

Determinants of health

What keeps population healthy?



determinant

/di'tɜːmɪnənt/

See definitions in:

All

Biology

Mathematics

noun

noun: **determinant**; plural noun: **determinants**

1. a factor which decisively affects the nature or outcome of something.
"pure force of will was the main determinant of his success"
 - **BIOLOGY**
a gene or other factor which determines the character and development of a cell or cells in an organism, a set of which forms an individual's idiosyncrasy.
2. **MATHEMATICS**
a quantity obtained by the addition of products of the elements of a square matrix according to a given rule.

adjective

adjective: **determinant**

serving to determine or decide something.

Origin



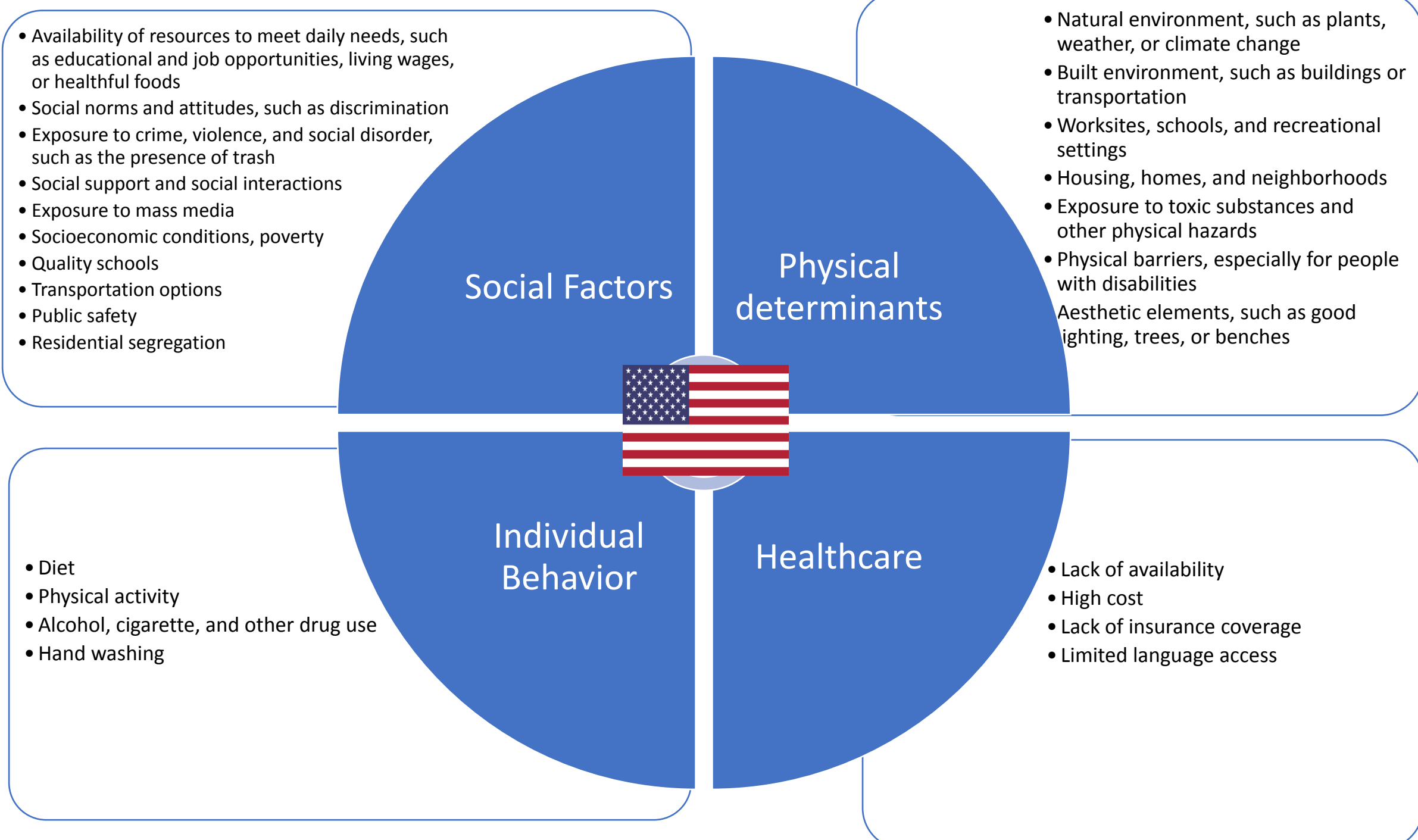
early 17th century: from Latin *determinant*- 'determining', from the verb *determinare* (see [determine](#)).

