

**Nineteenth session of the Joint Task Force on Environmental Statistics and Indicators  
Geneva, 3-4 November 2022**



**Agenda item 7. Data needs, statistics and indicators to manage environment-related human health issues**

# **Air Pollution and Health Data requirements for Air quality Impact assessments using the AirQ+ methodology**

04 November 2022

# Introduction

- Air Pollution and Health Data requirements for Air quality Impact assessments
- What is AirQ+?

# Health Risk Assessment of Air Pollution



<https://www.who.int/europe/publications/item/9789289051316>

« An Air Pollution Health Risk Assessment aims to estimate the risks of past, current or future exposure to air pollution and of changes in exposure that may result from planned policies or other modifications of air quality. »

(WHO, 2016: 3)

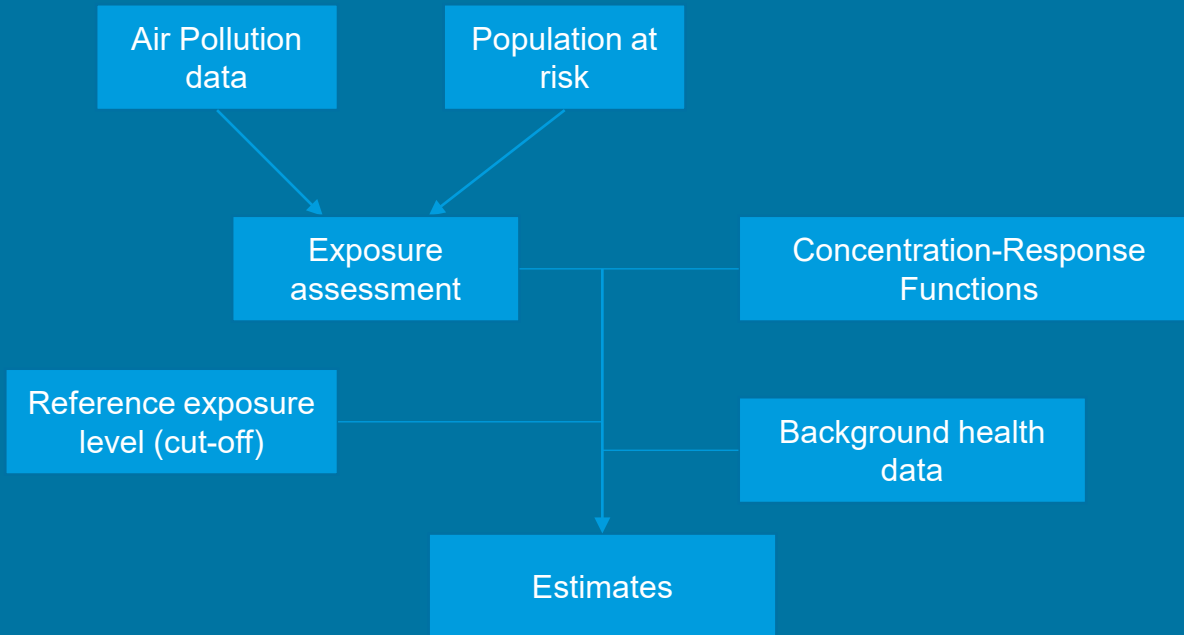
[https://www.euro.who.int/\\_data/assets/pdf\\_file/0006/298482/Health-risk-assessment-air-pollution-General-principles-en.pdf](https://www.euro.who.int/_data/assets/pdf_file/0006/298482/Health-risk-assessment-air-pollution-General-principles-en.pdf)

# Data input

- Air pollution
- Population
- Health data
- Risk selection

**From input data to estimates**

# Main steps in health risk assessment of air pollution



## Estimates

### Input information needed for HRA

**1) Current exposure level** (or exposure distribution) in the population

Reference exposure level (counterfactual, cut-off)

**2) Size of target population**

**3) Background incidence of health outcome**

**4) Concentration-response function**

They produce the fraction of health effects attributed to the exposure

# What is AirQ+?

A user-friendly software  
to estimate the magnitude  
of the most important and best recognized  
effects of air pollution in a given  
population

# What is AirQ+?

- Developed by WHO/Europe (supported by colleagues at HQ and in all the Regions) with support from German government
- Updated and improved version of the WHO AirQ software (used for more than fifteen years)
- Can also be used for supporting educational and training activities related to environment and health

# AirQ+ target users

AirQ+ is designed for  
**public health or environmental specialists**

with minimum knowledge of  
atmospheric modelling, statistical methods,  
epidemiology or GIS



# AirQ+ uses

AirQ+ is designed to calculate:

- How much of a particular health effect is attributable to selected air pollutants?
- Compared to the current scenario, what would be the change in health effects if air pollution levels changed in the future?

# AirQ+:

## Pre-loaded vs user-supplied data

### Users can also:

- change default RRs or
- load their own data for pollutants not included in AirQ+ if RRs are available.

# AirQ+ is downloadable online

## Link:

<https://www.who.int/europe/tools-and-toolkits/airq---software-tool-for-health-risk-assessment-of-air-pollution>

# 2016-2022 releases of AirQ+

## **AirQ+ 1.0** (May 2016)

- Original release of the new tool based on **AirQ 2.2 version (2006-2012)** / English

## **AirQ+ 1.2** (May 2017)

- Updated based on comments by experts users / Bugs identified and fixed / English and Russian

