Headway
A new roadmap in Mental Health

"Headway – Mental Health Index 2.0"

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*The following presentation contains data from the Report "Headway – Mental Health Index 2.0", which arises from the initiative "Headway – A new roadmap in Mental Health", realized by **The European House – Ambrosetti** in collaboration with **Angelini Pharma**.*

«Headway - Mental Health Index 2.0»

Monitoring the responsiveness of a Country, assessing its trend over time and comparing it to other systems, allows for a **dynamic and more complete picture of the effects of health, social, employment, educational and environmental policy interventions** on the mental health status of the population

The "Headway Mental Health Index 2.0" is designed to provide a **multidimensional picture on mental health** across European Countries (EU-27 + UK). The first **2 sub-indices** are:

1 — ENVIRONMENTAL DETERMINANTS OF MENTAL HEALTH

Analyzing **environmental determinants** of Mental Health in **European Countries**

KPI: e.g., Pollution (water, waste, air), Climate (average annual hours of daylight), Nature (green and blue areas, natural disasters), Urban Environment (i.e., poor housing and indoor air quality, noise pollution, …), Socio-economic and Political Scenario (i.e., wars, conflicts, forced migration, economic recession,…)

NEW

2 — MENTAL HEALTH STATUS OF THE POPULATION

Analyzing **Mental Health outcomes** across European Countries **KPIs:** prevalence of mental disorders, mortality rate (including suicide rate), years lived in disability, prevalence of risk factors (e.g., drug use, alcohol consumption, etc.)

N.B. **The realization of the "Headway - Mental Health Index 2.0" involves the use of the following databases:** World Bank, UN, WHO, OECD, Eurostat, European Environment Agency, Institute for Health Metrics and Evaluation (in particular Global Burden of Disease), as well as databases of Statistical Institutes and institutional sites of individual Member States (e.g., Ministries of Health sites), as well as secondary sources of scientific literature (e.g., papers, articles, reports, etc.).

KPIs of the pillar "Environmental determinants of Mental Health"

KPI	Unit of measure	Source
Hours of daylight	Hours	National databases
Average temperature	C^o	Climate Change Knowledge Portal
Economic damage caused by weather extreme events	Loss per capita in euro PPP	European Environment Agency
Earthquakes	Number of earthquakes of magnitude >2	European Facilities for Earthquake Hazard and Risk
Poor housing conditions	% population living in poor housing conditions	Eurostat
Overcrowding rate	% of population living in overcrowded households	Eurostat
Air pollution	% of population exposed to particulate matter	Eurostat
Noise pollution	% of population reporting they are impacted by noise	Eurostat
Transport and road traffic	Hours per year	Eurostat and Tom Tom database
Urban green space	% of green infrastructure over total area	Eurostat
Conflicts, migration, economic recession	Score	The Fund for Peace
Crime, violence or vandalism	% of people reporting crime, violence or vandalism in their neighborhood	Eurostat

The effects of **climate change on Mental Health** have been addressed only recently and knowledge on the pathways between the two is **still limited**

EXTREME WEATHER EVENTS, WARMING, DISPLACEMENT

CLIMATE CHANGE

TRAUMA, PTSD, SOLASTALGIA, DISTRESS, ANXIETY

Trends in annual temperature (average °C increase), 1960 - 2021

| 0.0 – 0.1 |
| 0.1 – 0.2 |
| 0.2 - 0.3 |
| 0.3 – 0.4 |
| 0.4 - 0.5 |
| >0.5 |

+1.99°C warmer surface temperature

- Leading to decrease in **Mental Health and Well-being** (e.g. increased prevalence of stress, anxiety, and mood disorders)

Source: The European House – Ambrosetti on various sources, 2022

Economic losses caused by Extreme Weather Events and Earthquakes

Economic damage caused by Extreme Weather Events –EWE
(average loss per capita in euros), 1980-2020

Earthquakes in EU-27 and the United Kingdom
(number of quakes of magnitude 2 or higher), 2021

