

# SUMMARY OF BELHEALTH RESULTS - WAVES 1 TO 6

Mental Health Data on Belgian Adults in the  
wake of COVID-19: September 2022 – June  
2024

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## Sciensano

Epidemiology and public health - Health information  
**BELHEALTH**

February 2025 • Brussels • Belgium  
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With the financial support of



Please cite as: H. Jonker, C. Duveau, R. Charafeddine, L. Gisle, S. Demarest. Summary of BELHEALTH results - Waves 1 to 6. Mental Health Data on Belgian Adults in the wake of COVID-19: September 2022 – June 2024. Brussels, Belgium: Sciensano ; 2025 23p. Report number: D/2025.14.440/21. Available from: <https://doi.org/10.25608/8rx4-me28>

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# INTRODUCTION

The COVID-19 pandemic has generated a major impact on the population and societies, threatening both the physical health and the healthcare systems worldwide<sup>1</sup>. Moreover, the pandemic has seriously impacted mental health and well-being, with the Belgian COVID-19 Health surveys<sup>2</sup> showing significant increases in stress, anxiety and depression. It became apparent that **health and well-being did not recover to before pandemic levels**. Moreover, Belgians' health and well-being was being threatened by other crises in the immediate aftermath of the pandemic: wars and their consequences, such as sky-high energy prices, the rising costs of living and other threats such as climate change.

For these reasons, Sciensano sustained the surveillance of health and well-being in the general population by setting up a cohort project in September 2022. The main goal is to identify to **examine the impact of multiple stress sources on health and well-being** in the adult population, and to identify subpopulations at higher risk for mental disorders when facing global threats. By looking at socio-demographic and personal factors, this project uncovers subpopulations most at risk of mental health problems. Moreover, the goal is also to inform decision makers and advise on interventions for mental health; **resilience and coping strategies** are therefore also included in the study. **Continuous monitoring of mental health is essential** to identify and respond to emerging trends, especially given the long-term consequences of the pandemic and the impact of concurrent crises, such as economic instability and climate change.

The **Belgian Health and Well-being** (BELHEALTH) cohort project is the successor of the *COVID-19 Health Surveys* that was organised eleven times in the period from April 2020 to June 2022. More information on the methodology of the BELHEALTH project is given in Annex 1 Methods. The specific methodology and an analysis of the sociodemographic profile of participants of each BELHEALTH wave can be found online<sup>3</sup>.

The BELHEALTH online questionnaire is administered three times a year. It consists of a set of repeated **core questions**, supplemented with wave-specific questions that capture additional contextual or personal information. The following results from September 2022 to June 2024 are discussed in this report: at first the results of the core questions of each wave will be elaborated:



Anxiety



Depression



Life satisfaction



Specific concerns



Social support and interaction

Second, the results of the **alternating section** will be explored, focusing on different important aspects of mental health.

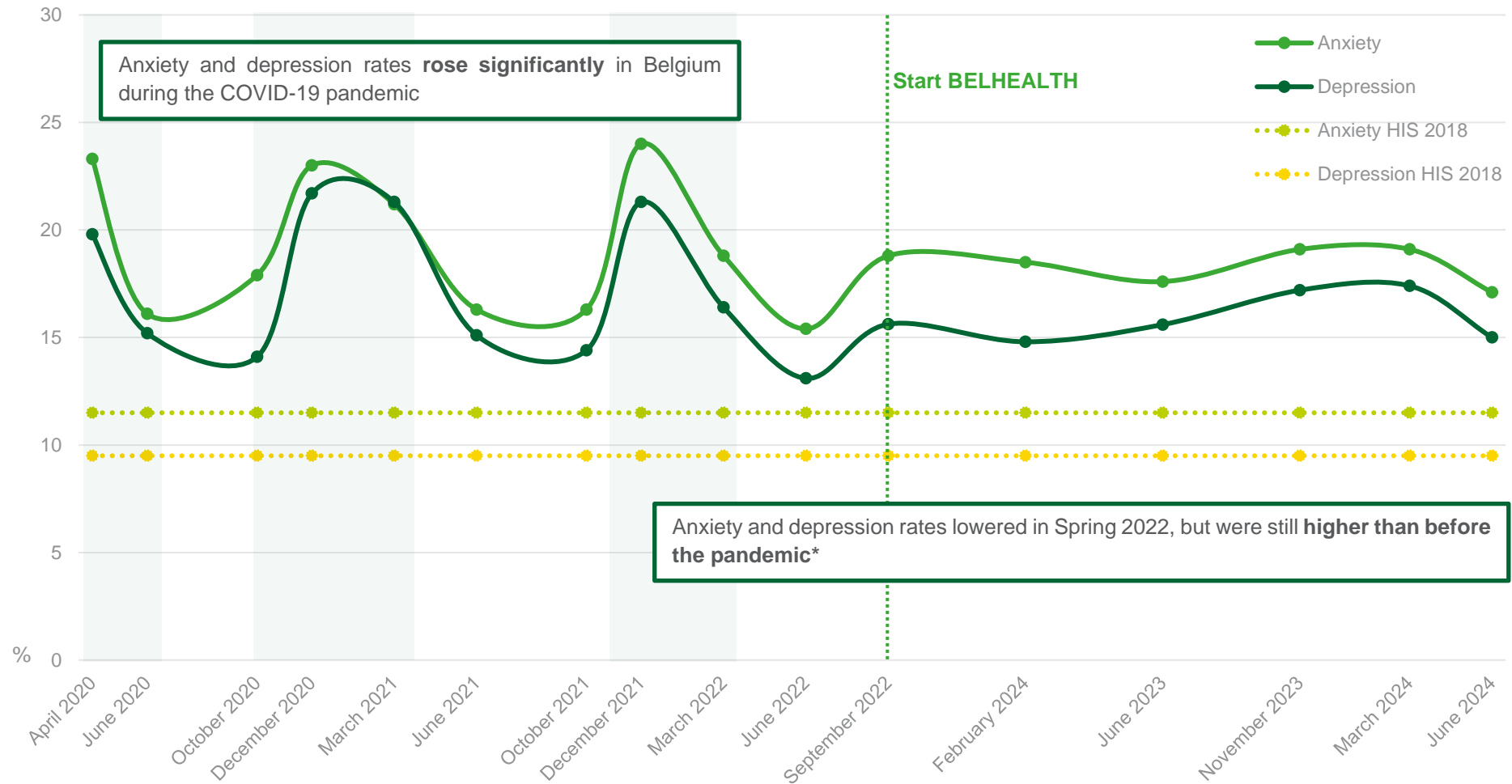
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<sup>1</sup> Bruggeman, H.; Smith, P.; Berete, F.; Demarest, S.; Hermans, L.; Braekman, E.; Charafeddine, R.; Driessens, S.; De Ridder, K.; Gisle, L. Anxiety and Depression in Belgium during the First 15 Months of the COVID-19 Pandemic: A Longitudinal Study. *Behav. Sci.* 2022, 12, 141. <https://doi.org/10.3390/bs12050141>