## **AirQ+ 1.3** (October 2018)

- Updated based on comments by experts users / English, Russian and French

## **AirQ+ 2.0** (December 2019)

- New interface and functionalities / English, Russian and French

## **AirQ+ 2.1** (May 2021)

- English, Russian, French and German / All bugs identified and fixed

## **AirQ+ 2.1.1-PL** (February 2022)

- Polish version

## **AirQ+ 2.2** (forthcoming)

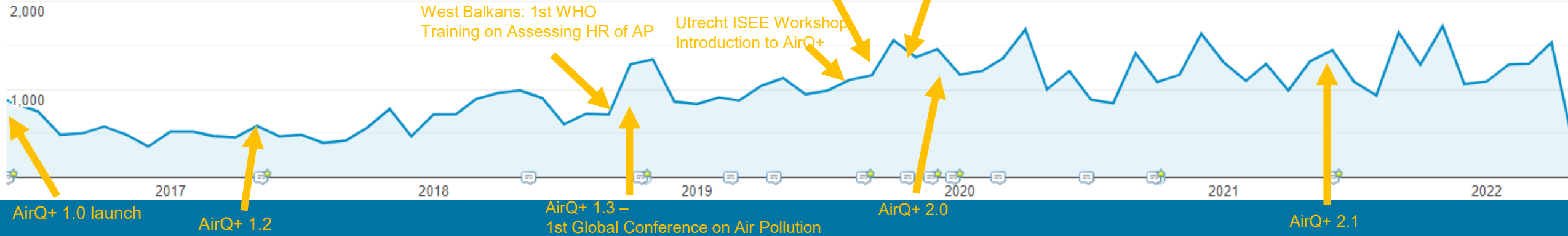
- Update w AQG values / Improved LT input / GEMM / English, Russian, French and German

# AirQ+ online: six years of statistics



## Monthly

### Pageviews



**Page views** is the total number of pages viewed. Repeated views of a single page are counted.

**Unique Pageviews** is the # of sessions during which the specified page was viewed at least once. A unique pageview is counted for each page URL + page Title combination.)

**Entrances** is the # of times visitors entered your site through a specified page or set of pages.

**Bounce rate** is the percentage of single-page sessions in which there was no interaction with the page.

| Page ?                                                                                                                            | Pageviews ?                                 | Unique Pageviews ?                          | Avg. Time on Page ?                                | Entrances ? ↓                               | Bounce Rate ?                                  | % Exit ?                                      |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|----------------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------------------------|
|                                                                                                                                   | 70,423<br>% of Total: 0.07%<br>(95,079,286) | 53,214<br>% of Total: 0.07%<br>(77,452,193) | 00:03:27<br>Avg for View:<br>00:01:11<br>(193.21%) | 42,038<br>% of Total: 0.10%<br>(42,137,890) | 55.67%<br>Avg for View:<br>66.40%<br>(-16.16%) | 55.49%<br>Avg for View:<br>44.32%<br>(25.20%) |
| 1. /en/health-topics/environment-and-health/air-quality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution | 64,926 (92.19%)                             | 48,967 (92.02%)                             | 00:03:31                                           | 39,089 (92.98%)                             | 55.54%                                         | 55.83%                                        |
| 2. /fr/health-topics/environment-and-health/air-quality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution | 2,998 (4.26%)                               | 2,366 (4.45%)                               | 00:03:22                                           | 1,921 (4.57%)                               | 60.91%                                         | 60.94%                                        |
| 3. /ru/health-topics/environment-and-health/air-quality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution | 1,221 (1.73%)                               | 924 (1.74%)                                 | 00:02:30                                           | 497 (1.18%)                                 | 56.80%                                         | 45.86%                                        |
| 4. /de/health-topics/environment-and-health/air-quality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution | 293 (0.42%)                                 | 243 (0.46%)                                 | 00:02:32                                           | 93 (0.22%)                                  | 64.89%                                         | 49.49%                                        |

| Page views |           |           |
|------------|-----------|-----------|
|            | 2016-2019 | 2016-2020 |
|            | 2016-2021 |           |
|            | 25,831    | 40,889    |
|            |           | 54,630    |

# AirQ+ online survey: six years of comments

- Home
- Health topics
- Countries
- Publications
- Data and evidence
- Media centre
- About us

Health topics > Environment and health > Air quality > Activities > AirQ+: software tool for health risk assessment of air pollution

## Air quality

- News
- Events
- Policy
- Activities**
- Data and statistics

## AirQ+: software tool for health risk assessment of air pollution

Quantifying the effects of exposure to air pollution in terms of public health has become a critical component in policy discussion. WHO/Europe's software tool AirQ+ performs calculations that allow quantification of the health effects of exposure to air pollution, including estimates of the reduction in life expectancy.

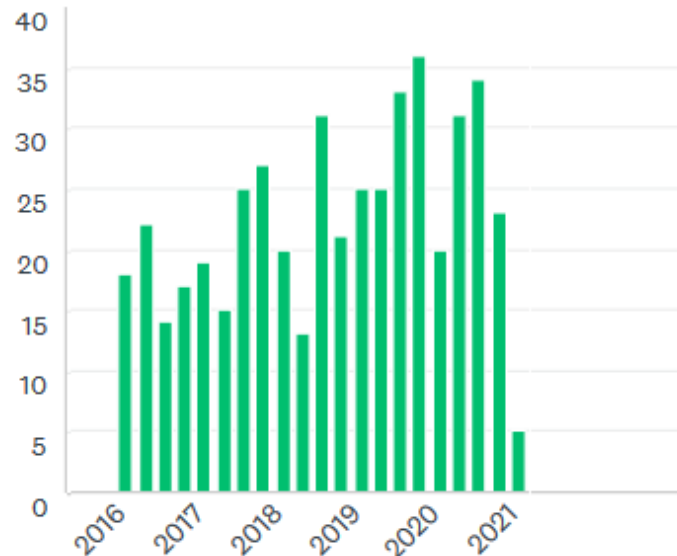
Take our AirQ+ survey

[Start the survey](#)

WHO/Europe is interested in gathering information about where and how AirQ+ is used, to improve its assistance. Please share information on your use of AirQ+. We will use the survey data in aggregated form for a general overview and statistical analysis of AirQ+ users.

