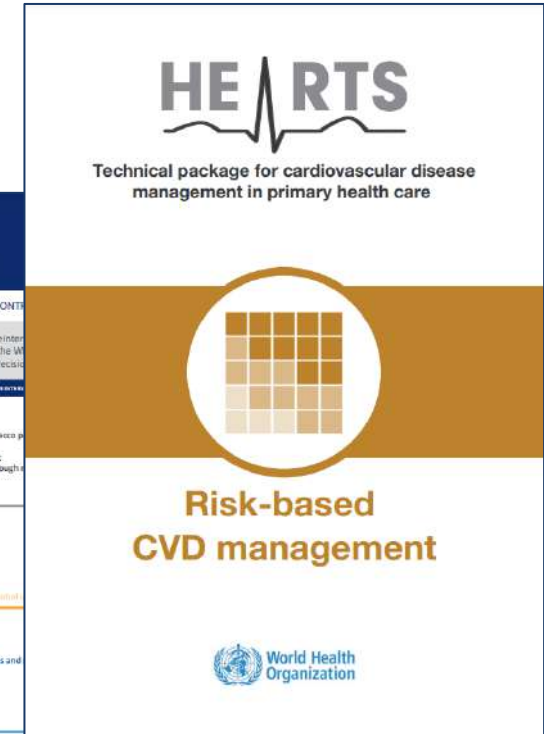
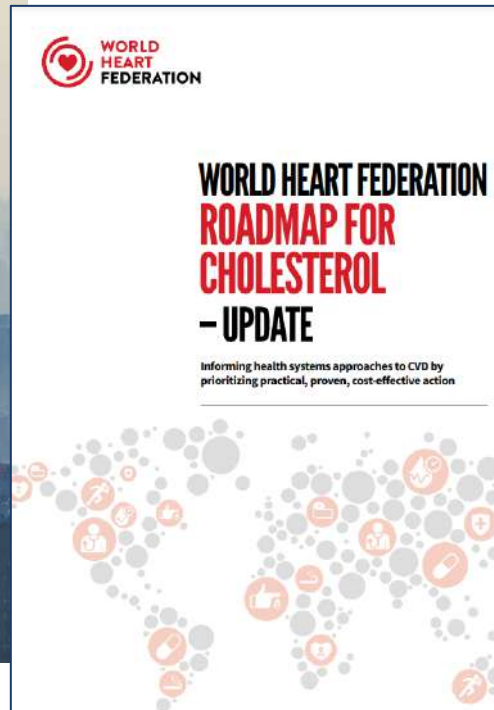
We are in official relations with WHO and advocate at the highest levels to bring CVD to the forefront of the global health agenda.



Translating science into policy



Knowing **which policies work** for improving the prevention and management of cardiovascular disease is essential...



Translating science into policy

...as is **reliable data** on the disease burden, leading risk factors, and health system in a country or region, to:

- Demonstrate the **need to act**;
- Inform **which policies and actions should be prioritized**.



The are multiple, valuable data initiatives in the cardiovascular disease space ...



ESC Atlas of Cardiology

What is the ESC Atlas of Cardiology?

Despite huge advances in cardiovascular medicine, cardiovascular disease (CVD) remains the world's biggest killer. To better understand why this is the case and how we can reduce CVD mortality, the ESC collects data across its 57 member countries through its 'Atlas of Cardiology'.

This unique compendium underlines major healthcare gaps and inequalities and provides robust data and decision-makers who can advance population health at a European level.

In order to complement the compendium by adding statistics from different sub-specialties, the ESC heart failure and interventional data, with the help of the Heart Failure Association and the EuroPercutaneous Cardiovascular Interventions. [@ESC_HFA Atlas](#), [@ESC_EAPCI Atlas](#)



The Global Burden of Disease Study 2019



© All Rights Reserved as a newspaper - ISSN 0954-6796
 Founded 1823 - Published weekly



Noncommunicable diseases (NCDs), such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are the leading cause of mortality in the world. This invisible epidemic is an under-appreciated cause of poverty and hinders the economic development of many countries. The burden is growing – the number of people, families and communities afflicted is increasing. Common, modifiable risk factors underlie the major NCDs. They include tobacco, harmful use of alcohol, unhealthy diet, insufficient physical activity, overweight/obesity, raised blood pressure, raised blood sugar and raised cholesterol. The NCD threat can be overcome using existing knowledge. The solutions are highly cost-effective. Comprehensive and integrated action at country level, led by governments, is the means to achieve success.

Total NCD mortality
40 million

of the 56 million global deaths in 2015 were due to NCDs

Premature NCD mortality
48%

of NCD deaths in low- and middle income countries in 2015 occurred before the age of 70

Risk factors
80%

of premature heart disease, stroke and diabetes can be prevented



About NCD-RisC

Latest Publications

NCD-RisC in the News

The World Heart Observatory

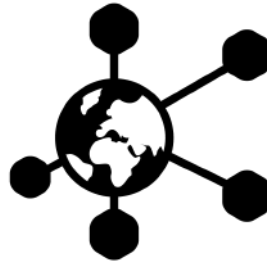
A first global data hub for CVD



Our goals:



**Inform evidence-based
decision-making for
health at population level**

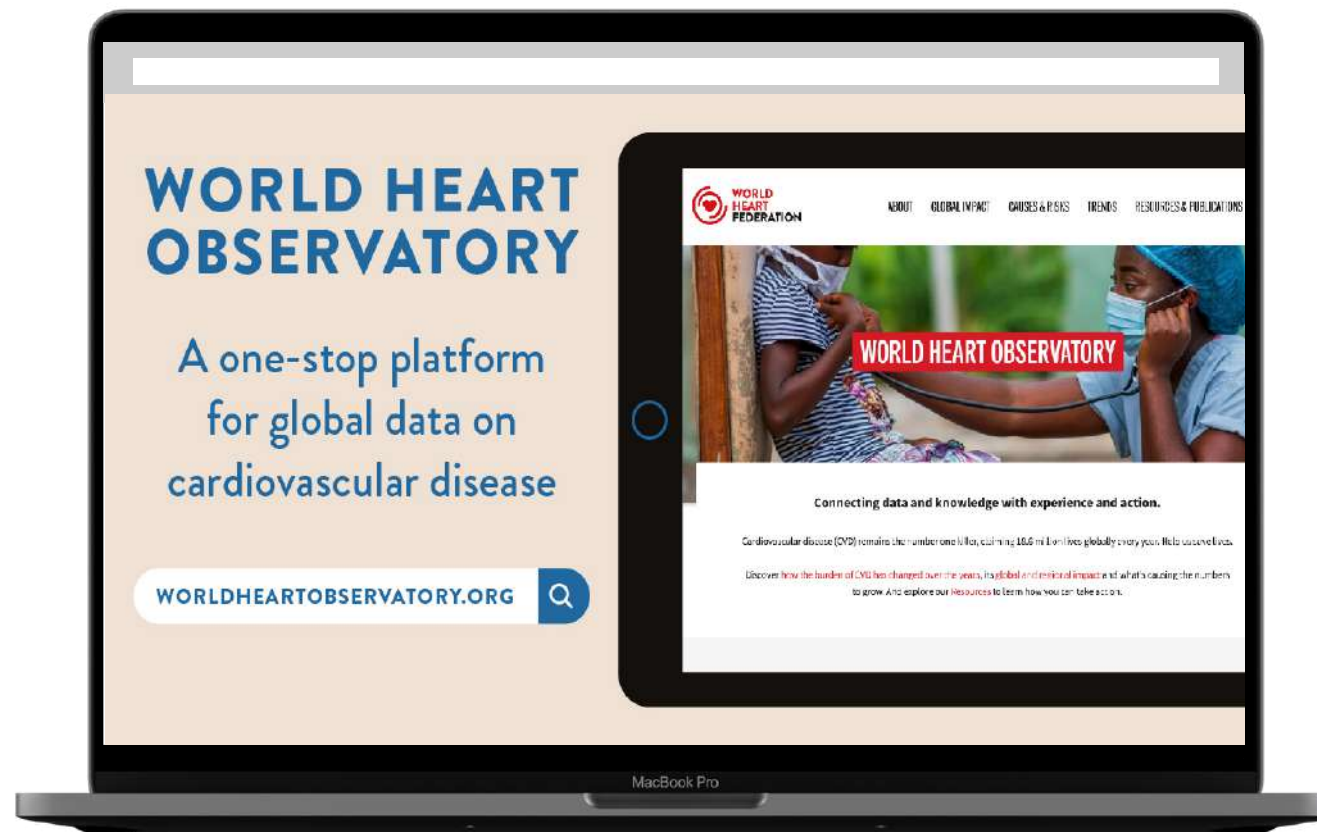


**Build data capacity
among national and
regional organizations**



**Create a forum for
research and debate for
cardiovascular health**

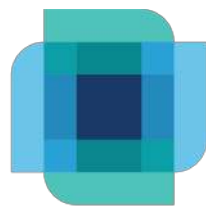
A one-stop platform for data on CVD



The World Heart Report 2023



“This first-ever World Heart Report is aimed at **equipping policymakers and advocates** around the world with the **information needed to help reduce CVD deaths and accelerate progress in cardiovascular health.**”