<sup>2</sup> COVID-19 Health surveys | [sciensano.be](https://sciensano.be)

<sup>3</sup> Belgian Health and Well-being Cohort | [sciensano.be](https://sciensano.be)

# CORE RESULTS: ANXIETY, DEPRESSION, LIFE SATISFACTION, WORRIES, SOCIAL SUPPORT AND INTERACTION



Note\*: Health Interview Survey (HIS), 2018. <https://www.sciensano.be/en/projects/health-interview-survey>

**Resilience, social support and loneliness: three risk factors for developing anxiety and depression**

**A low ability to bounce back after difficult periods (resilience)**



**Resilience**



People with a **low level of resilience** were **6 times more likely to experience anxiety**



People with a low level of resilience were **6 times more likely to experience depression.**



People with a low level of social support were **4 times more likely to experience anxiety**



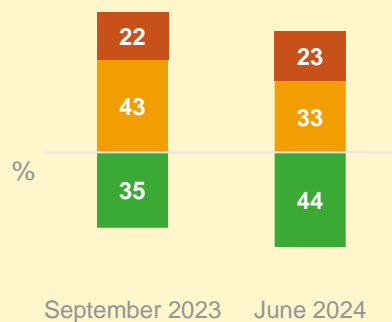
**Social support**

People with a low level of social support were **7 times more likely to experience depression**

**Loneliness**

**To what extent people felt lonely?**

People felt **less lonely** in June 2024 compared to September 2023



■ Severely lonely  
 ■ Moderately lonely  
 ■ Not lonely

**Which groups felt most lonely?**



**Aged 65+ years**  
29%



**Women**  
25%



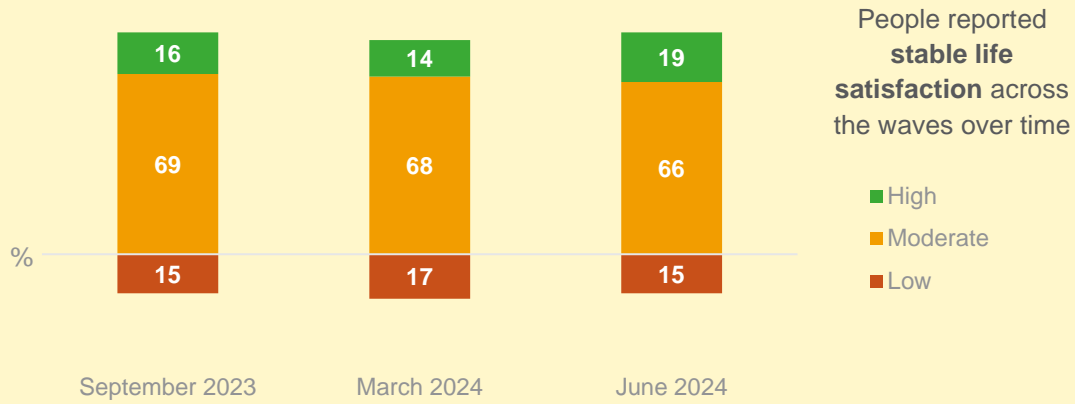
**At most secondary degree**  
25%



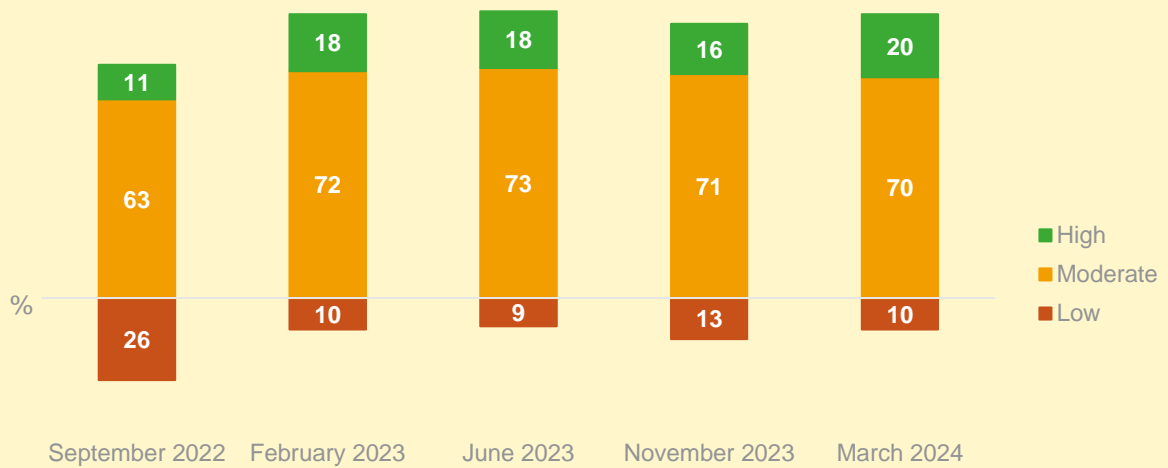
**With invalidity**  
39%

How did people rate their life satisfaction and mental health?