Major groups of health determinants

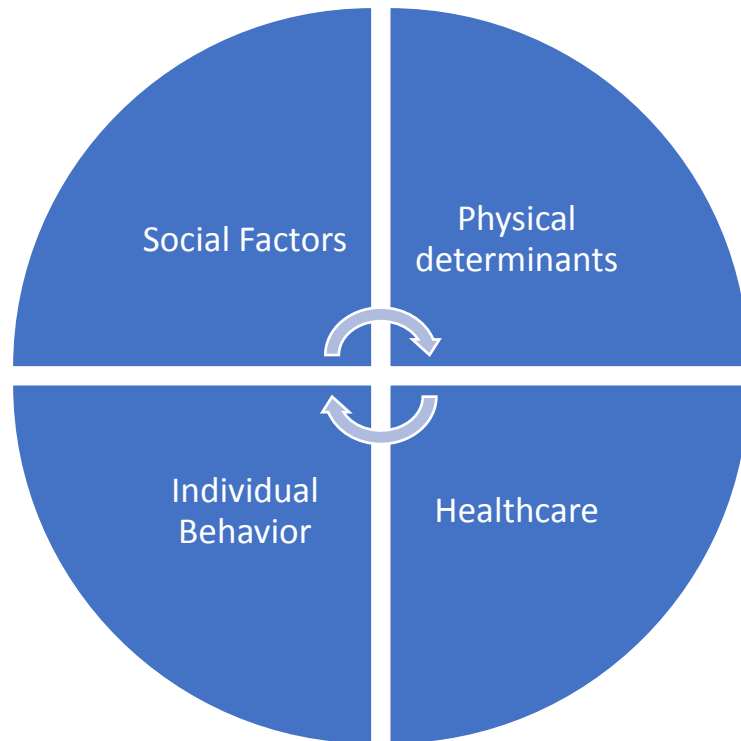
- Biology and genetics
- Physical determinants
- Social determinants
- Health services
- Public policies
- Individual behaviour

Taxonomy of health determinants

- Not universal
- Each country/region agency has its own terminology
- The principle is not contested and questioned



USA (healthypeople.gov)



CANADA (canada.ca/en/public-health)

