MUNI

Determinants of health

What keeps population healthy?

Health

WHO:

 state of complete physical, mental and social well-being and not merely the absence of disease or infirmity

bio-medical model of health (Holcik)

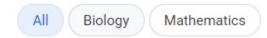
- is body that operates efficiently just like a machine. Any breakdown in the body system means that the latter is not healthy
- Disease: set of signs and symptoms and medically diagnosed pathological abnormalities.
- Ilness: how individuals experience disease.

Socioecological model of health (Holcik)

• a wide range of factors that are individual, interpersonal, organizational, social, environmental, political, and economic



See definitions in:



noun

noun: determinant; plural noun: determinants

- 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 idiotype.
- 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/reagion agency has its own terminology

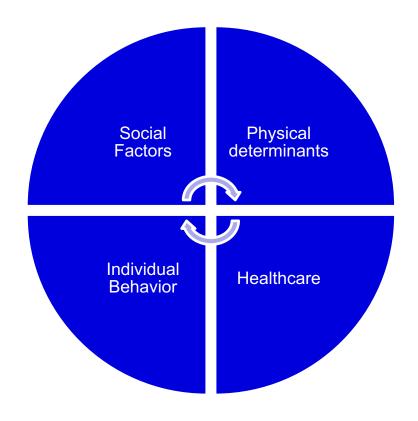
The concept of determinants is not contested and questioned

- Availability of resources to meet daily needs, such as educational and job opportunities, living wages, or healthful foods · Social norms and attitudes, such as discrimination • Exposure to crime, violence, and social disorder, such as the presence of trash Social support and social interactions • Exposure to mass media Socioeconomic conditions, poverty Social **Physical** Quality schools Transportation options determinants **Factors** Public safety Residential segregation Individual Healthcare Diet Behavior Physical activity
 - Natural environment, such as plants, weather, or climate change
 - Built environment, such as buildings or transportation
 - · Worksites, schools, and recreational settings
 - Housing, homes, and neighborhoods
 - Exposure to toxic substances and other physical hazards
 - Physical barriers, especially for people with disabilities Aesthetic elements, such as good ighting, trees, or benches

- Alcohol, cigarette, and other drug us
- Hand washing

- Lack of availability
- High cost
- Lack of insurance coverage
- Limited language access

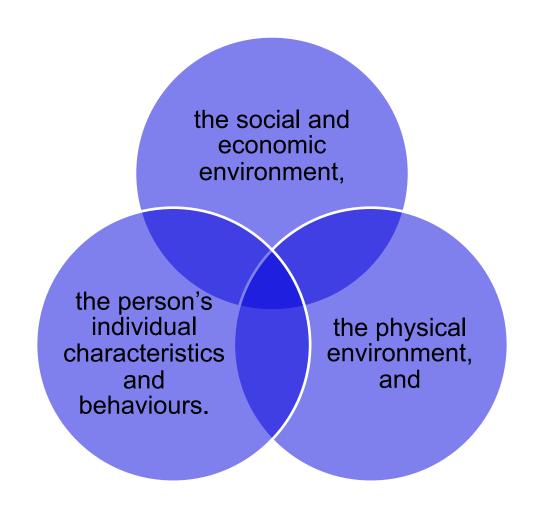
USA (healthypeople.gov)



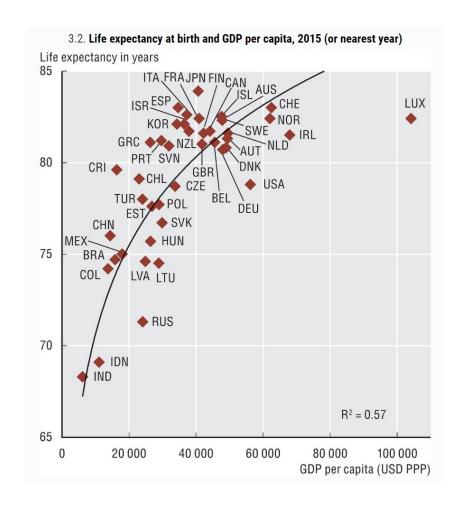
CANADA (canada.ca/en/public-health)