How **satisfied** were people with **life**?



How did people assess their **mental health** over time?

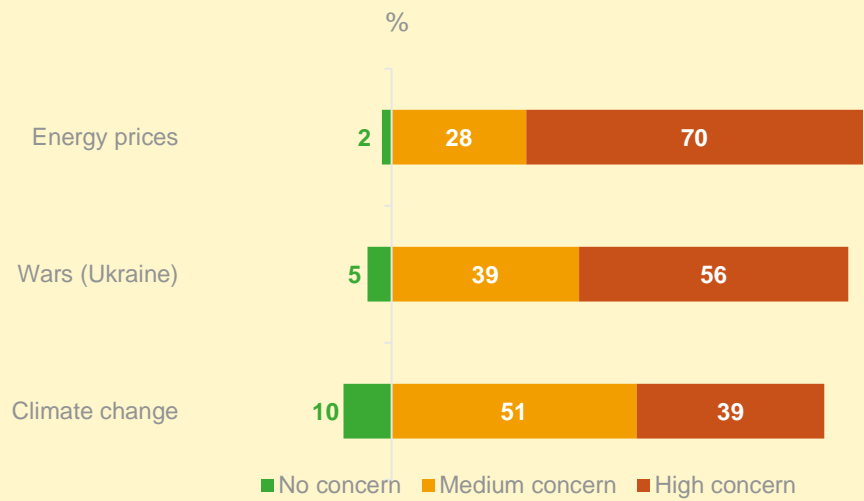


Which groups **perceived** their mental health status the **worst**?

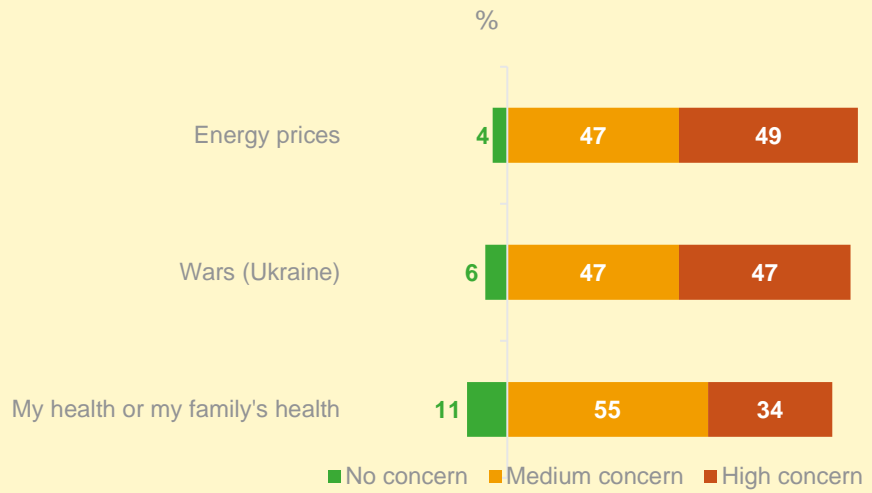


What were people top three concerns by wave?

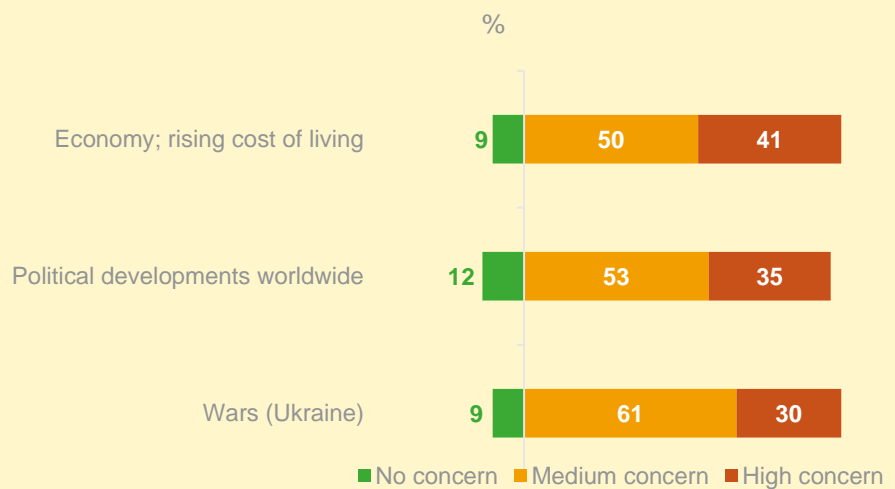
**September 2022:**  
Energy prices, wars and climate change were major concerns



**May 2023:**  
Energy prices, wars and people's health or their family's health were major concerns



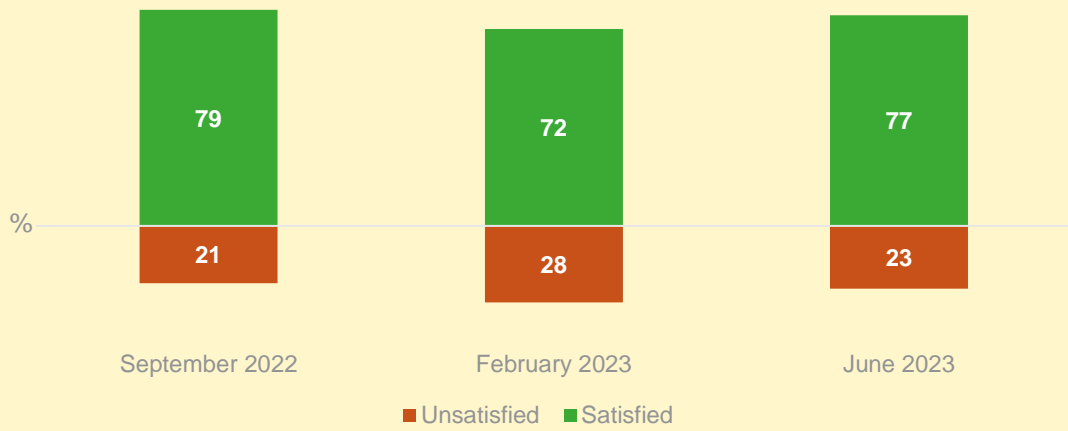
**March 2024**  
The economy, wars and political developments worldwide were major concerns