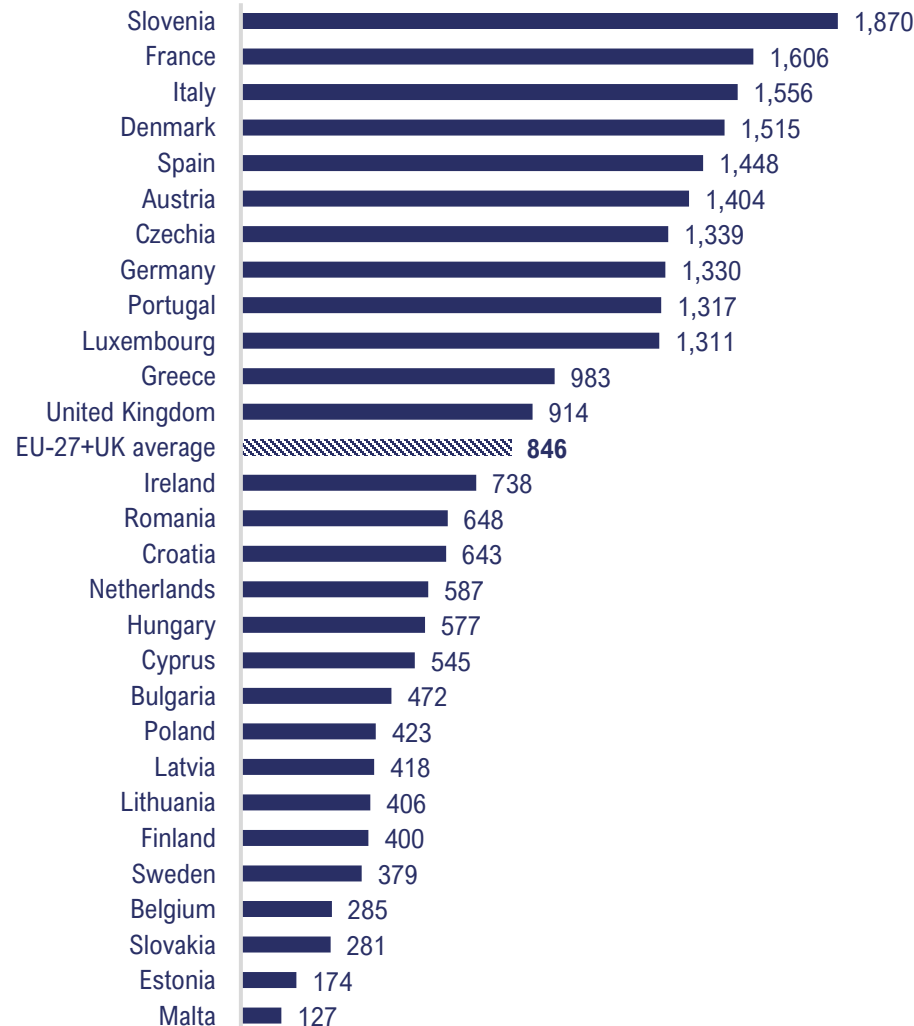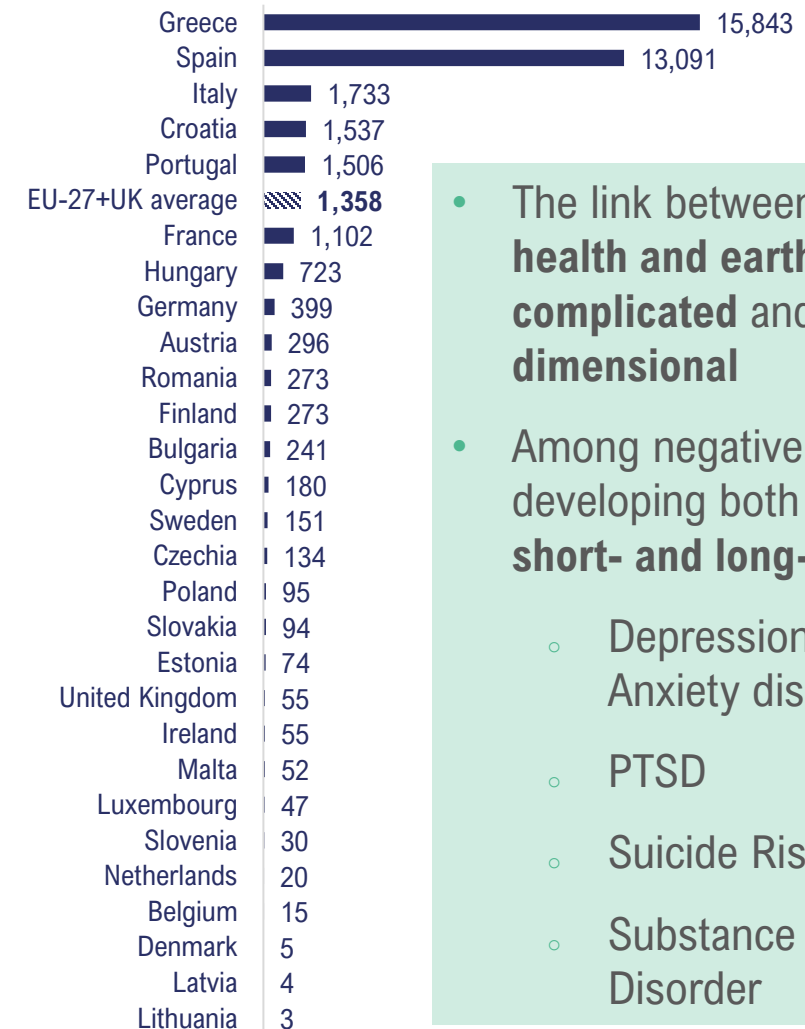The **economic losses in the EU due to EWE account for 12 billion euros per year:**
- **Children and adolescents** are the most vulnerable group of society
- **50% of adults** experiencing Extreme Weather Events report **emotional damage**

Country	EWE loss
Slovenia	1,870
France	1,606
Italy	1,556
Denmark	1,515
Spain	1,448
Austria	1,404
Czechia	1,339
Germany	1,330
Portugal	1,317
Luxembourg	1,311
Greece	983
United Kingdom	914
EU-27+UK average	**846**
Ireland	738
Romania	648
Croatia	643
Netherlands	587
Hungary	577
Cyprus	545
Bulgaria	472
Poland	423
Latvia	418
Lithuania	406
Finland	400
Sweden	379
Belgium	285
Slovakia	281
Estonia	174
Malta	127

Country	Earthquakes
Greece	15,843
Spain	13,091
Italy	1,733
Croatia	1,537
Portugal	1,506
EU-27+UK average	**1,358**
France	1,102
Hungary	723
Germany	399
Austria	296
Romania	273
Finland	273
Bulgaria	241
Cyprus	180
Sweden	151
Czechia	134
Poland	95
Slovakia	94
Estonia	74
United Kingdom	55
Ireland	55
Malta	52
Luxembourg	47
Slovenia	30
Netherlands	20
Belgium	15
Denmark	5
Latvia	4
Lithuania	3

- The link between **mental health and earthquakes is complicated** and **multi-dimensional**
- Among negative effects, developing both in the **short- and long-term:**
  - Depression and Anxiety disorders
  - PTSD
  - Suicide Risk
  - Substance Use Disorder

