

# COVID19BE OPEN DATA CODEBOOK

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## COVID19BE\_CASES\_AGESEX

### CONFIRMED CASES BY DATE, PROVINCE, AGE AND SEX

Variable	Definition
DATE	Date of symptoms onset, sampling, diagnosis, or reporting (earliest available date is used and might be changed as new information becomes available)
PROVINCE	Province of residence of confirmed cases (including Brussels)
REGION	Region of residence of confirmed cases
AGEGROUP	Age group of confirmed cases
SEX	Sex of confirmed cases
CASES	Number of confirmed cases (combinations with zero cases are not shown)

## COVID19BE\_CASES\_MUNI

### CONFIRMED CASES BY DATE AND MUNICIPALITY

Variable	Definition
DATE	Date of symptoms onset, diagnosis, or reporting (earliest available date is used)
NIS5	NIS-code of residence of confirmed cases (5 digits)
TX_DESCR_NL	Municipality of residence of confirmed cases (Dutch name)
TX_DESCR_FR	Municipality of residence of confirmed cases (French name)
TX_ADM_DSTR_DESCR_NL	Administrative district of residence of confirmed cases (Dutch name)
TX_ADM_DSTR_DESCR_FR	Administrative district of residence of confirmed cases (French name)
PROVINCE	Province of residence of confirmed cases (including Brussels)
REGION	Region of residence of confirmed cases
CASES	Number of confirmed cases (combinations with zero cases are not shown)

## COVID19BE\_CASES\_MUNI\_CUM

### CUMULATIVE NUMBER OF CONFIRMED CASES BY MUNICIPALITY

Variable	Definition
NIS5	NIS-code of residence of confirmed cases (5 digits)
TX_DESCR_NL	Municipality of residence of confirmed cases (Dutch name)
TX_DESCR_FR	Municipality of residence of confirmed cases (French name)
TX_ADM_DSTR_DESCR_NL	Administrative district of residence of confirmed cases (Dutch name)
TX_ADM_DSTR_DESCR_FR	Administrative district of residence of confirmed cases (French name)
PROVINCE	Province of residence of confirmed cases (including Brussels)
REGION	Region of residence of confirmed cases
CASES	Cumulative number of confirmed cases (combinations with zero cases are not shown)

## COVID19BE\_HOSP

### HOSPITALISATIONS BY DATE AND PROVINCE

Variable	Definition
DATE	Date
PROVINCE	Province of reporting hospitals (including Brussels)
REGION	Region of reporting hospitals
NR_REPORTING	Number of hospitals reporting
TOTAL_IN	Total number of lab-confirmed hospitalized COVID-19 patients at the moment of reporting, including ICU (prevalence)
TOTAL_IN_ICU	Total number of lab-confirmed hospitalized COVID-19 patients in ICU at the moment of reporting (prevalence)
TOTAL_IN_RESP	Total number of lab-confirmed hospitalized COVID-19 patients under respiratory support at the moment of reporting (prevalence)
TOTAL_IN_ECMO	Total number of lab-confirmed hospitalized COVID-19 patients on ECMO at the moment of reporting (prevalence)
NEW_IN	Number of new lab-confirmed COVID-19 patients in the last 24h (incidence), not referred from another hospital. This number excludes the patients that were admitted to the hospital for other reasons but tested positive for COVID-19 in a screening context.
NEW_OUT	Number of new lab-confirmed hospital discharges (alive) of COVID-19 patients in the last 24h (incidence), not referred to another hospital

## COVID19BE\_MORT

### DEATHS BY DATE, REGION, AGE AND SEX

Variable	Definition
DATE	Date of death
REGION	The region where death occurred (Flanders, Brussels, Wallonia, NA = unknown)
AGEGROUP	The age group of the deceased person (0-24, 25-44, 45-64, 65-74, 75-84, 85+, 999 = unknown)
SEX	The sex of the deceased person
DEATHS	Number of COVID-19 deaths (combinations with zero deaths are not shown)