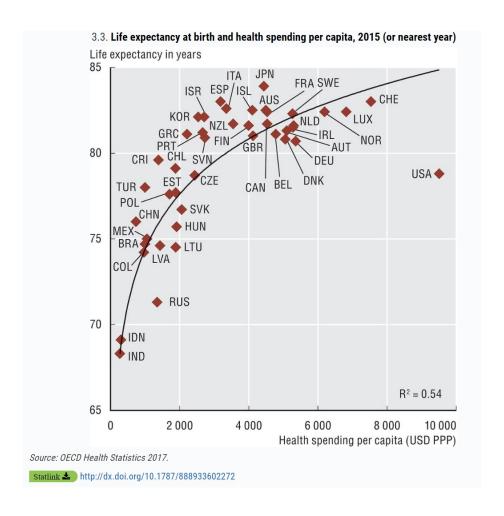
Income and social status
Employment and working conditions
Education and literacy
Childhood experiences
Physical environments
Social supports and coping skills
Healthy behaviours
Access to health services
Biology and genetic endowment
Gender
Culture
Race / Racism

WHO taxonomy



OECD Data





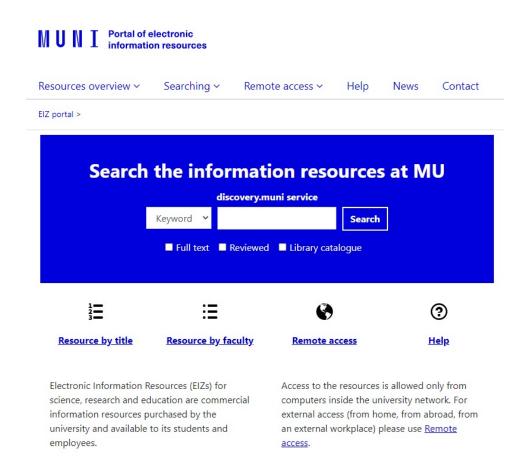
Social determinants of health in accordance to WHO

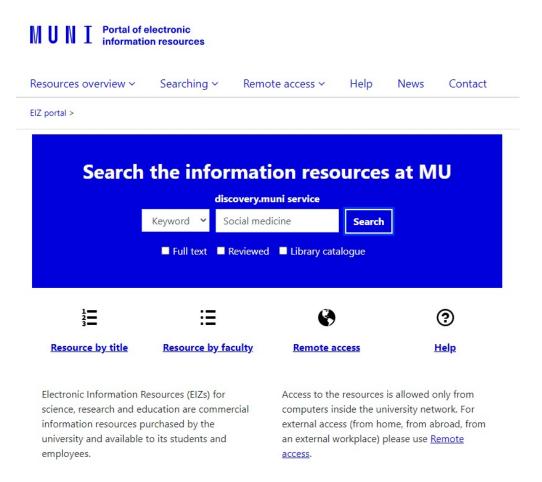
Income and social protection Education Unemployment and job security Working life conditions Food insecurity Housing, basic amenities and the environment Early childhood development Social support and inclusion Structural conflict Access to affordable health services of decent quality.

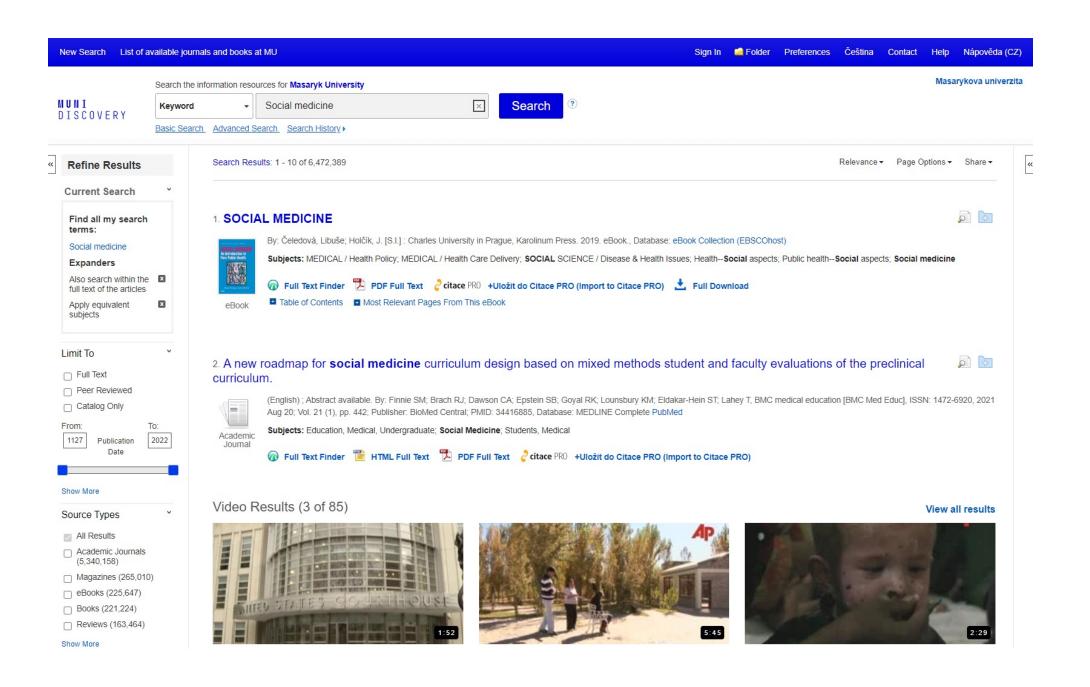
Social determinants of health (Holcik)