Income and social status

Employment and working conditions

Education and literacy

Childhood experiences

Physical environments

Social supports and coping skills

Healthy behaviours

Access to health services

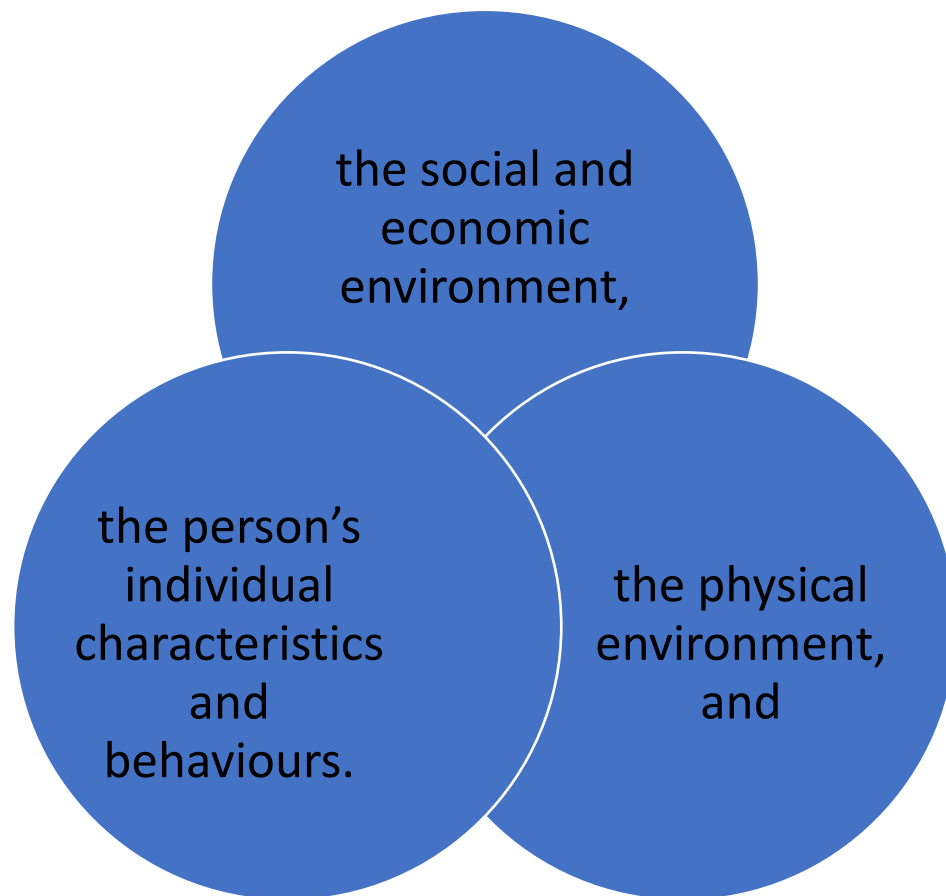
Biology and genetic endowment

Gender

Culture

Race / Racism

WHO taxonomy



Social determinants of health in accordance to WHO

Income and social protection

Education

Unemployment and job security

Working life conditions

Food insecurity

Housing, basic amenities and the environment

Early childhood development

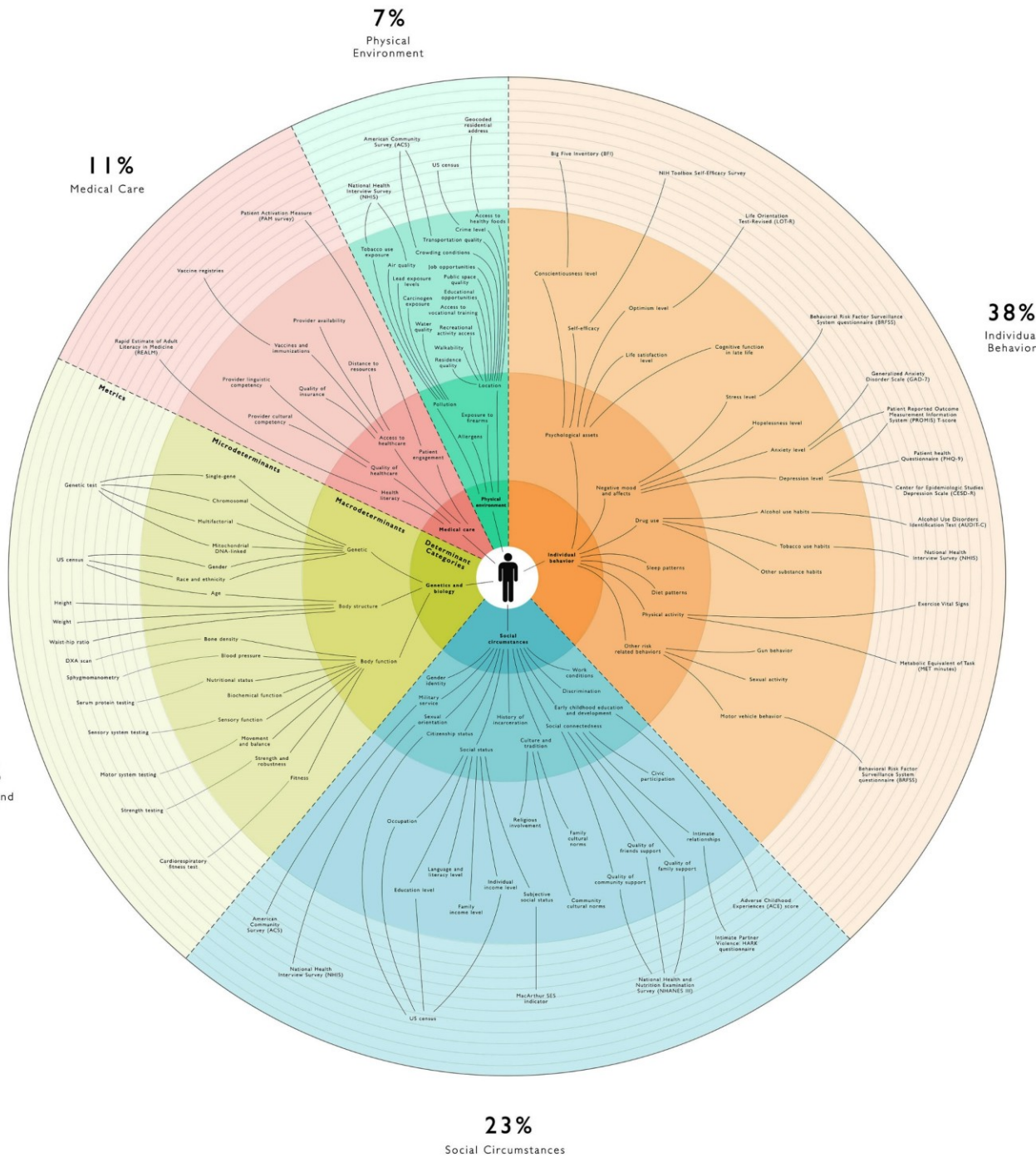
Social support and inclusion

Structural conflict

Access to affordable health services of decent quality.

Are all health
determinants equal?

