

European health information WHO/Europe's tools and practice

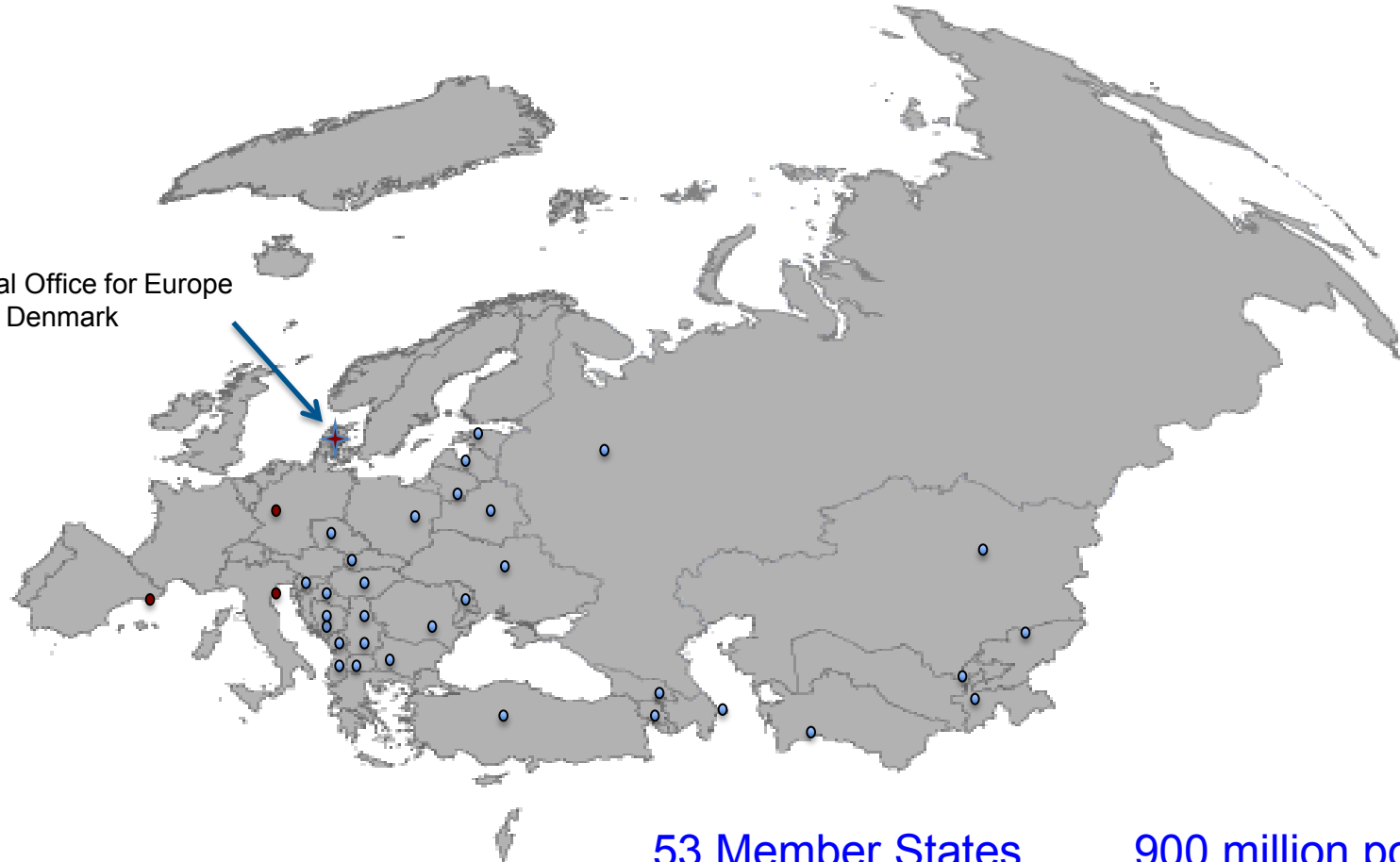
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Dr Christian Gapp

Division of Information, Evidence, Research and Innovation
28 November 2018



Introduction

The WHO European Region



WHO Regional Office for Europe
Copenhagen, Denmark

53 Member States

900 million population

European Health 2020 policy

- Emphasis on health and well-being
- The right to health and access to care
- People at the centre
- Addressing the determinants of health
- Whole of society approach
- Whole of government approach
- Importance of partnerships

European Health Information Initiative (EHII)



- Provides overarching coordination & guidance for health information activities WHO Europe;
- Multi-partner network;
- 11 Steering Group meetings held to date.



EHI participants: 40 and growing



Austria
Belarus
Belgium
Croatia
Czechia
Finland
Georgia
Germany
Greece
Hungary
Iceland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Malta
Netherlands
Poland
Portugal
Republic of
Moldova
Romania
Russian Federation
Slovakia
Slovenia
Sweden
Switzerland
The former Yugoslav
Republic of
Macedonia
Turkey
Ukraine
United Kingdom



European Commission



Wellcome Trust



European Public Health Association



IHME
Institute for Health Metrics
and Evaluation



The Commonwealth



World Health
Organization

REGIONAL OFFICE FOR
Europe

European Health Information Initiative



Measurement

H2020,
SDGs,
JMF



Access

HFA, Gateway,
CHI, Panorama



Capacity
Building

Autumn School,
Advanced Course



Networks

CARINFONET,
EVIPNet, SCHIN,
EBoDN, SEEHN,



Strategy

Support tool,
European action plan



Communication



World Health
Organization
REGIONAL OFFICE FOR
Europe



Organisation
mondiale de la Santé
BUREAU REGIONAL DE L'
Europe



Research
Weltgesundheitsorganisation
REGIONALBÜRO FÜR
Europa



Всемирная организация
здравоохранения
Европейское региональное бюро

Data collection

WHO mandate for health information

Constitution of the World Health Organization

- Article 2: In order to achieve its objective, the functions of the Organization shall be (extract from core functions of the WHO):
 - (...)
 - (f) to establish and maintain such *administrative and technical services* as may be required, *including epidemiological and statistical services*;
 - (q) to *provide information*, counsel and assistance in the field of health;
 - (s) to establish and revise as necessary *international nomenclatures* of diseases, of causes of death and of public health practices;

International sources of health related information

- WHO different technical programs: <http://www.who.int>. -> Search for topic of interest (e.g. Tuberculosis, Health workforce...);
- WHO Global Health Observatory: <http://www.who.int/gho/>;
- WHO classifications: The WHO Family of International Classifications: <http://www.who.int/classifications/en/>;
- WHO Regional offices (e.g. WHO Europe: <http://www.euro.who.int>);
- UN Data: <http://data.un.org>;
- World Bank: <http://data.worldbank.org>;
- Institute of Health Metrics and Evaluation (Global Burden of Disease - GBD, Global Health Data Exchange - GHDx): <http://www.healthdata.org>.