## COVID19BE\_MORT\_DIAGNOSTIC

### DEATHS BY WEEK, AGE, REGION OF RESIDENCE AND CASE CLASSIFICATION

Variable	Definition
WEEK	Year - Week of death (Monday to Sunday)
START WEEK	Date of the first day of the week of death
END WEEK	Date of the last day of the week of death
REGION_RES	The region where the deceased was living (Flanders, Brussels, Wallonia, NA = unknown)
AGEGROUP	The age group of the deceased person (<65, >=65)
DIAGNOSTIC	<p>How COVID-19 was diagnosed ? (Laboratory-confirmed, Radiologically-confirmed, Possible case)</p> <p>Radiologically-confirmed = a person who has a negative PCR test for SARSCoV-2 but is nonetheless diagnosed with COVID-19 on the basis of a suggestive clinical presentation and a compatible chest scanner</p> <p>Possible case = clinical criteria : a person with at least one of the following major symptoms of acute onset, with no other obvious cause: cough, dyspnoea, thoracic pain, anosmia or dysgeusia, or two or more of the following minor symptoms, with no other obvious cause: fever, muscle pain, fatigue, rhinitis, sore throat, headache, anorexia, watery diarrhoea, acute confusion, sudden fall, or exacerbation of chronic respiratory symptoms (COPD, asthma, chronic cough...), without any other obvious cause</p>
DEATHS	Number of COVID-19 deaths (combinations with zero deaths are not shown)

## COVID19BE\_MORT\_PROFILE

### DEATHS BY WEEK, AGE, REGION OF RESIDENCE AND TYPE OF RESIDENCE

Variable	Definition
WEEK	Year - Week of death (Monday to Sunday)
START WEEK	Date of the first day of the week of death
END WEEK	Date of the last day of the week of death
REGION_RES	The region where the deceased was living (Flanders, Brussels, Wallonia, NA = unknown)
AGEGROUP	The age group of the deceased person (<65, >=65)
PROFIL	The type of residence, e.g. being a nursing home resident or not (NH = nursing home resident, Non-NH = non-nursing home resident (other long-term care facilities (LTCF) included), NA = unknown)
DEATHS	Number of COVID-19 deaths (combinations with zero deaths are not shown)

## COVID19BE\_MORT\_PLACE

### DEATHS BY WEEK, AGE, REGION OF RESIDENCE AND PLACE OF DEATH

Variable	Definition
WEEK	Year - Week of death (Monday to Sunday)
START WEEK	Date of the first day of the week of death
END WEEK	Date of the last day of the week of death
REGION_RES	The region where the deceased was living (Flanders, Brussels, Wallonia, NA = unknown)
AGEGROUP	The age group of the deceased person (<65, >=65)
PLACE	The place of death (Hospital, NH = nursing home, Other/NA (NA = unknown))
DEATHS	Number of COVID-19 deaths (combinations with zero deaths are not shown)

## COVID19BE\_MORT\_REGION

### DEATHS BY WEEK, AGE, REGION OF DEATH AND REGION OF RESIDENCE

Variable	Definition
WEEK	Year - Week of death (Monday to Sunday)
START WEEK	Date of the first day of the week of death
END WEEK	Date of the last day of the week of death
REGION_RES	The region where the deceased was living (Flanders, Brussels, Wallonia, NA = unknown)
AGEGROUP	The age group of the deceased person (<65, >=65)

REGION_DEATHS	The region where death occurred (Flanders, Brussels, Wallonia, NA = unknown)
DEATHS	Number of COVID-19 deaths (combinations with zero deaths are not shown)

## COVID19BE\_TESTS

### NUMBER OF PERFORMED AND POSITIVE TESTS BY PROVINCE AND DATE

Variable	Definition
DATE	Date of performed tests (date of laboratory diagnosis, or when not available, date of sampling is used)
PROVINCE	Province of residence of tested individuals (including Brussels)
REGION	Region of residence of tested individuals
TESTS_ALL	Total number of performed tests
TESTS_ALL_POS	Total number of positive tests