Social gradient in heath	•refers to the fact that inequalities in the population health status are related to inequalities in the social status.
Stress	Continuing anxiety, inse -curity, low self-esteem, social isolation, and lack of control over worl
Early life	•Slow growth, emotional support, pregnancy, maternal stress, •Lifestyle habits development
Social exclusion	•unemployed, ethnic minority, guest workers, disabled people, refugees, and homeless people •living on less than 60% of the national median income
Work	•Income, social relationships •Stress, working conditions
Unemployment	•and the risk is higher in those regions where unemploy-ment is wides
Social support	•emotional and practical resources they need
Food	Diet and food suply. Food safety
Transport	 Cycling, walking, and the use of public transport promote health. They provide exercise, reduce fatal accidents, increase social contact, and reduce air pollution

Where to find literature







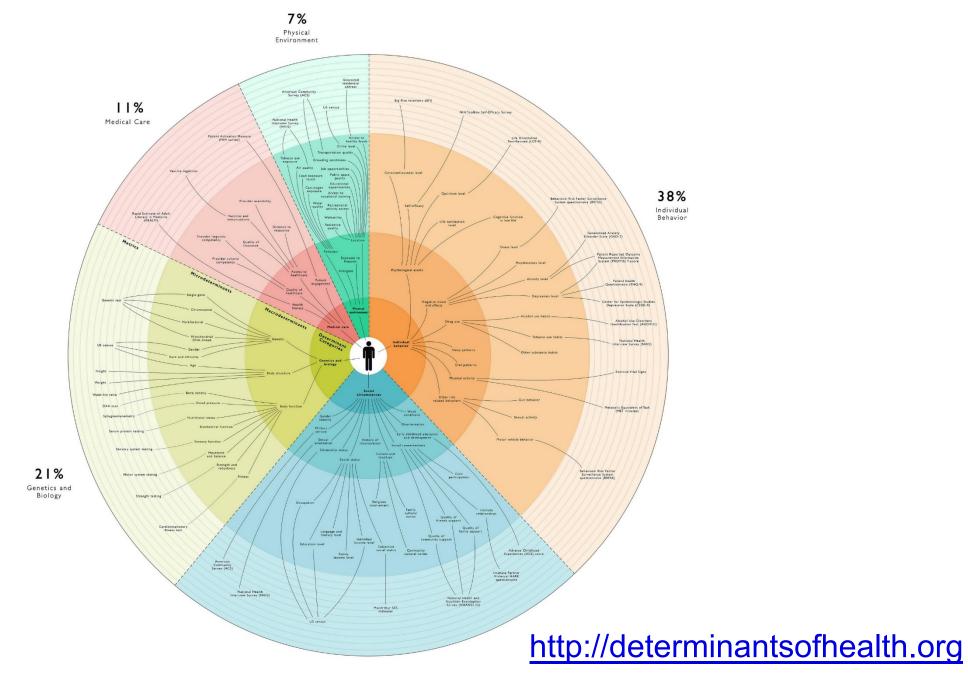
SOCIAL MEDICINE	
Author: Čeledová, Libuše, Holčík, J. Date: 2019 Detailed Record Publisher Permissions: Print/E-mail/Save 100 Pages Unilmited Copy/Paste Unrestricted Download eBook Availability: Unlimited copies available	
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▶ 4 THE WORLD HEALTH ORGANIZATION	4
▶ 5 EUROPEAN HEALTH POLICY	4
▶ 6 HEALTH LITERACY	4
▶ 7 HEALTH SYSTEMS	4
8 PUBLIC HEALTH INSURANCE IN THE CZECH REPUBLIC	*
▶ 9 PRIMARY CARE	4
10 DEMOGRAPHY AND ITS IMPORTANCE FOR PUBLIC HEALTH	*
▶ 11 BIOSTATISTICS	.4.
▶ 12 STUDY OF HEALTH STATUS	
13 INTERNATIONAL CLASSIFICATION OF DISEASES AND RELATED HEALTH PROBLEMS	<u>*</u>
14 INSTITUTE OF HEALTH INFORMATION AND STATISTIC OF THE CZECH REPUBLIC	+
15 CZECH MEDICAL CHAMBER	
▶ 16 GERONTOLOGY	4
17 MEDICAL ASSESSMENT SERVICE IN THE CZECH REPUBLIC	
▶ 18 HISTORY OF MEDICINE	4
▶ Annex	4