Databases at WHO Regional Office for Europe

European Health for All database (HFA-DB) - Indicators: 611

Since the mid-1980s, Member States of the WHO European Region have been reporting essential health-related statistics to the Health for All (HFA) family of databases, making it one of WHO's oldest sources of data.

European mortality database (MDB) - Indicators: 852

European mortality database allows age- and sex-specific analysis of mortality trends by broad disease-groups, as well as dis-aggregated to 67 specific causes of death. Data reach back to 1980. The data is taken from the WHO Global Mortality database.

Health 2020 indicators - Indicators: 49

Health 2020 core indicators were agreed by the WHO European Region Member States for monitoring progress towards the Health 2020 targets.

Other databases and information at WHO Europe.

Data validation

An approach to health data validation

WOLFENSON, L. B., AND WORTH, N. An approach to health data validation. Comput. Biomed. Res. 13, 501 (1980).

An example... Validation of HFA data

1. Modification of data validation procedures
2. Production and compilation of LaTeX files
3. Draft the validation questions
4. Data finalization
5. Update

Data standardisation

Standardization... practical steps

- Use of international definitions, making international comparability of data possible
- Good quality and translation in the metadata, including data and metadata validation procedures in place.
- Coding using international classifications
- Consistency in the use of a new source of data or a different methodology (avoiding breaks in time series)
- Use of a unified template and/or form for collecting information and data format

Reporting

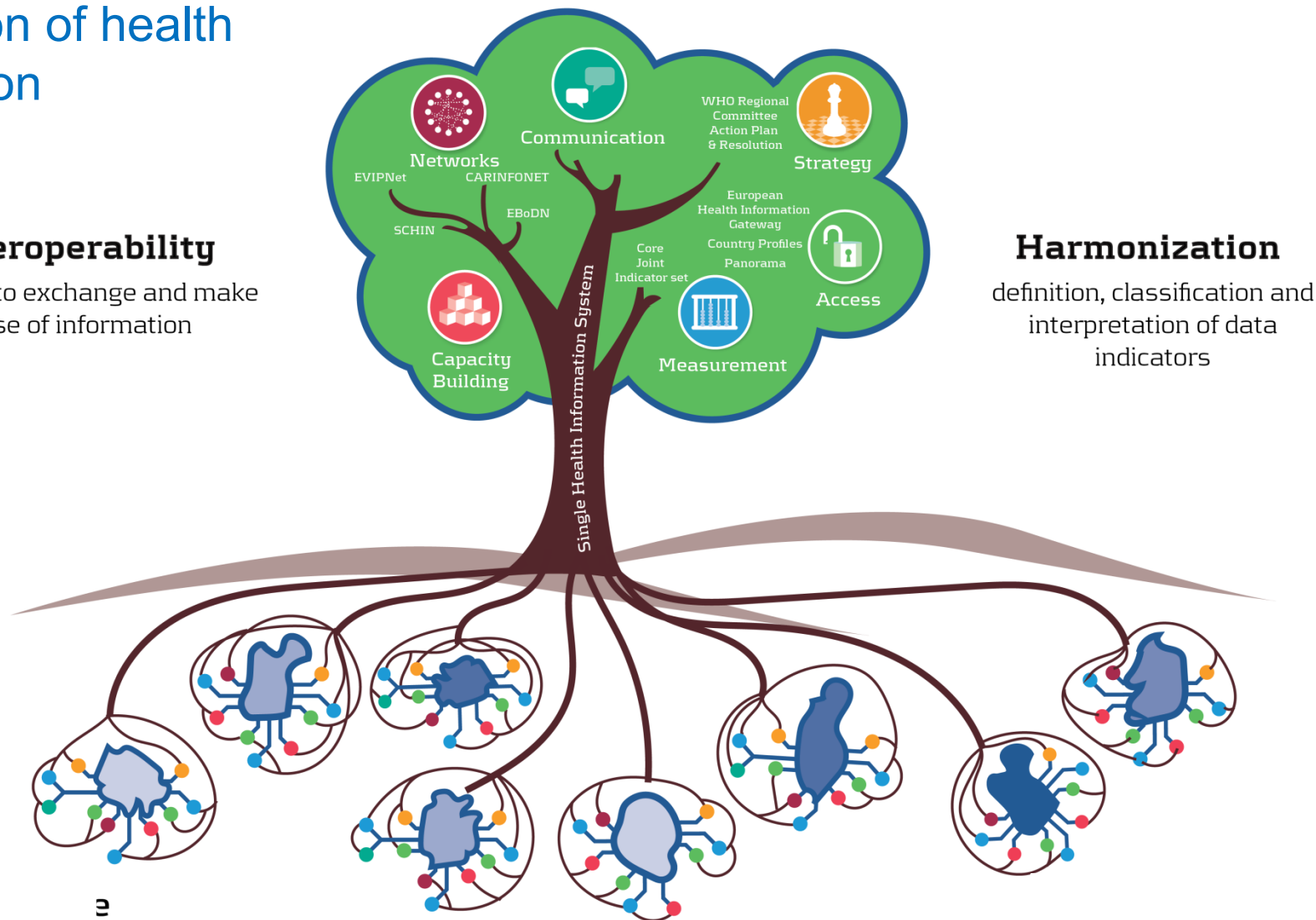
Current situation of health reporting in Europe

European
Health
Information
Initiative

The future: Integration of health information

Interoperability

Ability to exchange and make
use of information



Harmonization

definition, classification and
interpretation of data
indicators

- (a) promote and enhance the work of the EHII to harmonize and lead health information efforts in the European Region, ensuring collaboration with the European Union and the Organisation for Economic Co-operation and Development and their affiliated institutions in working towards a single integrated health information system for the WHO European Region;

2016

The reporting challenge for countries:



THE GLOBAL GOALS
For Sustainable Development



17 goals

6 targets

169 targets

9 targets

37 indicators

244 indicators
(26 indicators under SDG3)