NCD
SYMPOSIUM

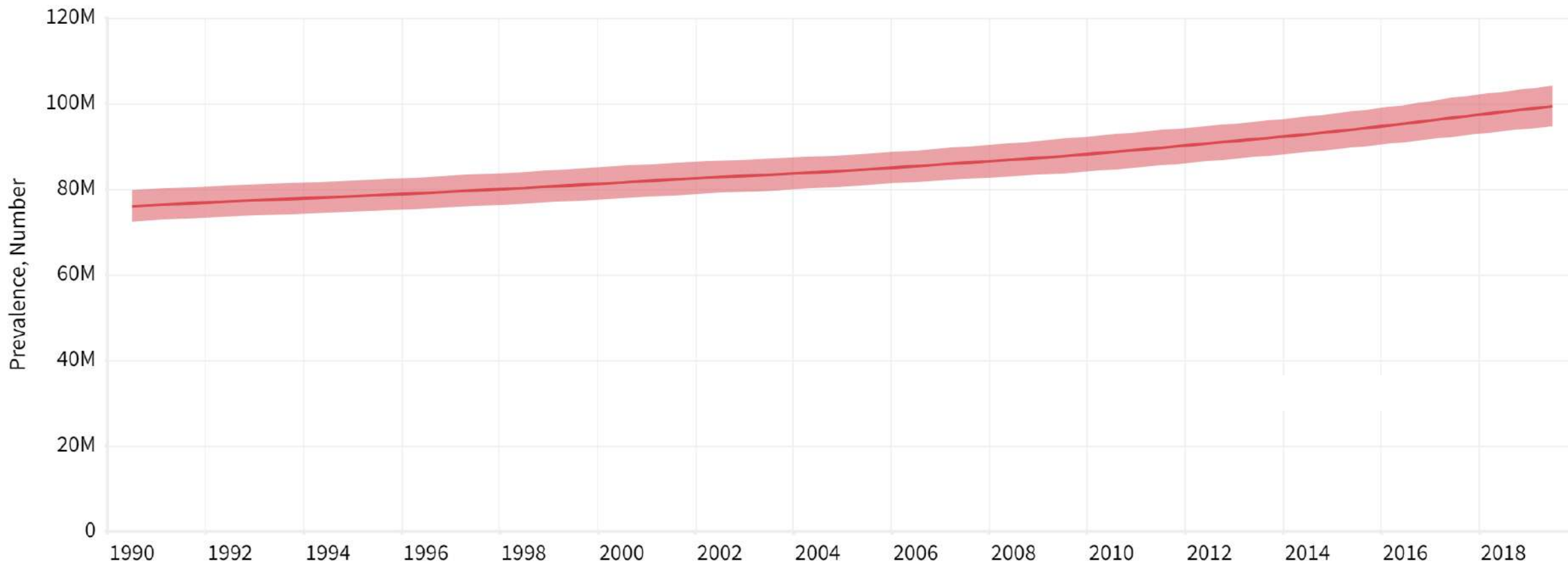
Cardiovascular Disease Globally and in Europe: Some key findings

The challenge: 100 million people living with CVD in Europe



Cardiovascular disease in Both Sexes, Prevalence Number, 1990 - 2019

European Region, All Ages



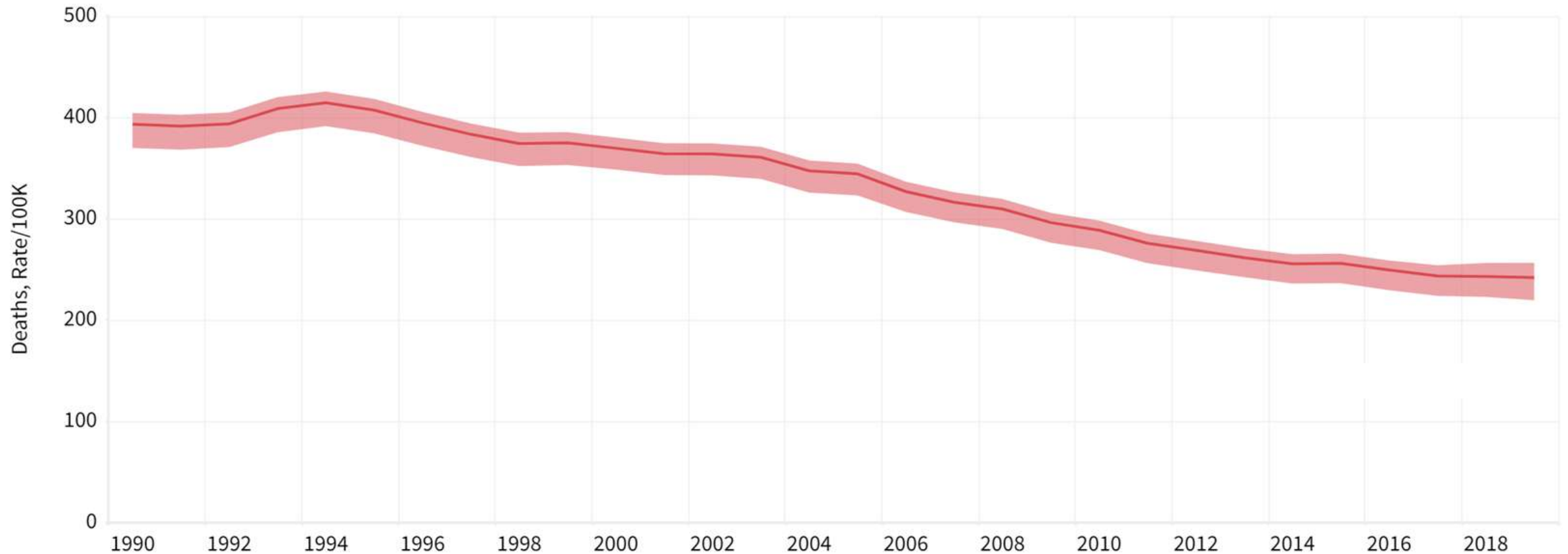
Source: [World Heart Observatory](#), IHME 2019

Progress: Falling age-standardized death rates



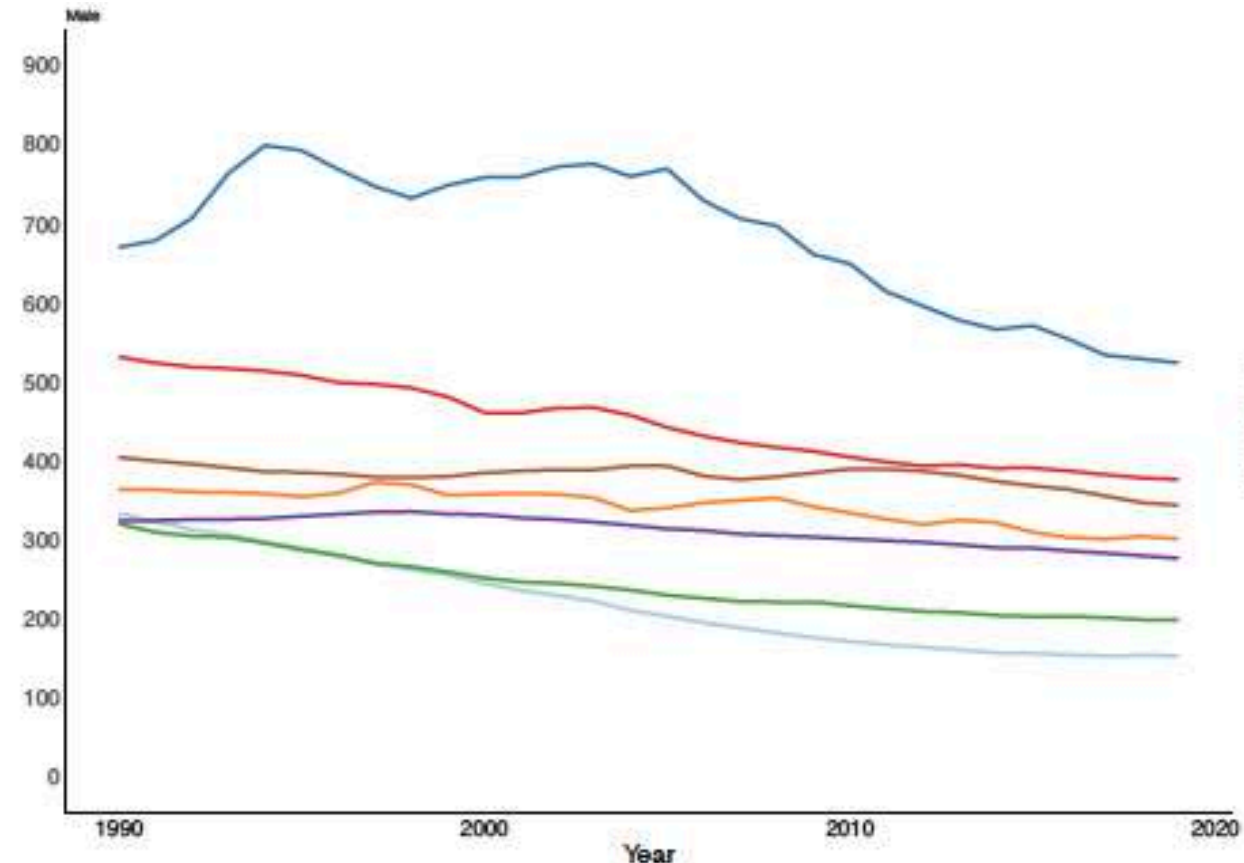
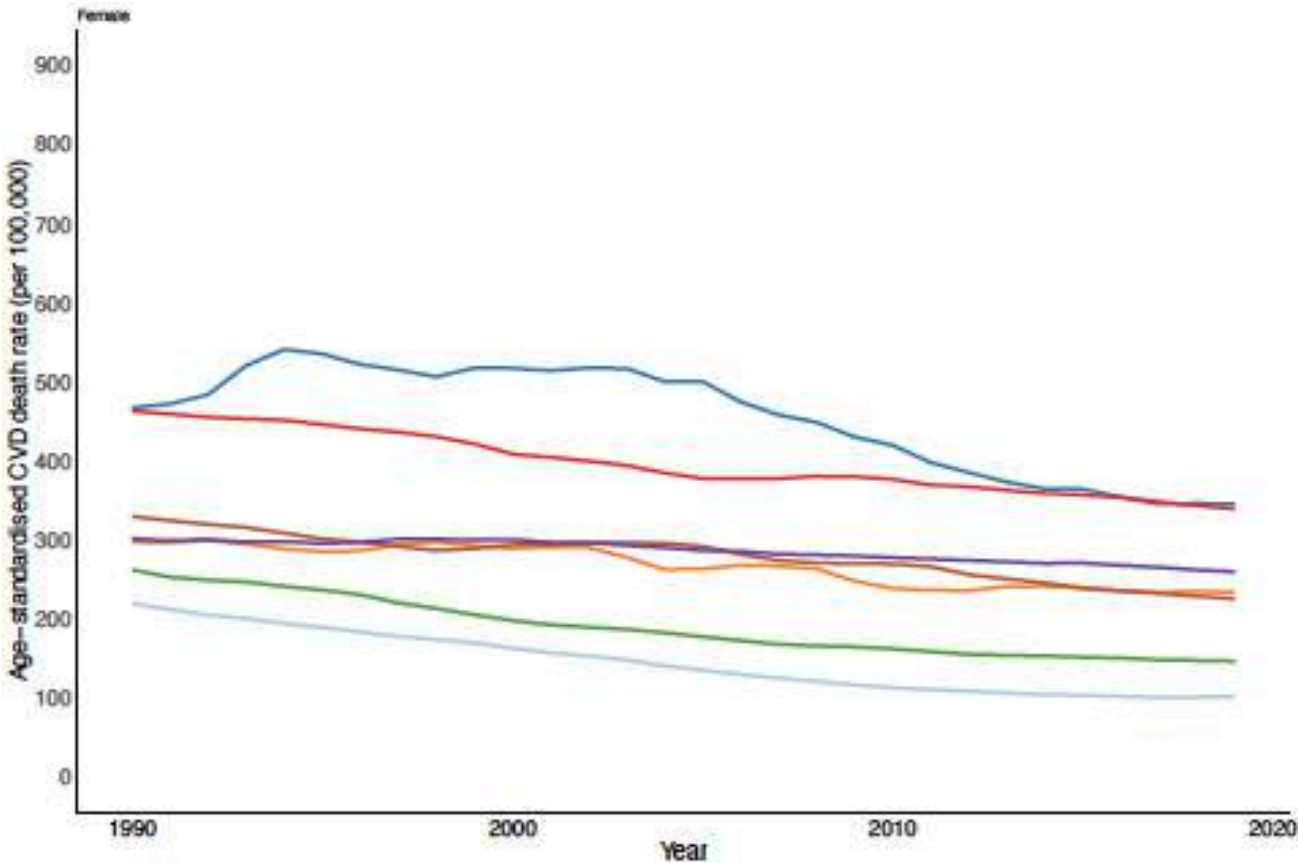
Cardiovascular disease in Both Sexes, Deaths Rate/100K, 1990 - 2019