1	An Introduction to Social Medicine (Jan Hoicik)
	1.1 The definition and the goal of Social Medicine
	1.2 The scope of Social Medicine
	1.3 The role of Social Medicine
	1.4 Concise notes on history of population health
	1.5 Origins and evolution of Social Medicine
2	Health and Disease (Jan Holčík)
	2.1 Health
	2.2 A bio-medical model of health and disease
	2.3 A socioecological model of health
	2.4 The lay understanding of health
	2.5 Health as value
	2.6 Health is a basic human right
	2.7 Disease
3	Determinants of Health (Jan Holčík)
	3.1 Genetic factors
	3.2 The environment
	3.3 Lifestyle
	3.4 Health care and health services.
	3.5 Social determinants of health
	3.5.1 Social gradient
	3.5.2 Stress
	3.5.3 Early life.
	3.5.4 Social exclusion
	3.5.5 Work.
	3.5.6 Unemployment.
	3.5.7 Social support.
	3.5.8 Addiction
	3.5.9 Food.
	3.5.10 Transport
	3.6 Social determinants of health are an important health strategy issue

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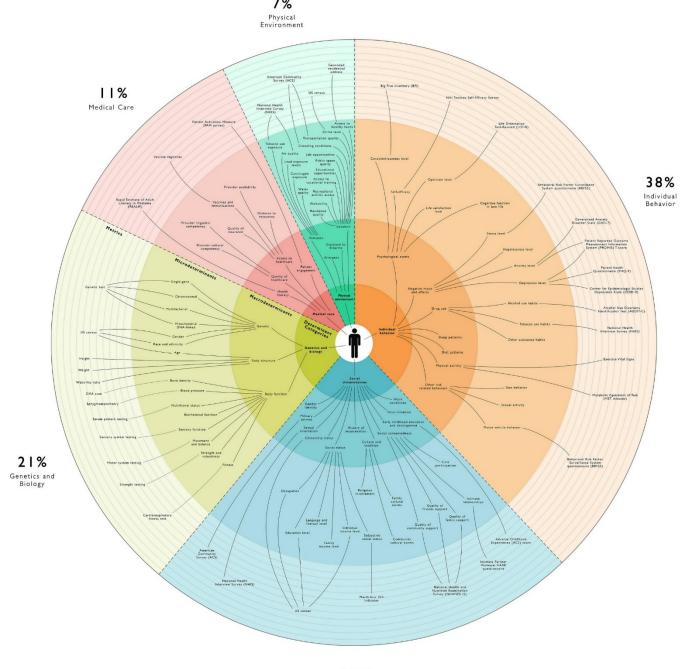
Are all health determinants equal?

