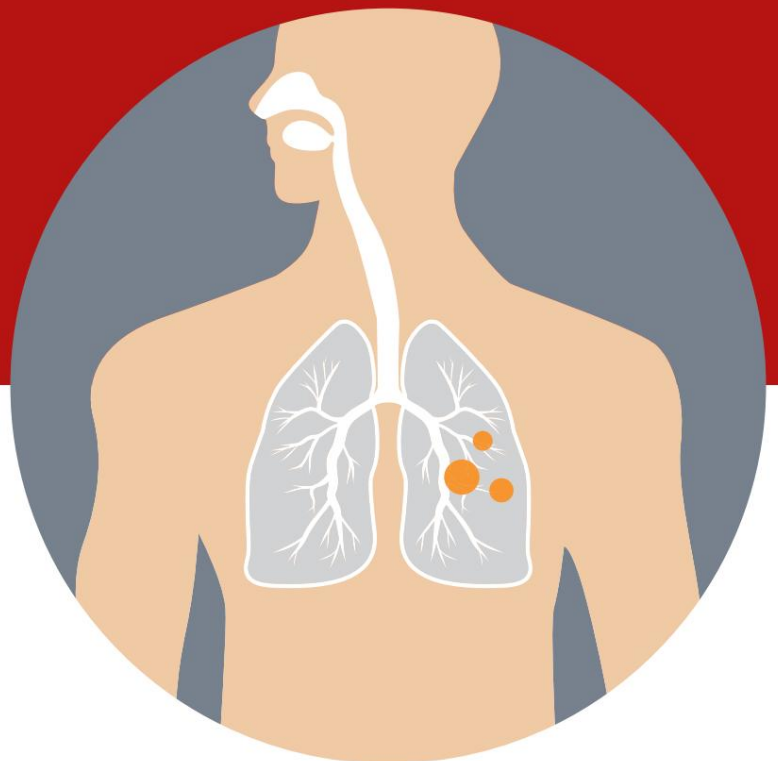


Weekly trends: covid-19 and other respiratory infections

Week 25 | 2022





The epidemiological development of covid-19 and other respiratory infections in Denmark from week 23 to week 24

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Overall assessment

The number of new COVID-19 cases continues increasing between week 23 and 24 with a growth of 42%, and the incidence on a national level has risen to 140 cases per 100,000 inhabitants. The test activity has increased in week 24 and there has been an average of 6,500 daily PCR tests. The rise in the number of new cases happens as the positive percentage increases both nationally, across all regions and in most age groups.

The number of hospitalizations has increased by 43% in week 24 and the proportion admitted because of COVID-19 has increased in week 22 (the last week it is possible to create these data for). Patients in age groups 50-89 years constitute the largest groups among the hospitalized. The increase in both number of new cases and in positive percentage among personnel in the health care- and social sector continues to increase in week 24.

Overall, we see an increasing incidence, rising positive percentages across age groups and geography as well as increasing concentrations of SARS-CoV-2 in wastewater samplings and it is estimated that there is an increasing wide dispersion of infections driven by the emergence of BA. 5. BA.5 accounts provisionally for 59% of the sequenced tests in week 24 and is thus assessed to be the dominant variant in Denmark.

On this background there is a continued high likelihood of rising SARS-CoV-2 case numbers along with the growth of BA.5. However, the magnitude of a new infection wave with BA.5 remains uncertain at this point in time as several factors must be expected to influence the development, such as the expected seasonal effect and decreased activity in society during the summer. The increase in hospital admissions seen in week 23 continues in week 24 and especially seen among the older age groups. There are until now no signs that BA.5 should lead to an increased risk of severe course of infection, however, it is still appraised that there is a high risk that rising infection rates could lead to corresponding hospital admissions in the coming weeks.



Summary

- The number of new cases with covid-19 has increased by 42% between week 23 and week 24, corresponding to the incidence in week 24 being 140 cases per 100,000 inhabitants. The positive percentage increased from 17% in week 23 to 19% in week 24. During the same period, the number of PCR tests increased by 22%.
- The incidence is still highest in the Capital Region (171 per 100,000 inhabitants) and then Region Zealand (134 per 100,000 inhabitants). Both are seen rising incidents and rising positive rates in all five regions. The lowest positive percentage is seen in the North Jutland Region (18.0%) and the Southern Denmark Region (18.1%), and the highest positive percentage is seen in the Central Jutland Region (21.6%).
- The incidence of infection continues to increase in all age groups. The incidence is highest among the 40-79-year-olds (171-225 per 100,000 inhabitants). In the remaining age groups, the incidence is between 15-142 per 100,000 inhabitants with a tendency for lower incidence in the younger age groups. The test rate is stable or slightly increasing in all age groups, and is still highest among the oldest and lowest among children and young people aged 0-19 years. The positive percentage increases in all age groups except the 3-15 year-olds, where a stable to slightly declining positive percentage is seen. The highest positive percentage of 23% is seen among the 50-79-year-olds, and the lowest positive percentage is among the 3-5-year-olds at 6.2%.
- The number of new admissions related to covid-19 has increased by 43% to 315 in week 24. People aged 70-89 continue to constitute the largest group among the new admissions. There is an increase in all age groups except the 30-39-year-olds and the 40-49-year-olds, where a decrease and a stabilization are seen, respectively. The number of admissions to intensive care units is stable at 9 in week 23 and 4 in week 24. The proportion of admissions among people admitted due to a covid-19 diagnosis (as opposed to covid-19) has increased from 46% in week 21 to 52% in week 22.
- The number of covid-19-related deaths has dropped to a preliminary 15 in week 24 from 25 in week 23.
- Among nursing home residents, the test rate increases from 2.0% in week 23 to 3.0% in week 24, and the positive percentage decreases from 6.3% in week 23 to 4.5% in week 24. The number of confirmed cases has increased from 50 cases in week 23 to 55 in week 24. The number of deaths among residents with covid-19 has decreased from 7 in week 23 to provisionally 5 in week 24.
- Among special staff groups, there is an increase in the number of confirmed cases in both the social and health sectors. Despite an unchanged test rate in the social sector, an increasing positive percentage is seen from 8.7% to 12.3%. In the healthcare sector, there is a small increase in both test rate and positive percentage, with the latter increasing from 18.5% to 19.2% between week 23 and week 24.



- BA.5 continues to constitute an increasing proportion of the sequenced samples, and in week 24 amounts to approx. 59%. The proportion of cases with BA.2.12.1 and BA.4 is respectively. provisionally in 10% and 7% of cases in week 24. However, a reservation must be made that a particularly large number of samples have not yet been sequenced in week 24.
- In week 24, an increase in SARS-CoV-2 concentration in the wastewater is seen at national level, so that the concentration of SARS-CoV-2 in the wastewater corresponds to the level at the end of April 2022. Divided by regions, there is also an increase in SARS-CoV-2 concentration in wastewater in all five regions.
- The proportion of COVID-meter user panel who are presumably infected with covid-19 in week 24 is 0.8%, which is a slight increase from 0.7% in week 23. The test rate among all COVIDmeter participants is 3.8% in week 24, which is an increase from 3.2% in week 23. There is an increase in the positive percentage to 25% in week 24 from 23% in week 23. Among the COVIDmeter participants who are suspected to be infected, the test rate is 58% in week 24, which is an increase from 51% in week 23, while there is also an increase in the positive percentage to 58% in week 24 from 53% in week 23.

Divided by regions, the highest proportion is thought to be infected with covid-19 in the Capital Region and Region Zealand (1.0%), while the highest positive percentage is seen in the Region of Southern Denmark (29%). Divided by age, the highest proportion presumed to be infected with covid-19 (1.3%) and the highest positive percentage among the 40-49 year olds (29%).

The most common symptoms reported at week 24 were more tired, debilitated or exhausted (3.7%), runny or stuffy nose (3.4%), and headache (3.2%).

- Sentinel monitoring shows that at week 23, parainfluenza and rhinovirus continued to be the two most common viruses among the samples.