European Region, Age-standardized



Source: [World Heart Observatory](#), IHME 2019

Age-standardized mortality by global region



- Central Europe, Eastern Europe, and Central Asia
- High-income
- Latin America and Caribbean
- North Africa and Middle East
- South Asia
- Southeast Asia, East Asia, and Oceania
- Sub-Saharan Africa

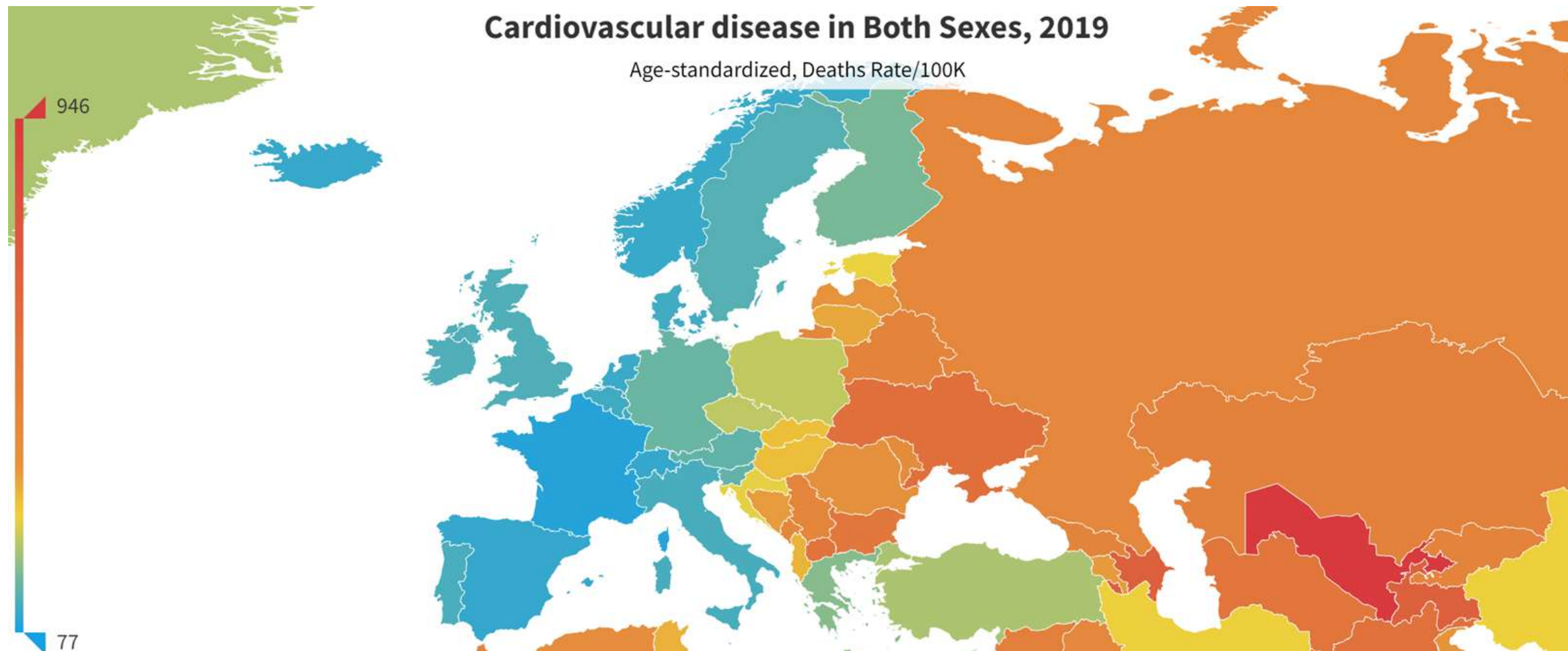
Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), IHME 2019.

Regional inequalities: higher age-standardized mortality in Central and Eastern Europe



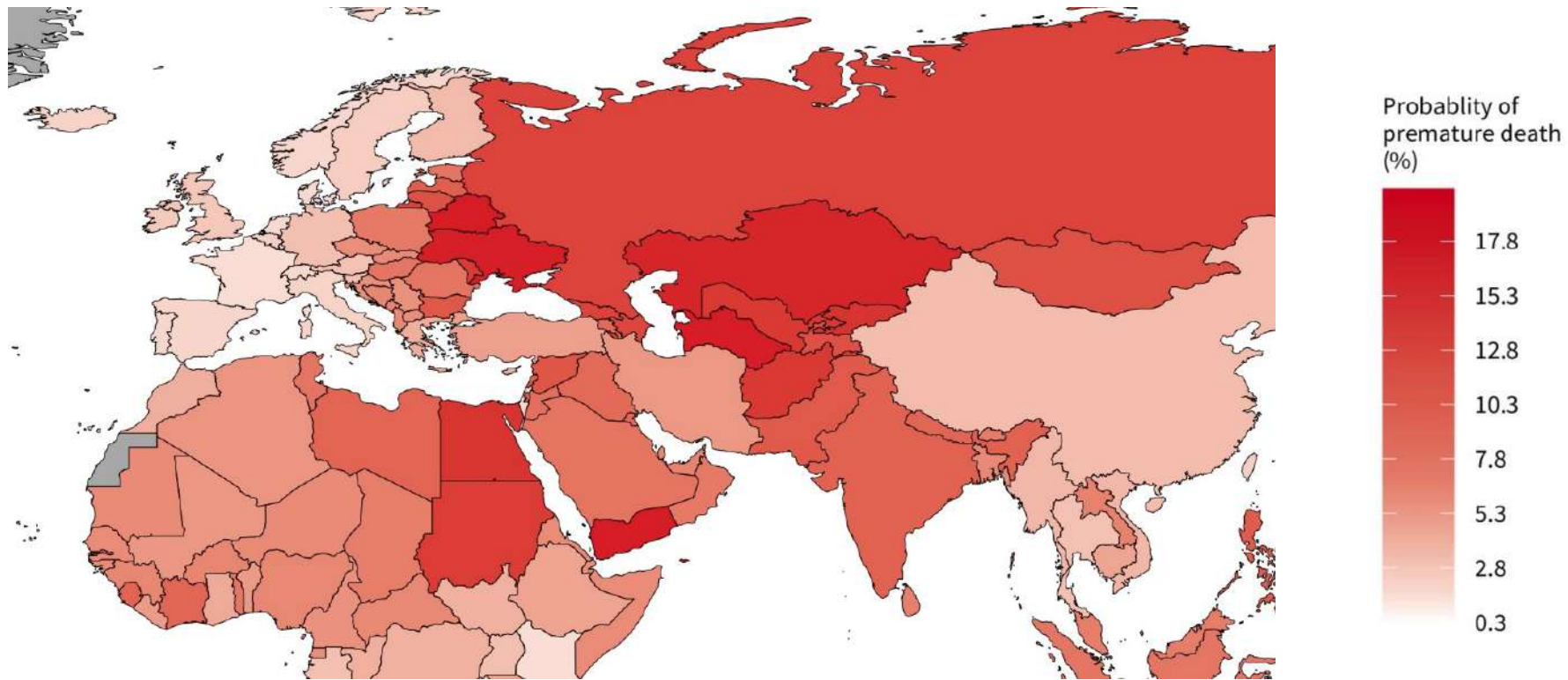
Cardiovascular disease in Both Sexes, 2019