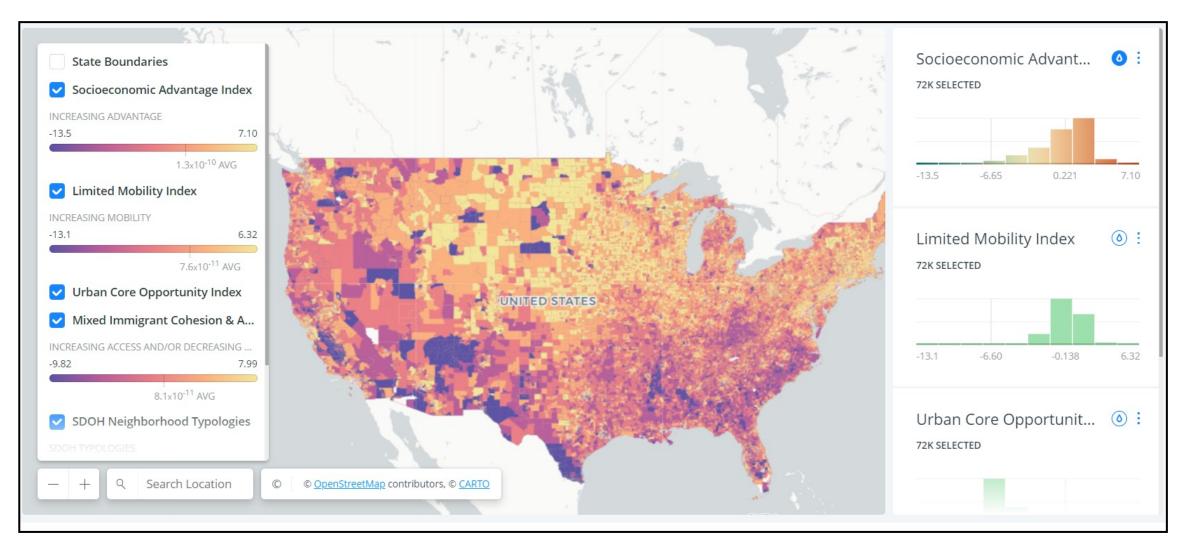
NO!



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





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

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-adetail/determinants-of-health

What can we do to change health determinants?

... we have to change society

Health in all policies (example)



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

CDC









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?

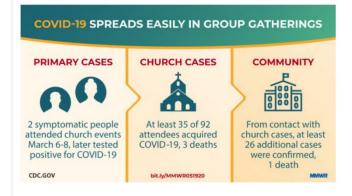
Large gatherings pose a risk for SARS-CoV-2 transmission.

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



THE BEST AND WORST COUNTRIES TO EAT, DRINK, SMOKE & VAPE IN THE EU

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 Snowdon with partners from all over Europe.

Enquiries: info@epicenternetwork.eu

Download the pdf here.

DOWNLOAD PUBLICATION

NANNY STATE INDEX 2021

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





PREVIOUS VERSION: 2019

CATEGORIES







ABOUT THE EDITOR

THE INDEX 2021

	LEAST FREE		LESS FREE			FREER	
	COUNTRIES	ALCOHOL	E- CIGARETTES	FOOD/SOFT DRINKS	TOBACCO	TOTAL	2019 RANKING
1	₩ NORWAY	22.4	13.9	5.3	9.9	51.5	
2	LITHUANIA	24.1	9.9	3	9.2	46.2	2
3	+- FINLAND	20.4	10	1.7	9	41.1	1
5=	HUNGARY	6.9	10.4	10	11.9	39.2	5
5=	LATVIA	14.9	8.9	5	10.4	39.2	7
6	ESTONIA	16.5	10.6	3	9	39.1	3
7	## ICELAND	21.6	5	1.3	8.1	36	-
8	IRELAND	16.9	3	4.7	11.3	35.9	6
9	POLAND	12.2	9.2	5.7	8.6	35.7	12
10	SWEDEN	18.2	7.7	1	5.9	32.8	8
11	GREECE	9.6	10.1	1.3	10.7	31.7	11
12	NIN UK	11	3	5	12.4	31.4	4
13	CROATIA	10	7	3	9.4	29.4	15
14	SLOVENIA	9.5	7.2	1.3	10	28	9
15	FRANCE	9.6	4.5	3	10.5	27.6	10
16	ROMANIA	7.8	7.5	0	12	27.3	17
17	PORTUGAL	6.6	9.3	3.7	6.8	26.4	14
18	NETHERLANDS	6.3	7.9	0.7	9.6	24.5	21
19	€ CYPRUS	5.7	9.4	0	8.1	23.2	13
21=	AUSTRIA	5.8	7.9	0.7	6.8	21.2	26
21=	BELGIUM	3.3	7.6	2	8.3	21.2	16
22	BULGARIA	4.5	3.5	2	10.8	20.8	18
24=	* MALTA	7.3	3.3	0	8.6	19.2	19
	SLOVAKIA	5.9	5.3	0	8	19.2	26
25	DENMARK	3.6	3.7	3.3	6.9	17.5	20
26	ITALY	5	4.5	0.7	7	17.2	23
27	SPAIN	4.3	4.7	0.3	7.6	16.9	23
28	LUXEMBOURG	4	6.9	0	5.3	16.2	24
29	CZECHIA	4.2	3.3	0	7.7	15.2	27
30	GERMANY	3	3	0	4.7	10.7	28