Source: The European House – Ambrosetti on European Environment Agency and European Facilities for Earthquake Hazard and Risk data, 2022
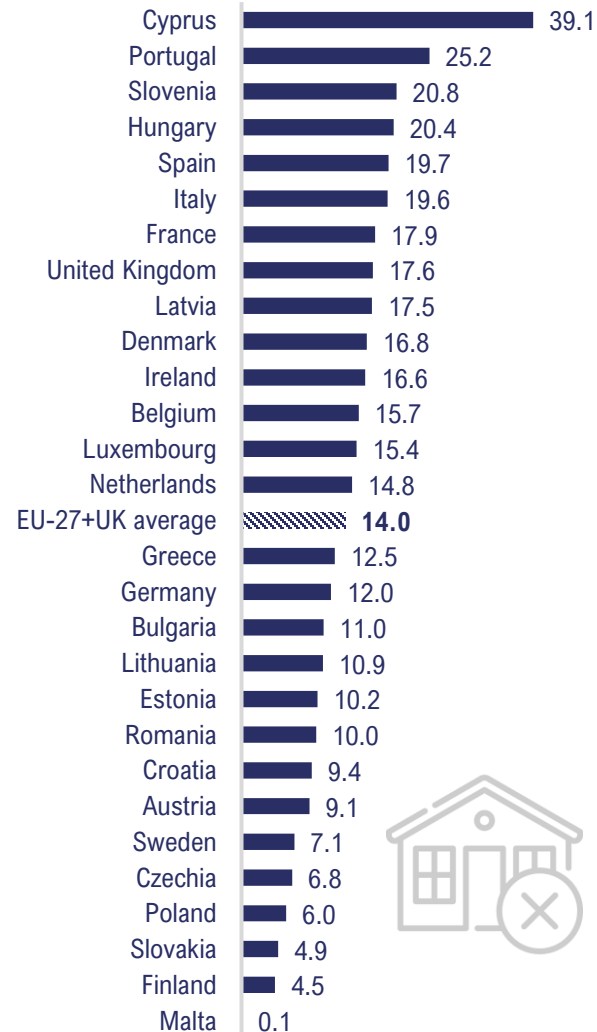
URBAN ENVIRONMENT AND ITS CHARACTERISTICS
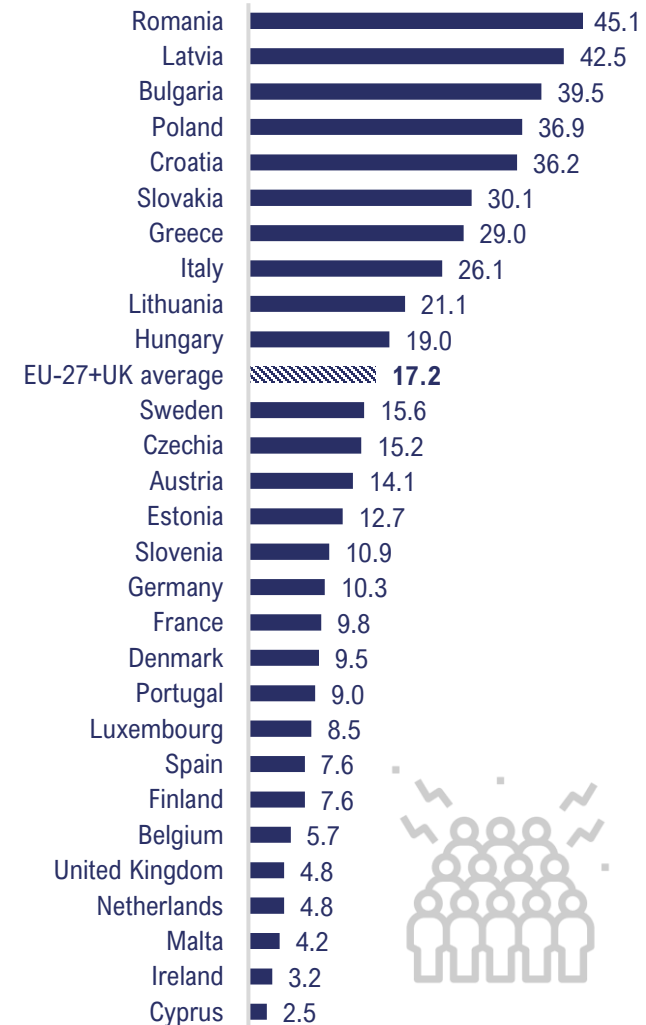
BUILT ENVIRONMENT

DISTRESS, POOR COGNITIVE DEVELOPMENT, AGGRESSION, TRAUMA

SOS

Population living in poor housing conditions
(% of total population), 2020

Country	%
Cyprus	39.1
Portugal	25.2
Slovenia	20.8
Hungary	20.4
Spain	19.7
Italy	19.6
France	17.9
United Kingdom	17.6
Latvia	17.5
Denmark	16.8
Ireland	16.6
Belgium	15.7
Luxembourg	15.4
Netherlands	14.8
EU-27+UK average	**14.0**
Greece	12.5
Germany	12.0
Bulgaria	11.0
Lithuania	10.9
Estonia	10.2
Romania	10.0
Croatia	9.4
Austria	9.1
Sweden	7.1
Czechia	6.8
Poland	6.0
Slovakia	4.9
Finland	4.5
Malta	0.1

Overcrowding rate
(% of total population), 2020

Country	%
Romania	45.1
Latvia	42.5
Bulgaria	39.5
Poland	36.9
Croatia	36.2
Slovakia	30.1
Greece	29.0
Italy	26.1
Lithuania	21.1
Hungary	19.0
EU-27+UK average	**17.2**
Sweden	15.6
Czechia	15.2
Austria	14.1
Estonia	12.7
Slovenia	10.9
Germany	10.3
France	9.8
Denmark	9.5
Portugal	9.0
Luxembourg	8.5
Spain	7.6
Finland	7.6
Belgium	5.7
United Kingdom	4.8
Netherlands	4.8
Malta	4.2
Ireland	3.2
Cyprus	2.5

- Studies highlight that people living in **poor housing conditions have a higher risk of experiencing mental ill health**:
  - An **alarming factor** is that people with a mental health disorder are **1.5 times** more likely to live in poor housing conditions vs. general population