Age-standardized, Deaths Rate/100K



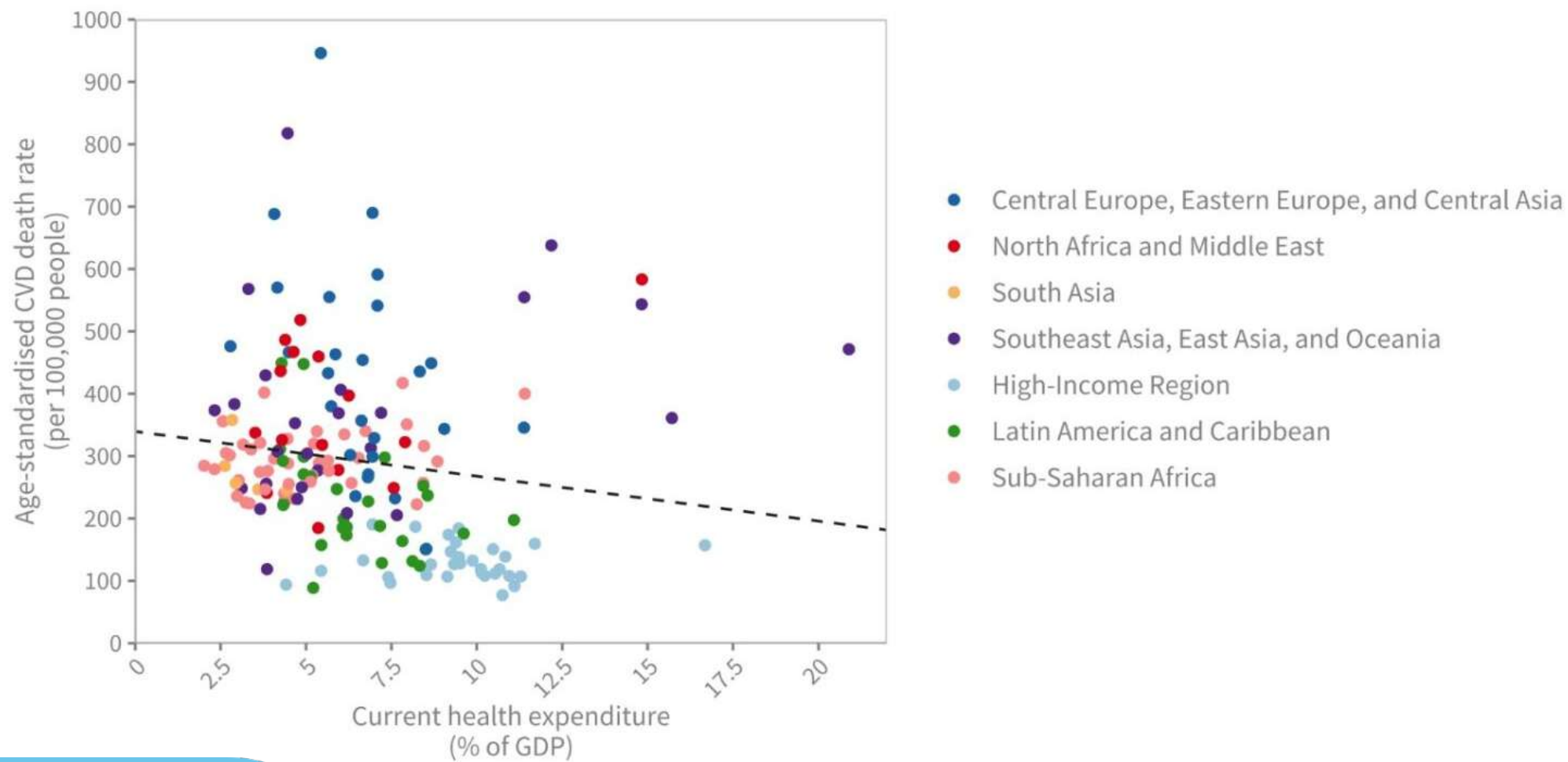
Source: [World Heart Observatory](#), IHME 2019

Regional inequalities: higher premature mortality in Central and Eastern Europe



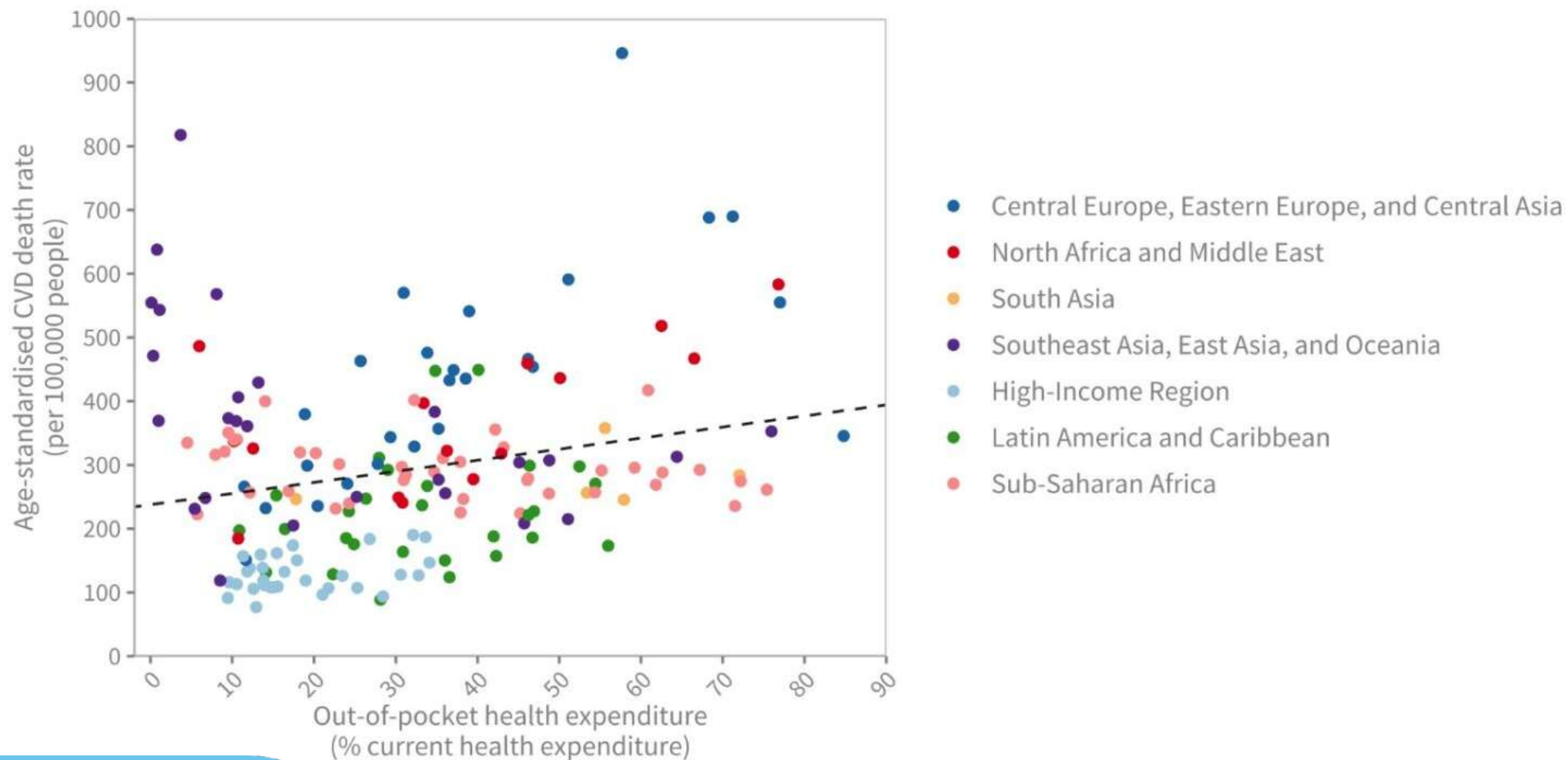
Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), NCD Countdown 2030

Age-standardized mortality versus investment in healthcare



Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), IHME 2019 and WHO 2021.

Age-standardized mortality versus Out-of-pocket expenditure on healthcare



Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), IHME 2019 and WHO 2021.