European perspective

EUROPE



Basic facts

- 750 million people
- 6 time zones
- 50 sovereign states
- Each responsible for its own health policy
- No common public health policy

Vast differences among individual regions

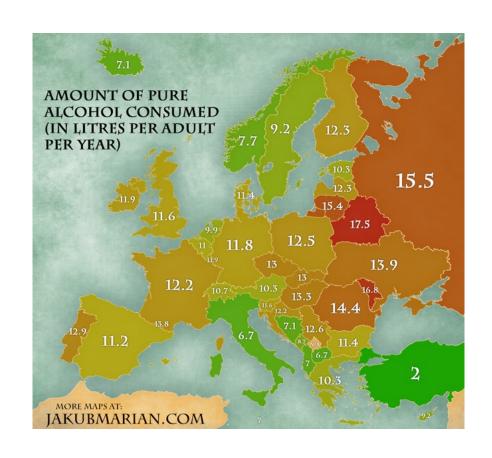
- Living standards
- Lifestyle
- Diet
- Life expectancy

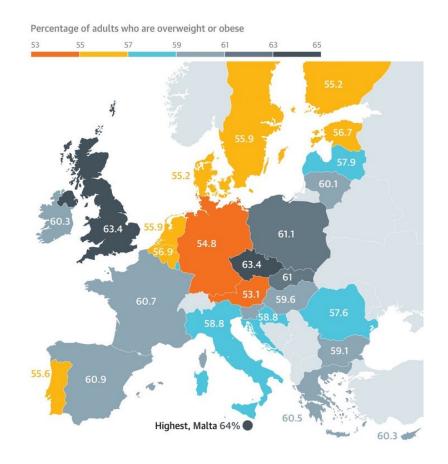
European gap in life expectancy/income





Other lifestyle differences





What do European states have in common /healthcare and public health perspective/

Christian tradition

- catholic and orthodox church used to be a major healthcare provider
- Hospitals were established in monasteries,
- Medical schools were run by churches

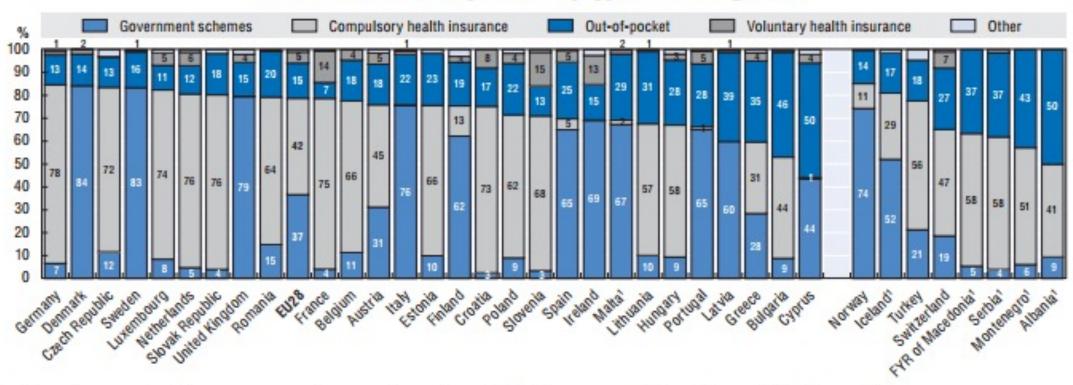
Welfare state

- Concept from 19th century
- Solidarity, social policies, welfare spending
- Public (and obligatory) health insurance

Result

- All European countries guarantee free (or heavily subsidized) access to Healthcare
- Health is (mistakenly) percieved to be a public service
- Much higher emphasis is on the provision of healthcare than public health

5.11. Current health expenditure by type of financing, 2014



lote: Countries are ranked by government schemes and compulsory health insurance as a share of current health expenditure.

Includes investments.