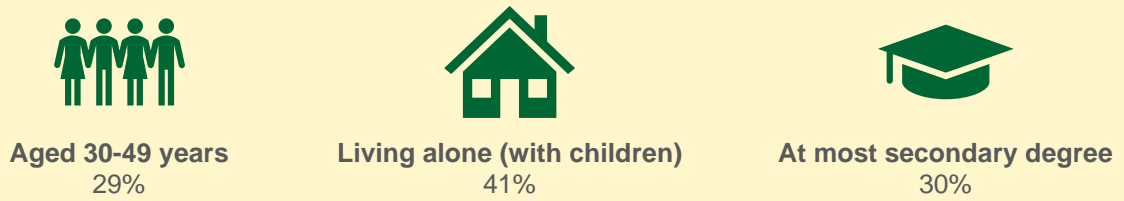


CORE RESULTS: ANXIETY, DEPRESSION, LIFE SATISFACTION, WORRIES, SOCIAL SUPPORT AND INTERACTION

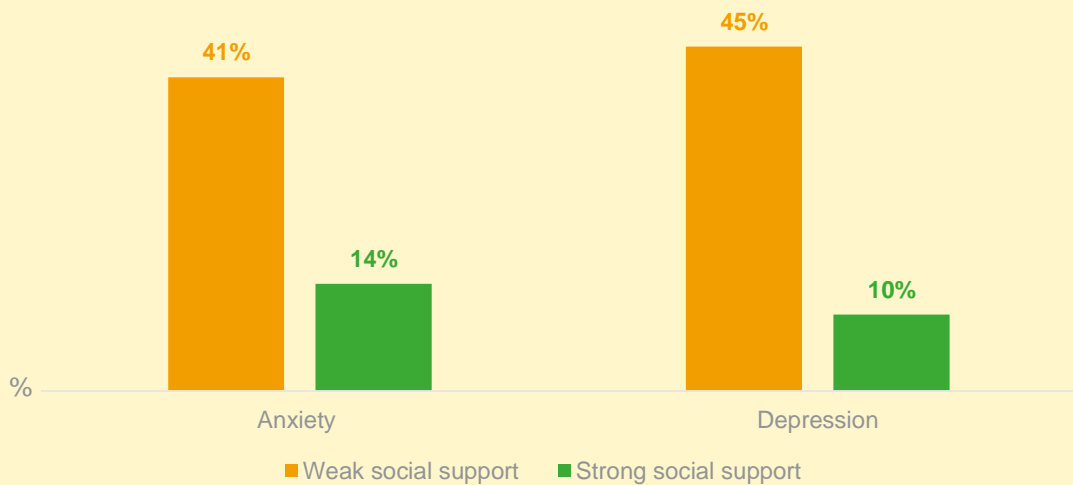
How satisfied were people with their social interactions over time?



Which groups felt most poorly supported by those around them?



People with **low social support** had **higher levels of anxiety and depression** than those with strong social support



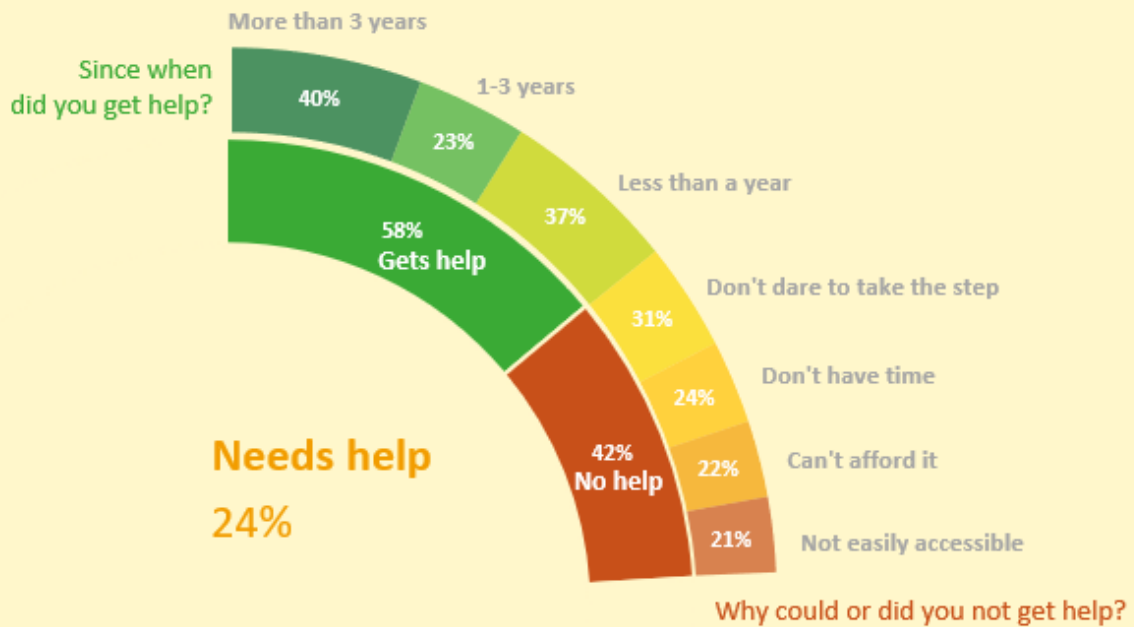
# SUMMARY OF RESULTS FROM SPECIFIC SECTIONS: KEY ASPECTS OF MENTAL HEALTH HIGHLIGHTED

The second chapter of this report will focus on the results of BELHEALTH's **alternating section**, focusing on a variety of important aspects of mental health. These have been assessed in BELHEALTH in following waves:



This report continues as follows. At first, mental healthcare use and access will be explored, followed by work engagement and burnout at the workplace, use of psychotropic medicines, poor sleep, suicide behaviors, discrimination and stigma towards mental health, and changes in alcohol use.