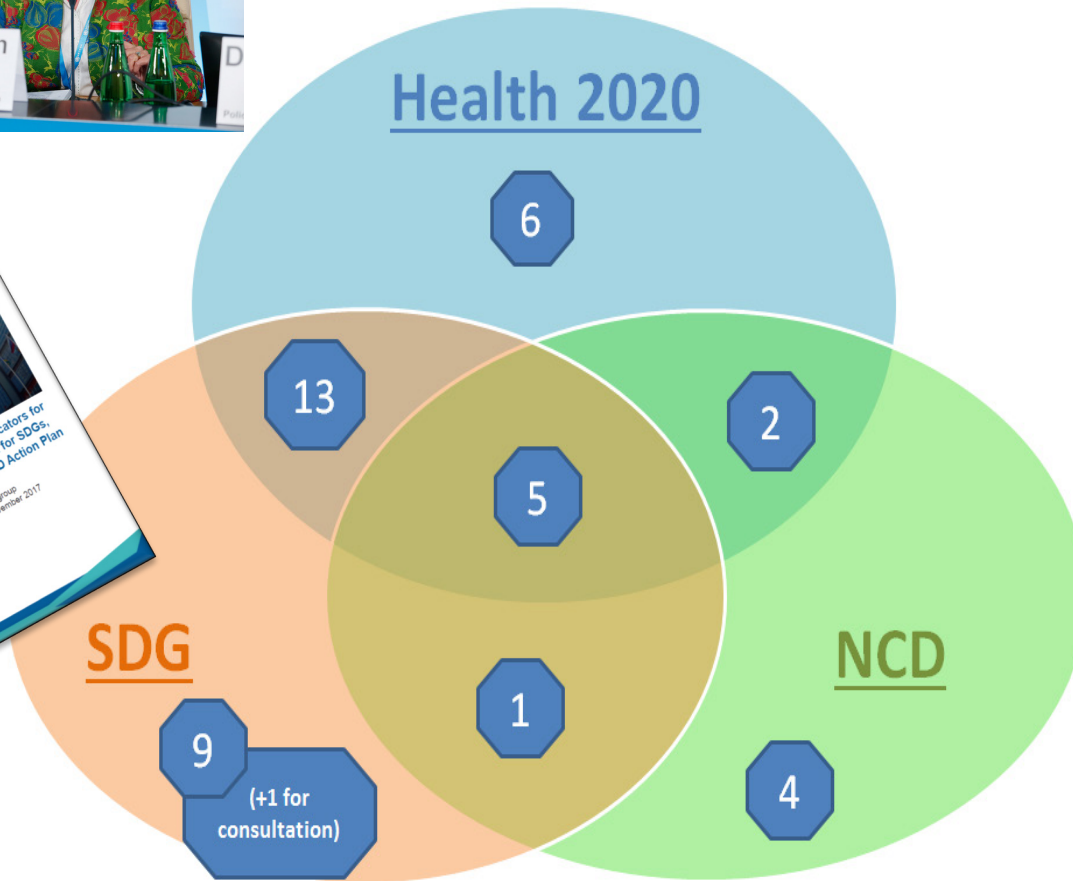
25 indicators

19 core

18 additional

- UNECE: even most developed countries
- Can only report on **50%** of SDG indicators;
 - Can only cover **76** out of 169 targets;
 - Joint Framework to be proposed.

Coverage of indicators across frameworks and Public Health domains



Domains (number of indicators)

Mortality and health expectancies (8)

Health behaviours and risk factors (9)

Social determinants of health (5)

Morbidity – NCDs and communicable diseases (7)

Health systems (4)

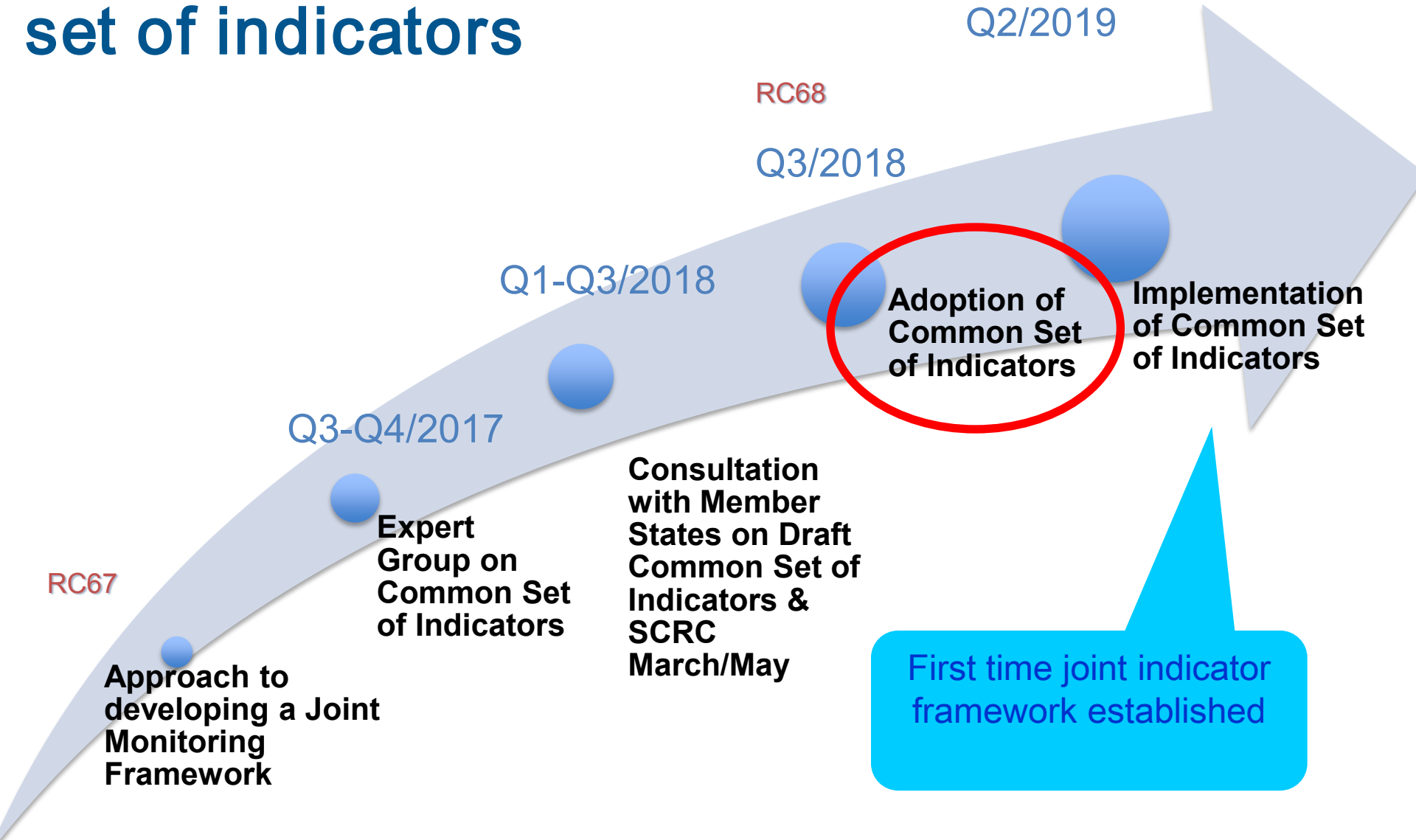
Well-being (3)