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European union perspective



European union



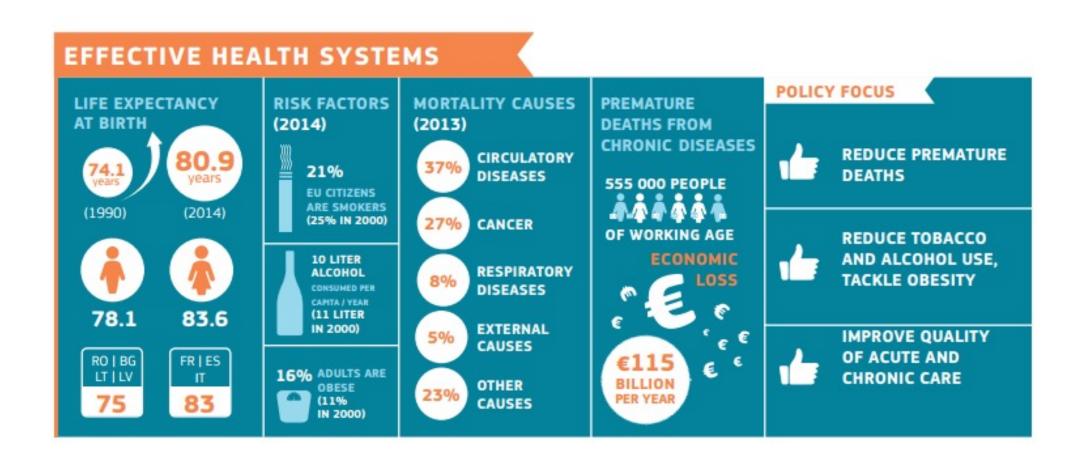
Basic facts

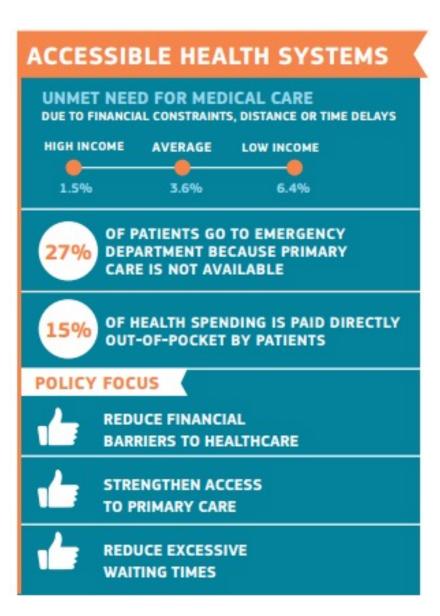
- 27 countries
- 550 million citizens

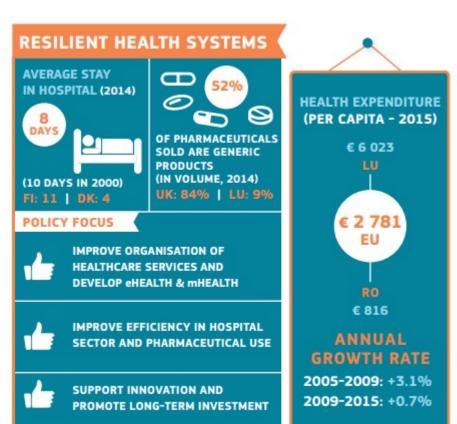
It is not a state but ...

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

Public Health Objectives and challenges

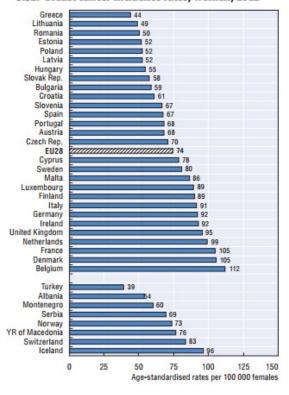




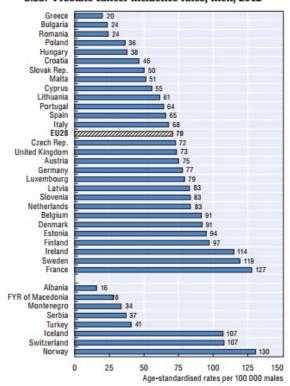


The regional differences are again huge

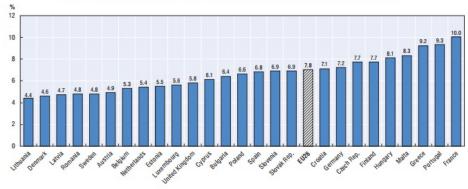
3.32. Breast cancer incidence rates, women, 2012



3.33. Prostate cancer incidence rates, men, 2012



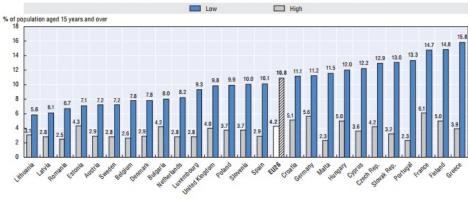
3.34. Self-reported diabetes, population aged 15 years and over, 2014 (or nearest year)



Source: Eurostat Database, based on Health Interview Surveys.