## COVID19BE\_VACC

### NUMBER OF ADMINISTERED VACCINES BY DATE, REGION, AGE, SEX, BRAND, AND DOSE

Variable	Definition
DATE	Date of administration of the vaccine
REGION	Region of residence of people receiving the vaccine (Ostbelgien numbers are specified and excluded from Wallonia totals)
AGEGROUP	Age group of people receiving the vaccine
SEX	Sex of people receiving the vaccine
BRAND	Vaccine brands (vaccines that are normally not used in Belgium but that have been approved by a national regulatory authority in Europe or included in the World Health Organization's Emergency Use listing are grouped under the brand label "Other"). For brands producing adapted vaccines based on different virus strains the version of the vaccine is specified.
DOSE	Dose identifier (for vaccines requiring 2 doses: A for first dose, B for second dose; C for vaccine requiring only 1 dose; E for extra/booster dose of vaccine administered since the 9 <sup>th</sup> of September 2021; E2 for second booster administered since the 20 <sup>th</sup> of January 2022; E3 for third booster).
COUNT	Number of people receiving the vaccine (combinations with 0 vaccination are not shown)

## COVID19BE\_VACC\_MUNI\_CUM

### CUMULATIVE NUMBER OF ADMINISTERED VACCINES BY WEEK, MUNICIPALITY, AGE, AND DOSE

Variable	Definition
YEAR_WEEK	Week (Monday to Sunday) including all vaccines that were administered by the end of that week and registered in Vaccinnet+
NIS5	NIS-code (municipality) of residence of people receiving the vaccine (5 digits)
AGEGROUP	Age group of people receiving the vaccine
DOSE	Dose identifier (for vaccines requiring 2 doses: A for first dose, B for second dose; C for vaccine requiring only 1 dose; E for extra/booster dose of vaccine administered since week 36 of 2021); E2 for second booster administered since week 4 of 2022; E3 for third booster).
CUMUL	Cumulative number of people receiving the vaccine (combinations with less than 10 vaccinations are indicated with "<10", combinations with 0 vaccination are not shown)

## COVID19BE\_VACC\_MORT

### NUMBER OF VACCINATED PEOPLE DECEASED BEFORE 2024 BY REGION, AGE GROUP, SEX, AND LAST DOSE RECEIVED

Variable	Definition
REGION	Region of residence of the persons (Ostbelgien numbers are specified and excluded from Wallonia totals)
AGEGROUP	Age group of the persons
SEX	Sex of the persons
DOSE	Dose identifier of the last dose received (for vaccines requiring 2 doses: A for first dose, B for second dose; C for vaccine requiring only 1 dose; E for extra/booster dose; E2 for second extra/booster; E3 for third extra/booster).
TOT	Number of deceased people in the sub-category, values are not shown when the total in the subcategory is strictly lower than 5

## COVID19BE\_VACC\_STATUS

### NUMBER OF PEOPLE (RE)VACCINATED BY DATE, REGION, AGE, SEX, AND BRAND

Variable	Definition
DATE	Date of administration of the vaccine
CAMPAIGN	ID of the ongoing campaign. Beginning of a campaign is based on the official date when available, or deduced from a sharp increase in the number of vaccinations. A campaign ends the day before the next one begins.
REGION	Region of residence of people receiving the vaccine (Ostbelgien numbers are specified and excluded from Wallonia totals)
AGEGROUP	Age group of people receiving the vaccine

SEX	Sex of people receiving the vaccine
BRAND	Vaccine brands. Vaccines that are normally not used in Belgium but that have been approved by a national regulatory authority in Europe or included in the World Health Organization's Emergency Use listing are grouped under the brand label "Other". For brands producing adapted vaccines based on different virus strains the version of the vaccine is specified.
STATUS	<p>Vaccination status. People are Vaccinated when completing a primary vaccination course, and Revaccinated when receiving any additional dose after the primary course.</p> <p>A person is counted as Revaccinated every time they receive an additional dose.</p> <p>Although the minimal delay between two revaccinations (6 months) allows someone to be (re)vaccinated twice during the same campaign, it concerns a very limited number of individuals (e.g. people with reduce immunity or severe comorbidity).</p>
COUNT	Number of people reaching the (re)vaccinated status (combinations with 0 vaccination are not shown)