Environmental health (2)

Health policy (2)

Process to arrive at the JMF set of indicators

Q4/2018-
Q2/2019



European health reports

- Flagship corporate publication;
- Every 3 years;
- Reporting on implementation of Health 2020 (baseline 2010).



Having crossed the half-way point of the implementation period of Health 2020, the 2018 report reflects on the effect Health 2020 has had on the Region, and outlines any aspects that may be unfinished by 2020 and beyond.

68th session of the WHO Regional Committee for Europe

Rome, Italy, 17–20 September 2018

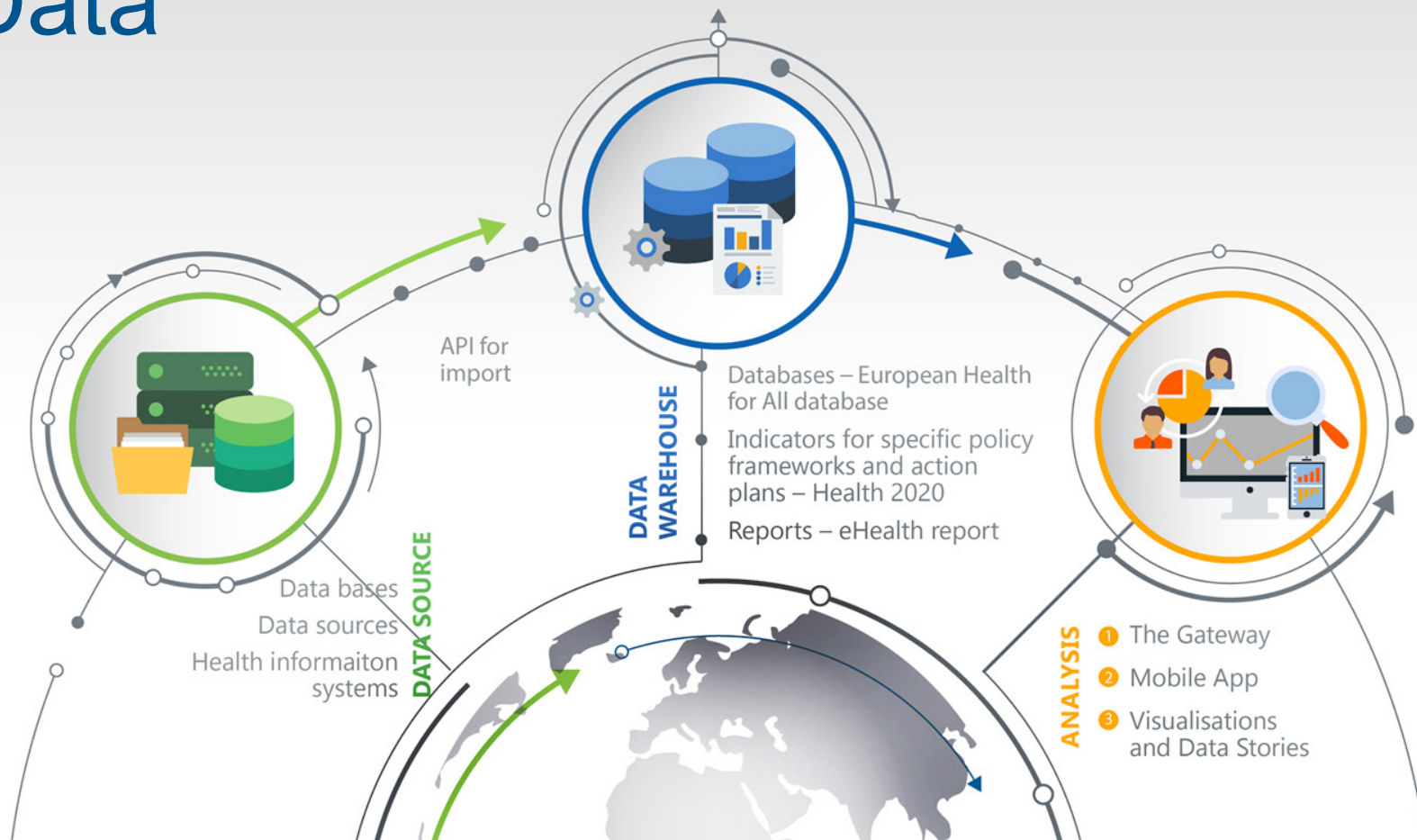
Some key outcomes:

- To **adopt and implement the Joint Monitoring Framework** in the context of the roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020, the European policy for health and well-being, EUR/RC68(1).
- To review all existing core indicators, in particular the **Health 2020 indicators** and enter into a second phase indicator development in collaboration with the EC and the OECD in the coming biennium.