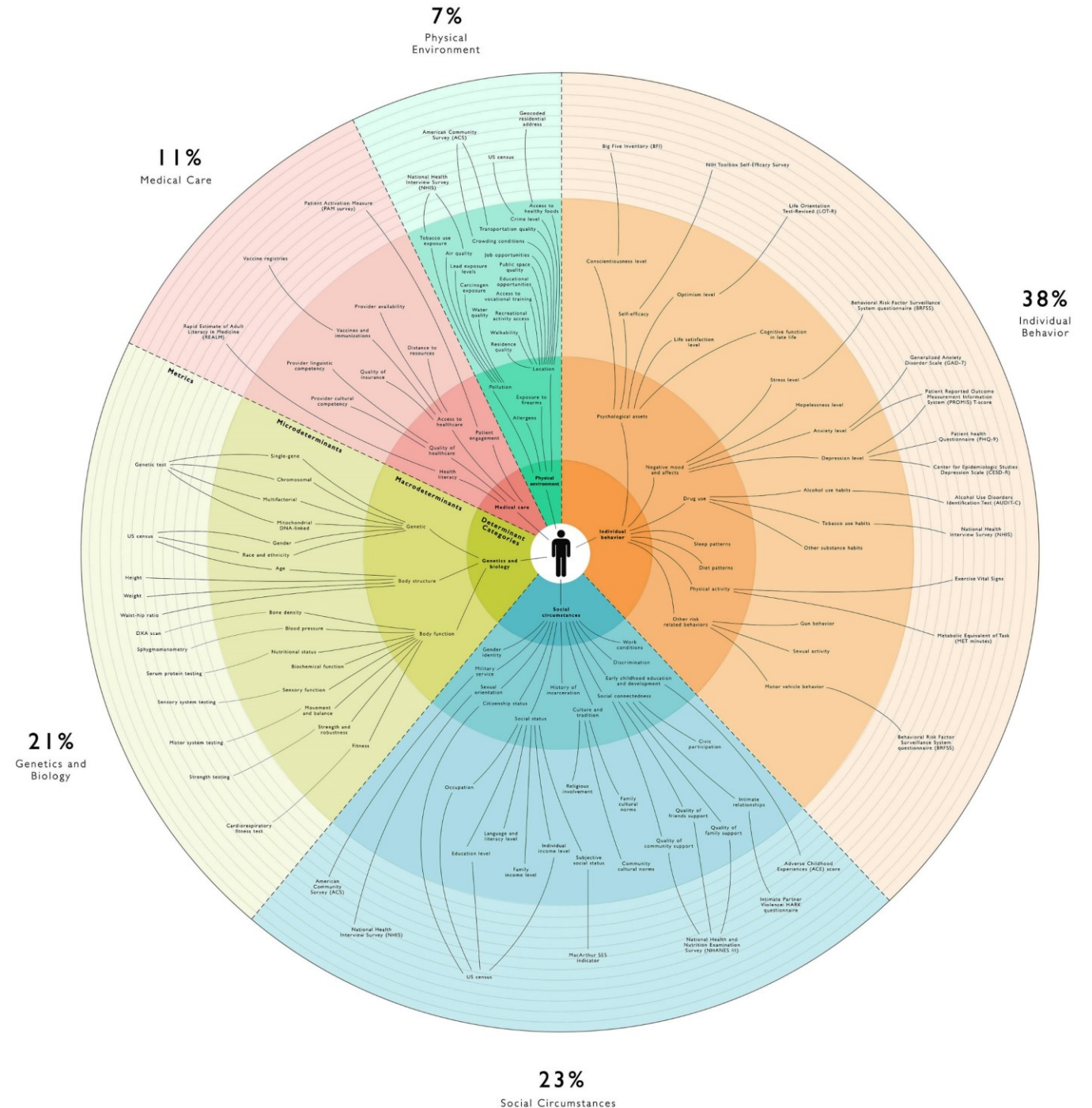
NO!