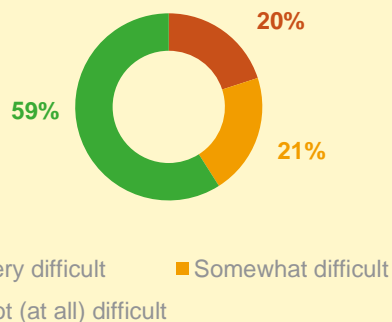
### Did people use mental health care?



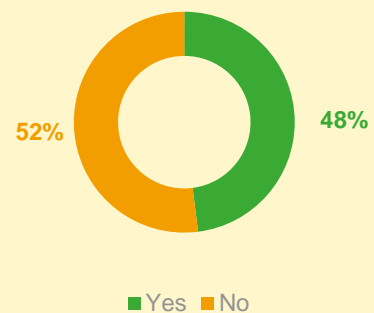
In February 2023, **24% of people expressed that they had felt the need for professional help in the past six months**. More than half (58%) of those got help, and most (40%) of those got help for more than three years. More than one-third (37%) of people who needed help and got help sought help for less than a year; more than half of them (59%) had no difficulty getting an appointment, while 41% found it difficult to get an appointment. Almost half (52%) who got help less than a year ago got the sessions reimbursed, benefiting from the recent care reform which offers partial reimbursement of counseling with a first line registered psychologist.

In February 2023, in the context of **overloaded demands for counselling** during COVID-19 and the new reimbursement scheme for mental health care, people were asked if they got help in the past year.

#### Was it **difficult** to get an **appointment**?



#### Were the sessions **reimbursed**?



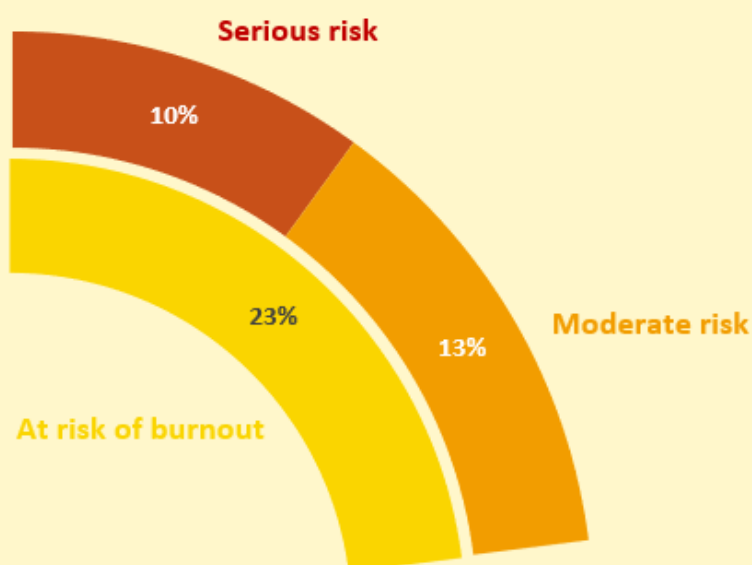
### Did people feel engaged with their work?



The large majority of people were **satisfied** (87%) and engaged (82%) **with their job** in June 2023

### Were people at risk of burnout at the workplace?

23% of people were at risk of burnout in November 2023



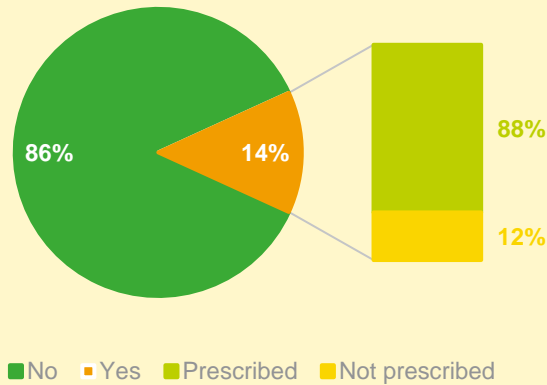
### People at risk of burnout are at higher risk of mental health problems

■ Not at risk of burnout ■ At risk of burnout

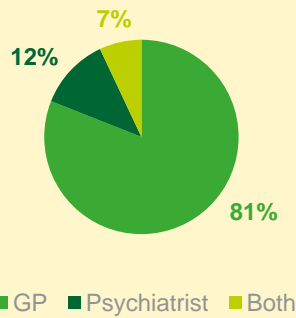


### Who took sedatives?

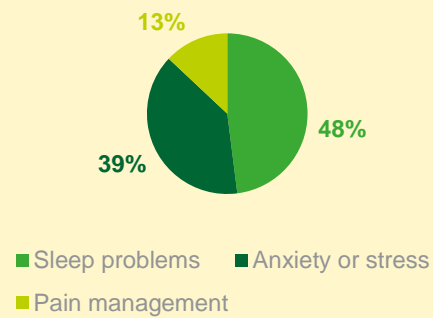
14% of people took a sedative in the past two weeks.  
88% of sedatives were prescribed by a healthcare professional.