## Responses (by quarter)

First: 5/26/2016



549 responses  
6 years (2183 days)  
(17 May 2016 – 09 May 2022)

474 responses  
5 years (1817 days)  
(17 May 2016 – 08 May 2021)

252 responses  
3 years (1,094 days)  
(17 May 2016 – 15 May 2019)

364 responses  
4 years (1,452 days)  
(17 May 2016 – 08 May 2019)

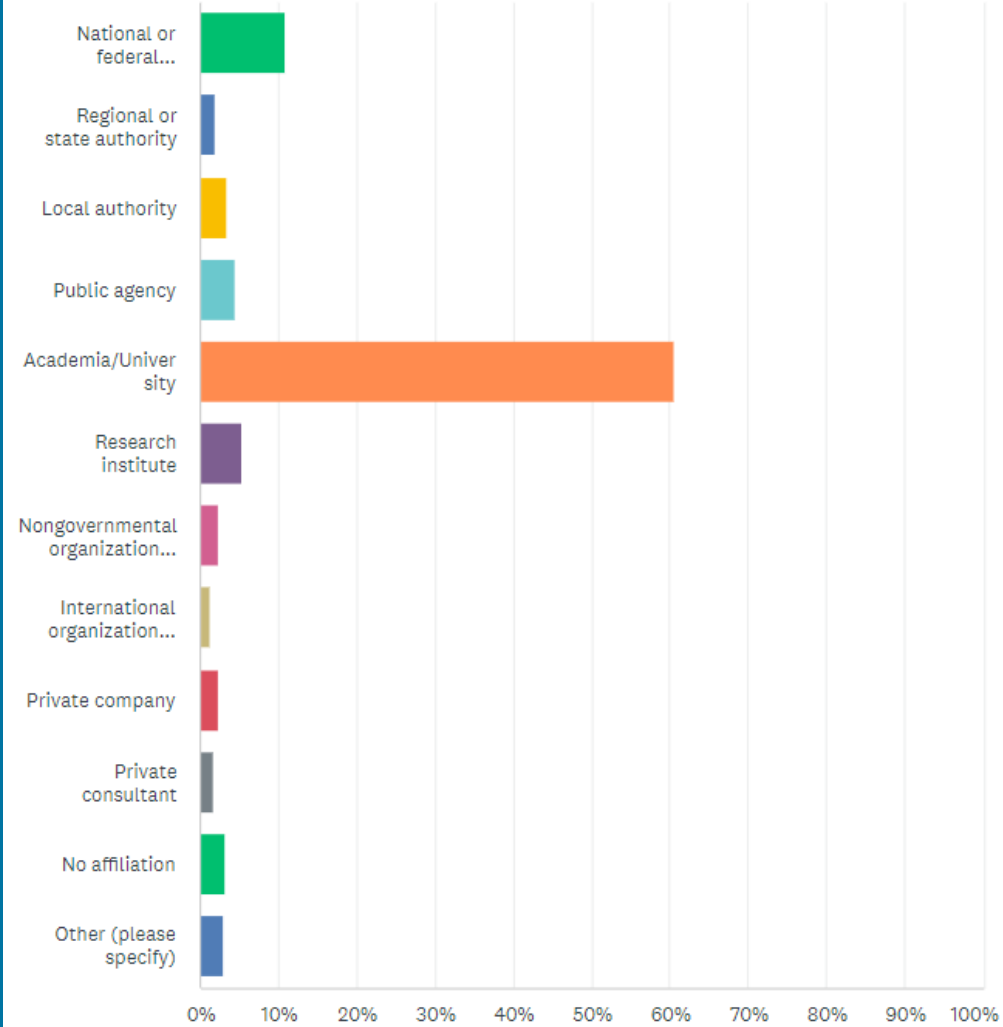
81 responses  
1 year (365 days)  
(17 May 2016 – 16 May 2017)

164 responses  
2 years (720 days)  
(17 May 2016 – 16 May 2018)

# AirQ+ Survey monkey 1

What is your affiliation?

Answered: 549 Skipped: 6



2016-2022

| ANSWER CHOICES                                                                     | RESPONSES  |
|------------------------------------------------------------------------------------|------------|
| National or federal authority (e.g. Ministry of Health or Ministry of Environment) | 10.93% 60  |
| Regional or state authority                                                        | 1.82% 10   |
| Local authority                                                                    | 3.46% 19   |
| Public agency                                                                      | 4.37% 24   |
| Academia/University                                                                | 60.47% 332 |
| Research institute                                                                 | 5.28% 29   |
| Nongovernmental organization (NGO)                                                 | 2.37% 13   |
| International organization (e.g. EU, UN agency)                                    | 1.28% 7    |
| Private company                                                                    | 2.37% 13   |
| Private consultant                                                                 | 1.64% 9    |
| No affiliation                                                                     | 3.10% 17   |
| Other (please specify)                                                             | 2.91% 16   |
| <b>TOTAL</b>                                                                       | <b>549</b> |

2016-2021

| ANSWER CHOICES                                                                     | RESPONSES  |
|------------------------------------------------------------------------------------|------------|
| National or federal authority (e.g. Ministry of Health or Ministry of Environment) | 10.04% 47  |
| Regional or state authority                                                        | 1.71% 8    |
| Local authority                                                                    | 3.42% 16   |
| Public agency                                                                      | 4.70% 22   |
| Academia/University                                                                | 61.54% 288 |
| Research institute                                                                 | 5.56% 26   |
| Nongovernmental organization (NGO)                                                 | 2.56% 12   |
| International organization (e.g. EU, UN agency)                                    | 1.07% 5    |
| Private company                                                                    | 2.56% 12   |
| Private consultant                                                                 | 1.28% 6    |
| No affiliation                                                                     | 2.56% 12   |
| Other (please specify)                                                             | 2.99% 14   |
| <b>TOTAL</b>                                                                       | <b>468</b> |

2016-2020

| ANSWER CHOICES                                                                     | RESPONSES  |
|------------------------------------------------------------------------------------|------------|
| National or federal authority (e.g. Ministry of Health or Ministry of Environment) | 10.06% 36  |
| Regional or state authority                                                        | 1.68% 6    |
| Local authority                                                                    | 3.91% 14   |
| Public agency                                                                      | 4.19% 15   |
| Academia/University                                                                | 63.41% 227 |
| Research institute                                                                 | 5.31% 19   |
| Nongovernmental organization (NGO)                                                 | 3.07% 11   |
| International organization (e.g. EU, UN agency)                                    | 1.12% 4    |
| Private company                                                                    | 2.23% 8    |
| Private consultant                                                                 | 1.40% 5    |
| No affiliation                                                                     | 2.23% 8    |
| Other (please specify)                                                             | 1.40% 5    |
| <b>TOTAL</b>                                                                       | <b>358</b> |