The WHO European health information Gateway



WHO Europe's tools to access Data



gateway.euro.who.int



Public health thematic overviews



Datasets



Country profiles

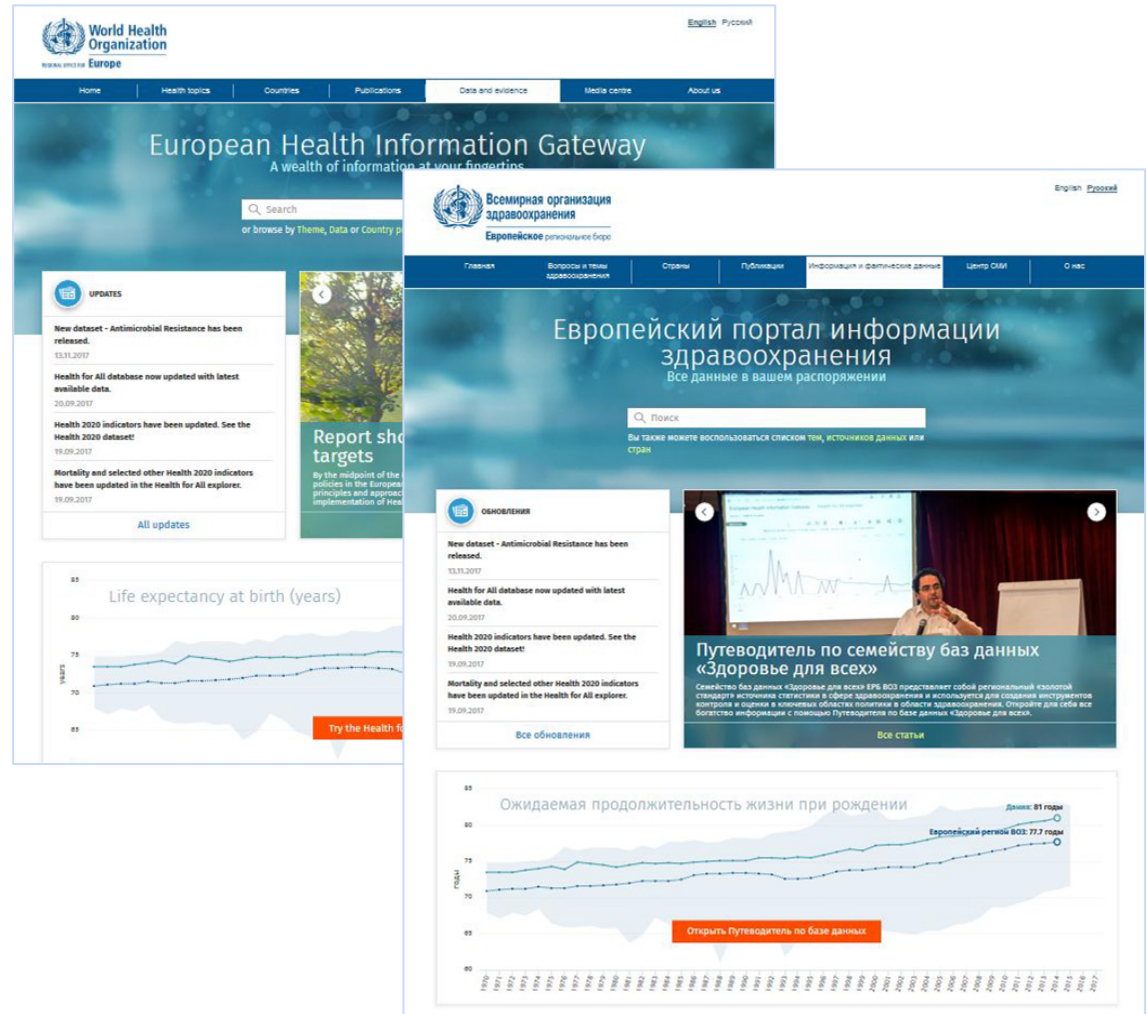


Search

gateway.euro.who.int

A bilingual,
interactive
one-stop health
information shop

- For policy-makers
- Media
- The general public
- WHO staff



The Gateway makes data accessible

SDR, Influenza, per 100 000

*Exportable data
and graphs*



Indicator full name: Influenza, per 100 000 population, by sex (age-standardized death rate)

Unit: deaths per 100 000

Dimensions:

- Age group (AGE_GRP_LIST)
- Country (COUNTRY)
- Supranational group of countries (COUNTRY_GRP)
- Sex (SEX)
- Subnational country codes for HFA-MDB (SUBNATIONAL_MDB)
- Year of measure (YEAR)

Years data is available: 1979–2016

Indicator is part of data set(s):

MDB

Last updated: 14 June 2018

Export to: [CSV](#) [Excel](#)

Countries with no data (2): ^

- Andorra
- Monaco

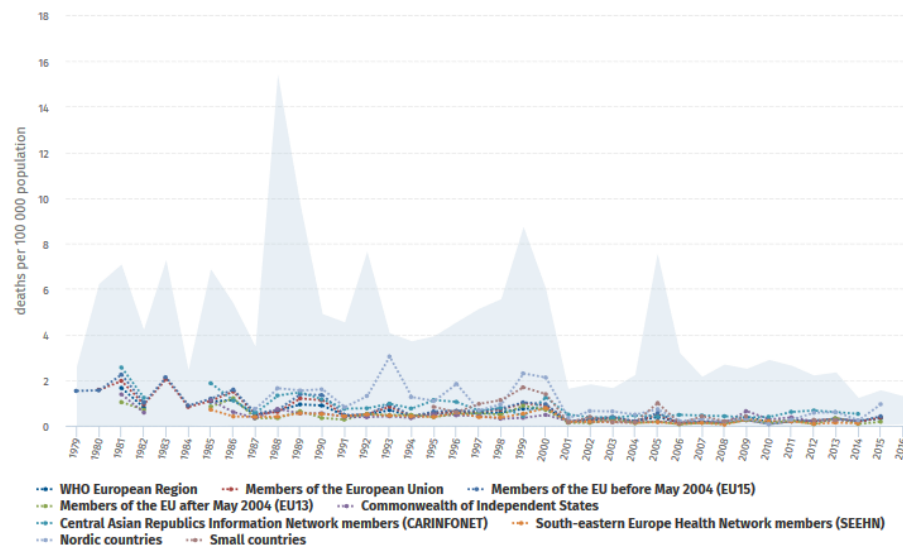
(Sub)regional averages available for: ^

- WHO European Region
- Members of the European Union
- Members of the EU before May 2004 (EU15)
- Members of the EU after May 2004 (EU13)
- Commonwealth of Independent States
- Central Asian Republics Information Network members (CARINFONET)
- South-eastern Europe Health Network members (SEEHN)
- Nordic countries
- Small countries

[View in HFA explorer](#)

Explore this indicator's data in a specialized tool

Influenza, per 100 000 population (age-standardized death rate) (Line chart)



[See full graph](#)

[Data set notes](#) ^

[Indicator notes](#) ^

[Country notes](#)