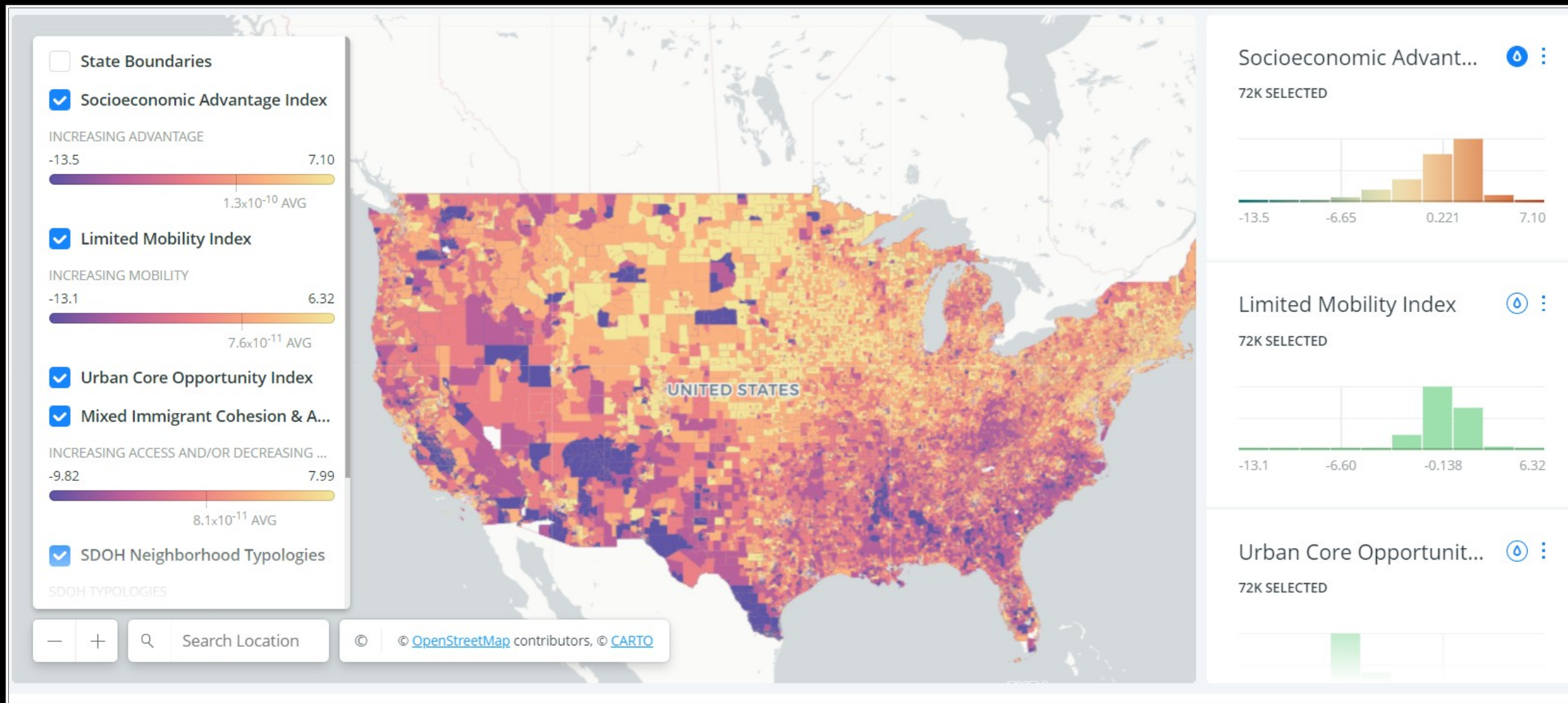


<http://determinantsofhealth.org>

Statistical relevance of determinants:

- Ranking
 - Individual behaviour 38%
 - Social determinants 23%
 - Genetics and biology 21%
 - Medical care 11%
 - Physical environment 7%
- Be careful with generalisation !
 - Interprets the data of population (North America)
 - Little relevance to individual cases