2016-2017

|                                                                                    |        |           |
|------------------------------------------------------------------------------------|--------|-----------|
| National or federal authority (e.g. Ministry of Health or Ministry of Environment) | 8.78%  | 7         |
| Regional or state authority                                                        | 0.00%  | 0         |
| Local authority                                                                    | 5.00%  | 4         |
| Public agency                                                                      | 2.50%  | 2         |
| Academia/University                                                                | 60.00% | 48        |
| Research institute                                                                 | 8.78%  | 7         |
| Nongovernmental organization (NGO)                                                 | 2.50%  | 2         |
| International organization (e.g. EU, UN agency)                                    | 1.28%  | 1         |
| Private company                                                                    | 3.78%  | 3         |
| Private consultant                                                                 | 0.00%  | 0         |
| No affiliation                                                                     | 5.00%  | 4         |
| Other (please specify)                                                             | 2.50%  | 2         |
| <b>Total</b>                                                                       |        | <b>80</b> |

2016-2019

|                                                                                    |        |            |
|------------------------------------------------------------------------------------|--------|------------|
| National or federal authority (e.g. Ministry of Health or Ministry of Environment) | 7.54%  | 19         |
| Regional or state authority                                                        | 1.19%  | 3          |
| Local authority                                                                    | 3.57%  | 9          |
| Public agency                                                                      | 3.57%  | 9          |
| Academia/University                                                                | 65.87% | 166        |
| Research institute                                                                 | 5.16%  | 13         |
| Nongovernmental organization (NGO)                                                 | 3.17%  | 8          |
| International organization (e.g. EU, UN agency)                                    | 1.59%  | 4          |
| Private company                                                                    | 2.78%  | 7          |
| Private consultant                                                                 | 1.19%  | 3          |
| No affiliation                                                                     | 2.78%  | 7          |
| Other (please specify)                                                             | 1.59%  | 4          |
| <b>TOTAL</b>                                                                       |        | <b>252</b> |

# AirQ+ Survey monkey 2



513 answers

|                                  |    |             |    |                       |    |
|----------------------------------|----|-------------|----|-----------------------|----|
| Afghanistan                      | 1  | Gambia      | 1  | Nigeria               | 8  |
| Albania                          | 3  | Germany     | 6  | North Macedonia       | 2  |
| Algeria                          | 3  | Ghana       | 1  | Oman                  | 1  |
| Argentina                        | 3  | Gibraltar   | 1  | Pakistan              | 7  |
| Australia                        | 1  | Greece      | 5  | Panama                | 1  |
| Austria                          | 1  | Haiti       | 1  | Peru                  | 8  |
| Azerbaijan                       | 1  | Hungary     | 2  | Philippines           | 1  |
| Bangladesh                       | 3  | Iceland     | 1  | Poland                | 7  |
| Belarus                          | 3  | India       | 50 | Portugal              | 10 |
| Belgium                          | 2  | Indonesia   | 5  | Republic of Korea     | 2  |
| Bolivia                          | 9  | Iran        | 85 | Romania               | 3  |
| Bosnia and Hercegovina           | 8  | Iraq        | 1  | Russia                | 6  |
| Brasil                           | 14 | Ireland     | 1  | San Marino            | 1  |
| Bulgaria                         | 3  | Italy       | 22 | Sant Boi de Llobregat | 1  |
| Burkina Faso                     | 1  | Ivory Coast | 1  | Senegal               | 1  |
| Canada                           | 1  | Japan       | 2  | Serbia                | 3  |
| Central African Republic         | 1  | Jordan      | 3  | Sierra Leone          | 1  |
| Chile                            | 3  | Kosovo      | 4  | Slovakia              | 1  |
| China                            | 12 | Kuwait      | 4  | South Africa          | 5  |
| Colombia                         | 12 | Kyrgyzstan  | 1  | South Korea           | 1  |
| Croatia                          | 1  | Latvia      | 1  | Spain                 | 16 |
| Cuba                             | 2  | Liberia     | 1  | Sri Lanka             | 2  |
| Cyprus                           | 2  | Lithuania   | 9  | Sudan                 | 1  |
| Czech republic                   | 2  | Malta       | 2  | Sweden                | 1  |
| Democratic Republic of the Congo | 1  | Mexico      | 10 | Switzerland           | 2  |
| Denmark                          | 2  | Moldova     | 2  | Syria                 | 1  |
| Ecuador                          | 3  | Mongolia    | 1  | Taiwan                | 1  |
| Egypt                            | 8  | Montenegro  | 2  | Tajikestan            | 2  |
| El Salvador                      | 1  | Morocco     | 4  | Tanzania              | 1  |
| Estonia                          | 1  | Mozambique  | 1  | Thailand              | 3  |
| Ethiopia                         | 8  | Myanmar     | 1  | Tunisia               | 3  |
| France                           | 14 | Nepal       | 1  | Turkey                | 17 |
|                                  |    | Netherlands | 2  | Uganda                | 2  |
|                                  |    | New Zealand | 2  | UK                    | 6  |
|                                  |    | Niger       | 1  | Ukraine               | 3  |
|                                  |    |             |    | United Arab Emirates  | 6  |
|                                  |    |             |    | Uruguay               | 1  |
|                                  |    |             |    | USA                   | 6  |
|                                  |    |             |    | Vietnam               | 2  |