Source: The European House – Ambrosetti on Eurostat data, 2022

INDIVIDUALS AFFECTED BY ENVIRONMENTAL NOISE IN EUROPE

HIGH ANNOYANCE
22,000,000

HIGH SLEEP DISTURBANCE
6,500,000

PREMATURE MORTALITY
12,000

HEART DISEASE
48,000

COGNITIVE IMPAIRMENT IN CHILDREN
12,500

1 in 5 EU citizens lives in areas where **noise levels are** considered **harmful to mental health**
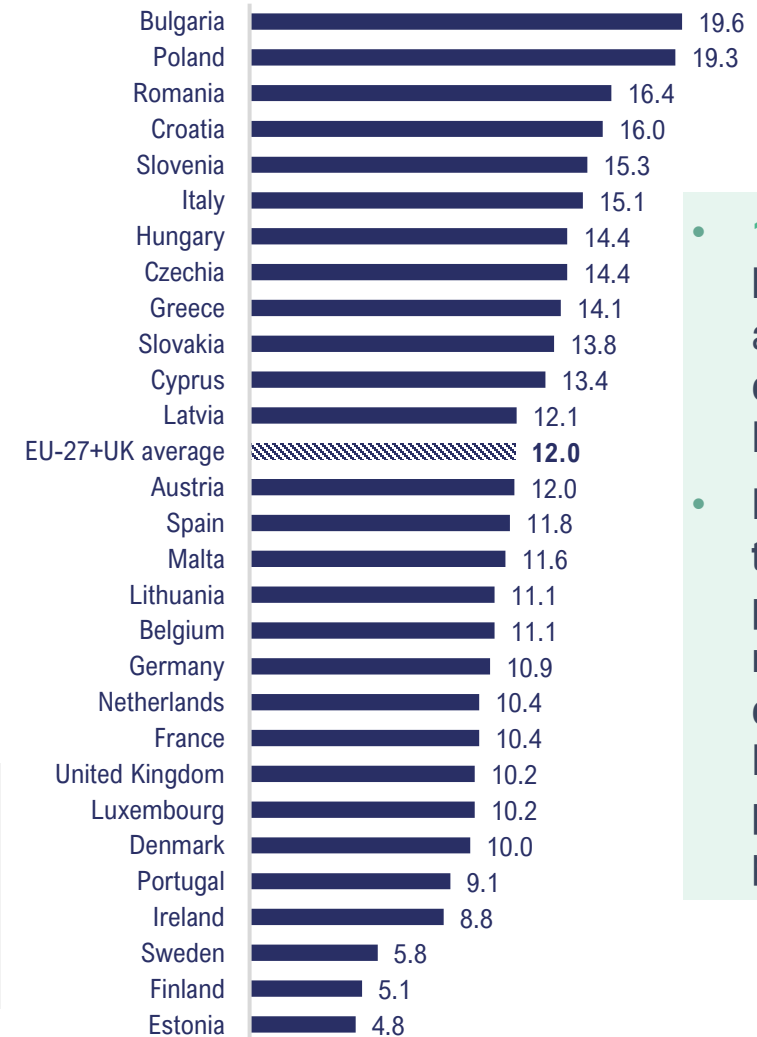
Noise pollution
(% of total population exposed), 2020

Country	Value
Malta	30.8
Netherlands	25.5
Portugal	25.1
Spain	21.9
Germany	21.6
France	20.5
Greece	20.1
United Kingdom	19.8
Luxembourg	19.7
Denmark	18.2
Sweden	17.3
Austria	16.8
EU-27+UK average	**16.2**
Romania	16.1
Slovenia	15.0
Lithuania	14.7
Belgium	14.5
Italy	14.3
Finland	14.1
Cyprus	14.0
Czechia	13.3
Poland	12.6
Latvia	12.5
Ireland	10.3
Slovakia	9.9
Hungary	9.3
Bulgaria	8.8
Croatia	8.1
Estonia	8.0

The chart shows **great variability** across Europe

Air pollution
(% of urban population exposed to PM2.5), 2019

Country	Value
Bulgaria	19.6
Poland	19.3
Romania	16.4
Croatia	16.0
Slovenia	15.3
Italy	15.1
Hungary	14.4
Czechia	14.4
Greece	14.1
Slovakia	13.8
Cyprus	13.4
Latvia	12.1
EU-27+UK average	**12.0**
Austria	12.0
Spain	11.8
Malta	11.6
Lithuania	11.1
Belgium	11.1
Germany	10.9
Netherlands	10.4
France	10.4
United Kingdom	10.2
Luxembourg	10.2
Denmark	10.0
Portugal	9.1
Ireland	8.8
Sweden	5.8
Finland	5.1
Estonia	4.8

- **12%** of people living in urban areas are **exposed to PM2.5**

- **People exposed to certain air pollutants** are more likely to **experience Mental Health problems**, in particular **anxiety**

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Head way — A new roadmap in Mental Health

CONFLICT

- **1/5 people in conflict settings** experience depression, anxiety disorders, PTSD, bipolar disorder and schizophrenia

- The **Ukrainian conflict** and its ripple effect will have a negative impact on the Mental Health of the population
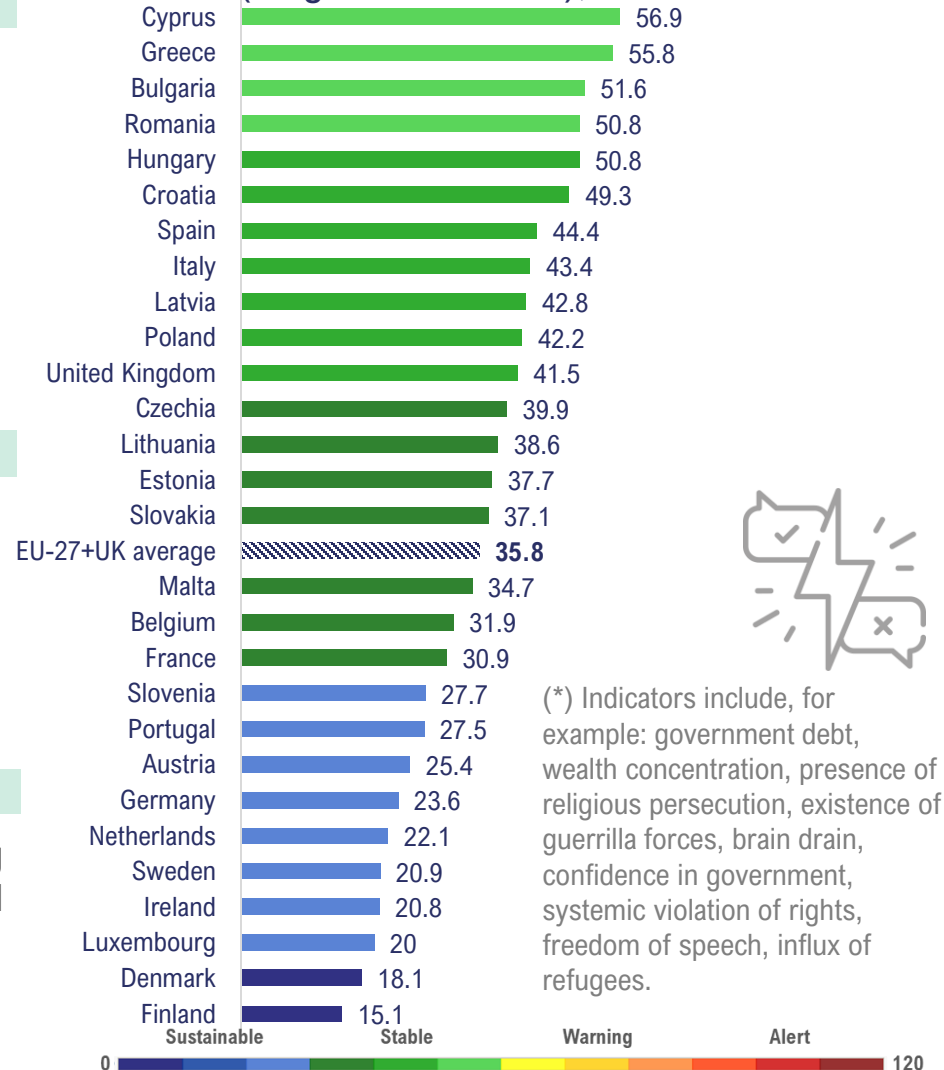
MIGRATION