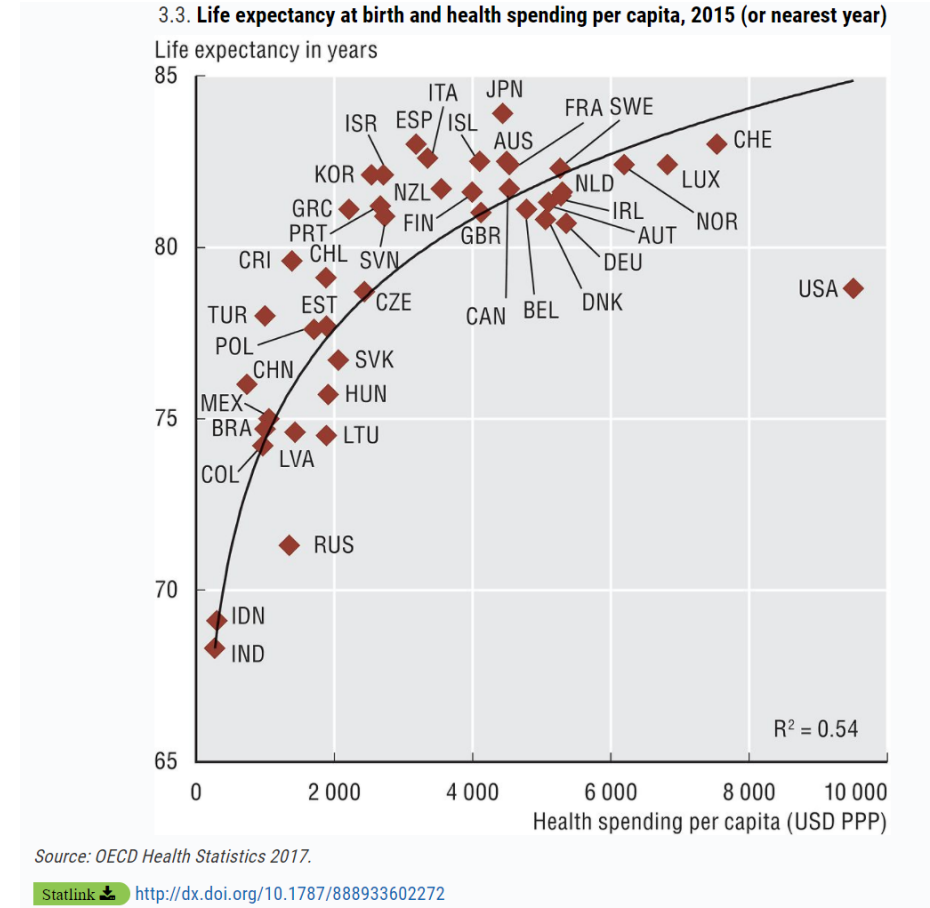
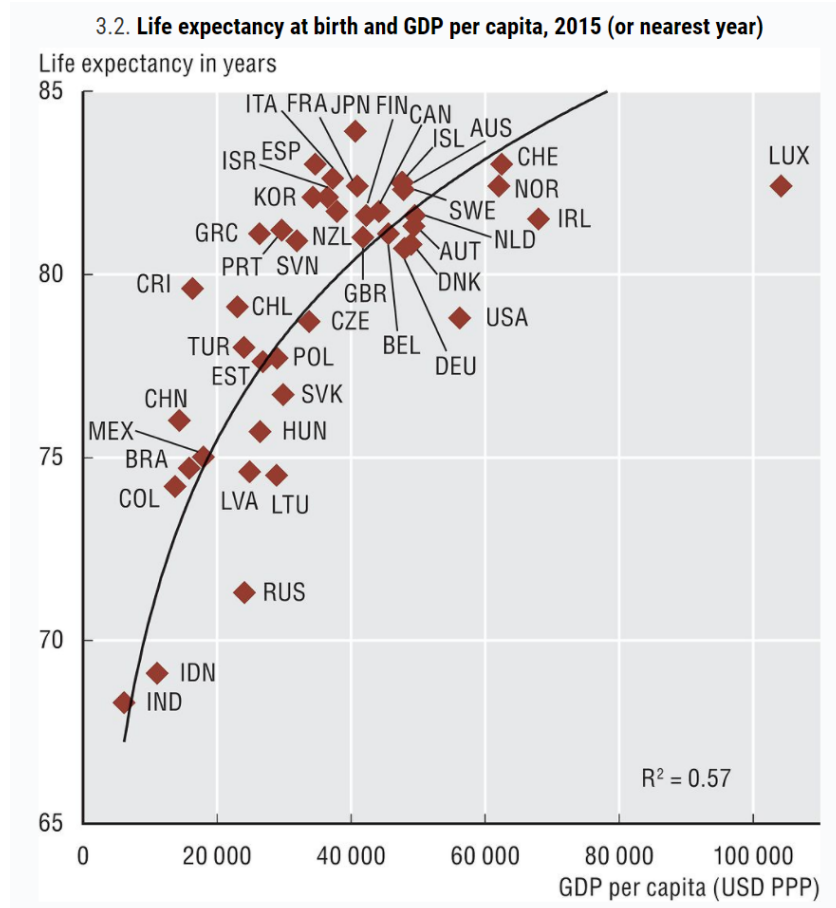


Geographical variability

Quantification of Neighborhood-Level Social Determinants of Health in the Continental United States

Kolak M, Bhatt J, Park YH, Padrón NA, Molefe A. Quantification of Neighborhood-Level Social Determinants of Health in the Continental United States. JAMA Netw Open. 2020;3(1):e1919928. doi:10.1001/jamanetworkopen.2019.19928

OECD Data



Conclusions ...

The context of people's lives determine their health, and so

blaming individuals for having poor health or crediting them for good health is inappropriate!

Individuals are unlikely to be able to directly control many of the determinants of health.

- World health organisation <https://www.who.int/news-room/q-a-detail/determinants-of-health>

What can we do to change health determinants?