**2016-2022:**

**107 Countries and territories**

Countries and territories

2016-2021: 100

2016-2020: 94

2016-2019: 84

2016-2018: 62

2016-2017: 28



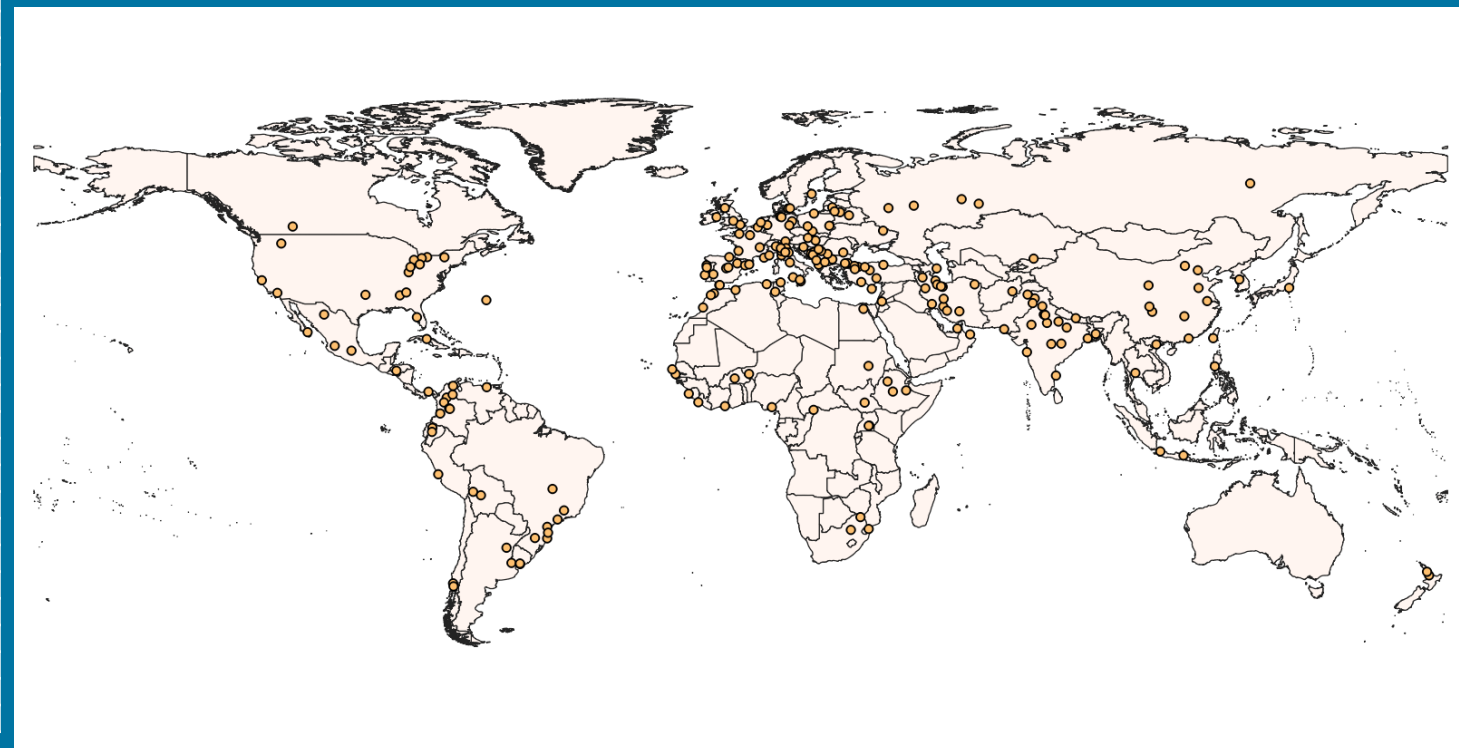
# AirQ+ Survey monkey 3



511 answers

2016-2022:

289 Cities and areas



The designations employed and the presentation of the material in this presentation do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Cities and areas:

2016-2021: 282

2016-2019: 164 / 2016-2020: 222

2016-2017: 60 / 2016-2018: 153

Aveiro  
Abidjan  
Adan  
Addis Ababa  
Agadir  
Agra  
Ahvaz  
Alcalá De  
Henares  
Algeciras  
Alto Alegre  
Dos Parecis  
Ambato  
Amman  
Ankara  
Antalya  
Arak  
Attard  
Auckland  
Babol  
Badajoz  
Baguio City  
Bahir Dar  
Baku  
Balurghat  
Bandarabbas  
Bangkok  
Bangui  
Banjul  
Barcelona  
Beijing  
Belgrade  
Bhimavaram  
Bilbao  
Birmingham  
Bishkek  
Blumenau  
Bogotá  
Bojnurd  
Bologna  
Bolu  
Bor  
Bordeaux  
Brasilia  
Brasilia  
Bratislava  
Brescia  
Brussels  
Bucharest  
Budapest  
Bursa

Caen  
Cairo  
Calgary  
Cali  
Casablanca  
Catania  
Chandigarh  
Changsha  
Chattogram  
Chengdu  
Chennai  
Chihuahua  
Chisinai  
Cities Of Uttar  
Pradesh  
Buenos Aires  
Cochabamba  
Constantine  
Copenhagen  
Cordoba  
Capital  
Coyhaique  
Curitiba  
Dakar  
Dar Es  
Salaam  
Delhi  
Dhaka  
Dhanbad  
Dnipro  
Doshanbeh  
Dubai  
Duisburg  
Edirne  
Egypt  
Esfahan  
Estonia  
Firozabad  
Freetown  
Gafsa  
Garmsar  
Gdańsk  
Geesthacht  
Gibraltar  
Gorgan  
Greater Noida  
Grenade  
Guaatinguetá  
Guadalajara  
Hamburg  
Hamedan  
Hamilton  
Hanoi

Harar  
Helvoirt  
Ho Chi Minh  
Hooghly  
Ilam  
Innsbruck  
Iran  
Isfahan  
Islamabad  
Istanbul  
Istanbul  
İzmit  
Jakarta  
Jambi  
Jammu  
Jining  
Jiroft  
Johannesburg  
Jomend  
Kabul  
Kampala  
Kaohsiung  
Karachi  
Karaj  
Kathmandu  
Kaunas  
Kermanshah  
Kharkiv  
Khartoum  
Kırklareli  
Kirsehir  
Kolkata  
Kothagudem  
Koya  
Krakow  
Kuwait  
Kyiv  
La Paz  
Lahore  
Lanzhou  
Larissa  
Lattakia  
Lavras  
Leipzig  
Lima  
Limpopo  
Lisboa  
Lisbon  
London

Lordegan  
Lublin  
Lucknow  
Lugano  
Lyon  
Madrid  
Malahide  
Maputo  
Mashhad  
Matosinhos  
Mecellín  
Medellín  
Medellín  
Mekelle  
Mexico City  
Miercurea Ciuc  
Minsk  
Monrovia  
Montevideo  
Morena  
Moscow  
M'sila  
Mukono  
Mumbai  
Muscat  
Nagpur  
Nanjing  
Naypyitaw  
New Delhi  
New York  
Niamey  
Nice  
Nicosia  
Novi Sad  
Nsw Hunter  
Valley  
NYC  
Ocaña  
Ogun State  
Orleans  
Osorno  
Ostrava  
Ota  
Ouagadougou  
Padua  
Palermo  
Panamá  
Paris  
Parma  
Passo Fundo