StatLink http://dx.doi.org/10.1787/888933428845

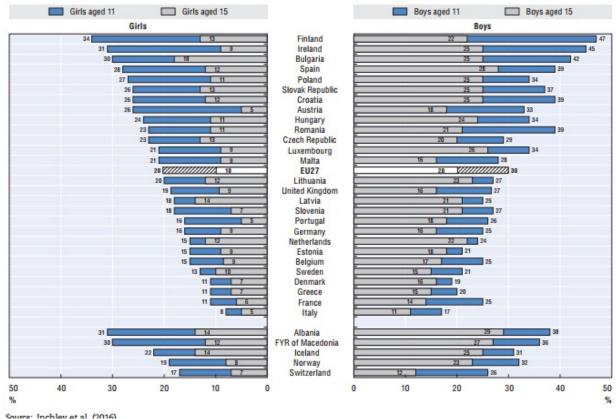
3.35. Self-reported diabetes by level of education, 2014 (or nearest year)



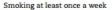
Source: Eurostat Database, based on Health Interview Surveys.

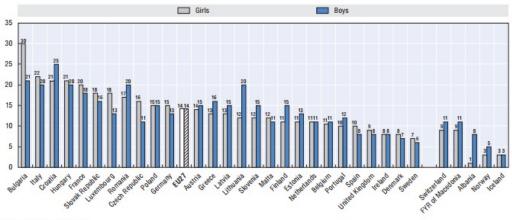
Health determinants are completely

4.22. Daily moderate-to-vigorous physical activity, 11- and 15-year-olds, 2013-14



4.1. Smoking among 15-year-olds, 2013-14

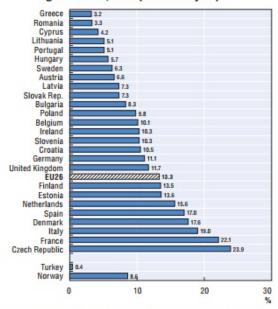




ource: Inchley et al. (2016).

StatLink http://dx.doi.org/10.1787/888933428929

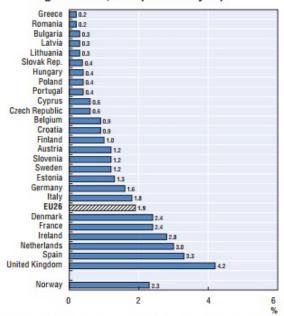
4.26. Cannabis use over the last 12 months among people aged 15 to 34, 2014 (or nearest year)



Source: EMCDDA (2016), European Drug Report 2016: Trends and Developments.

StatLink http://dx.doi.org/10.1787/888933429174

4.27. Cocaine use over the last 12 months among people aged 15 to 34, 2014 (or nearest year)



Source: EMCDDA (2016), European Drug Report 2016: Trends and Developments.

StatLink http://dx.doi.org/10.1787/888933429180

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



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.

EU4Health 2021-2027 – a vision for a healthier European Union

EU4Health 2021-2027 – a vision for a healthier European Union

EU4Health is the EU's ambitious response to COVID-19. The pandemic has a major impact on patients, medical and healthcare staff, and health systems in Europe. The new EU4Health programme will go beyond crisis response to address healthcare systems' resilience.

EU4Health, established by Regulation (EU) 2021/522, will provide funding to eligible entities, health organisations and NGOs from EU countries, or non-EU countries associated to the programme.

Areas of action

With EU4Health, the EU will invest €5.3 billion in current prices in actions with an EU added value, complementing EU countries' policies and pursuing one or several of EU4Health's objectives:



Improve & foster health in the Union



Protect people in the Union from serious cross-border threats to health



Improve medicinal products, medical devices & crisisrelevant products



Strengthen health systems

EU Health Policy



Overview

EU countries hold primary responsibility for organising and delivering health services and medical care. EU health policy therefore serves to complement national policies, and to ensure health protection in all EU policies.

EU policies and actions in public health aim to:

- Protect and improve the health of EU citizens
- Support the modernisation of health infrastructure
- Improve the efficiency of Europe's health systems.

Strategic health issues are discussed by representatives of national authorities and the European Commission in a senior-level working group on public health. EU institutions, countries, regional and local authorities, and other interest groups contribute to the implementation of the EU's health strategy.

Further actions

Movement of workforce

Health professional

Movement of goods

- Safety standards
- Marketing rules

Cross-border provision of healthcare

Thank you for your attention