Proportion of countries spending at least 5% of GDP on healthcare



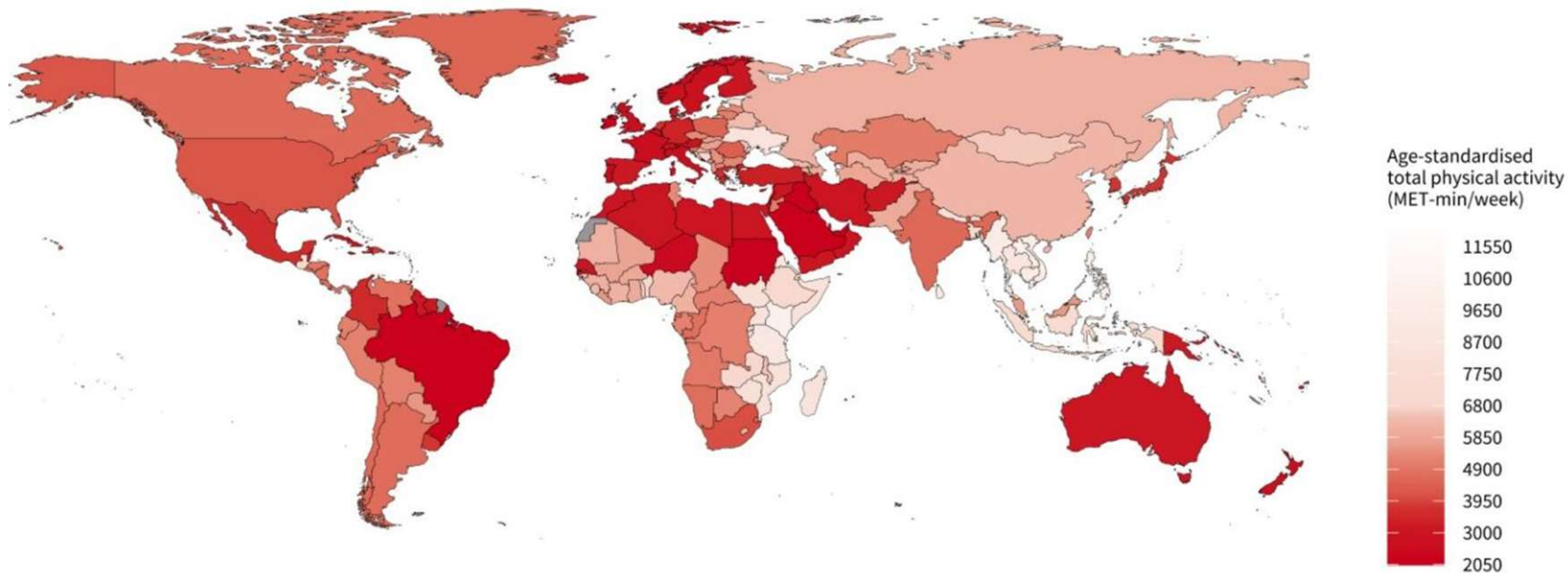
Region	%
High-Income	97
Central Europe, Eastern Europe, and Central Asia	85
Latin America and Caribbean	71
North Africa and Middle East	53
Southeast Asia, East Asia, and Oceania	50
Sub-Saharan Africa	45
South Asia ¹⁴	0

Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), WHO 2021.

MODIFIABLE RISK FACTORS CONTRIBUTING TO CVD MORTALITY IN 2021:

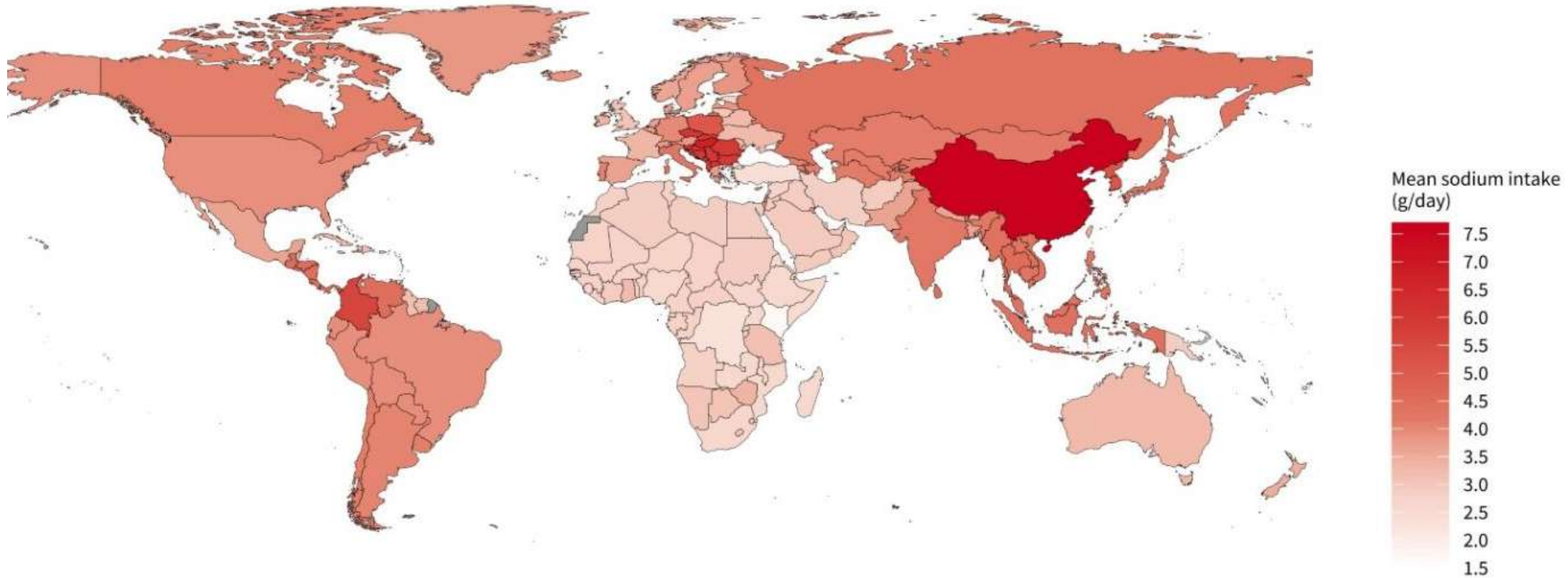
- Raised blood pressure (10.8 million deaths)
- Elevated LDL cholesterol – one type of blood lipid (3.8 million deaths)
- High fasting plasma glucose (2.3 million deaths)
- Air pollution (4.8 million deaths)
- High body-mass index (2 million deaths)
- Tobacco use (3.0 million deaths)
- Low physical activity (397,000 deaths)

Comparatively high CVD risk-factors in Europe: Low physical activity in men and women



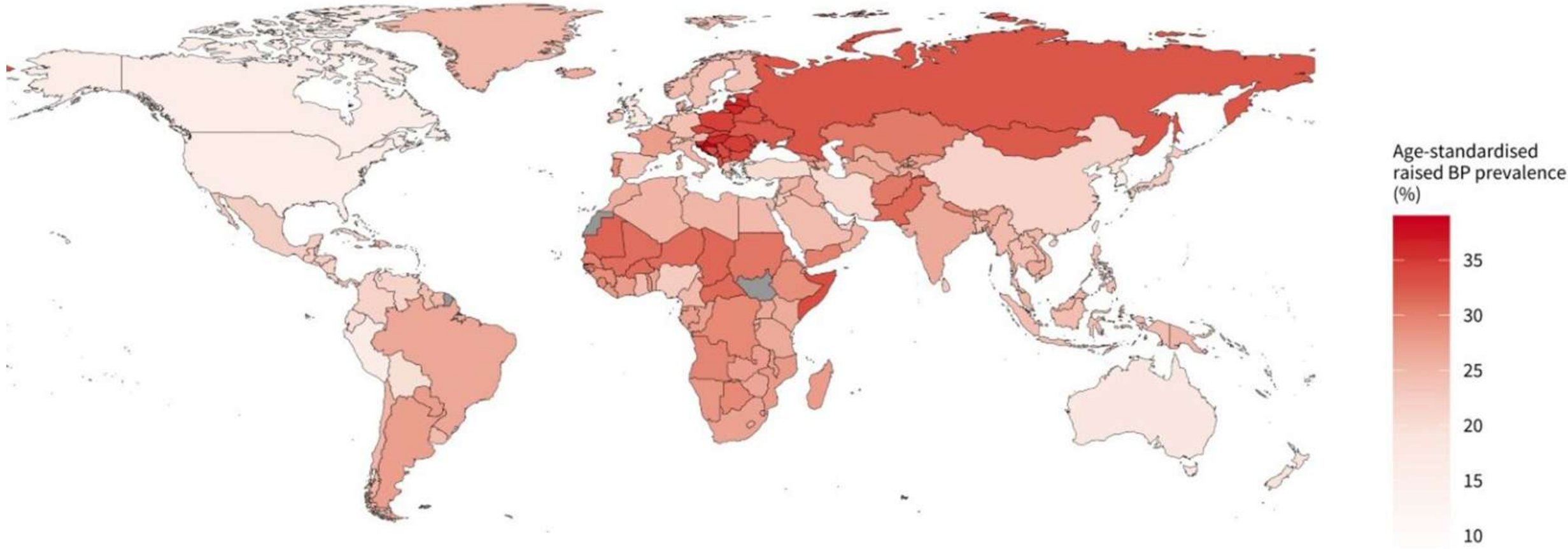
Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), IHME 2019.