- In 2021, **281 million international migrants are likely** to have unhealthy life-styles, risk behaviors, psychological and social distress and low self-esteem

ECONOMIC RECESSION

- **Unemployment** and a **decline in living conditions** cause psychological distress and greater use of mental health services
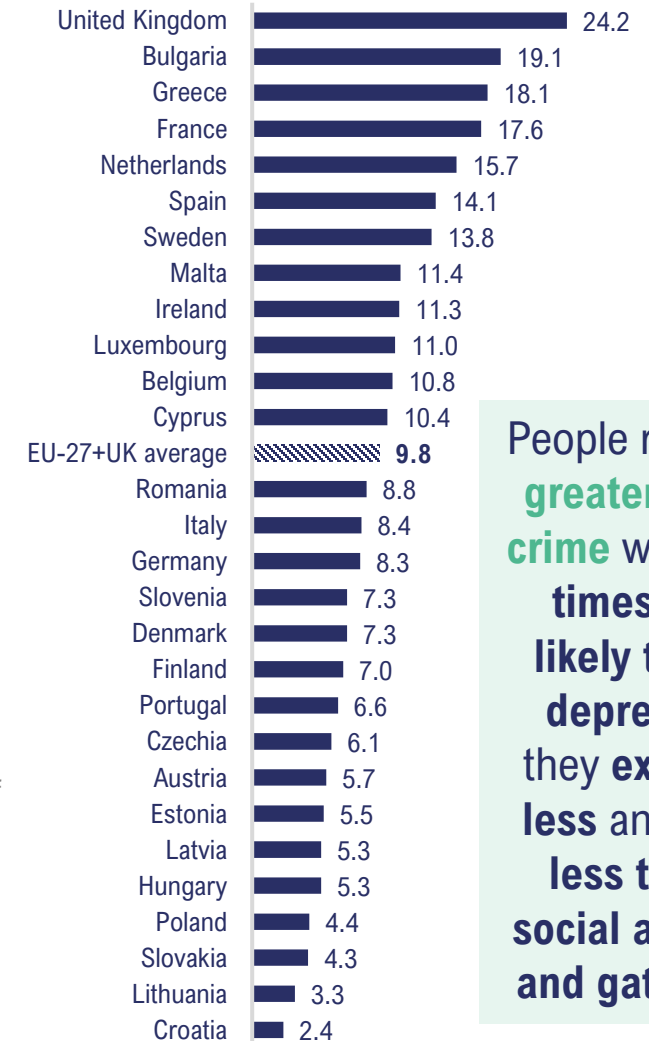
Conflicts, migration, economic recession* (Fragile State Index), 2022

Country	Value
Cyprus	56.9
Greece	55.8
Bulgaria	51.6
Romania	50.8
Hungary	50.8
Croatia	49.3
Spain	44.4
Italy	43.4
Latvia	42.8
Poland	42.2
United Kingdom	41.5
Czechia	39.9
Lithuania	38.6
Estonia	37.7
Slovakia	37.1
EU-27+UK average	35.8
Malta	34.7
Belgium	31.9
France	30.9
Slovenia	27.7
Portugal	27.5
Austria	25.4
Germany	23.6
Netherlands	22.1
Sweden	20.9
Ireland	20.8
Luxembourg	20
Denmark	18.1
Finland	15.1

Sustainable — Stable — Warning — Alert
0 — 120

(*) Indicators include, for example: government debt, wealth concentration, presence of religious persecution, existence of guerrilla forces, brain drain, confidence in government, systemic violation of rights, freedom of speech, influx of refugees.