No information

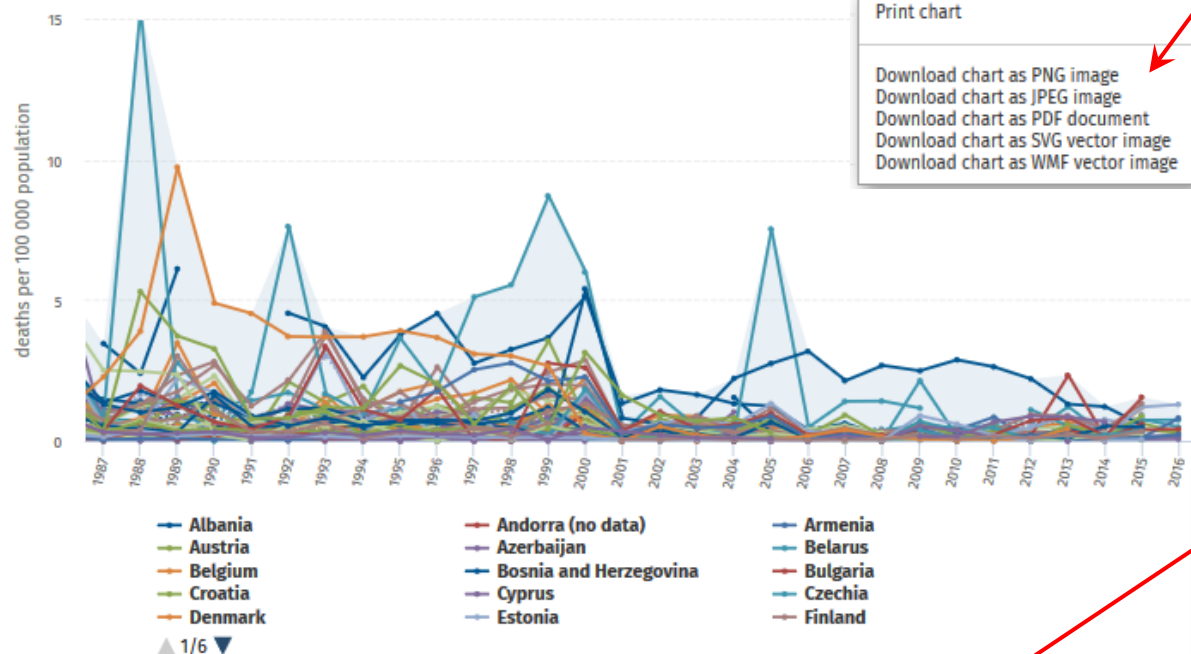
*Interactive graphs and
infographics, reusable
on other web sites*

Export and share

Influenza, per 100 000 population (age-standardized death rate) (Line chart)

Graph Table Notes

Influenza, per 100 000 population (age-standardized death rate)



* The former Yugoslav Republic of Macedonia (MKD is an abbreviation by the International Organization for Standardization (ISO))

Deselect all

Hide range

Export to:

CSV

Excel

Embed code

X axis range

Y axis range

Chart export

Size

☐ Small

☐ Custom

☐ Medium

3200 x 1333 px

☒ Large

☒ Keep aspect ratio

☐ Increased font size

Optimized for PowerPoint presentation slides

Export

Embed code

Code to embed chart:

```
<iframe frameborder="0" class="whoWidget"
onload="(function
){if(!document.getElementById('ifr')){var
s=document.createElement('script');
s.type='text/javascript';s.id='ifr';s.src='https:
//gateway.euro.who.int/Scripts
/libs/iframeResizer/iframeResizer.min.js';
document.getElementsByTagName('head')}
```



здравоохранения

Европейское региональное бюро

Why do DW and API matter?

Source of up-to-date data in all tools

- [Gateway, mobile app, interactive infographics](#)

Standardised data format and coding

- [Download Excel overview of all data deposited into the DW](#)

Easily access current data with statistical software or a script

- [See “API specifications”](#)



API

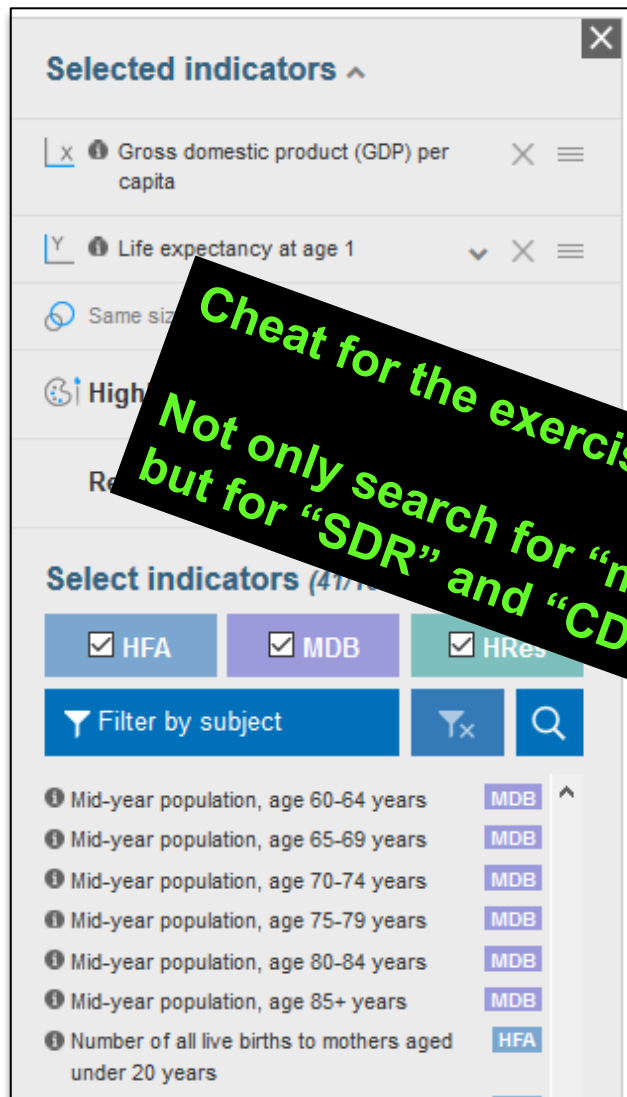
Are you a developer? All data can be queried via our API: [WHO/Europe Data Warehouse API](#)

The Gateway consists of:

- HFA explorer
- Datasets, indicators
- Country Profiles
- Search functionality
- Themes
- Resources
- Tutorials
- Mobile app
- Data Warehouse & API