Overall assessment

The number of new cases of covid-19 continues to increase between weeks 23 and 24 with a growth of 42%, and the incidence at national level has increased to 140 cases per 100,000 citizens. Test activity has increased in week 24, and there have been an average of 6,500 PCR tests daily. The increase in the number of new cases takes place in parallel with the positive percentage increasing both nationally, across all regions and in most age groups.

The number of admissions increased by 43% in week 24, and at the same time the proportion admitted due to covid-19 increased for week 22 (which is the most recent week for which data can be calculated). Patients in the age groups 50-89 years constitute the largest groups among the inpatients. The increase in both the number of new cases and in the positive percentage among staff in the health and social sector continues in week 24.

Overall, increasing incidence, increasing positive percentages across age groups and geography as well as increasing concentrations of SARS-CoV-2 are seen in the wastewater, and it is assessed that that there is increasing societal infection driven by the emergence of BA.5. BA.5 currently accounts for 59% of the sequenced samples in week 24, and is thus now considered to be the dominant variant in Denmark.

Against this background, there is still a high probability that the infection with SARS-CoV-2 will increase in parallel with the continued growth of BA.5. However, there is uncertainty about the extent of a new wave of infection with BA.5 at present, as several factors must be expected to be able to influence the development, including the expected seasonal effect and reduced activity in society over the summer. The increase in admissions that was in week 23 continues in week 24, and the increase is seen especially among the older age groups. There is still no evidence that BA.5 is associated with an increased risk of severe course of covid-19, but there is still an assessment that there is still a risk that increasing infection may lead to a secondary increase in admissions in the coming weeks.

At the end of this report, the data basis is described.



key figures

Covid-19

Table 1. COVID-19: Key numbers and trends, weekly, 2022

Table 1. Covid-19: Key figures and trends, broken down by week, 2022

Covid-19	2022						Trend week 19-24
	19	20	21	22	23	24	
Incidence pr. 100,000 inhabitants *	8.2	7.0	5.6	6.5	9.9	14.0	
Number of tests performed (PCR)	47,014	43,041	34,129	33,525	37,349	45,620	
Confirmed cases (PCR)	4,787	4,120	3,262 (in most common)	3,805	5,830	8,258	
Positive Percentage (PCR)	11.1	10.4	10.4	12.1	16.6	19.4	

Notes to table: The positive percentage in this table is calculated solely on the basis of PCR tests from the public sector.

* The population for calculating incidences is described in the data base under the section "Populations for calculating incidence".

Table 2. COVID-19: Key numbers and trends for hospital admissions and deaths, weekly, 2022

Table 2. Covid-19: Key figures and trends for hospitalized and dead, by week, 2022

Covid-19	2022						Trend week 19-24
	19	20	21	22	23	24	
New hospital admissions	276	249	201	179	220	315	
Number of patients admitted on Monday morning *	447	318	267	230	222	245	
Number of inpatients on intensive Monday morning **	13	10	13	9	9	4	
Number of dead ***	47	38	26	27	25	15	

* Week 20-22: Data is from Tuesday morning due to problems in data delivery on Monday morning.

** Week 20-22: Due to delays in data, there is a risk that the actual number of inpatients may be slightly higher or lower.

*** The number of deaths is updated retrospectively as data may be delayed due to post-registration.



Other respiratory diseases

Data is updated backwards.

Follow developments in sentinel surveillance - GPs' surveillance of flu-like illness on SSI's [website](#).

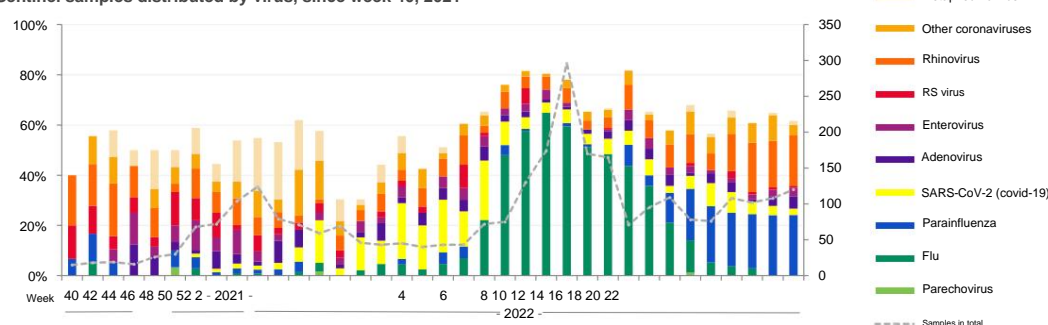
Table 3. Sentinel surveillance: Total number of test, proportion of airborne virus infections (%) and proportion of different types of airborne virus infections with 5 or more cases in week 18-23, 2022
Table 3. Sentinel surveillance: total number of samples, proportion detected respiratory virus (%) and proportion of different types of respiratory virus with 5 or more cases in week 18-23, 2022

	2022 week						Trend week
	18	19	20	21	22	23	18-23
Total number of samples	78	76	108	102	108	120	
Detected respiratory virus (%)	67.9	56.6	65.7	60.8	64.8	61.7	
Detected cases with other coronaviruses (%)	9.0	6.6	6.5	7.8	10.2	4.2	
Detected cases of rhinovirus (%)	11.5	6.6	14.8	19.6	18.5	20.0	
Detected cases of adenovirus (%)	1.3	3.9	3.7	1.0	3.7	5.0	
Detected cases with covid-19 (%)	5.1	9.2	8.3	4.9	3.7	2.5	
Detected cases of parainfluenza (%)	20.5	22.4	21.3	21.6	24.1	24.2	
Detected cases of influenza (%)	12.8	5.3	3.7	2.9	0.0	0.0	

Figure 1. Airborne viruses: Sentinel tests across virus types, week 40-23, 2021-2022.

Figure 1. Respiratory virus: Sentinel samples by virus, week 40-23, 2021-2022

Sentinel samples distributed by virus, since week 40, 2021





Trends - covid-19

This section shows more detailed graphs and tables to illustrate the evolution of covid 19 over the past six weeks.

For other respiratory infections, refer to [SSI's website](#) under disease surveillance.

Regional differences

Table 4. COVID-19: Key numbers and trends by region, weekly, 2022

Table 4. Covid-19: Key figures and trends for regions, by week, 2022

Covid-19	Region	2022 week						Trend week 19-24
		19	20	21	22	23	24	
Incidence pr. 100,000 inhabitants	The capital	9.1	7.3	6.4	7.1	12.1	17.1	
	Central Jutland	7.1	6.5	5.0	6.1	8.2	13.0	
	North Jutland	7.3	5.2	4.5	4.6	7.0	10.3	
	Zealand	7.8	7.8	6.2	6.7	10.1	13.4	
	Southern Denmark	8.1	6.8	4.5	6.0	8.8	11.8	
Positive percentage	The capital	10.2	9.3	9.8	11.3	17.0	19.7	
	Central Jutland	13.0	12.4	11.7	14.3	17.4	21.6	
	North Jutland	12.4	9.8	10.2	11.0	14.5	18.0	
	Zealand	10.3	10.9	11.1	12.1	15.6	18.9	
	Southern Denmark	12.3	10.9	10.0	12.6	16.9	18.1	
New hospital admissions	The capital	10.8	9.5	8.7	6.1	10.1	12.5	
	Central Jutland	3.9	4.4	2.7	3.9	2.7	5.1	
	North Jutland	3.1	2.3	2.0	1.2	7	2.5	
	Zealand	4.4	4.5	3.9	3.2	4.2	5.9	
	Southern Denmark	5.1	4.2	2.4	3.0	3.9	4.9	
	Unknown region	3	0	4	5	4	6	



Age-distributed incidence, test rates and positive percentage

Data is updated backwards.

See also cases by age SSI's regional [dashboard](#).