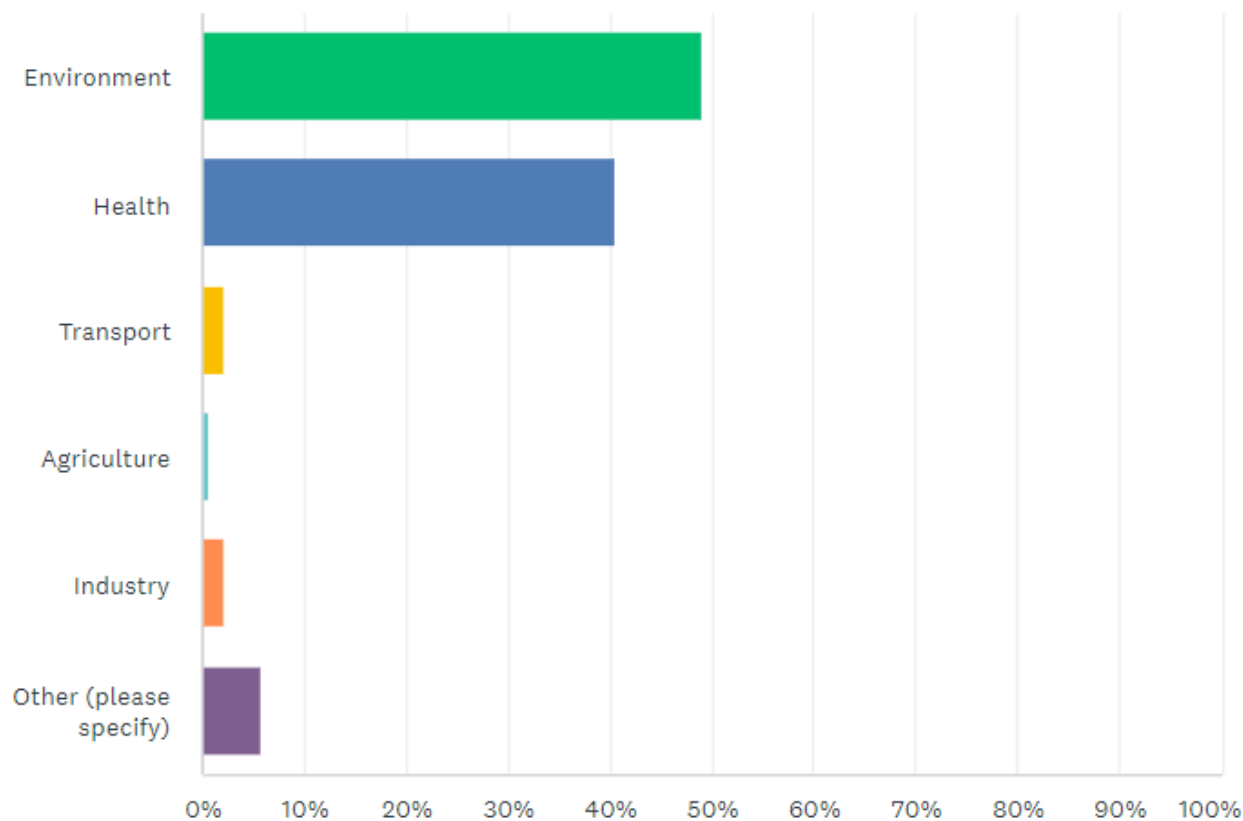
Perm  
Pisa  
Podgorica  
Port-Harcourt  
Port-Au-Prince  
Potsdam  
Prishtina  
Qazvin  
Quito  
Quito-  
Pichincha  
Rabat  
Raipur  
Rasht  
Ravenna  
Reus  
Reykjavik  
Rio De Janeiro  
Rome  
Roskilde  
Saharanpur  
Salé  
Samsun  
Sanandaj  
Santa Clara  
Santa Cruz Do  
Sul  
São Paulo  
Sarajevo  
Semnan  
Seoul  
Shenzhen  
Shiraz  
Šiauliai  
Siracusa  
Sirjan  
Skopje  
Sofia  
Soulangis  
St Petersburg  
Stockholm  
Suphanburi  
Surabaya  
Tabriz  
Takengon  
Tampa  
Tehran  
Tekirdagd  
Thessaloniki

Tohoyandou  
Tirana  
Tirane  
Tlemcen  
Torino And  
Lampedusa  
Toulon  
Tunis  
Tuzla  
Ulaanbaatar  
Urmia  
Ústí Nad Labem  
Utrecht  
Uyo  
Valdivia  
Valledupar  
Varanasi  
Vellore, India  
Verneuil-En-Halatte  
Vicenza  
Vilnius  
Volos  
West Bengal  
Wroclaw  
Wroclaw  
Yakutsk  
Yasuij  
Yasuj  
Yekaterinburg  
Yokohama  
Zagreb  
Zaragoza  
Zenica  
Zigong  
南昌

# AirQ+ Survey monkey 4

## What is your main sector of activity?

Answered: 534 Skipped: 21



### 2016-2022

| ANSWER CHOICES         | RESPONSES       |            |
|------------------------|-----------------|------------|
| Environment            | 49.06%          | 262        |
| Health                 | 40.45%          | 216        |
| Transport              | 2.06%           | 11         |
| Agriculture            | 0.56%           | 3          |
| Industry               | 2.06%           | 11         |
| Other (please specify) | Responses 5.81% | 31         |
| <b>TOTAL</b>           |                 | <b>534</b> |

### 2016-2020

|                        |                 |            |
|------------------------|-----------------|------------|
| Environment            | 47.46%          | 168        |
| Health                 | 41.81%          | 148        |
| Transport              | 1.98%           | 7          |
| Agriculture            | 0.85%           | 3          |
| Industry               | 1.98%           | 7          |
| Other (please specify) | Responses 5.93% | 21         |
| <b>TOTAL</b>           |                 | <b>354</b> |