Crime, violence or vandalism in the area (% annual measure), 2020

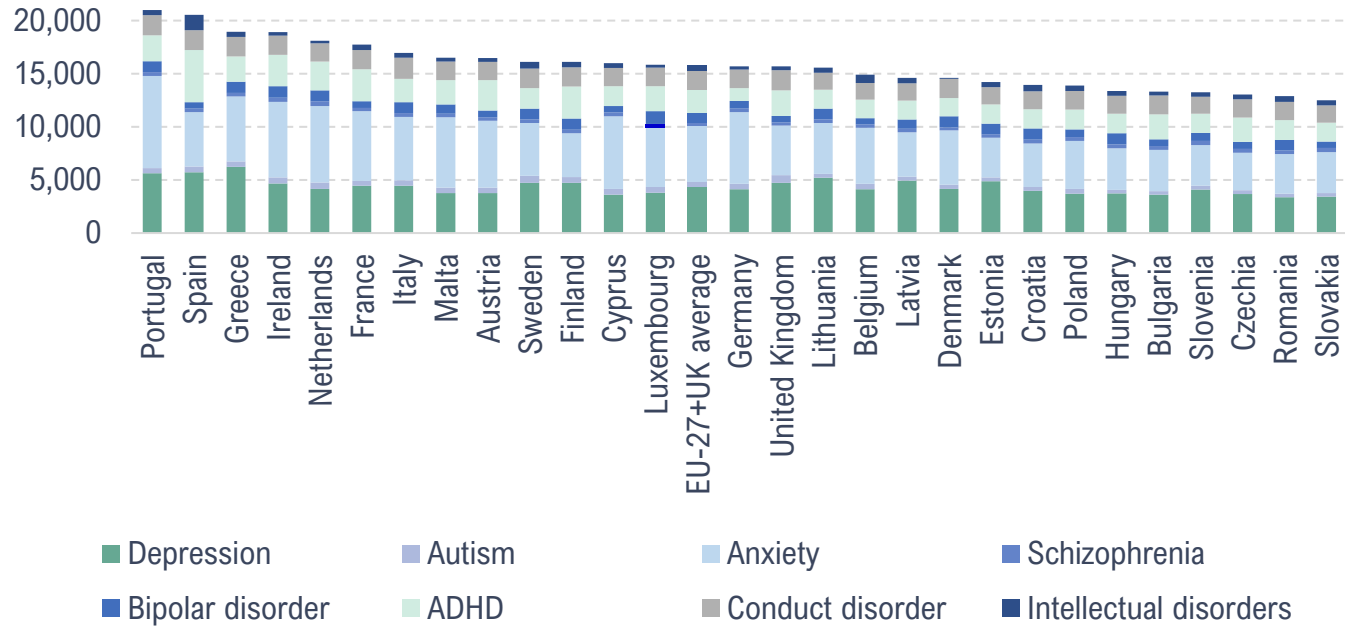| Country	Value
United Kingdom	24.2
Bulgaria	19.1
Greece	18.1
France	17.6
Netherlands	15.7
Spain	14.1
Sweden	13.8
Malta	11.4
Ireland	11.3
Luxembourg	11.0
Belgium	10.8
Cyprus	10.4
EU-27+UK average	9.8
Romania	8.8
Italy	8.4
Germany	8.3
Slovenia	7.3
Denmark	7.3
Finland	7.0
Portugal	6.6
Czechia	6.1
Austria	5.7
Estonia	5.5
Latvia	5.3
Hungary	5.3
Poland	4.4
Slovakia	4.3
Lithuania	3.3
Croatia	2.4

People reporting **greater fear of crime** were **1.93 times more likely to have depression,** they **exercised less** and **spent less time in social activities and gatherings**
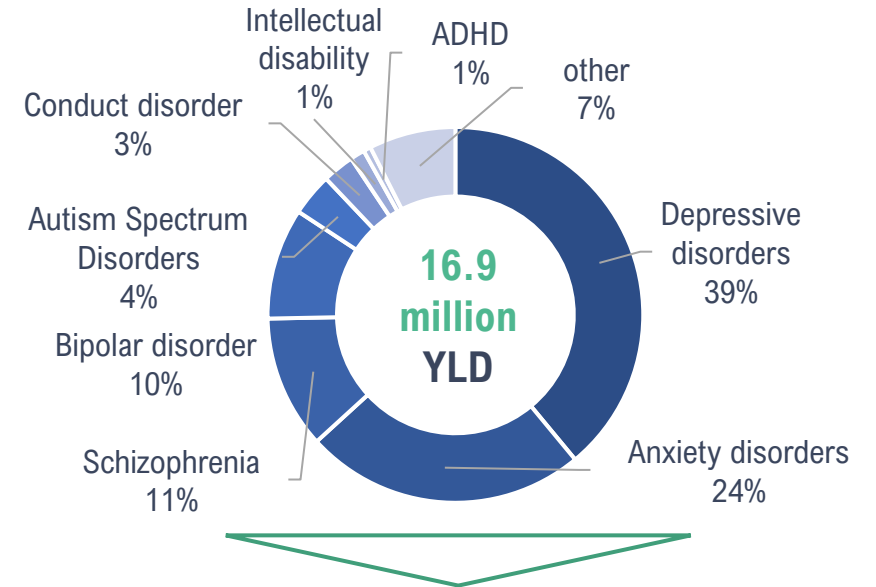
Source: The European House – Ambrosetti on Fragile State Index 2022 and Eurostat, 2022

KPIs of the pillar "Mental Health status of the population"

KPI	Unit of measure	Source
Prevalence (depression, anxiety, schizophrenia, bipolar disorder, autism, ADHD, conduct disorders and intellectual disorders)	Rate per 100,000 inhabitants	Global Burden of Disease, databases of National Statistic Institutes of Member States, official platforms of scientific associations
Disability - Years Lived with Disability (mental and behavioral disorders for general population and <20 years)	Rate per 100,000 inhabitants	Global Burden of Disease
Mortality (mental and behavioral disorders and suicide)	Standardized rate per 100,000 inhabitants	Eurostat and databases of National Statistic Institutes of Member States, official platforms of scientific associations
Risk factors (smoking and drug use in adults and adolescents, alcohol abuse in adults, bullying in young people and sexual abuse)	% Rate per 100,000 inhabitants	Eurostat, European Monitoring Center for Drugs and Drug Addiction, Global Burden of Disease and databases of National Statistic Institutes of Member States, official platforms of scientific associations

Prevalence of Mental Health disorders in Europe and its burden of disease

Prevalence of Mental Health disorders in Europe
(per 100.000 inhabitants), 2019

Legend:
- ■ Depression
- ■ Autism
- ■ Anxiety
- ■ Schizophrenia
- ■ Bipolar disorder
- ■ ADHD
- ■ Conduct disorder
- ■ Intellectual disorders