Figure 2. COVID-19: Age-specific incidence per 100,000 inhabitants

Figure 2. Covid -19: Age-specific incidence per 100,000 inhabitants

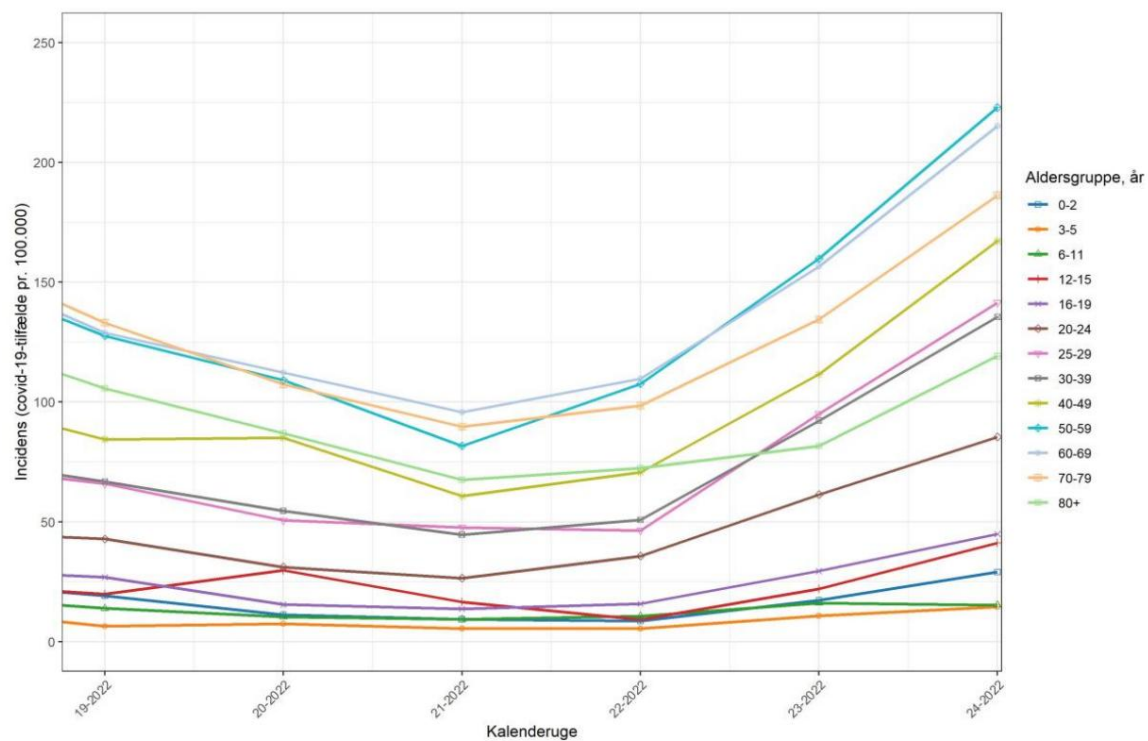




Table 5. Covid-19: Age-specific incidence per 100,000 inhabitants, test rate and positive percentage

Table 5. Covid-19: Age-specific incidence per 100,000 population, test rate and positive percentage

Covid-19, age groups	Incidence, test rate (%), positive percentage	2022 week						Trend week 19-24
		19	20	21	22	23	24	
0-2 years	Incidence	17	10	8	7	17	25	
	Test rate	0.2	0.2	0.2	0.2	0.2	0.2	
	Positive percentage	8.4	5.1	5.3	4.6	9.1	11.0	
3-5 years	Incidence	6	7	6	6	11	15	
	Test rate	0.2	0.2	0.1	0.1	0.2	0.3	
	Positive percentage	3.3	4.4	4.4	4.3	6.5	6.2	
6-15 years	Incidence	17	19	12	10	19	26	
	Test rate	0.3	0.3	0.3	0.2	0.3	0.4	
	Positive percentage	5.2	6.7	4.7	4.3	7.1	7.0	
16-19 years	Incidence	27	16	13	16	32	45	
	Test rate	0.4	0.3	0.3	0.3	0.3	0.3	
	Positive percentage	6.0	4.7	4.9	6.6	11.0	13.0	
20-24 years	Incidence	42	31	27	36	63	86	
	Test rate	0.7	0.6	0.4	0.5	0.5	0.6	
	Positive percentage	6.4	5.3	6.2	7.7	13.0	15.0	
25-29 years	Incidence	66	52	49	46	97	142	
	Test rate	0.8	0.7	0.6	0.5	0.6	0.8	
	Positive percentage	8.6	7.4	8.5	8.7	16.0	18.0	
30-39 years	Incidence	67	56	45	52	93	137	
	Test rate	0.8	0.7	0.6	0.6	0.6	0.8	
	Positive percentage	8.5	7.8	7.8	8.9	15.0	17.0	
40-49 years	Incidence	87	88	62	72	115	171	
	Test rate	0.8	0.8	0.6	0.6	0.7	0.9	
	Positive percentage	10.0	11.0	10.0	12.0	16.0	20.0	
50-59 years	Incidence	128	110	83	109	162	225	
	Test rate	1.0	0.9	0.7	0.7	0.9	1.0	
	Positive percentage	13.0	12.0	12.0	15.0	19.0	23.0	
60-69 years	Incidence	130	113	98	111	158	217	
	Test rate	1.0	0.9	0.74	0.7	0.8	1.0	
	Positive percentage	13.0	12.0	13.0	15.0	19.0	22.0	
70-79 years	Incidence	134	109	91	100	137	189	
	Test rate	1.0	0.9	0.7	0.7	0.8	0.9	
	Positive percentage	14.0	12.0	13.0	15.0	18.0	21.0	
80+ years	Incidence	109	90	70	75	85	122	
	Test rate	1.4	1.2	1.0	0.9	0.9	1.2	
	Positive percentage	8.1	7.4	6.7	8.2	9.5	10.0	

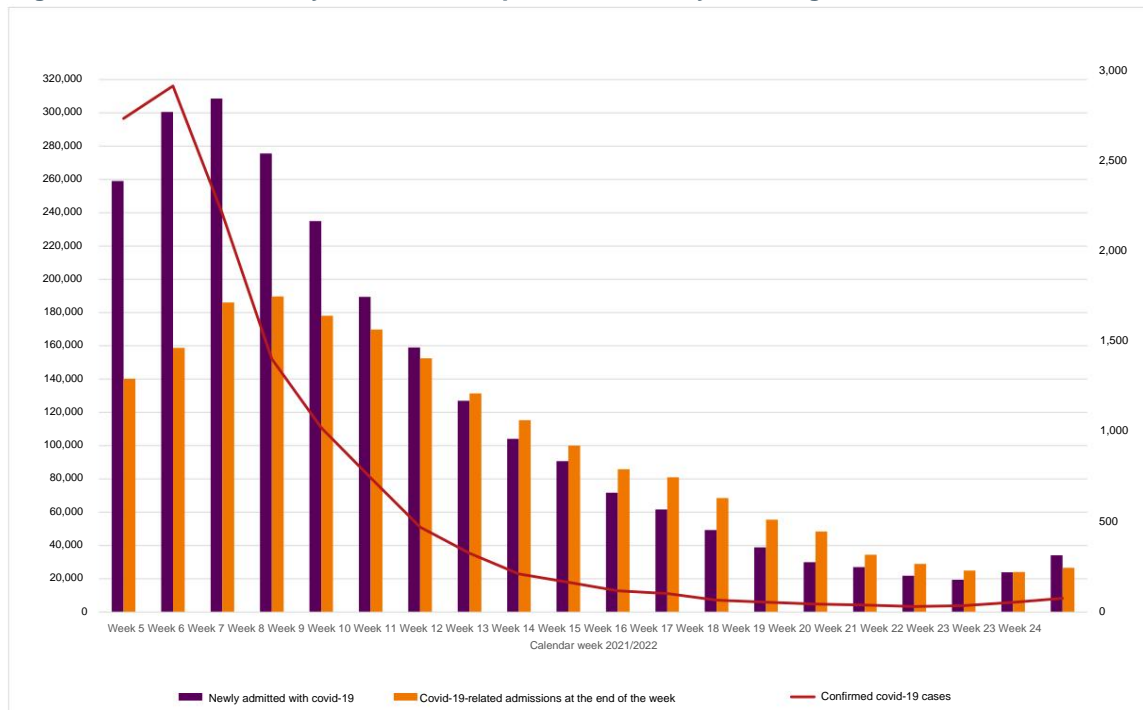


Newly admitted

See also age distribution curves of new entrants on [SSI's regional dashboard](#).