### 2016-2021

| ANSWER CHOICES         | RESPONSES       |            |
|------------------------|-----------------|------------|
| Environment            | 50.44%          | 230        |
| Health                 | 39.25%          | 179        |
| Transport              | 1.97%           | 9          |
| Agriculture            | 0.66%           | 3          |
| Industry               | 1.75%           | 8          |
| Other (please specify) | Responses 5.92% | 27         |
| <b>TOTAL</b>           |                 | <b>456</b> |

### 2016-2017

|                        |                 |           |
|------------------------|-----------------|-----------|
| Environment            | 47.37%          | 36        |
| Health                 | 43.42%          | 33        |
| Transport              | 1.32%           | 1         |
| Agriculture            | 0.00%           | 0         |
| Industry               | 1.32%           | 1         |
| Other (please specify) | Responses 6.58% | 5         |
| <b>Total</b>           |                 | <b>76</b> |

### 2016-2019

|                        |                 |            |
|------------------------|-----------------|------------|
| Environment            | 49.60%          | 123        |
| Health                 | 41.53%          | 103        |
| Transport              | 2.82%           | 7          |
| Agriculture            | 0.00%           | 0          |
| Industry               | 1.21%           | 3          |
| Other (please specify) | Responses 4.84% | 12         |
| <b>TOTAL</b>           |                 | <b>248</b> |

# AirQ+ welcome screen (English)

The screenshot shows the AirQ+ interface with several key elements highlighted by colored circles and boxes:

- Language:** A yellow box highlights the 'English' dropdown menu in the top right corner.
- Menu:** A yellow circle highlights the 'Projects Overview' sidebar on the left, which includes 'Impact Assessment', 'Burden of Disease', and 'Risk Analysis'.
- Documentation:** A red circle highlights the 'Disclaimer', 'Glossary', 'Manuals', and 'Citation' links in the top right.
- Start analysis:** A green circle highlights the three main analysis options: 'Create new Impact Assessment', 'Create new Burden of Disease', and 'Create new Risk Analysis'.
- Version:** A blue box highlights the 'Version' label and the version number 'v. 2.1.1' in the bottom right corner.

The main content area features a 'Welcome to AirQ+' message and a list of documentation links: 'What is AirQ+?', 'Getting started', and 'Acknowledgments'. Below these are the three main analysis options, each with a brief description and a 'Create new' button.

Language

Documentation

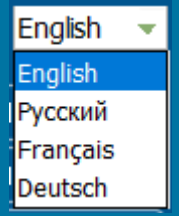
Menu

Start analysis

Version

v. 2.1.1

# AirQ+ welcome screen (Russian)



# AirQ+ welcome screen (French)



# AirQ+ welcome screen (German)



**Всемирная организация здравоохранения**

# AirQ+

Обзор проектов

- Оценка воздействия
- Бремя болезней
- Оценка рисков

**Добро пожаловать в AirQ+**

Начните новый анализ или выберите существующий анализ

Что такое AirQ+?

Начать

Благодарность

Как изменится состояние здоровья, если уровень загрязнения воздуха снизится или увеличится?

**+ Создать новую Оценку**

Какая часть конкретных эффектов в состоянии здоровья (например, смертность) связана с текущим уровнем воздействия загрязнителя воздуха?

**+ Создать новое Брем**

Каков уровень канцерогенного риска, связанный с воздействием отдельных загрязнителей воздуха в течение всей жизни, для которых доступен параметр «Единичный риск»?

**+ Создать новый Ана**

AirQ+

**Organisation mondiale de la Santé**

# AirQ+

Franglais

Avertissement

Glossaire

Manuels

Citation

Aperçu des projets

- Évaluation d'impact
- Charge de morbidité
- Analyse de risque

**Bienvenue à AirQ+**

Lancer une nouvelle analyse ou sélectionner une analyse existante dans la liste de l'aperçu des projets à gauche.

Qu'est-ce que AirQ+?

Commencer

Remerciements

Quel serait le changement sur le plan de la santé si le niveau de pollution de l'air diminuait ou augmentait?

**+ Créer une nouvelle**

Dans quelle mesure un résultat particulier pour la santé (p. ex. la mortalité) est-il attribuable à l'exposition actuelle à un polluant atmosphérique?

**+ Créer une nouvelle**

Quel est le risque de cancer associé à l'exposition au cours de la vie à certains polluants atmosphériques pour lesquels il existe un "risque unitaire" ?

**+ Créer une nouvelle**

AirQ+

**Weltgesundheitsorganisation**

# AirQ+

Deutsch

Info

Glossar

Handbücher

Haftungsausschluss

Quellenangabe

**Willkommen zu AirQ+**

Starten Sie eine neue Analyse oder wählen Sie eine bestehende Analyse aus der Projektübersicht auf der linken Seite aus.

Was ist AirQ+?

Erste Schritte

Danksagung

Wie würde sich die Gesundheit bei Abnahme oder Zunahme der Luftverschmutzung verändern?

**+ Neue Gesundheitsfolgenabschätzung**

Wie viele verlorene Lebensjahre lassen sich auf die aktuelle Exposition gegenüber einem Luftschadstoff zurückführen?

**+ Neue Krankheitslastberechnung**

Wie hoch ist das Krebsrisiko in Verbindung mit der lebenslangen Belastung (Lebenszeitexposition) durch ausgewählte Luftschadstoffe, für die ein Unit Risk verfügbar ist?