### Who prescribed the sedative?



### What were the primary complaints?



### Frequency



71% took them daily or regularly

### Duration



74% took them for more than a year

### Type



80% of sedatives were benzodiazepines or Z-drugs

### Which groups were more likely to take sedatives?



Aged 65+ years  
19%



Living in Wallonia  
20%



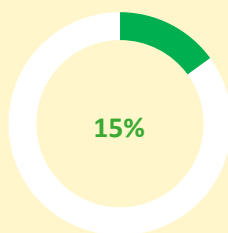
At most secondary degree  
16%



Anxiety or depression  
30% (both respectively)

### Who took antidepressants?

15% of people took a prescribed antidepressant in the last two weeks



#### Health care professional



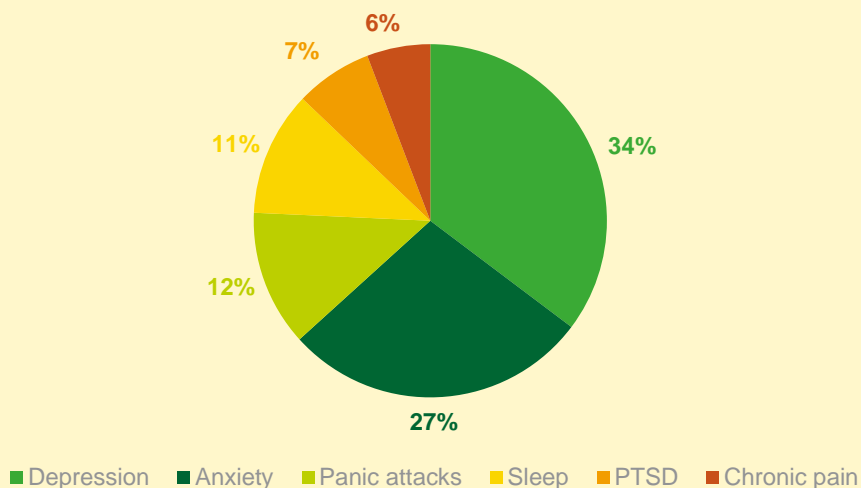
Antidepressants were prescribed by a doctor (63%), a psychiatrist (26%) or both (11%)

#### Duration



66% took them for more than a year

### What were the primary complaints<sup>4</sup>?



### Which groups were more likely to take antidepressants?



Aged 50-64 years  
20%



Living in Wallonia  
18%



At most secondary degree  
18%

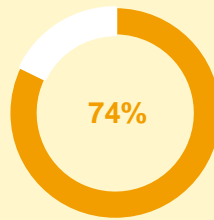


Anxiety or depression  
33% and 37% respectively

<sup>4</sup> PTSD: post-traumatic stress disorder.

### Who reported poor sleep?

Almost three-fourths (74%) of people had experienced sleeping problems in March 2024



People with bad sleep were **at higher risk** of various **mental health disorders**



### Which groups reported the poorest sleep?



**Aged 18-29**  
52%



**Living alone with children**  
58%



**At most secondary degree**  
44%

### What were the main causes of sleep problems?



**Daily hassles or stressors**  
(34%)



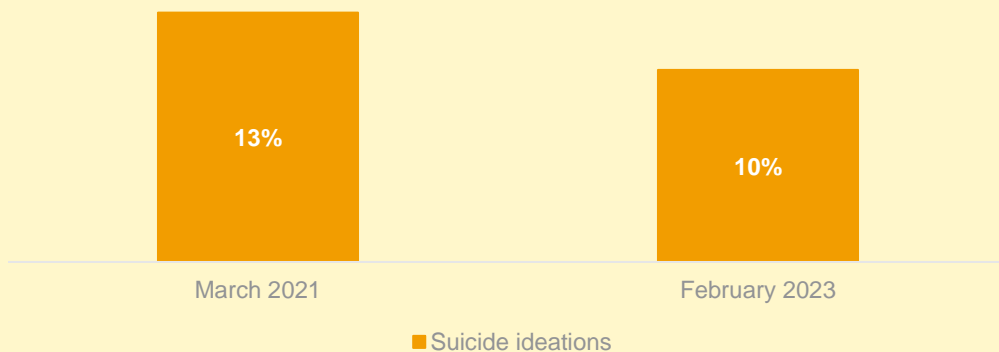
**Physical pain or discomfort**  
(13%)



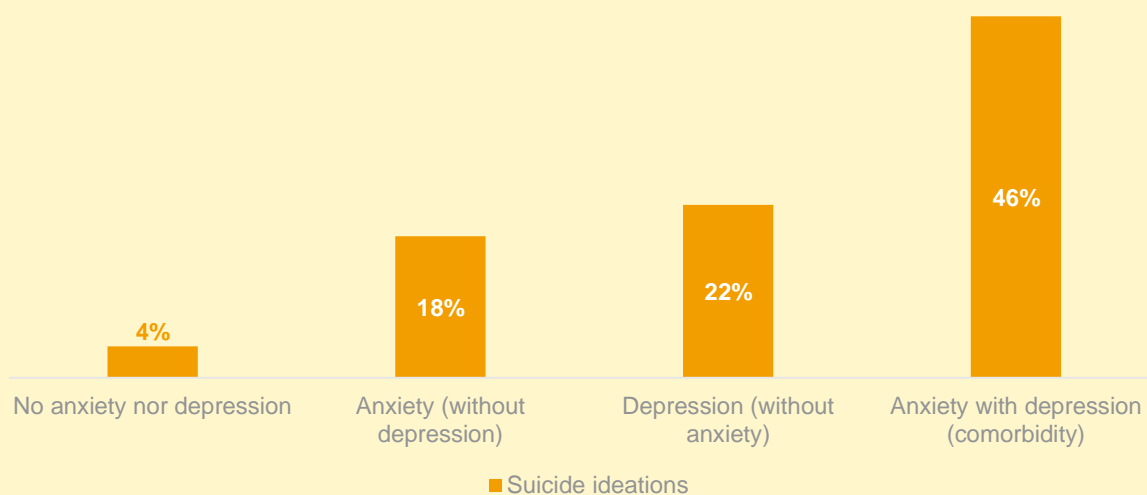
**Personal problems or concerns**  
(11%)

### In difficult times, people might think of ending their life

In March 2021, **13%** of people had suicide ideations in the past 12 months. In February 2023, **10%** of people had suicide ideations in the past 12 months.



