Methodology: Bulletin n°5 BELHEALTH

The data collection for the 5th BELHEALTH survey was carried out between 18 March and 3 April 2024. The survey is directed at adults (18 years and older) living in Belgium who have agreed to be part of the BELHEALTH study (i.e. 10,301 people). The survey was developed with the LimeSurvey software.

The following conditions had to be accepted before accessing the survey:

- Participation in the survey is voluntary, and participation can be stopped at any time;
- All information provided will only be used for the purposes of the study;
- Sciensano will only use the results of the survey to create general statistics, and individual data will never be passed on to third parties;
- The data collected will only be kept for the duration of the project.

A total of 6,424 people responded to the survey: they provided at least information on their age, sex, education level and postal code of residence in the fifth or one of the previous waves.

Table 1 gives an overview of the number and proportion of people aged 18 and over living in the three Belgian regions (based on Statbel data, on 01/01/2019) compared to the proportions of participants in the 5th BELHEALTH survey according to their region of residence (determined from the question about their postal code).

Table 1| Comparison of the composition of the population and the composition of the sample of the 5th BELHEALTH survey, by region, Belgium 2024

	Number of inhabitants (%)	Number of participants (18+)(%)
Flemish Region	5,311,613 (58.2%)	4,227 (66.0%)
Brussels Region	932,366 (10.2%)	621 (9.7%)
Walloon Region	2,882,040 (31.6%)	1,576 (24.5%)
Belgium	**9,126,019 (100%)**	**6,424 (100%)**

In relative terms, participants residing in the Flemish Region are over-represented in the sample compared to the distribution of inhabitants and participants in the Walloon Region are under-represented.

Table 2| Composition of the sample of the 5th BELHEALTH survey, by sex and age group, Belgium 2024

	Number of men (%)	Number of women (%)	Total number (%)
18-24 years	13 (0.2%)	30 (0.5%)	43 (0.7%)
25-34 years	86 (1.3%)	215 (3.4%)	301 (4.7%)
35-44 years	193 (3.0%)	379 (5.9%)	572 (8.9%)
45-54 years	308 (4.8%)	715 (11.1%)	1,023 (15.9%)
55-64 years	588 (9.2%)	1,006 (15.7%)	1,594 (24.8%)
65+ years	1,449 (22.6%)	1,442 (22.5%)	2,891 (45.0%)
Total	**2,637 (41.0%)**	**3,787 (59.0%)**	**6,424 (100%)**

More women (59%) than men (41%) took part in the survey, so they are over-represented (in the population, the distribution is 51% women and 49% men). The age distribution among the participants also differs from that of the population: the youngest age group (18 to 24 years) is notably under-represented in the survey (12.5% in the population, <1% in the survey).

Table 3 | Sample composition of the 5th BELHEALTH survey, by education level, Belgium 2024

	Population (18+)(%)	Number of participants (18+)(%)
At most secundary degree	6,302,716 (67.1%)	1,644 (25.6%)
Higher level of education	3,084,424 (32.9%)	4,780 (74.4%)
Total	**9,387,140 (100%)**	**6,424 (100%)**

The composition of the sample is therefore quite different from the composition of the population (18 years and older) in terms of region, gender, age group, and education. Consequently, any conclusions drawn based on the analysis of the results may be biased. To compensate for this, a weighting adjustment (post-stratification) is used in the analyses to obtain more accurate estimates. This technique consists of using the information on the actual composition of the population in Belgium (here in terms of gender, age group, education, and province) to adjust the sample data to the exact distribution when calculating the survey results:

- The 'exact' composition of the Belgian population by gender, age group, and province comes from the data on the composition of the population on 1 January 2019, calculated by Statbel;
- The composition of the population by level of education is based on the results of the Labour Force Survey 2018 (LFS), organised by Statbel. Two education groups were distinguished: people with at most a secondary (higher) education degree and people with a higher education degree.

We formed subgroups (also called strata) in both the population and the sample, based on a cross-reference between gender, age group, province, and education level. Weights were obtained by dividing, per stratum, the number of people in the population by the number of participants in the survey. An upper limit for the weights was then established, defined as the minimum value of all weights multiplied by 100. Any weights exceeding this upper limit were replaced to match the upper limit.