## COVID19BE\_NH

### CONFIRMED CASE, HOSPITALISATION AND DEATH RATES AMONG NURSING HOME RESIDENTS BY WEEK AND REGION/COMMUNITY

Variable	Definition
YEAR_WEEK	Week (Monday to Sunday)
REGION	Region/community of nursing home location (Brussels, Flanders, Wallonia, German Speaking Community)
CASES_PER_100 <sup>1</sup>	<b>Percentage</b> of new <b>confirmed</b> COVID-19 cases among nursing home residents per week. The denominator is the number of residents of the nursing homes that reported (a nominator) at least once that week. If the nursing home reported more than once, the median of that week was used.
NEW_IN_PER_100 <sup>1</sup>	<b>Percentage</b> of new hospitalisations due to COVID-19 among nursing home residents per week. The denominator is the number of residents of the nursing homes that reported (a nominator) at least once that week. If the nursing home reported more than once, the median of that week was used.
DEATHS_PER_100 <sup>2</sup>	<b>Percentage</b> of deaths due to COVID-19 (possible, confirmed and radiologically confirmed) among nursing home residents (all places of death combined) per week. The denominator is the number of residents of the nursing homes that reported at least once that week. If the nursing home reported more than once, the median was used. Small additional corrections were needed to preserve realistic denominators on a weekly basis.
PART_RATE_PERCENT	Number of nursing homes that participated at least once in the corresponding week, expressed in a percentage.

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<sup>1</sup> The number of cases and the number of hospitalizations were reported by the nursing homes themselves in an aggregated way. The date of reporting by the nursing home has been used as the date to present the case/hospitalization. As testing was lacking in these institutions in the beginning of the pandemic and not all nursing homes participate, are these numbers NOT exhaustive! The number of cases/hospitalizations since week 20 (11 May 2020), before this date incidence data was not available in all regions/communities.

<sup>2</sup> The number of deaths represents all nursing home residents who died in all possible locations (the nursing home, the hospital, at home). In order to do so, different datasets were combined with the data reported by the nursing homes and hospitals. These numbers should be seen as preliminary, as we continuously work on a better validation of the data.



# COVID19BE OPEN DATA CHANGES IN REPORTING

## COVID19BE\_TESTS

Date	Change in definition
27/11/2023	On Thursday 23 November 2023 there was a retrospective correction of the tests data over the entire period of data collection. There was a decrease in the overall number of tests of 8 628.

## COVID19BE\_CASES

Date	Change in definition
11/03/2020	Modification of screening policy: only cases requiring hospitalization, and healthcare professionals with fever are tested
28/03/2020	Receipt of retrospective data from a new laboratory performing COVID-19 tests; this led to an increase in reported cases in Wallonia.
28/03/2020	Modification of screening policy: the first cases (up to a maximum of 5 cases) of a cluster in a residential group, which meet the case definition, are now also tested.
21/12/2021	On 21/12/2021 there has been a correction of the data during the period of 26/09/2021 until 31/05/2021 included. There was a decrease in the estimated number of cases of 10 780.
15/03/2023	On 15/03/2023, 5 879 'German' cases that were recorded between 25/09/2020 and 30/12/2022, but not included in the cases flow yet, have been added to the total number of cases.
11/10/2023	COVID19BE_CASES_MUNI and COVID19BE_CASES_MUNI_CUM are archived and no longer updated.
27/11/2023	As a result of the retrospective correction of the tests data applied on Thursday 23 November 2023, there was also a retrospective correction of the cases data over the entire period of data collection. There was a decrease in the overall number of cases of 228.