... we have to change society

Health in all policies



- The developed countries go beyond physical infrastructure
 - Social programs
 - Cash transfers
 - Reduction of poverty
 - Educational programs
 - Improving social status of individuals
 - Promoting healthy lifestyle
 - Behavioural incentives
 - Tobacco, Alcohol regulations

Rio Political Declaration on Social Determinants of Health

Work across different sectors and levels of government

Develop policies that are inclusive and take account of the needs of the entire population

Specific attention to vulnerable groups and high-risk areas

Support comprehensive programmes of research

Promote awareness of policy-makers

Support all sectors to address social determinant

Foster collaboration with the private sector, safeguarding against conflict of interests,

Strengthen occupational health safety

Promote and strengthen universal access to social services and social protection floors

Give special attention to gender-related aspects

Access to affordable, safe, efficacious and quality medicines

Strengthen international cooperation

Balancing public health
objectives against other
societal/cultural values

High COVID-19 Attack Rate Among Attendees at Events at a Church — Arkansas, March 2020

Weekly / May 22, 2020 / 69(20);632–635

On May 19, 2020, this report was posted online as an MMWR Early Release.

Allison James, DVM, PhD^{1,2}; Lesli Eagle¹; Cassandra Phillips¹; D. Stephen Hedges, MPH¹; Cathie Bodenhamer¹; Robin Brown, MPAS, MPH¹; J. Gary Wheeler, MD¹; Hannah Kirking, MD³ ([View author affiliations](#))

[View suggested citation](#)

Summary

What is already known about this topic?

Large gatherings pose a risk for SARS-CoV-2 transmission.

What is added by this report?

Among 92 attendees at a rural Arkansas church during March 6–11, 35 (38%) developed laboratory-confirmed COVID-19, and three persons died. Highest attack rates were in persons aged 19–64 years (59%) and ≥65 years (50%). An additional 26 cases linked to the church occurred in the community, including one death.

What are the implications for public health practice?

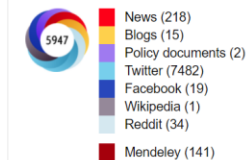
Faith-based organizations should work with local health officials to determine how to implement the U.S. Government guidelines for modifying activities during the COVID-19 pandemic to prevent transmission of the virus to their members and their communities.



On March 16, 2020, the day that national social distancing guidelines were released (1), the Arkansas Department of Health

Article Metrics

Altmetric:



Citations: 5

Views: 332 445

Views equals page views plus PDF downloads

[Metric Details](#)

[Figure](#)

[Tables](#)

[Table 1](#)

[Table 2](#)

[References](#)

[Related Materials](#)



Policie na Staroměstském náměstí použila obrněný transportér, slzný plyn i vodní děla. Dav rozhání koňmi. Na místě jsou zranění. (18. října 2020)

Autor: Tomáš Krist, MAFRA

ABOUT

The Nanny State Index (NSI) is a league table of the worst places in the European Union to eat, drink, smoke and vape. The initiative was launched in March 2016 and was a media hit right across Europe. It is masterminded and led by IEA's Christopher Snowden with partners from all over Europe.

Enquiries: info@epicenternetwork.eu

[Download the pdf here.](#)

DOWNLOAD PUBLICATION

NANNY STATE INDEX 2019

By Christopher Snowden
Head of Lifestyle Economics, Institute of Economic Affairs



PREVIOUS VERSION: 2017

CATEGORIES



ABOUT THE EDITOR

Christopher Snowden is the head of Lifestyle Economics at the Institute of Economic Affairs. His research focuses on lifestyle freedoms, prohibition

THE INDEX 2019

	COUNTRIES	E-CIGS (1/6)	TOBACCO (1/6)	FOOD (1/3)	ALCOHOL (1/3)	TOTAL (OUT OF 100)	CHANGE IN POSITION SINCE 2017
1	FINLAND	10.8	11.1	3.3	24.3	49.5	—
2	LITHUANIA	7.6	7.9	3	20.2	38.7	▲6
3	ESTONIA	9.2	8.3	3.3	16.5	37.3	▲12
4	UK	2.7	15.1	6.7	12.5	37	▼2
5	HUNGARY	11.4	10.4	9.7	4.9	36.4	▼1
6	IRELAND	3	12.3	6.7	13.9	35.9	▼3
7	LATVIA	7.6	8.2	5	11.9	32.7	—
8	SWEDEN	4.3	5.8	1	21.2	32.3	▼3
9	SLOVENIA	9.7	9.6	1.3	9.7	30.3	▲2
10	FRANCE	4.5	11.7	4	9.9	30.1	▼4
11	GREECE	10.2	10.7	1.3	6.8	29	▼1
12	POLAND	7.2	7.9	0.7	9.7	25.5	▼3
13	CYPRUS	9.7	9	0	6.4	25.1	▲2
14	PORTUGAL	9.1	6.9	3	6	25	▲6
15	CROATIA	6.6	9.5	0	8.8	24.9	▼1
16	BELGIUM	7.1	7.1	3	4.2	21.4	▼4
17	ROMANIA	5.8	8.9	0	5.5	20.2	▲5
18	BULGARIA	3.5	9.4	2	4.6	19.5	▲2
19	MALTA	3.3	8.6	0	7.5	19.4	▼2
20	DENMARK	3.7	6.1	2.7	6.3	18.8	▼2
21	NETHERLANDS	2.7	8.1	0.7	7.1	18.6	▲3
23=	ITALY	4.2	7.5	0.7	5.3	17.7	▲6
23=	SPAIN	4.7	8.1	0.3	4.6	17.7	▼4
24	LUXEMBOURG	6.9	5.4	0	5.3	17.6	▲1
26=	AUSTRIA	3.5	5.4	0.7	7.3	16.9	▼2
26=	SLOVAKIA	5.3	6.8	0	4.8	16.9	—
27	CZECH REPUBLIC	3.3	7.2	0	3.3	13.8	▲1
28	GERMANY	2.7	5.5	0	3.5	11.7	▼1