**+ Neue Risikoanalyse**

AirQ+ v.2.1.1

# AirQ+ manuals

## Publication of 5 Manuals in 4 languages



**Health impact assessment  
of air pollution:** introductory  
manual to AirQ+



**Health impact assessment of  
air pollution:** AirQ+ multiple-  
area data input



**Health impact assessment of  
air pollution:** AirQ+ life table  
manual



**AirQ+:** burden of disease due to  
air pollution manual



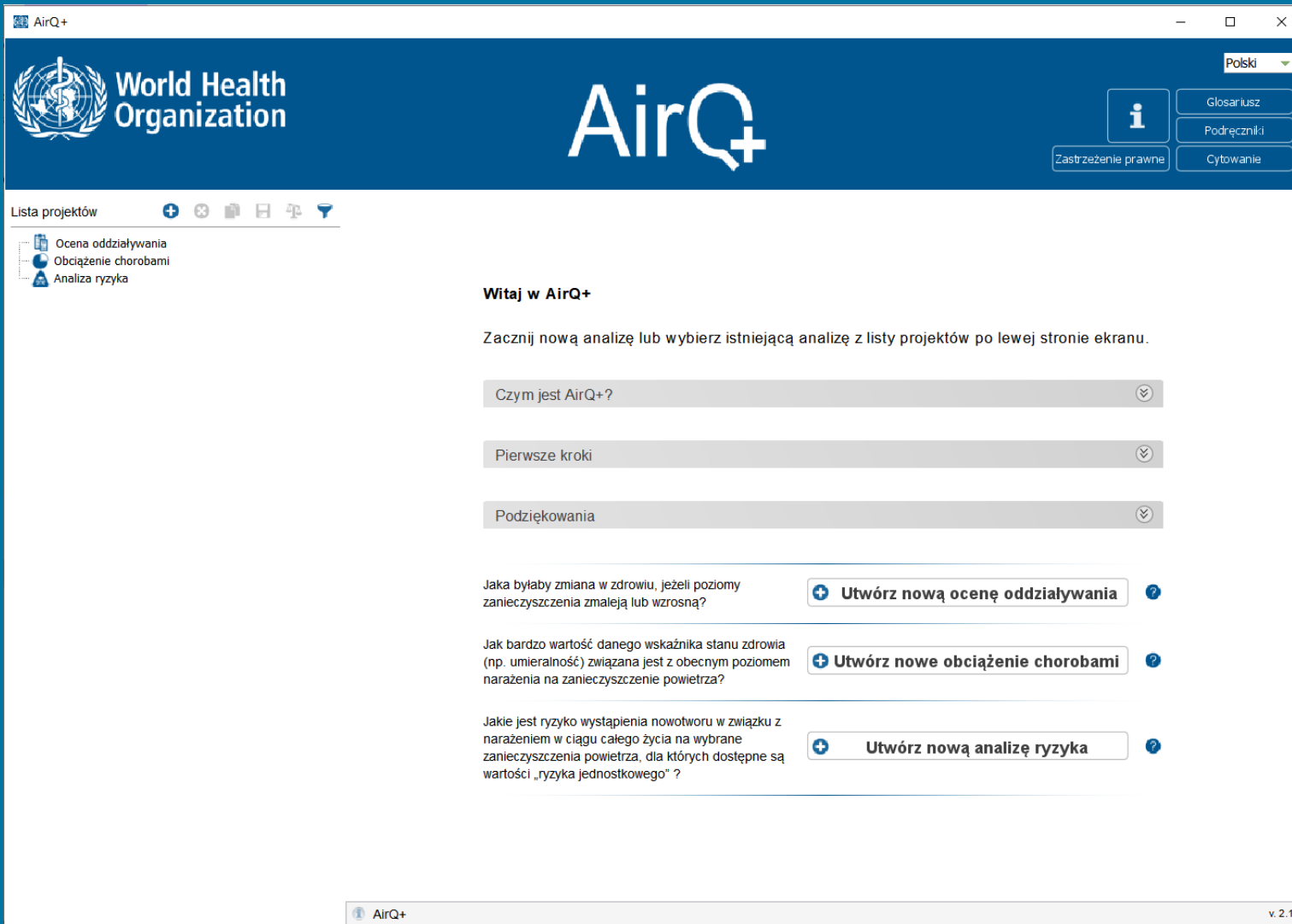
**AirQ+:** carcinogenic pollutants  
and risk analysis

Available at <https://www.who.int/europe/tools-and-toolkits/airq---software-tool-for-health-risk-assessment-of-air-pollution>

# 2021-2022 work

Polish version

Translation of all the Manuals in Polish



The screenshot shows the AirQ+ web application interface in Polish. The top navigation bar includes the World Health Organization logo, the 'AirQ+' title, and a language dropdown menu set to 'Polski'. Below the navigation bar, there are buttons for 'Glosariusz', 'Podręczniki', 'Zastrzeżenie prawne', and 'Cytowanie'. The main content area is titled 'Witaj w AirQ+' and contains a welcome message: 'Zacznij nową analizę lub wybierz istniejącą analizę z listy projektów po lewej stronie ekranu.' Below this, there are three dropdown menus: 'Czym jest AirQ+?', 'Pierwsze kroki', and 'Podziękowania'. At the bottom, there are three buttons for creating new analyses: 'Utwórz nową ocenę oddziaływania', 'Utwórz nowe obciążenie chorobami', and 'Utwórz nową analizę ryzyka'. The footer shows 'AirQ+' and 'v. 2.1'.

**Ocena wpływu  
zanieczyszczenia powietrza na  
zdrowie: podręcznik  
wprowadzający do AirQ+**

# New 2.2 version

- Update of all suggested default parameters based on the 2021 AQG
- Improved Life Table module
- Updated GBD functions
- GEMM function available

# Next steps and future plans

- Receiving feedback on AirQ+ 2.2
- AirQ+ 2.2 manuals update
- AirQ+ 2.2.1-pol (Polish) update
- AirQ+ 2.2.1-esp (Spanish) translation
- AirQ+ 2.3 (Economic module, first version likely only in English)
- Identification of priority updates and improvements with a variety of experts
- Production of additional supporting documentation
- Harmonization and “dialogue” with other WHO tools
- Dissemination activities (testing and getting comments is a fundamental activity)



# Main challenges

- Data availability
- Sources of uncertainty affecting quantification of air pollution-related health impacts
- Communicating Air Pollution and Health Risks

# Conclusions

- Health Risk Assessment provides an important process to understand the impacts of air pollution
- Estimating health impacts of policies are important to orient decision-making
- The health sector is empowered with tools that allow collaboration with other sectors
- WHO provides AirQ+ that is a tool that is simple to use to estimates adverse health risks and impacts of air pollution

# Thank you – Merci – Danke – Спасибо



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## Thanks to:

Dorota Jarosinska-Helena Shkarubo

Michal Krzyzanowski

Ingu Kim

## Web sites

Air quality and health: [euro.who.int/air](http://euro.who.int/air)

Environment and health: [euro.who.int/envhealth](http://euro.who.int/envhealth)

*AirQ+ is co-funded by the German Ministry of Environment (BMU)*

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