## COVID19BE\_HOSP

Note : From May 16<sup>th</sup> the data collection, which is done via the FPS Public Health (FOD Volksgezondheid, SPF Santé Publique) as of 2<sup>nd</sup> of March, is simplified following the transition to management level 1. Hospitals report prevalence on one day a week and some variables are removed from the survey, such as those related to the origin of patients and the discharges. Important to mention is that a part of the data that previously, due to an IT issue, could not be sent by the Vivalia hospital network in Luxembourg, are now included retrospectively. These data span the second half of 2022.

Date	Change in definition
28/04/2020	Given the enlarged test indications since 22/04/2020 (all patients admitted to the hospital can be tested, regardless of the reason for admission) and given the gradual return to normal hospital activities, <b>the new lab-confirmed admissions</b>

**are now subdivided according to pathology**, i.e. COVID-19 lab-confirmed patients admitted to the hospital because of COVID-19, and COVID-19 lab-confirmed patients admitted to the hospital because of another pathology but who tested positive within a screening context. The latter are not included in the variable **NEW\_IN**.

11/02/2021	On 11/02/2021 there has been a correction of a systematic underreporting of the number of new patients ( <b>NEW_IN</b> ) and discharges ( <b>NEW_OUT</b> ) by some of the hospitals, throughout the entire time series to date. More information in the following document in <a href="#">NL</a> or <a href="#">FR</a> .
14/12/2021	On 14/12/2021 there has been a correction of a systematic underreporting from one hospital of the total number of patients in hospital ( <b>TOTAL_IN</b> ) and the total number of new patients ( <b>NEW_IN</b> ) during the period of 20/10/2021 until 24/11/2021 included.
24/05/2022	On 24/05/2022 there has been a correction of a systematic underreporting from one hospital of the total number of patients in hospital ( <b>TOTAL_IN</b> ) and the total number of new discharges ( <b>NEW_OUT</b> ) during the period of 01/04/2022 until 02/05/2022 included.
02/03/2023	From 02/03/2023 on, Surge Capacity hospital data are no longer collected by Sciensano, but by the FPS Public Health.
27/06/2023	The mandatory Surge Capacity Survey data collection (hospital surveillance) was stopped.

## COVID19BE\_MORT

Date	Change in definition
24/03/2020	Mortality statistics provided by the regional authorities are now complemented with mortality statistics provided directly by the hospitals; doubles are removed.
31/03/2020	Inclusion of possible COVID-19 deaths occurring in LTCF and in the community.
7/04/2020	Inclusion of COVID-19 deaths occurring in the LTCF of Flanders.
9/04/2020	Inclusion of COVID-19 deaths occurring in the LTCF of Flanders.
22/04/2020	Inclusion of COVID-19 deaths occurring in the LTCF of the German-speaking Community.
6/05/2020	Inclusion of radiologically-confirmed and possible cases in hospitals.
24/05/2020	Inclusion of data flow from the website Matra in Wallonia, German-speaking Community and Brussels.
26/08/2020	Inclusion of missing individual data on age, sex and date of deaths occurring in Flemish nursing homes, retrospectively collected for the period from 18/03/20 until 02/06/20. For more details, see <a href="#">FR</a> / <a href="#">NL</a> .
16/03/2021	Inclusion of COVID-19 hospital death data corrections for the period from 18/03/20 until 21/01/21. For more details, see <a href="#">FR</a> / <a href="#">NL</a> .
18/12/2021	Inclusion of COVID-19 hospital death data corrections for the period from 10/03/20 until 31/08/20. For more details, see <a href="#">FR</a> / <a href="#">NL</a> / <a href="#">EN</a> .
09/02/2022	Inclusion of COVID-19 hospital death data corrections for the period from 16/09/20 until 16/08/21.
02/03/2023	Hospitals no longer send their data directly to Sciensano, but to the FPS Public Health. FPS Public Health then forwarded the data to Sciensano for processing and

reporting. The reporting of individual data became facultative, but was still encouraged (aggregated data stayed mandatory to report). The percentage of individual data reported decreased over time, but was still around 2/3.