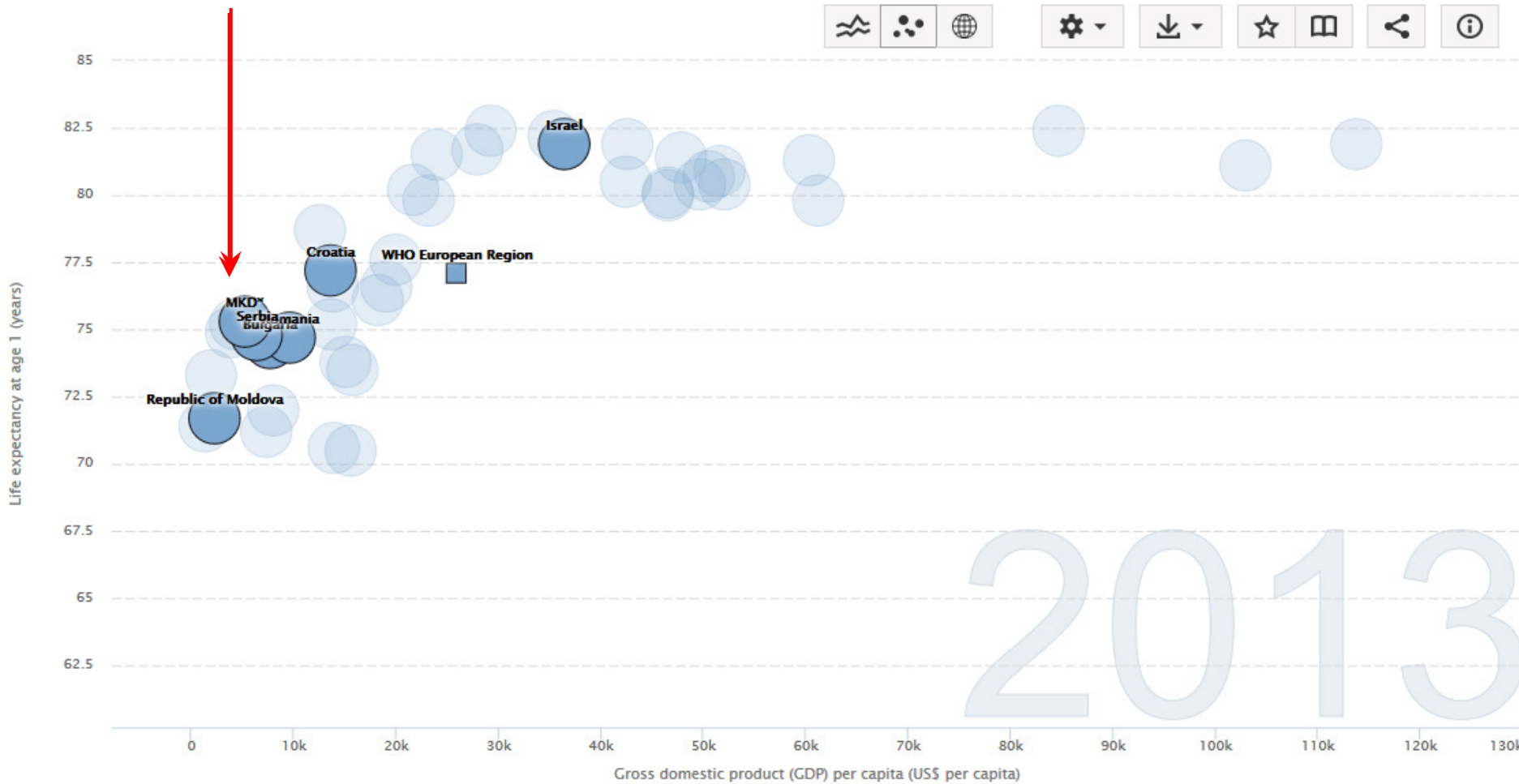


Explore the Explorer

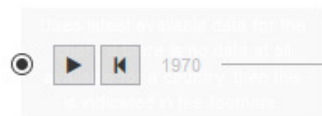


- Search across 1500+ indicators in 3 databases
- Select indicator, country, subregional average
- Select graph
- Highlight countries

Highlight countries



No data available (10 countries): Albania, Andorra, Azerbaijan, Bosnia and Herzegovina, Greece, Monaco, Montenegro, San Marino, Tajikistan, Ukraine.



Animated walk-through across years

Show latest data available

REGIONAL OFFICE FOR Europe

BUREAU REGIONAL DE L'Europe

REGIONALBURO FÜR Europa

ЕВРОПЕЙСКОЕ РЕГИОНАЛЬНОЕ БЮРО

Search functionality

- Search by Country, indicators, within datasets, and qualitative resources.
- Intuitive search provides a country's results, and compares against regional averages.

Gateway > Search

influenza Search

Search results for: influenza

Indicators (17) Stakeholders and resources (15)

☐ European Health for All database (HFA-DB) (6) HFA-DB

☐ European mortality database (MDB) (11) MDB

☐ Child and adolescent health (1) ChildAdolescentHealth

Deaths(#), influenza MDB

SDR, influenza, per 100 000 MDB

SDR(0-14), influenza, per 100 000 MDB

SDR(0-64), influenza, per 100 000 MDB

SDR(15-29), influenza, per 100 000 MDB

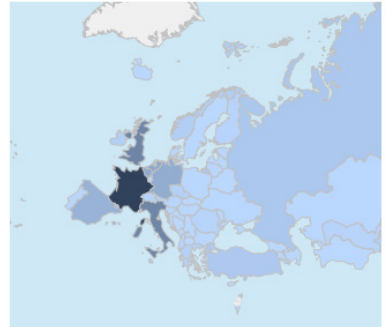
SDR(25-64), influenza, per 100 000 MDB

Filter by data set

SDR(30-44), influenza, per 100 000 MDB

SDR(45-59), influenza, per 100 000 MDB

View "Deaths(#), Influenza (number of deaths)" in the HFA explorer




Themes


1. Focus on specific area
2. Most important documents, stakeholders, and resources
3. Graphs and indicators
4. Organizations and projects
5. Evidence and evidence-informed practice
6. Policy and analysis
7. Tools and methods


[Home](#) [Country profiles](#) [Themes](#) [Data](#) [HFA HFA explorer](#)


Gateway > Themes > Air quality


Air quality

**Stakeholders & projects**
Organisations: 4

**Evidence and evidence-informed practice**
Databases: 2, Overviews: 17

**Policy & analysis**
Policy: 11, Analysis: 1


**Tools & methods**
Policy support: 3


**Indicators & visualizations**
Indicators: 14, Visualizations: 30

About the theme

Evidence shows that air pollution at current levels in European cities is responsible for a significant burden of deaths, hospital admissions and exacerbation of symptoms, especially for cardiorespiratory disease. While the hazardous properties of many common pollutants are still under intensive research, evidence-based policies demonstrate that health protection is possible and effective. WHO Regional Office for Europe works to make sure that the available evidence on the health risks of air pollution is used in public debate and in policy-making.