Figure 3. COVID-19: PCR-positive hospital admissions (purple), PCR-positive patients in hospital on Monday morning (orange) and confirmed (PCR-positive) cases in population (red)

Figure 3. Covid-19: Newly admitted, hospitalized Monday morning and confirmed cases

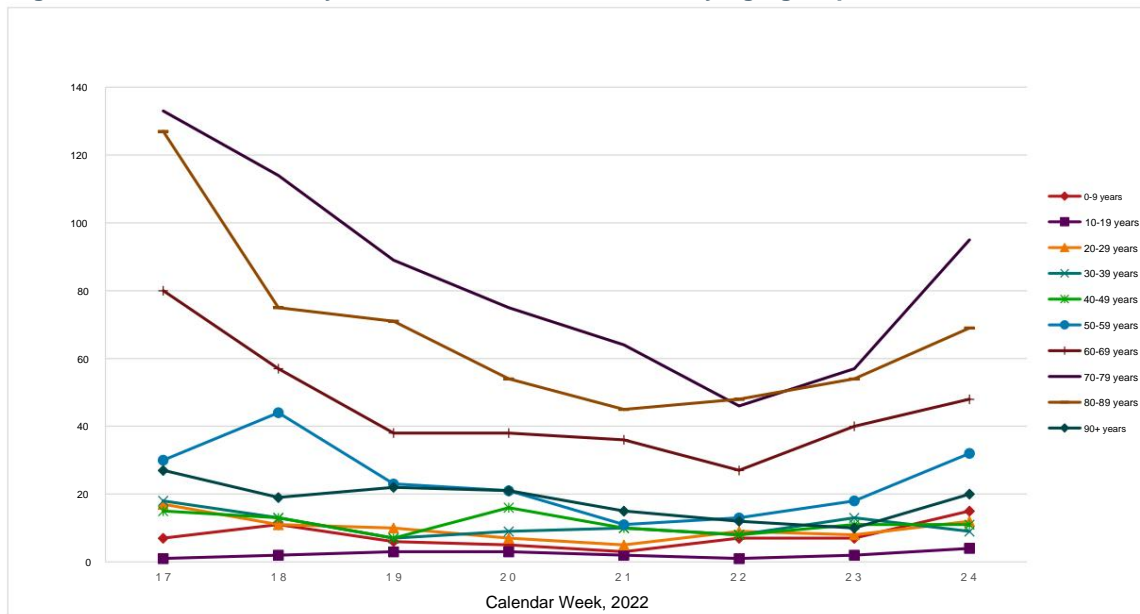


Note to figure: Number of covid-19-related admissions week 20 is data retrieved Tuesday morning and not Monday morning as in the remaining weeks due to delivery issues.

Due to delays in data for week 21, there is a risk that the actual number of inpatients may be slightly higher or lower.



Figure 4. COVID-19: Weekly numbers of PCR-positive hospital admissions by age group
Figure 4. Covid-19: Weekly number of new admissions by age group





The following figures and tables in this section are updated retrospectively.

Figure 5. COVID-19: Proportion of hospital admissions with a positive SARS-CoV-2 test with a COVID-19 diagnosis (red), with a respiratory or tentative COVID-19 diagnosis (green), or with another diagnosis (blue), June 1st 2020 to June 5th 2022

Figure 5. Covid-19: Proportion of new admissions with positive SARS-CoV-2 sample admitted due to covid-19 diagnosis, due to respiratory or obs covid-19 diagnosis, or due to other diagnosis, 1 June 2020 to June 5, 2022

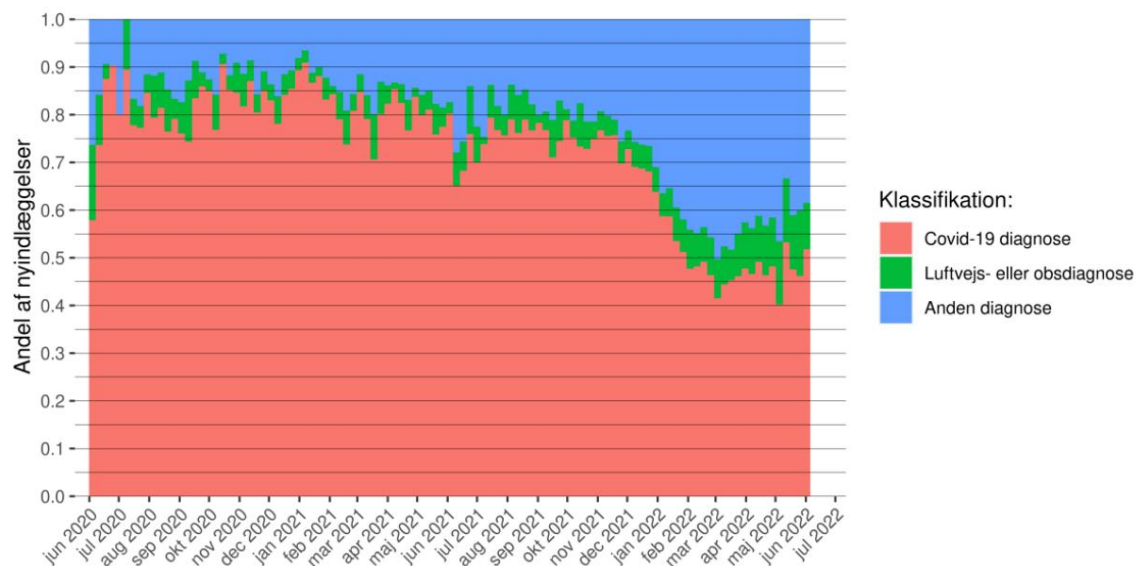


Table 6. COVID-19: Proportion of PCR-positive hospital admissions with a COVID-19 diagnosis, with a respiratory or tentative COVID-19 diagnosis, or with other diagnosis

Table 6. Covid-19: Proportion of new admissions with positive SARS-CoV-2 sample admitted due to covid-19 diagnosis, due to respiratory or obs covid-19 diagnosis, or due to other diagnosis

Diagnosis	2022 week						Trend week 17-22
	17	18	19	20	21	22	
Covid-19 diagnosis	48	40	53	48	46	52	
Respiratory or observational diagnosis	10	13	13	11	14	10	
Second diagnosis	42	47	33	41	40	38	



Figure 6. COVID-19: Proportion of PCR-positive hospital admissions with a COVID-19-diagnosis (red), with a respiratory or tentative COVID-19-diagnosis (green), or with other diagnosis (blue) by age group, June 1st 2020 to June 5th 2022

Figure 6. Covid-19: Proportion of new admissions with positive SARS-CoV-2 sample admitted due to covid-19 diagnosis, due to respiratory or obs covid-19 diagnosis, or due to other diagnosis divided by age groups, 1 June 2020 to June 5, 2022