People who reported having thought about suicide in the past year were significantly more likely to suffer from **anxiety or depression**



Which **groups** reported having had more suicide ideations?



**Aged 18-29**  
19%



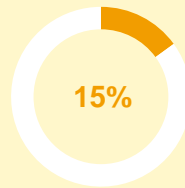
**Living in Wallonia**  
14%



**At most secondary degree**  
12%



### Which people felt part of a group that may suffer discrimination?



In June 2024, **15% of people** indicated being part of a group they felt was discriminated against in Belgium

The top three grounds on which groups were discriminated against were



**Gender**  
27%

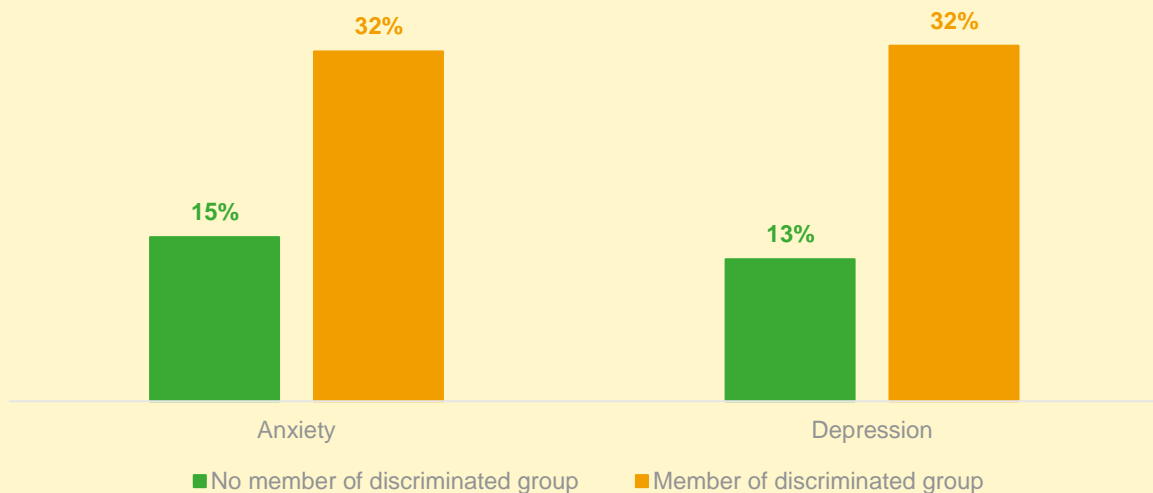


**Sexual orientation**  
24%



**Disability**  
22%

Being a member of a discriminated group was associated with **more than twice a higher prevalence of anxiety and depression**



### Stigma towards mental health



**29%** of people agreed with the statement that in our society, people think **one never recovers from mental health problems**



**45%** of people agreed with the statement that in our society, people think if someone talks about their mental health problems, **they might lose some friends**

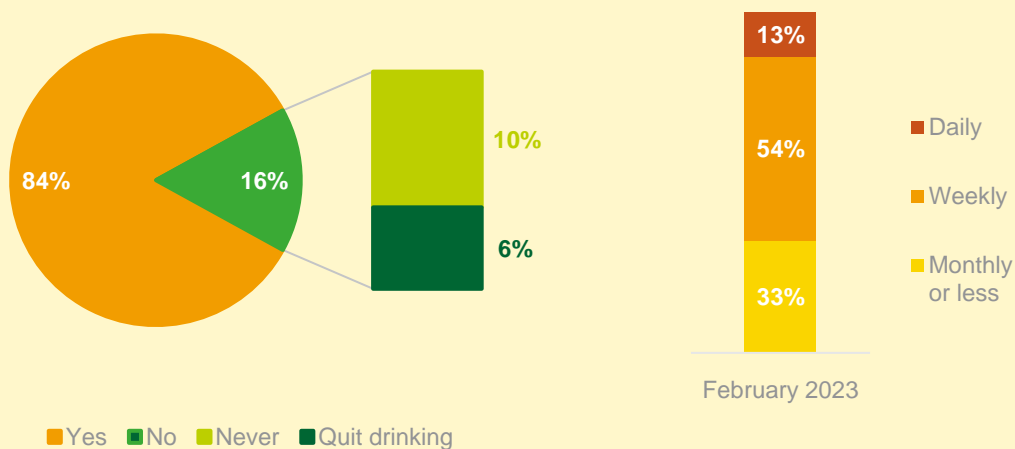


**54%** of people agreed with the statement that in our society, people think if an employer finds out that the employee is suffering from mental health problems, the employee **might lose their job**

Where there changes in alcohol use of people in March 2024 in the past year?

Did you **drink alcohol** in the last twelve months?

If yes, what was the **frequency** of drinking?



What were the **characteristics** of daily drinkers?

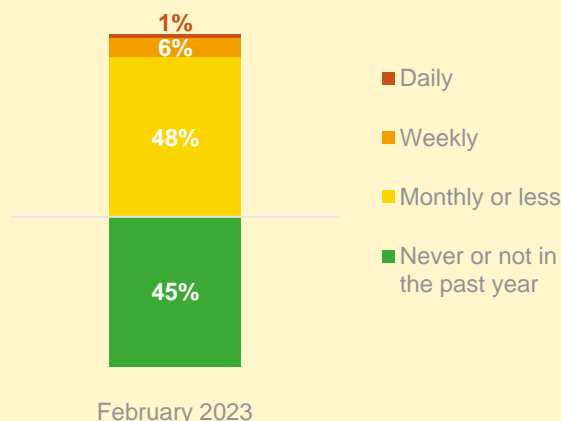


**Older people (aged 55+)** drank more on a daily basis (17%) compared with other age groups



**Twice** (14%) as many **men** than women (7%) drank of a daily basis

What was the frequency of **risky single occasion drinking**<sup>5</sup>?