PARTNERS



European perspective

European union perspective



European union



Basic facts

- 27 countries
- 550 million citizens

It is not a state but ...

- Union of sovereign states
- Common currency (in most countries)
- Free movement of citizens, goods, services
- Common policies in certain areas

What can EU do about it (and what should be left for national states).



1. Health in all policies

Since health is determined to a large extent by factors outside the health area, an **effective health policy must involve all relevant policy areas**, in particular:

- social and regional policy
- taxation
- environment
- education
- research.

All EU policies are required by the EU treaty to follow this "*Health in all Policies*" (HIAP) approach. But to be fully effective, this approach needs to be extended to **national, regional and local** policies.

Agencies on EU level

[Consumers, Health and Food Executive Agency \(Chafea\)](#) –

- implements the EU Health Programme, Consumer Programme and Better Training for Safer Food initiative.

[European Centre for Disease Prevention and Control \(ECDC\)](#) –

- works to strengthen Europe's defences against infectious diseases.

[European Environment Agency \(EEA\)](#)

- provides reliable, independent information on the environment.

[European Monitoring Centre for Drugs and Drug Addiction \(EMCDDA\)](#)

- supplies comprehensive information on drugs and drug addiction in Europe.

[European Medicines Agency \(EMA\)](#) –

- protects and promotes public and animal health by evaluating medicines for human and veterinary use.

[European Chemicals Agency \(ECHA\)](#) –

- ensures chemical substances are registered, evaluated, authorised and restricted consistently across the EU.

[European Food Safety Authority \(EFSA\)](#) –

- provides independent scientific advice and clear communication on risks to food and feed safety.

[European Agency for Safety and Health at Work \(EU-OSHA\)](#) –

- supplies information needed by EU employers and workers to address safety and health issues.

[Eurofound](#)

- – provides expertise on living and working conditions, industrial relations and managing change for key EU social policy actors.

Third EU Health Programme 2014-2020

European
Commission

The scope of the Programme



Health and
Consumers

The objectives

1) Promote health, prevent disease and foster supportive environments for healthy lifestyles

2) Protect citizens from serious cross-border health threats

3) Contribute to innovative, efficient and sustainable health systems

4) Facilitate access to better and safer healthcare for Union citizens

Address in particular the key risk factors with a focus on the Union added value.

Coherent approaches integrated into MS preparedness plans

Innovative tools and mechanisms in health and health prevention

Increase access to medical expertise and information for specific conditions

Health and
Consumers

Where is EU taking action (?)



Ensuring health security

- › Blood, tissues and organs
- › Climate change
- › Crisis preparedness and response



Improving health systems

- › Cross-border healthcare
- › European Reference Networks
- › Health workforce
- › Patient safety
- › Health systems performance assessment
- › Health technology assessment
- › eHealth
- › Expert panel



Taking Action against Diseases

- › Antimicrobial resistance
- › Communicable diseases
- › Vaccination
- › Major and chronic diseases
- › Rare diseases



Health in Society

- › Migrants' health
- › Social determinants and health inequalities
- › Ageing
- › Population groups
- › Interest groups
- › Healthy environments



Fostering good health

- › Nutrition and physical activity
- › Alcohol
- › Tobacco
- › Illicit drugs
- › Mental health
- › Sexually transmitted diseases



Indicators and data

- › Health indicators
- › Data collection



Indicators and data

- › Health indicators
- › Data collection



Pharmaceuticals

- › Medicinal products for human use
- › Medicinal products for veterinary use
- › International activities



Endocrine disruptors

- › Endocrine disruptors



Biocides

- › Biocides

Further actions

Movement of workforce

- Health professional

Movement of goods

- Safety standards
- Marketing rules

Cross-border provision of healthcare

Thank you for your attention