01/05/2023	The national monitoring of COVID-19 in LTCF switched to regional monitoring, with only surveillance in Wallonia continuing. COVID-19 mortality data for Wallonia in LTCF were still included in the national COVID-19 mortality data until the 30 June 2023.
27/06/2023	The Surge Capacity Survey data collection (hospital surveillance) was stopped.
30/06/2023	Inclusion of the latest COVID-19 death data. End of collection of COVID-19 deaths as part of real time epidemiological surveillance.
23/08/2023	Inclusion of COVID-19 deaths data corrections received from the AViQ for the period from March 2020 until 30/06/2023. For more details, see <a href="#">FR</a> / <a href="#">NL</a> / <a href="#">EN</a> .

## COVID19BE\_VACC & COVID19BE\_VACC\_MUNI\_CUM

Date	Change in definition
08/06/2021	Change in reference date for age calculation: age of vaccinated people is now age on the 1st of January 2021. Age was previously calculated based on the date of vaccine administration. This impacts the repartition of vaccinated people by age groups.
23/06/2021	Since the 23 <sup>rd</sup> of June, doses administered abroad to Belgian residents or in the context of a clinical trial can be registered in the Vaccinnet+ registry. This may include vaccine brands that are normally not used in Belgium. Such vaccine brands that have been approved by a national regulatory authority in Europe or included in the World Health Organization's Emergency Use listing are grouped under the brand label "Other".
22/09/2021	Add category "E" in the DOSE variable of the COVID19BE_VACC dataset for extra/booster doses administered since the 9 <sup>th</sup> of September 2021.
30/09/2021	Second doses of a mRNA vaccine administered since the 9 <sup>th</sup> of September 2021 after a one-dose vaccine are now also labelled as "E".
22/12/2021	Add category "E" in the DOSE variable of the COVID19BE_VACC_MUNI_CUM dataset for extra/booster doses administered since week 36 of 2021
18/02/2022	Add category "E2" in the DOSE variable of the COVID19BE_VACC dataset for second booster doses administered since the 20 <sup>th</sup> of January 2022.
20/06/2022	Change in reference date for age calculation: age of vaccinated people is now age on the 1 <sup>st</sup> of January 2022 in both COVID19BE_VACC and COVID19BE_VACC_MUNI_CUM datasets. This change is made following the publication of the Belgian population structure on 1 <sup>st</sup> January 2022 (released by Statbel on 16 <sup>th</sup> June 2022). Note that both datasets are only based on the number of doses administered, deaths occurring before 2022 in vaccinated people or other corrections are not considered in these datasets.
	Add category "E2" in the DOSE variable of the COVID19BE_VACC_MUNI_CUM dataset for second booster doses administered since week 4 of 2022.
19/09/2022	Add category "E3" in the DOSE variable of both the COVID19BE_VACC and COVID19BE_VACC_MUNI_CUM datasets for third boosters.

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	Specify the vaccine version in BRAND variable of COVID19BE_VACC dataset for brands producing adapted vaccines based on different virus strains.
04/08/2023	Change in reference date for age calculation: age of vaccinated people is now age on the 1 <sup>st</sup> of January 2023 in both COVID19BE_VACC and COVID19BE_VACC_MUNI_CUM datasets. This change is made following the publication of the Belgian population structure on 1 <sup>st</sup> January 2023 (released by Statbel on 16 <sup>th</sup> June 2022). Note that both datasets are only based on the number of doses administered, deaths occurring before 2023 in vaccinated people or other corrections are not considered in these datasets.
11/10/2023	COVID19BE_VACC and COVID19BE_VACC_MUNI_CUM are archived and no longer updated.

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## COVID19BE\_VACC\_MORT

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04/08/2023	Now consider vaccinated people deceased before 2023 (instead of 2022).
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