Featured indicator

 Degree of implementation of policies to reduce exposure of children to SHS in the WHO European Region (*Map*)



[See full graph](#)

Infographics



PROTECTING CHILDREN FROM THE ENVIRONMENT

Environmental risks include air pollution, chemicals, poor water, sanitation and hygiene.


CHILDREN ARE AFFECTED BY:

- Air pollution
- Inadequate water, sanitation and hygiene

CHILDREN ARE ALSO AFFECTED BY EMERGING THREATS SUCH AS:

[Browse all infographics \(4\)](#)

Featured stories



Enhancing national action on environment and health

Every year, avoidable environmental risks account for at least 1.4 million deaths in the WHO European Region. These include air pollution, inadequate water and sanitation services, hazardous chemicals, poor waste disposal and climate change. More than 350 resources on environment and health have now been gathered through the European Environment and Health Process to aid the strengthening of national efforts to address the leading environmental determinants of ill health.

[Read more](#)

Popular indicators

State of “Health 2020”

State of "Health 2020"

♦ Health 2020 ♦ Health inequalities and social determinants of health
 ♦ Health system performance: quality, costs, accessibility, equity and reform ♦ Mental health
 ♦ Noncommunicable diseases ♦ Obesity, physical activity and nutrition
 ♦ Reproductive, maternal, adolescent & child health ♦ Water use, sanitation and hygiene

- An overview of how Member States are doing, ranked against the policy's targets and indicators, which had been adopted by all European Member States.

- Further, data is available in the Health for All explorer.

Embed code

How Member States measure up

WHO's health policy for Europe, Health 2020, aims to improve health and well-being, reduce health inequities and ensure universal health coverage. This visualization gives an overview of how Member States are doing, ranked against the policy's targets and indicators. Full dataset is available on the WHO European Health Information Gateway.

← [Back to data stories](#)

Next data story:

[Theme in focus: Health 2020](#)

Previous data story:

[Enhancing national action on environment and health](#)



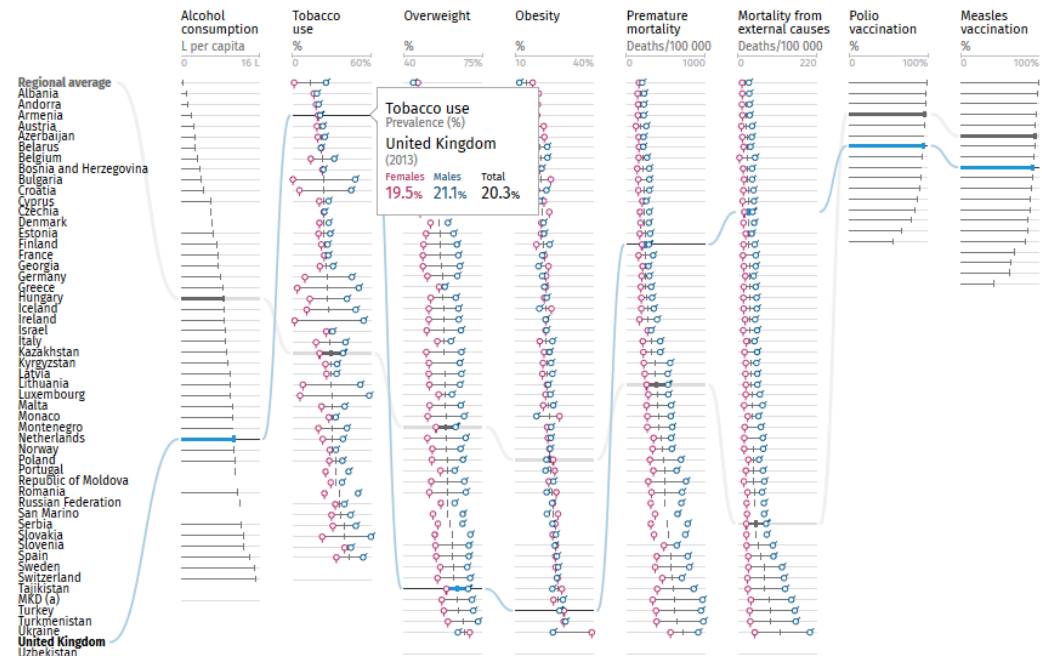
Target 1. Reduce premature mortality rate in Europe

The description of progress towards this target is based on three areas – premature mortality from noncommunicable diseases (NCDs), vaccine-preventable diseases and external causes.

The WHO European Region is on track to reduce premature mortality from NCDs, but not to reach the global NCD targets, despite steadily declining tobacco use. Mortality from injuries has declined significantly in recent years; it is shown here as death from external causes, one of the leading causes of premature mortality. A large percentage of premature mortality can be attributed to unhealthy behavior. Europe has the highest levels of alcohol consumption in the world, and alarming and rising rates of overweight and obesity. Vaccination rates indicate the extent of health-system coverage and can identify areas of weak performance. Overall, vaccination coverage is improving, but sustained measles outbreaks continue and the threat of poliomyelitis (polio) importation requires vigilance.

There are many positive trends in health, but significant inequalities between countries persist.

Highlight group: **WHO European Region** Sort by: • Country • Males • Females • Total

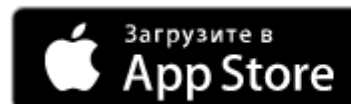


European health statistics mobile app

- Updatable statistical reference, also off-line.

Contains essential indicators:

- Qualitative Health 2020 indicators
 - European Health Report
 - Health behavior in school-aged children report
-
- Query indicators, compare countries, set reference country, send via email.



Why do DW and API matter?

Source of up-to-date data in all tools

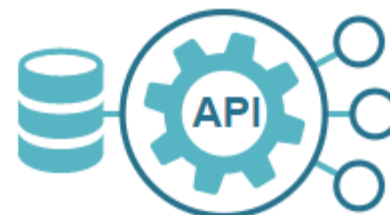
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API

Вы разработчик? Все данные могут быть получены через наш API. Исследуйте его здесь: [Data Warehouse API](#)



Thank you for
your attention

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gappc@who.int