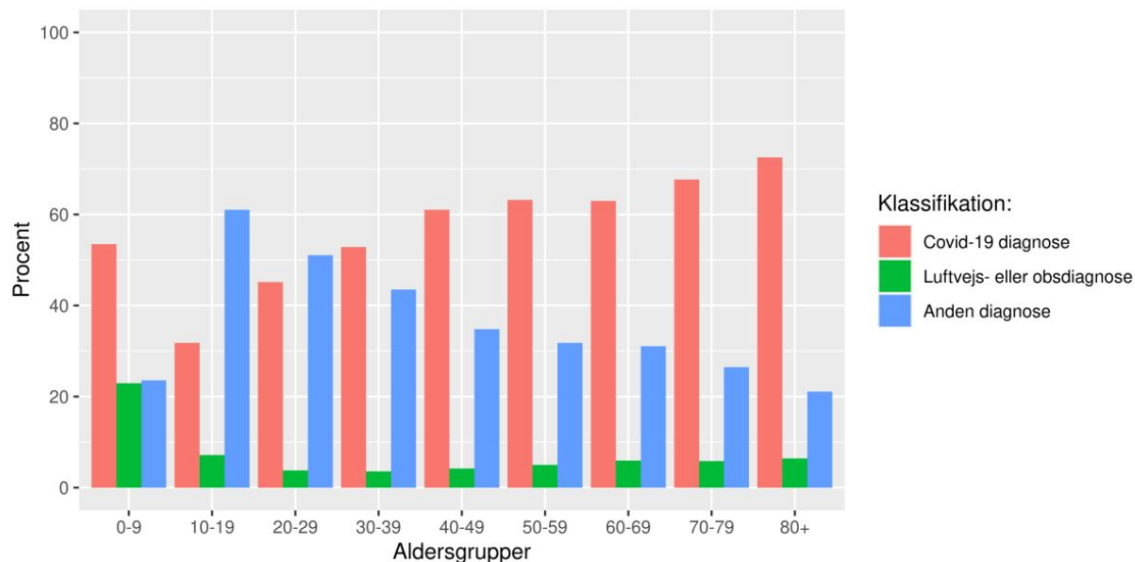







Table 7. COVID-19: Proportion of PCR-positive hospital admissions with a COVID-19-diagnosis (red), with a respiratory or tentative Covid-19 diagnosis (green), or with other diagnosis (blue), by age groups 0-59 and 60+ years old

Table 7. Covid-19: Proportion of new admissions with positive SARS-CoV-2 samples admitted due to covid-19 diagnosis, or due to respiratory or obs covid-19 diagnosis, or due to other diagnosis, divided by age groups 0-59-year-olds and 60 + -year-olds

Diagnosis / age groups	2022 week						Trend week
	17	18	19	20	21	22	17-22
0-59-year-olds							
Covid-19 diagnosis	32.6	26.1	31.6	36.1	35.0	53.8	
Respiratory or observational diagnosis	10.5	18.5	15.8	11.5	2.5	13.5	
Second diagnosis	57.0	55.4	52.6	52.5	62.5	32.7	
60+ year olds							
Covid-19 diagnosis	51.9	45.0	58.9	51.4	49.0	51.0	
Respiratory or observational diagnosis	10.2	11.4	12.8	11.4	16.6	8.4	
Second diagnosis	37.9	43.5	28.3	37.3	34.4	40.6	



SARS-CoV-2 variants

Sequences from the Danish positive covid-19 samples can be seen here:

<https://www.covid19genomics.dk/home>

Figure 7. COVID-19: The 10 most frequently observed (sub) variants based on whole genome sequencing data

Figure 7. Covid-19: The 10 most frequently observed (sub) variants based on whole genome sequencing data

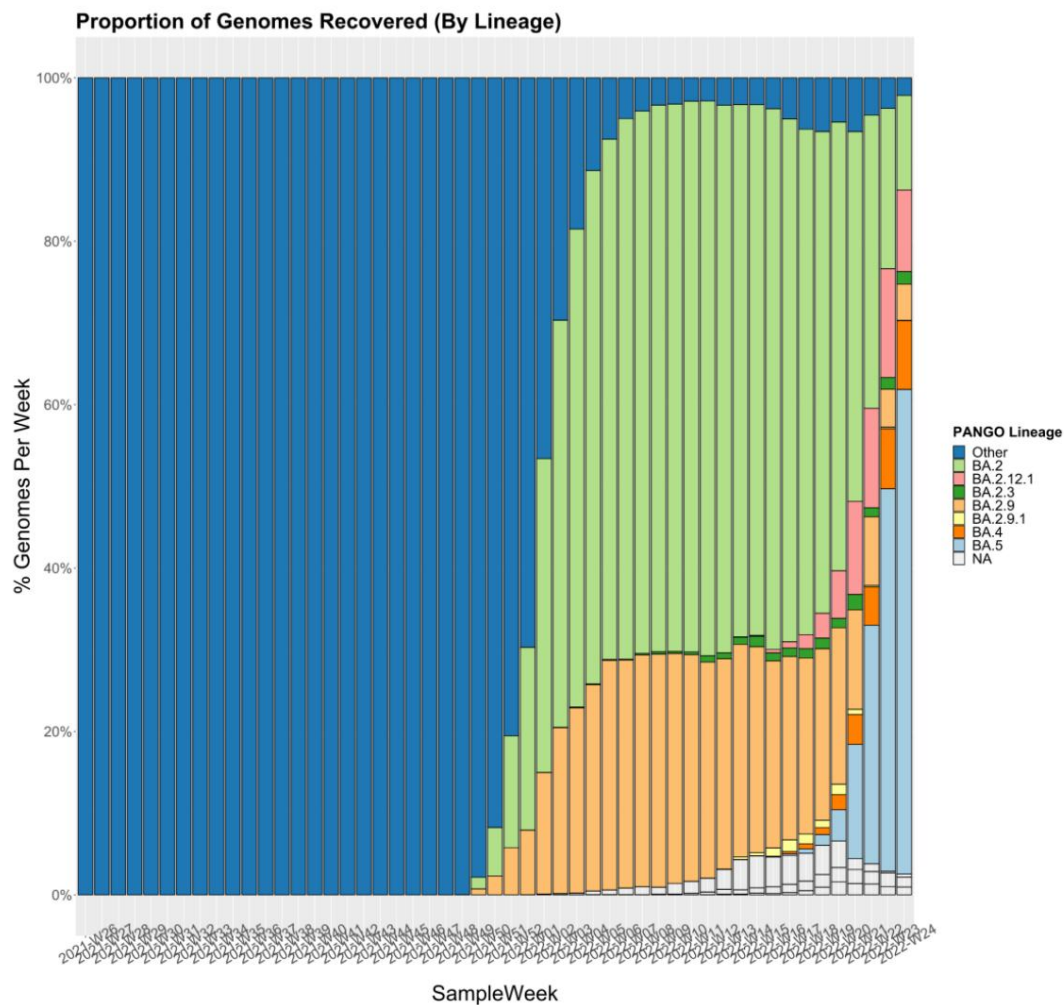




Table 8. COVID-19: The most frequently observed sub (variants) based on whole-genome sequencing data for the last four weeks, 2022

Table 8. Covid-19: The most frequently observed (sub) variants based on whole genome sequencing data in the last four weeks, 2022