Distribution of Years-Lived-With-Disability - YLD- by mental disorder (%), 2019

16.9 million YLD

- Conduct disorder 3%
- Intellectual disability 1%
- ADHD 1%
- other 7%
- Autism Spectrum Disorders 4%
- Bipolar disorder 10%
- Schizophrenia 11%
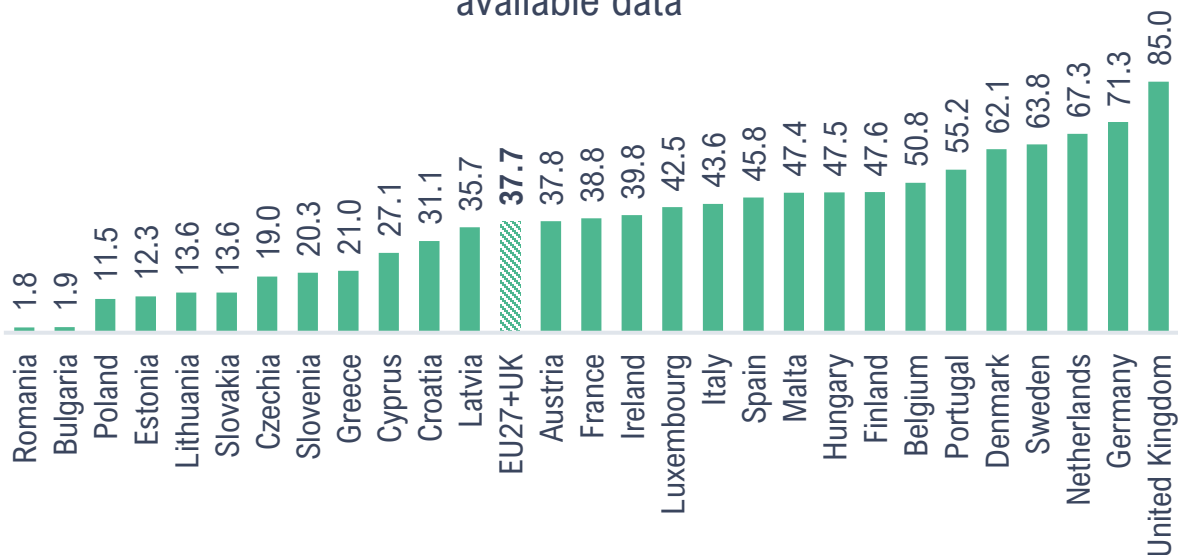- Depressive disorders 39%
- Anxiety disorders 24%

In Europe, COVID-19 pandemic triggered a **+25% increase in prevalence of anxiety and depressive disorders**
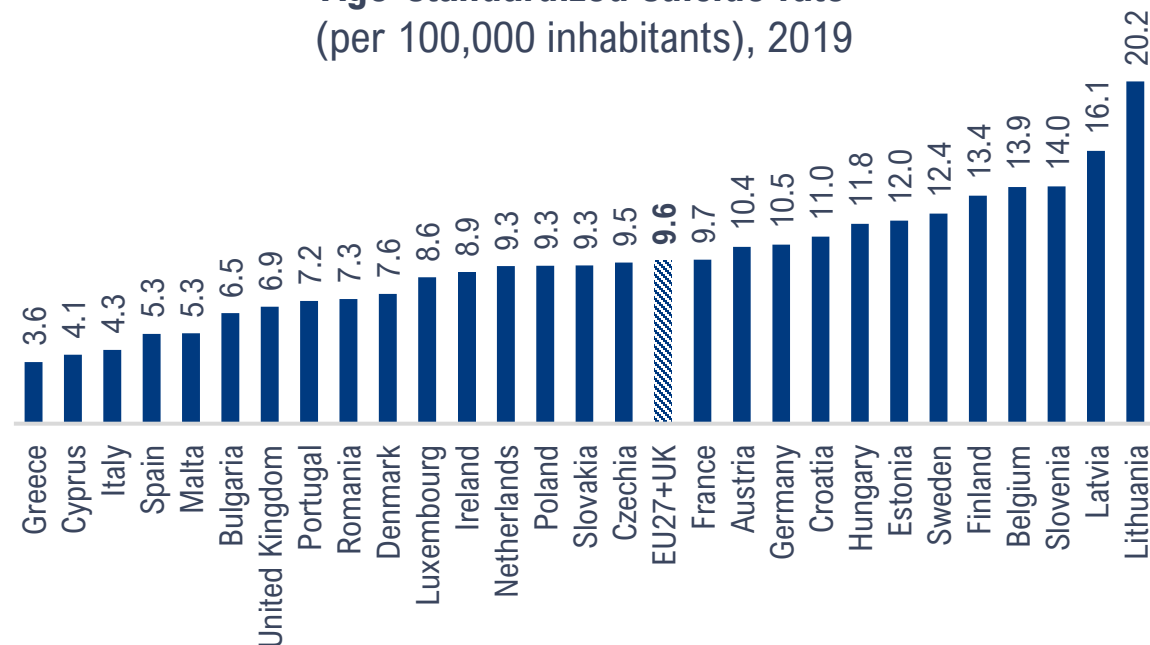
>1 out of 6 people are affected by Mental Health disorders

- Mental Health disorders rank **2nd** among the most **common disabling non-communicable diseases**
- The scenario is **projected to worsen given the increased prevalence rate** due to the COVID-19 pandemic

Source: The European House – Ambrosetti on Global Burden of Disease (GBD) data, 2022

Standardized death rate of mental and behavioral disorders in European Countries (per 100,000 inhabitants), 2020 or last available data

Romania 1.8
Bulgaria 1.9
Poland 11.5
Estonia 12.3
Lithuania 13.6
Slovakia 13.6
Czechia 19.0
Slovenia 20.3
Greece 21.0
Cyprus 27.1
Croatia 31.1
Latvia 35.7
EU27+UK 37.7
Austria 37.8
France 38.8
Ireland 39.8
Luxembourg 42.5
Italy 43.6
Spain 45.8
Malta 47.4
Hungary 47.5
Finland 47.6
Belgium 50.8
Portugal 55.2
Denmark 62.1
Sweden 63.8
Netherlands 67.3
Germany 71.3
United Kingdom 85.0

Over 235,000 (approximately 4% of all deaths) **annual deaths** due to **mental and behavioral disorders** in Europe