Comparatively high CVD risk-factors in Europe: High sodium intake in men and women in Central and Eastern Europe



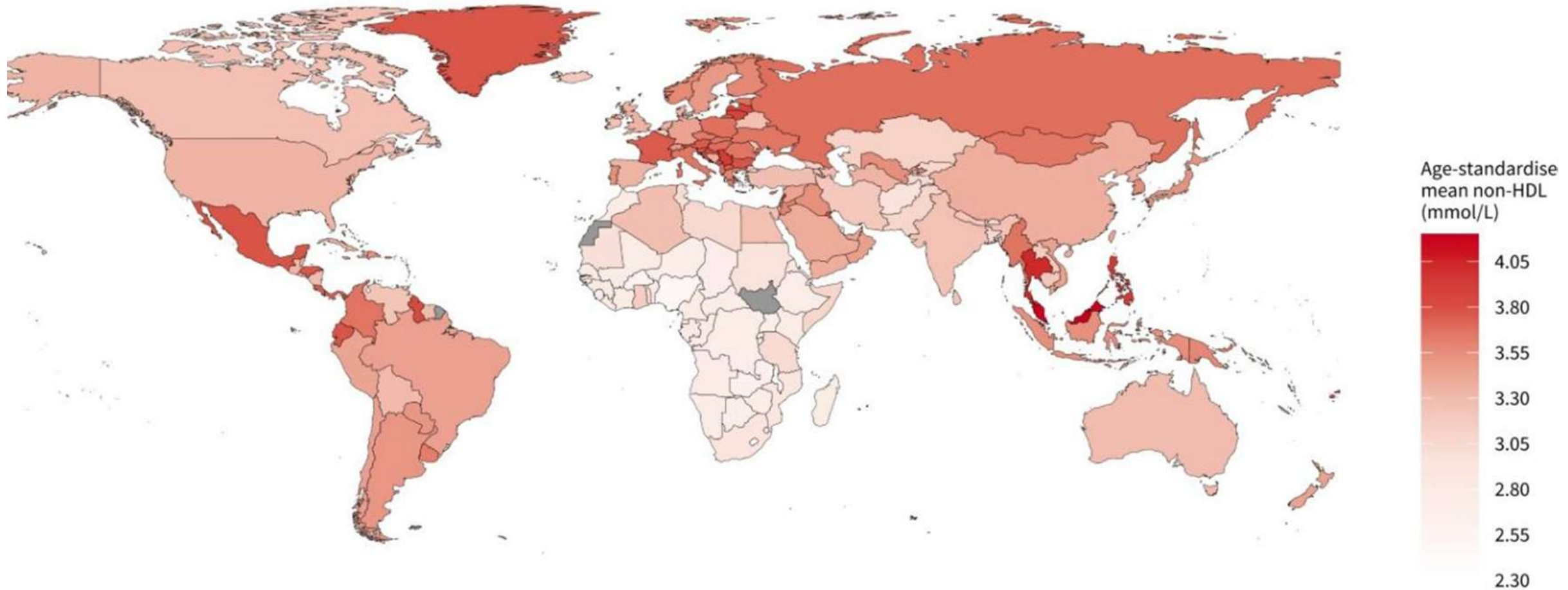
Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), IHME 2019.

Comparatively high CVD risk-factors in Europe: Raised blood pressure in men in Central and Eastern Europe



Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), NCD-RisC 2015.

Comparatively high CVD risk-factors in Europe: Non-HDL cholesterol in men

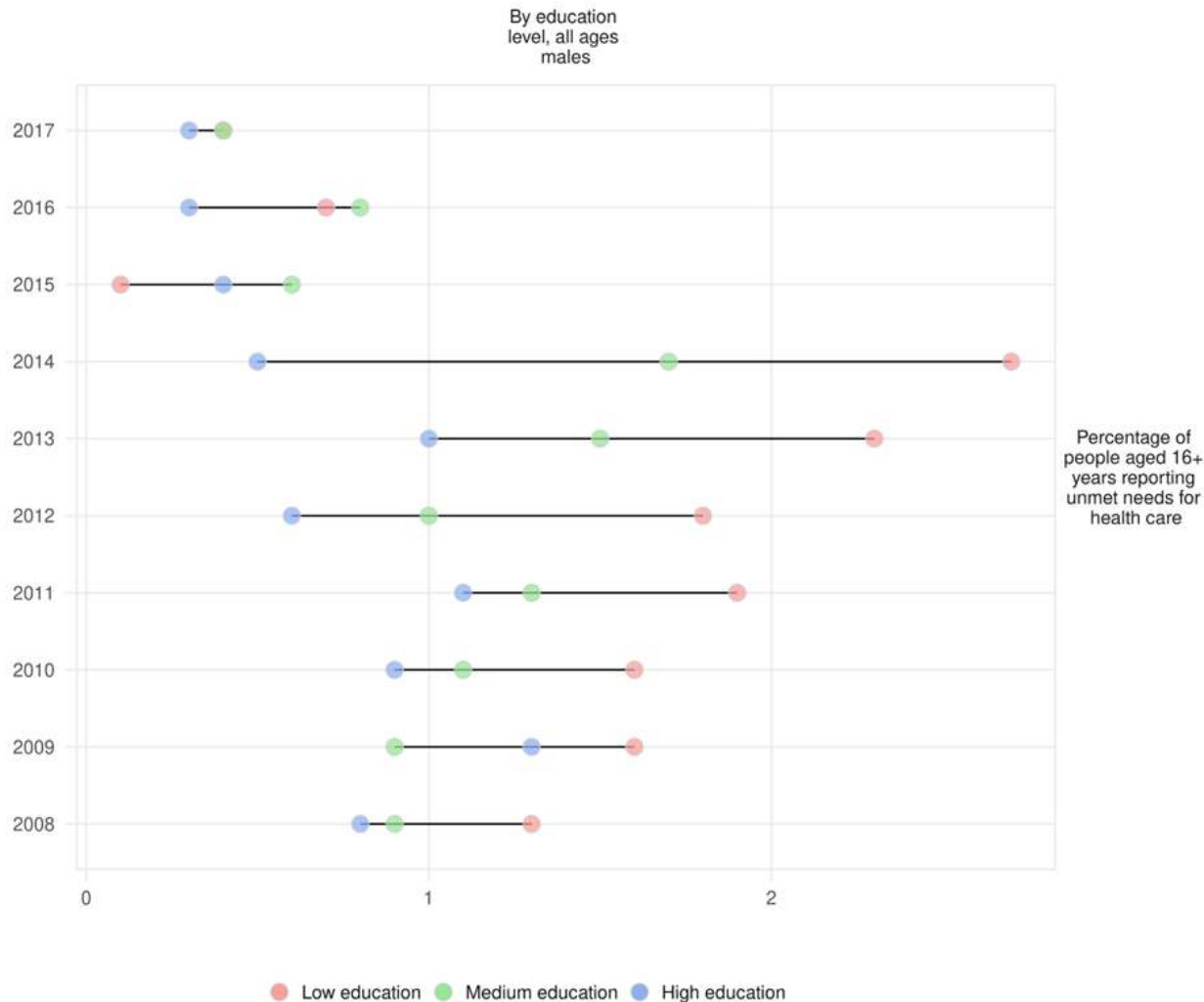


Source: [World Heart Report 2023: Confronting the World's Number One Killer](#), NCD-RisC 2018.

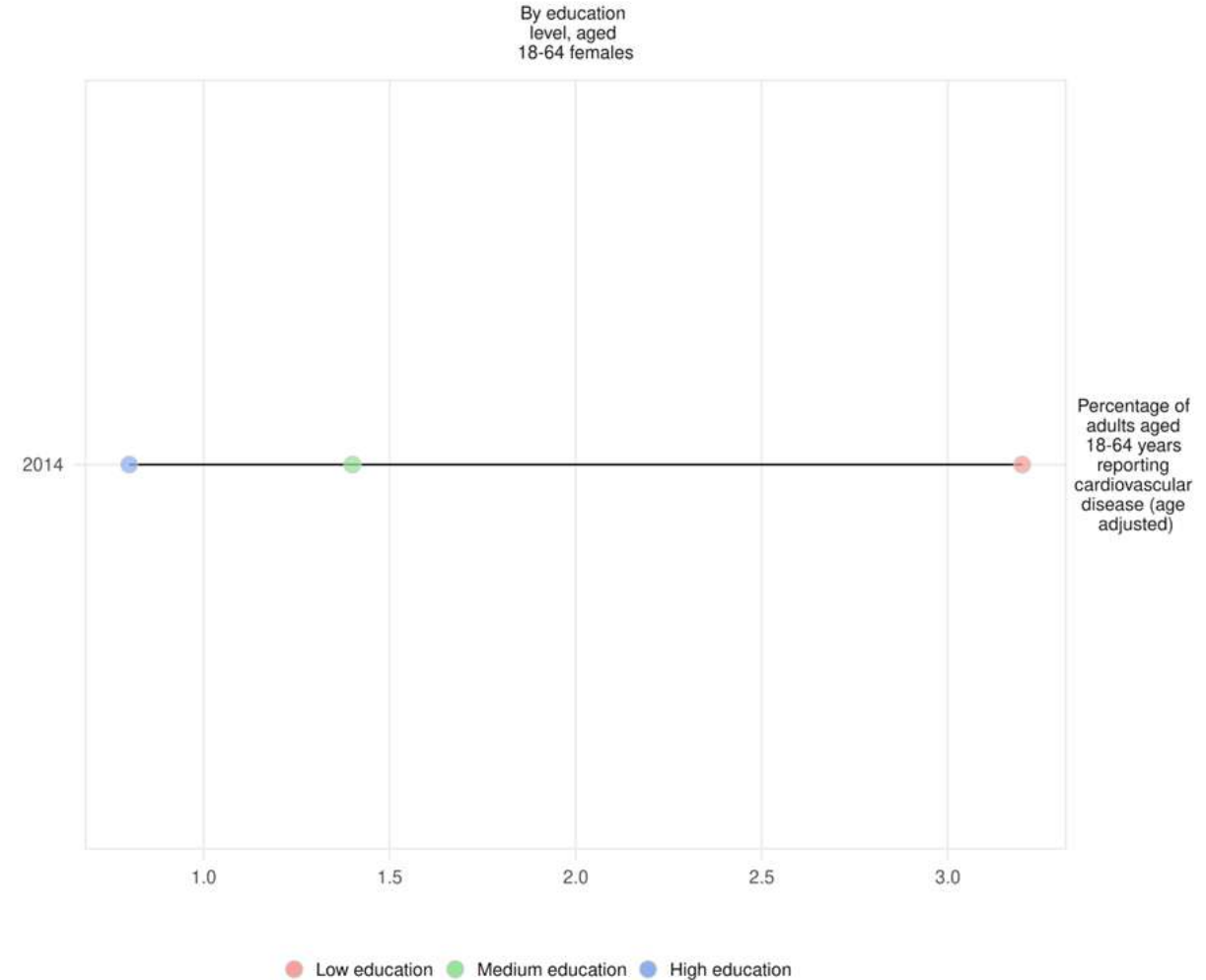
Inequalities within countries: Health needs and cardiovascular disease by education level