The most frequently observed (sub) variants based on whole genome sequencing data in the last 4 weeks					
Lineage	WHO	21	22	23	24
BA.5	Omicron	315 (13.97%)	636 (29.20%)	1693 (46.79%)	1608 (59.31%)
BA.2	Omicron	1021 (45.28%)	782 (35.90%)	711 (19.65%)	314 (11.58%)
BA.2.12.1	Omicron	257 (11.40%)	265 (12.17%)	481 (13.29%)	271 (10.00%)
BA.4	Omicron	83 (3.68%)	102 (4.68%)	266 (7.35%)	228 (8.41%)
BA.2.9	Omicron	275 (12.20%)	183 (8.40%)	168 (4.64%)	121 (4.46%)
BA.2.36	Omicron	39 (1.73%)	33 (1.52%)	60 (1.66%)	33 (1.22%)
BA.2.3	Omicron	42 (1.86%)	24 (1.10%)	52 (1.44%)	41 (1.51%)
BA.2.18	Omicron	31 (1.37%)	29 (1.33%)	37 (1.02%)	26 (0.96%)
BA.2.38	Omicron	10 (0.44%)	7 (0.32%)	30 (0.83%)	12 (0.44%)
BA.2.23	Omicron	15 (0.67%)	12 (0.55%)	26 (0.72%)	8 (0.30%)
BA.2.31	Omicron	29 (1.29%)	13 (0.60%)	10 (0.28%)	3 (0.11%)
BA.2_212insSGR	Omicron	30 (1.33%)	21 (0.96%)	8 (0.22%)	10 (0.37%)
BA.2.13	Omicron	18 (0.80%)	8 (0.37%)	7 (0.19%)	2 (0.07%)
BA.2.2	Omicron	0 (0.00%)	1 (0.05%)	7 (0.19%)	0 (0.00%)
BA.2.7	Omicron	6 (0.27%)	3 (0.14%)	7 (0.19%)	1 (0.04%)
BA.2.9.1	Omicron	14 (0.62%)	4 (0.18%)	7 (0.19%)	1 (0.04%)
BA.5.1	Omicron	2 (0.09%)	1 (0.05%)	7 (0.19%)	9 (0.33%)
BA.2.14	Omicron	10 (0.44%)	10 (0.46%)	6 (0.17%)	1 (0.04%)
BA.2.11	Omicron	3 (0.13%)	0 (0.00%)	5 (0.14%)	1 (0.04%)
BA.2.5	Omicron	9 (0.40%)	6 (0.28%)	5 (0.14%)	0 (0.00%)
BA.2.35	Omicron	0 (0.00%)	0 (0.00%)	4 (0.11%)	0 (0.00%)
BA.2.1	Omicron	2 (0.09%)	2 (0.09%)	3 (0.08%)	0 (0.00%)
BA.2.10.1	Omicron	3 (0.13%)	4 (0.18%)	3 (0.08%)	1 (0.04%)
BA.2.32	Omicron	2 (0.09%)	0 (0.00%)	3 (0.08%)	1 (0.04%)
XM	Recombinant	3 (0.13%)	1 (0.05%)	3 (0.08%)	2 (0.07%)
BA.2.40.1	Omicron	0 (0.00%)	7 (0.32%)	2 (0.06%)	5 (0.18%)
BA.2.6	Omicron	2 (0.09%)	1 (0.05%)	2 (0.06%)	0 (0.00%)
XG	Recombinant	16 (0.71%)	6 (0.28%)	2 (0.06%)	0 (0.00%)
BA.2.12	Omicron	1 (0.04%)	0 (0.00%)	1 (0.03%)	2 (0.07%)
BA.2.33	Omicron	0 (0.00%)	0 (0.00%)	1 (0.03%)	0 (0.00%)
BA.2.40	Omicron	0 (0.00%)	0 (0.00%)	1 (0.03%)	0 (0.00%)
AY.4.2	Delta	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.04%)
BA.1.1.1	Omicron	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.04%)
BA.2.10	Omicron	9 (0.40%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
BA.2.20	Omicron	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.04%)
BA.2.22	Omicron	3 (0.13%)	1 (0.05%)	0 (0.00%)	0 (0.00%)
BA.2.23.1	Omicron	0 (0.00%)	2 (0.09%)	0 (0.00%)	0 (0.00%)
BA.2.24	Omicron	0 (0.00%)	1 (0.05%)	0 (0.00%)	2 (0.07%)
BA.2.25	Omicron	2 (0.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
BA.2.27	Omicron	1 (0.04%)	2 (0.09%)	0 (0.00%)	0 (0.00%)
BA.2.28	Omicron	0 (0.00%)	3 (0.14%)	0 (0.00%)	0 (0.00%)
BA.2.3.2	Omicron	1 (0.04%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
BA.2.34	Omicron	0 (0.00%)	2 (0.09%)	0 (0.00%)	0 (0.00%)
BA.2.37	Omicron	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.04%)
BA.2.4	Omicron	1 (0.04%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
BA.2.41	Omicron	0 (0.00%)	4 (0.18%)	0 (0.00%)	1 (0.04%)
BA.2.8	Omicron	0 (0.00%)	2 (0.09%)	0 (0.00%)	2 (0.07%)
BA.2.9.2	Omicron	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.04%)
Total		2255	2178	3618	2711

Note to table: Number of variants may change when multiple samples are sequenced and included in the table. The last week's figures are incomplete and must be interpreted with reservations.



Mortality

SSI contributes every week with monitoring mortality in Denmark, by calculating the number of the total number of deaths in society in relation to the expected number of deaths in Denmark. See also [note on mortality](#). In addition, SSI contributes with mortality monitoring together with 26 other European countries (www.euromomo.eu).

Figure 8. COVID-19: Estimated deaths due to or with COVID-19, by week. Calculated number of deaths directly related to COVID-19 infection (red), calculated number of deaths unrelated to COVID-19 infections (orange), 2022

Figure 8. Covid-19: Estimated deaths of or with covid-19 and proportion of all covid-19-recorded deaths calculated as non-covid-19-related, broken down by weeks, 2022

PGA. TECHNICAL PROBLEMS DELETE DATA THIS WEEK

Note: Calculation performed on the basis of a model from PandemiX Research Center, RUC in collaboration with EuroMOMO, SSI.

Figure 9. COVID-19: Estimated proportion of all COVID-19-registered deaths estimated not related to COVID-19, by week, 2022

Figure 9. Covid-19: Estimated share of all covid-19-registered deaths calculated as non-covid-19-related, broken down by weeks, 2022

PGA. TECHNICAL PROBLEMS DELETE DATA THIS WEEK

Note: Calculation performed on the basis of a model from PandemiX Research Center, RUC in collaboration with EuroMOMO, SSI.



Table 9. COVID-19: Estimated deaths with positive SARS-CoV-2 test within 30 days, total. Deaths due to (caused by) COVID-19. Deaths with (ie not caused by) COVID-19. Proportion of deaths with COVID-19

Table 9. Covid-19: Estimated deaths with positive covid-19 PCR test within 30 days, total, deaths "of" and "with" covid-19 and proportion of deaths with covid-19

PGA. TECHNICAL PROBLEMS DELETE DATA THIS WEEK

Note: Calculation performed on the basis of a model from PandemiX Research Center, RUC in collaboration with EuroMOMO, SSI.



Figure 10. COVID-19: Deaths by and with COVID-19 based on death certificates (DAR: The Cause of Death Register). Death not related to COVID-19-infection (light), death related to COVID-19-infection (dark), 2020-2022

Figure 10. Covid-19: Deaths by and including covid-19 based on death certificates, 2020-2022

PGA. TECHNICAL PROBLEMS DELETE DATA THIS WEEK

Note: Prepared on the basis of data from the Cause of Death Register (DAR) via the Danish Health and Medicines Authority



Figure 11. COVID-19: Deaths by and with COVID-19 based on death certificates (DAR: The Cause of Death Register). Death not related to COVID-19-infection (light), death related to COVID-19-infection (dark), 2022

Figure 11. Covid-19: Deaths by and including covid-19 based on death certificates, 2022

PGA. TECHNICAL PROBLEMS DELETE DATA THIS WEEK

Note: Prepared on the basis of data from the Cause of Death Register (DAR) via the Danish Health and Medicines Authority



Hospital outbreaks

Table 10. COVID-19: Outbreaks at hospitals

Table 10. Covid-19: hospital outbreaks

Hospital outbreaks	2022 week					
	19	20	21	22	23	24
Number of outbreaks (out of 12 infection control units)	2	3	3	-	4	-
Of which no outbreak	2	3	3	-	2	-
Of which units with eruptions	0	0	0	-	2	-
Total number of outbreaks	0	0	0	-	2	-
Number of major outbreaks (> 20 infected, patients and / or staff)	0	0	0	-	0	-
Number of medium-sized outbreaks (11 to 20 infected, patients and / or staff)	0	0	0	-	0	-
Number of minor outbreaks (≤10 infected, patients and / or staff)	0	0	0	-	2	-

Nursing home

Data is updated backwards.

Table 11. COVID-19 at nursing homes

Table 11. Covid-19 in nursing homes

Covid-19, nursing home	2022 week						Trend week 19-24
	19	20	21	22	23	24	
Confirmed cases among residents	55	52	50	36	50	55	
Test rate among residents (%) *	3.8	3.1	2.7	2.2	2.0	3.0	
Positive percentage among residents *	3.6	4.2	4.6	4.0	6.3	4.5	
Deaths among confirmed cases	7	9	6	5	7	5	
Nursing homes with confirmed cases	33	30	26	18	21	32	

* Data is drawn the night before Tuesday, with the other data in the table drawn on Tuesday morning, and the background population is defined a bit different, cf. data basis



Special staff groups

Data is updated backwards.