Age-standardized suicide rate (per 100,000 inhabitants), 2019

Greece 3.6
Cyprus 4.1
Italy 4.3
Spain 5.3
Malta 5.3
Bulgaria 6.5
United Kingdom 6.9
Portugal 7.2
Romania 7.3
Denmark 7.6
Luxembourg 8.6
Ireland 8.9
Netherlands 9.3
Poland 9.3
Slovakia 9.3
Czechia 9.5
EU27+UK 9.6
France 9.7
Austria 10.4
Germany 10.5
Croatia 11.0
Hungary 11.8
Estonia 12.0
Sweden 12.4
Finland 13.4
Belgium 13.9
Slovenia 14.0
Latvia 16.1
Lithuania 20.2

- In the WHO-Europe region, poor mental health is responsible for **140,000 deaths** per year by suicide:
  - **6th cause of death** in the population aged <70 years
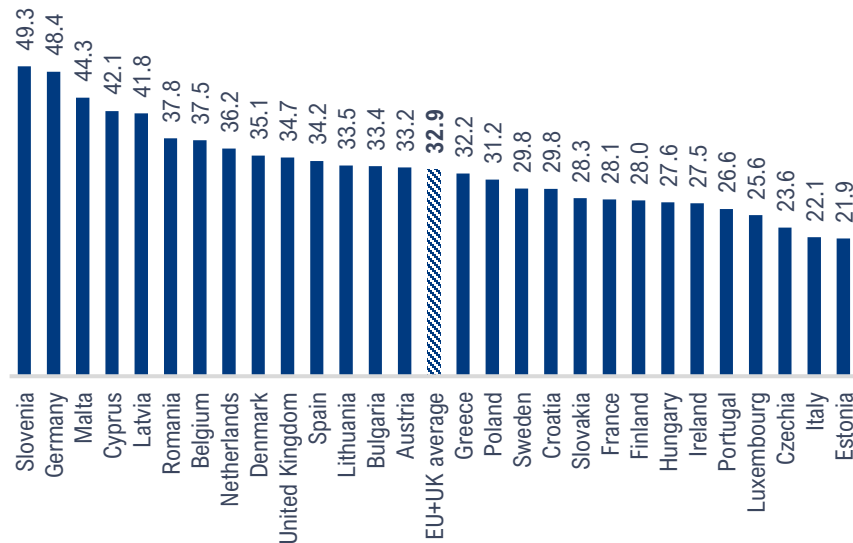 - **4th cause of death** in the population below <20 years

The pandemic, current socio-economic uncertainties and geopolitical conflicts (e.g. **war in Ukraine**) are responsible for **increased uncertainty, insecurity, grief and loss.** The effects of these impactful events on people's **mental health are significantly high**

Source: The European House – Ambrosetti on GBD, Eurostat and WHO data, 2022

Example of KPI monitored

Head way
A new roadmap in Mental Health

Addictive behaviors, binging and episodes of abuse of alcohol, tobacco and drugs are frequently related and represent **major signaling factors of incoming or ongoing Mental Health disorders.**

32.9% of people in Europe reported having had **heavy episodic drinking** in the previous months

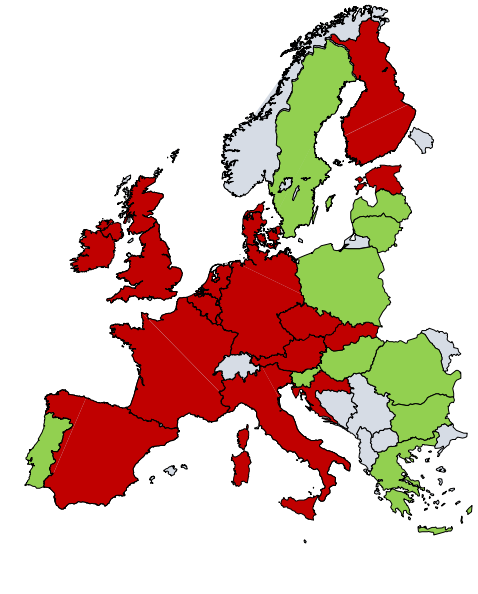**700,000 deaths** per year across EU Countries with a **higher share of male reporting** daily smoking

Almost **16.9% of young adults make use of illicit drugs** regularly

Alcohol abuse (% of the population who report heavy episodic drinking in the previous 30 days), 2020

Smoking (% of the population aged 15 years and over who are daily smokers), 2020 or last year available

Drug use (% of the population having used any illicit drug over lifetime), 2021

Alcohol abuse chart values:
Slovenia 49.3, Germany 48.4, Malta 44.3, Cyprus 42.1, Latvia 41.8, Romania 37.8, Belgium 37.5, Netherlands 36.2, Denmark 35.1, United Kingdom 34.7, Spain 34.2, Lithuania 33.5, Bulgaria 33.4, Austria 33.2, EU+UK average **32.9**, Greece 32.2, Poland 31.2, Sweden 29.8, Croatia 29.8, Slovakia 28.3, France 28.1, Finland 28.0, Hungary 27.6, Ireland 27.5, Portugal 26.6, Luxembourg 25.6, Czechia 23.6, Italy 22.1, Estonia 21.9

Smoking chart values:
Bulgaria 27.3, Cyprus 25.2, Hungary 24.9, Greece 24.9, Croatia 24.5, France 24.0, Latvia 22.6, Slovakia 21.0, Spain 19.8, Romania 19.8, EU27+UK 18.9, Malta 18.9, Lithuania 18.9, Germany 18.8, Italy 18.6, Czechia 18.1, Estonia 17.9, Slovenia 17.4, Poland 17.1, Denmark 16.9, Luxembourg 16.8, UK 15.8, Netherlands 15.4, Belgium 15.4, Portugal 14.2, Ireland 14.0, Finland 13.0, Sweden 10.4

Source: The European House – Ambrosetti on OECD and European Monitoring Center for Drugs and Drug Addiction data, 2022

- We need a **public mental health approach**

- **Evidence-based, cost-effective** public mental health (PMH) interventions exist

- **Primary Prevention** at forefront

- **Inclusion of understudied environmental factors:** natural, climate change, urban environment, political and socio-economic variables

- **Worse Mental Health outcomes after COVID-19** (we need to deepen the value and commitment we give to mental health)