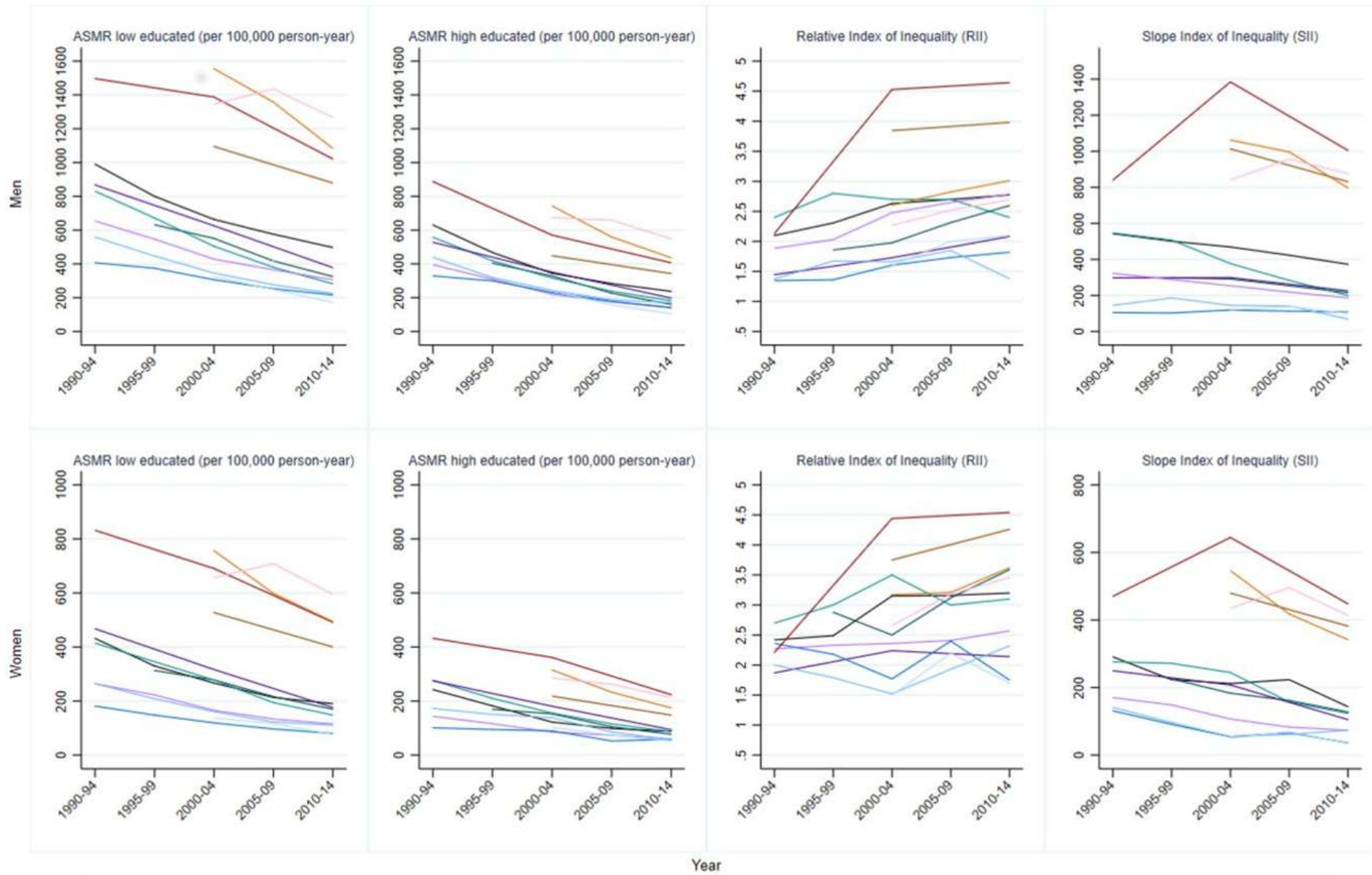


Percentage of people aged 16+ years reporting unmet needs for health care - Netherlands



Percentage of adults aged 18-64 years reporting cardiovascular disease (age adjusted) - Portugal





Significant reductions in age-standardized mortality are observed across all education levels in Europe, but reductions have been quicker in the highest educated groups, increasing relative inequalities.

Source: Girolamo et al, Progress in reducing inequalities in cardiovascular disease mortality in Europe. <http://dx.doi.org/10.1136/heartjnl-2019-315129>

Inequalities within countries: Sex-differences in CVD and care provided

1

Data gaps

Women are under-represented in CVD research, leading to knowledge gaps about tailored treatment and risk factors that are predominant and specific to women.

2

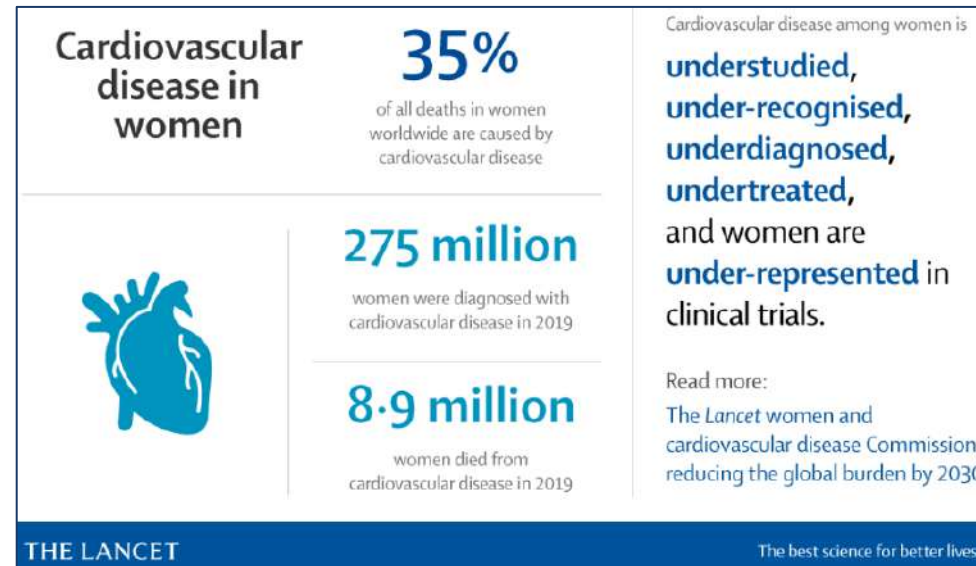
Differences in awareness and education

Studies have shown low awareness among women of their CVD risk. Clinical education of sex differences in CVD are also needed to improve care.

3

Differences in care

Women may be less likely to receive a correct diagnosis when presenting with symptoms of MI, and less likely to receive reperfusion treatment and be prescribed guideline-directed medications for secondary prevention.



Source: [The Lancet Women and CVD Commission](#)

Mapping key CVD policies across countries



THE WHF POLICY INDEX



The WHF Policy Index Explained



What it is

An analysis of the level to which national governments have implemented eight policies that are critical for CVD health.



What it does

Combines data on whether the following policies/measures have been implemented in a country:

- 1) National tobacco control programmes
- 2) Action plan for CVDs
- 3) Operational Unit in Ministry of Health with responsibility for NCDs
- 4) Guidelines for the management of CVDs
- 5) Action plan to reduce physical inactivity
- 6) Action plan to reduce unhealthy diet related to NCDs
- 7) Action plan to reduce the harmful use of alcohol
- 8) Availability of CVD drugs (e.g., ACE inhibitors, aspirin, and Beta blockers) in the public health sector.