Table 12. COVID-19: Confirmed cases, incidence per 100,000 inhabitants, test rate and positive percentage among specific employees Table 12. Covid-19: confirmed cases, incidence per 100,000 inhabitants, test rate and positive percentage among special staff groups

Covid-19, special staff groups	Confirmed cases, incidence per 100,000, test rate (%), positive percentage	2022 week						Trend week
		19	20	21	22	23	24	19-24
Social sector	Confirmed cases	194	155	122	141	206	292	
	Incidence	112	89	70	81	119	168	
	Test rate	2.1	1.9	1.5	1.5	1.4	1.4	
	Positive percentage	5.3	4.7	4.6	5.5	8.7	12.3	
Health sector	Confirmed cases	219	213	171	185	353	479	
	Incidence	123	120	96	104	198	269	
	Test rate	1.3	1.3	0.9	1.0	1.1	1.4	
	Positive percentage	9.7	9.6	10.8	10.9	18.5	19.2	



Sewage

You can read more about [wastewater](#) measurements on SSI's website with monitoring of SARS-CoV-2 .

Please note that in week 1 and week 16 2022 there are changes in test and calculation methods. For further explanation see the data base.

Figure 12. COVID-19: Incidence and results from waste-water surveillance, 2021/2022

Figure 12. Covid-19: incidence and results from wastewater measurements, 2021/2022

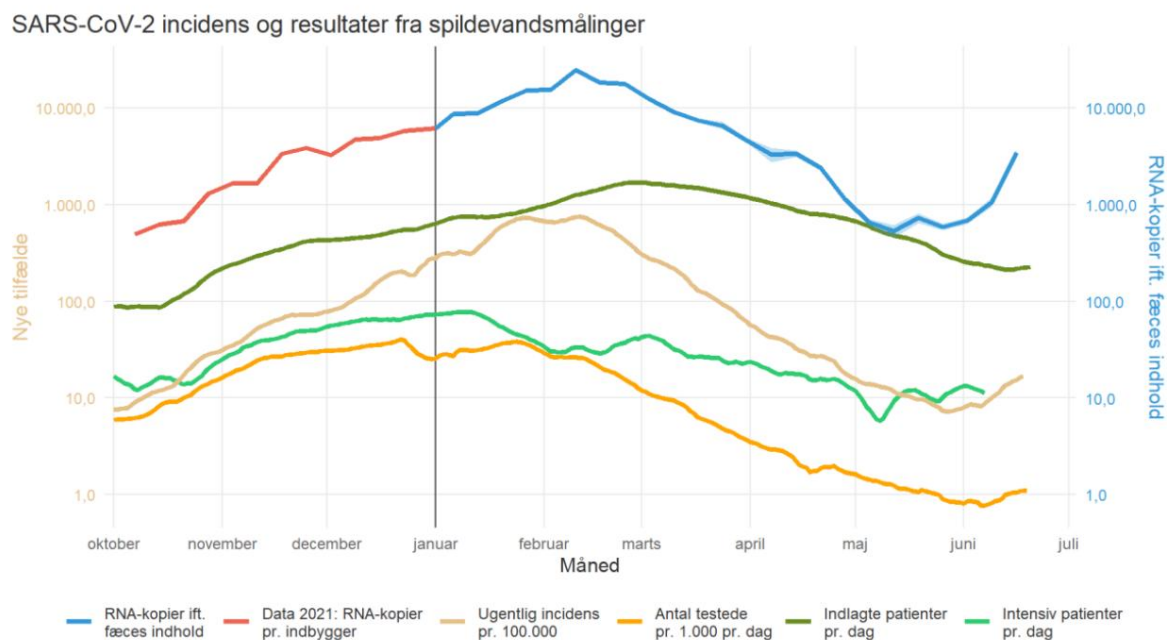
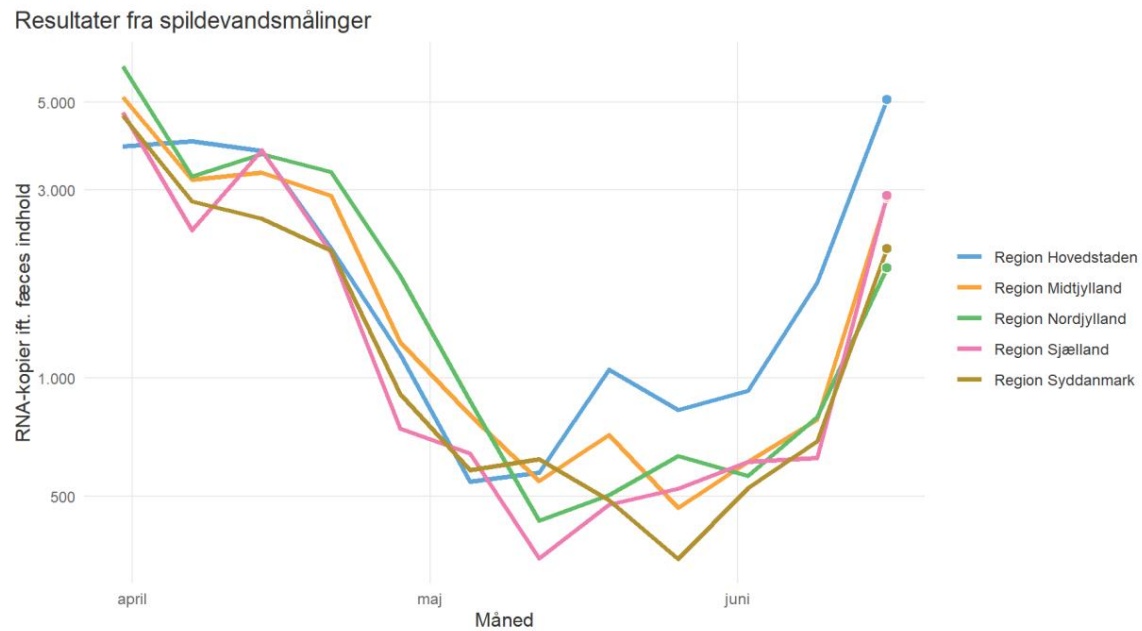




Figure 13. COVID-19. Results from waste-water surveillance by region, 2022

Figure 13. Covid-19: results from wastewater measurements by regions, 2022





Presumably infected with covid-19 and symptoms

You can read more about [COVIDmeter](#) on SSI's website with monitoring of SARS-CoV-2 .

Data is updated backwards.

Figure 14. COVID-19: Proportion of participants in user-panel presumably infected with COVID-19 per week. Gray color indicates confidence interval for the calculation.

Figure 14. Covid-19: the proportion of responses from participants suspected of being infected with covid 19 per week in the last 5 months. The gray color indicates the confidence interval for the calculation (dark gray 95%, light gray 99%).