<sup>5</sup> *Risky single occasion drinking* (RSOD) refers to drinking six or more standard glasses of alcohol on one occasion.

# ANNEXES

## 1. Methods

### 1.1. QUESTIONNAIRE AND LIST OF VARIABLES

For the development of the questionnaire of BELHEALTH, the survey questions for the core section were mainly extracted from the questionnaire of the 2018 *Belgian Health Interview Survey*<sup>6</sup> and of the *COVID-19 Health Surveys*. This is way, comparisons before and during and after the pandemic were possible. For the survey questions of the alternating section, other validated questionnaires or scales were used.

Apart from the core section and the alternating section, topics in the questionnaire included:

- Demographic information:
  - o Belgian residency, age, sex, postal code, nationality, country of birth, household composition, educational level, and employment and financial situation (including changes in the employment or financial status)
- *Basic Psychological Need Satisfaction and Frustration Scale* (BPNSFS)
- Peri-traumatic stress reaction
- Personality traits (introversion/extraversion)
- Economic difficulties
- Changes in nutritional habits and physical activity
- Height and weight
- Household conditions: crowding (number in rooms in the household in relation to the number of people in the household), satisfaction with household

The questionnaire will be available in Dutch, French, German and English; participants can use a PC or a smartphone to fill in the questionnaire.

### 1.2. SAMPLE SIZE AND SAMPLE METHODS

The cohort population consisted of participants of the former *COVID-19 Health Surveys* who consented to be recontacted in the framework of future Sciensano surveys. To achieve a good representativeness of the general adult population, the cohort was enriched by sample-based refreshment recruitments. Members of the cohort were invited to complete an online questionnaire every 3 to 4 months, including questions on health and well-being as well as potential determinants of mental disorders.

Former participants of the COVID-19 Health Surveys who had consented to future contact were invited to join the BELHEALTH cohort. This occurred in two stages:

- Participants in the final COVID-HIS survey were asked if they were interested in the BELHEALTH cohort.
- Those who didn't participate in the final COVID-HIS survey but had previously consented to future contact received an email. This email included their COVID-HIS results, information about the BELHEALTH study, and a link to express interest in the cohort.

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<sup>6</sup> <https://www.sciensano.be/en/projects/health-interview-survey>

To ensure a more representative sample, an additional random selection of underrepresented groups was recruited from the national register in collaboration with Statbel. These individuals received personal postal invitations with a link to the online survey.

To address dropout and maintain representativeness, the cohort underwent periodic refreshment recruitment. Descriptive analyses were conducted at each wave to assess representativeness based on gender, age, region, education, job status, and household composition. This approach ensured a large, representative sample of the adult population in Belgium over time.

### **1.3. DATA COLLECTION**

The first round of data collection started in September 2022. At each wave, the survey stayed online for 14 days. After one week, a reminder e-mail was sent. The survey was conducted online via *LimeSurvey*, a web application running on a server located within Sciensano. Access to the administration of LimeSurvey application is restricted to a limited number of people involved in the administrative management of the survey, who are authenticated with a username and password.

Data of the questionnaires were transferred to a secured Sciensano SAS database with access restricted to the researchers involved in this survey. Data management and analysis were performed in SAS 9.4®. In the next appendix we will give more information on the careful handling of participant's data.

## 2. Ethics and data protection

The objective of BELHEALTH's data collection was twofold. On the one hand, it served to provide health authorities with accurate and up-to-date information concerning health and well-being in the adult population in Belgium. On the other hand, the data collection was necessary for scientific research purposes. Strict data ethics principles are always guaranteed, as the processing of the data is in accordance with Articles 9 §2 i) and 9 §2 j) of the *General Data Protection Regulation* (GDPR). The following measures were taken into account in order to ensure ethical and data privacy principles:

- **Informed consent:** The participants were informed about the context and objectives of the survey, the voluntary nature of the participation, and their rights such as the right to review and correct their data (for those who provided their e-mail address) and their right to withdraw from the study at any time without prejudice. Contact information to fulfill their rights was provided. The first page of the questionnaire provided all the information needed to inform the consent of the participants.
- **Additional information:** At the end of the survey, the aftercare principle was applied. A text with a link was provided for people experiencing mental health or social problems (<http://www.tele-onthaal.be>).
- **Confidentiality:** Data collection and transfer occurred through the LimeSurvey web application running on a server located within the Sciensano datacenter. No data were located outside Sciensano. Access to the administration of LimeSurvey application was restricted to a limited number of people involved in the administrative management of the survey, authenticated with a username and password. Data of the questionnaires are transferred to a secured Sciensano SAS database with access restricted to the researchers involved in this survey.
- **Anonymous participation & temporary pseudo-anonymization:** Confidential treatment of participant's data is always guaranteed. Since people needed to provide their email-address, each participant was assigned a study ID token. This token was the only connection between participants' email-addresses and the survey data, as email addresses were never included in the data file. The key was saved safely in LimeSurvey and was only accessible by those limited number of people of the administration of the LimeSurvey application. After the data collection period, the mail addresses will be deleted.
- **Data storage:** The data of the questionnaire were stored on the secure Sciensano server and will be kept only for the necessary duration of the research, that is for 10 years after the end of field work.
- **Data reporting:** Individual data will never be transmitted to third parties; only aggregated data will be published. We adhere the FAIR data principle; data previously anonymized may be shared with other researchers upon justified request. In that case, a data sharing agreement will be written and signed (e.g. agreeing to not share the data with external parties and publications are always discussed first with Sciensano) and the requested data will be shared via the secure BELNET system. This is the best way to protect data and their accessibility, as well as to set up the rules and conditions of reuse (with whom, when, what data, etc.).



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