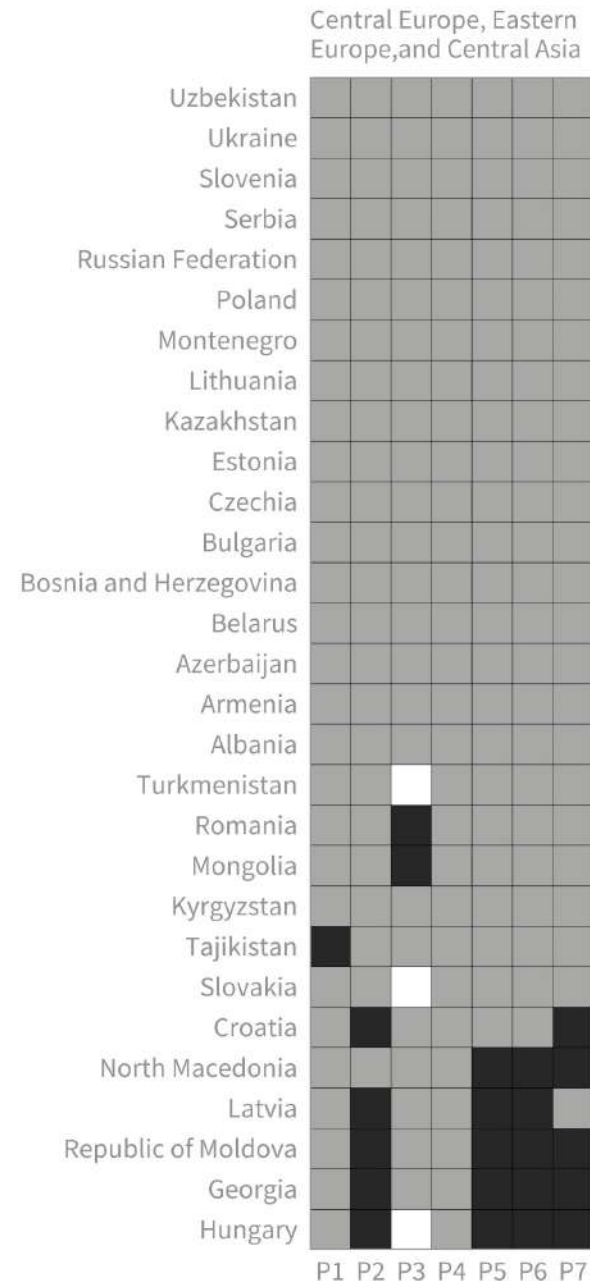


How it's calculated

For each policy implemented, a score of 1 is assigned. The Index is calculated by adding up each country's overall score, ranging from 0 (none of the policies are implemented) to 8 (all the policies are implemented). The source of data for each country is the WHO Global Health Observatory.

The WHF Policy Index: Some insights

- The largest proportion of countries with the maximum score (8) were in the **South Asia region (80%)**, the **Central Europe, Eastern Europe, and Central Asia region (68%)**, and the **High-Income (62%)** region.
- Over **50% of countries in the Sub-Saharan Africa region** do not have general availability of CVD drugs, a CVD national plan or an NCD Unit in the MoH.
- Globally, **64% of countries have at least 7 out of 8 policies** in place.

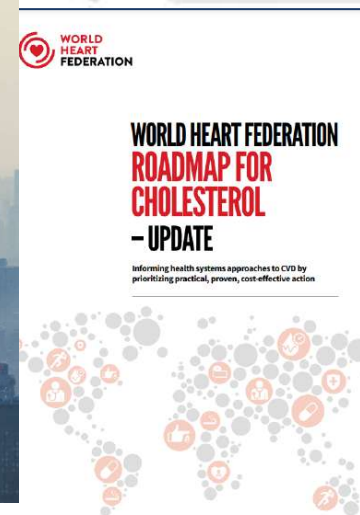
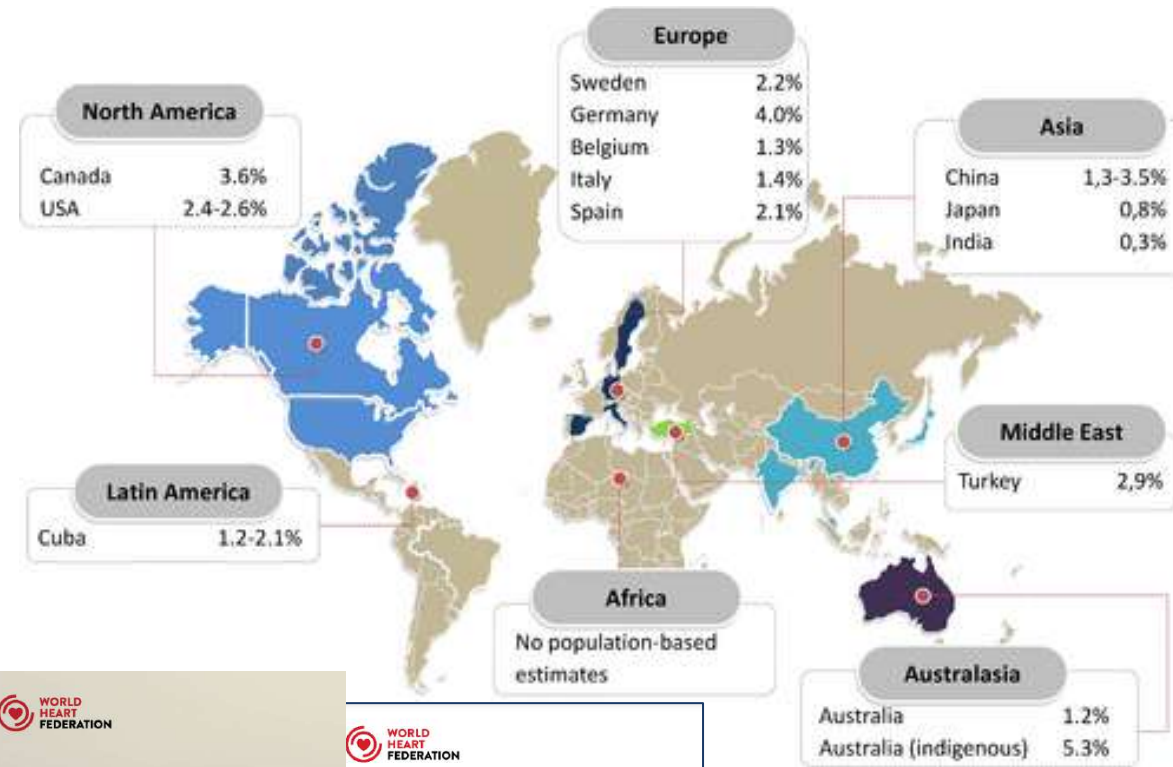


- P1** – National tobacco control programmes
- P2** – Action plan for CVDs
- P3** – Operational Unit in MoH with responsibility for CVDs
- P4** – Guidelines for management of CVDs
- P5** – Action plan to reduce physical inactivity
- P6** – Action plan to reduce unhealthy diet related to CVDs
- P7** – Action plan to reduce harmful use of alcohol

No
 Yes
 Unknown

Tackling the CVD burden: Priorities for action

- All stakeholders should continue efforts to **improve data** for CVDs, relevant health policy indicators, and local implementation barriers and strategies.
- Guided by the **burden of disease** and **predominant risk factors**, and supported by **technical and policy tools**, countries should implement policies to combat CVDs.
- Implementation of policies needs to be **adequately resourced and monitored for progress**.



Source: Groenewegen, A., Rutten, F.H., Mosterd, A. and Hoes, A.W. (2020), Epidemiology of heart failure. Eur J Heart Fail, 22: 1342-1356. <https://doi.org/10.1002/ejhf.1858>

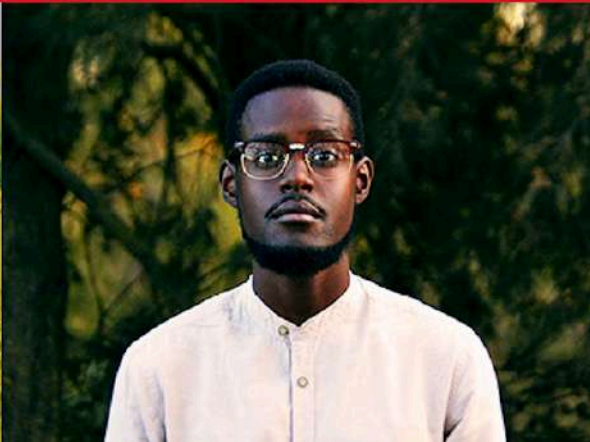
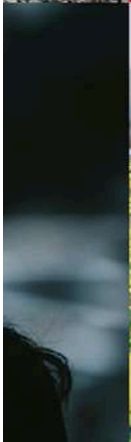
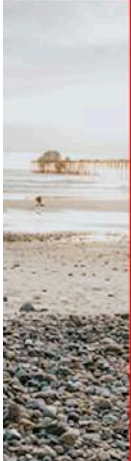
Tackling the CVD burden: Priorities for action

- **National CVD plans**, including clear actions and targets for primary, secondary and tertiary prevention of CVD, should be developed and implemented them appropriate levels of investment.
- Plans should carefully consider **inequalities** and **implementation barriers** specific to the national context.
- Development of **first dedicated national CVD plans in Europe in Spain and Poland** serve as good examples for other countries.





**WORLD
HEART
DAY** 29 SEP



BEATING TOGETHER

World Heart Day is a reminder to everyone around the world to take care of their hearts. This year's campaign focuses on the essential step of knowing our hearts first. Because when we know more, we can take better care.

USE  KNOW 

UNITING all people from all countries and backgrounds in the fight against CVD

DRIVING international action

ENCOURAGING heart-healthy living

BELIEVING in a world where heart health is a fundamental human right





What scares you more?
 Shark attacks kill 6 people every year globally.
 Cardiovascular disease kills 18.6 million people.

USE ♥ KNOW ♥


WORLD HEART DAY 29 SEP | #UseHeart | #WorldHeartDay
 WORLDHEARTDAY.ORG

IN PARTNERSHIP WITH






ARE YOU AT RISK OF ♥?

USE ♥ KNOW ♥

When you know your numbers – blood pressure, cholesterol, blood sugar, BMI – you can take control of your health.


WORLD HEART DAY 29 SEP | #UseHeart | #WorldHeartDay
 WORLDHEARTDAY.ORG

IN PARTNERSHIP WITH







USE ♥ KNOW ♥

Cardiovascular disease (CVD) is the leading cause of death worldwide. By knowing your numbers, you can know whether your heart is healthy or at risk for heart disease.


WORLD HEART DAY 29 SEP | #UseHeart | #WorldHeartDay
 WORLDHEARTDAY.ORG

IN PARTNERSHIP WITH








Thank you