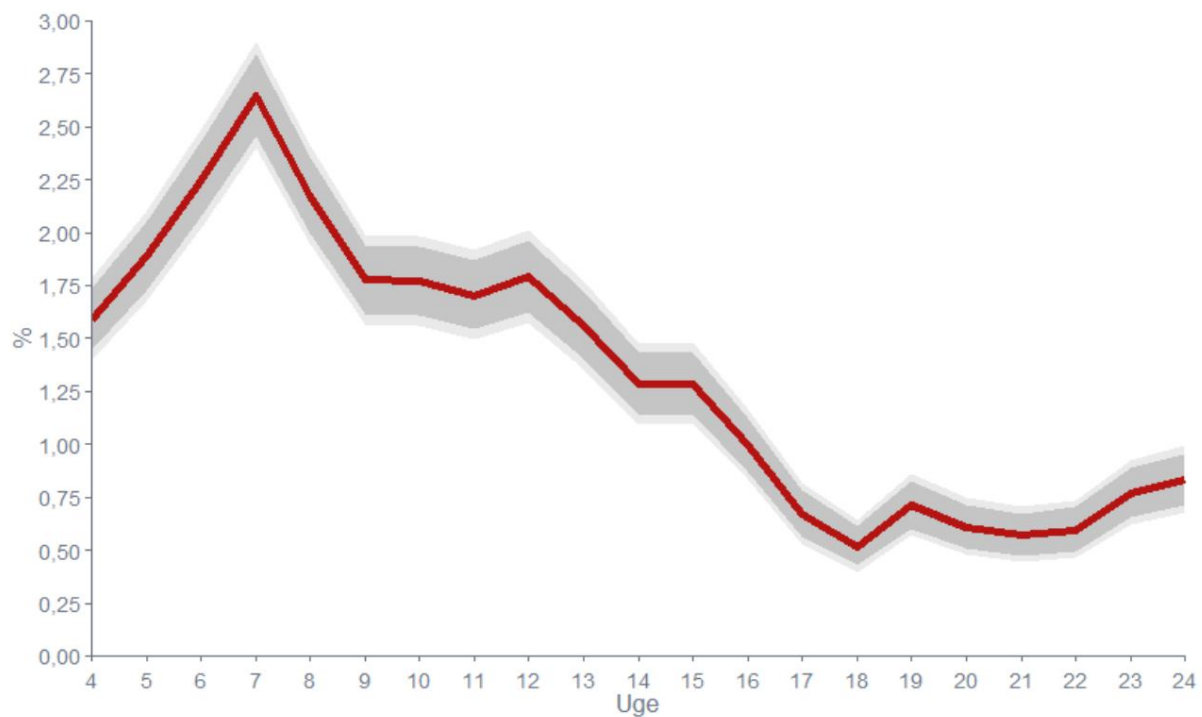




Table 13. COVIDmeter: Number of participants, proportion of presumably infected with COVID-19, self-reported test rate and positive percentage among all COVIDmeter participants and self-reported test rate and positive percentage among presumably infected with COVID-19

Table 13. COVIDmeter: number of participants, proportion presumed infected with covid-19, self-reported test rate and positive percentage among all COVIDmeter participants and among presumed infected with covid-19

COVIDmeter	Number of participants, proportion presumed infected with covid-19 (%), test rate	2022 week						Trend week 19-24
		19	20	21	22	23	24	
All participants in COVIDmeter	Number of participants	21,823	22,355	22,017	21,360	22,102	21,885	
	Presumed infected with covid-19 (%)	0.7	0.6	0.6	0.6	0.8	0.8	
	Test rate (%) *	3.4	3.2	2.7	2.7	3.2	3.8	
	Positive percentage *	2.2	1.8	1.6	1.8	2.3	2.5	
Supposedly infected with covid-19	Test rate (%) *	5.6	4.4	4.2	4.3	5.1	5.8	
	Positive percentage *	5.4	4.2	3.2	4.9	5.3	5.8	

* self-reported PCR or antigen test (private and home test) (in nose or throat), with test results.

Table 14. COVIDmeter: Proportion presumably infected with COVID-19, self-reported test rate and positive percentage among all COVIDmeter participants by region

Table 14. COVIDmeter: proportion presumed infected with covid-19, self-reported test rate and positive percentage among all COVIDmeter participants by regions

COVIDmeter	Region	2022 week						Trend week 19-24
		19	20	21	22	23	24	
Number of participants	The capital	7,990	8,208	8,082	7,847 in most common	8,092	8,048	
	Central Jutland	4,968	5,041	5,015	4,779	5,011	4,925	
	North Jutland	2,029	2,062	2,004	1,976	2,033	2,006	
	Zealand	3,064	3,177	3,065	3,011	3,101	3,093	
	Southern Denmark	3,772	3,867 in most common	3,851	3,747 in most common	3,862 in most common	3,813	
Presumably infected with covid-19 (%)	The capital	0.8	0.8	0.6	0.7	0.9	1.0	
	Central Jutland	0.6	0.5	0.4	0.5	0.8	0.7	
	North Jutland	0.6	0.5	0.6	0.6	0.5	0.7	
	Zealand	0.8	0.4	0.7	0.4	0.5	1.0	
	Southern Denmark	0.6	0.4	0.6	0.6	0.9	0.6	
Test rate (%) *	The capital	4.0	3.8	3.4	3.0	3.9	4.7	
	Central Jutland	2.9	2.7	2.2	2.1	2.6	3.2	
	North Jutland	3.0	2.7	2.4	2.0	3.1	3.1	
	Zealand	2.7	2.8	3.0	2.5	2.2	4.0	
	Southern Denmark	3.3	3.2	1.9	3.2	3.2	2.8	
Positive percentage *	The capital	23.9	17.2	15.3	20.6	26.8	25.1	
	Central Jutland	21.4	19.9	16.1	13.3	19.5	23.9	
	North Jutland	21.7	28.6	14.9	23.1	28.6	25.8	
	Zealand	22.9	11.1	18.7	20.0	11.8	23.4	
	Southern Denmark	17.7	16.8	14.9	15.8	17.7	29.0	

* self-reported pcr or antigen test (private and home test) (in nose or throat), with test results.



Table 15. COVIDmeter: Age specific proportion presumably infected with COVID-19, self reported test rate and positive percentage among COVIDmeter participants by week, 2022.
Table 15. COVIDmeter: age-specific proportion presumed infected with covid-19, self-reported test rate and positive percentage among COVIDmeter participants divided into weeks, 2022

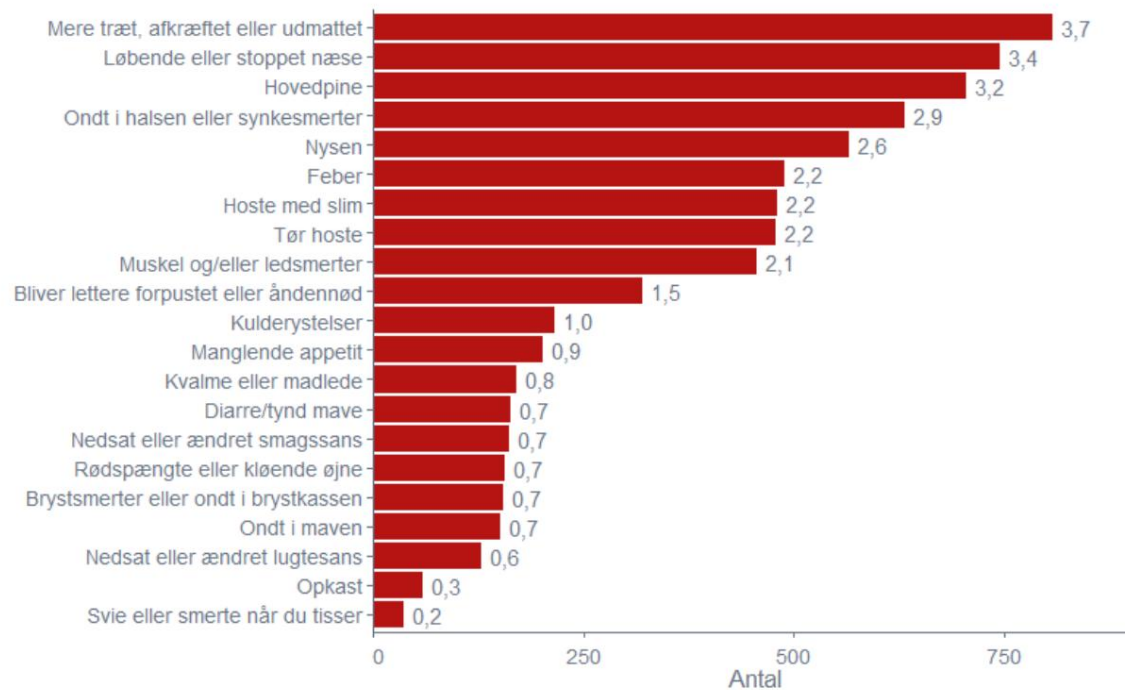
COVID meters, age groups	Number of participants, proportion presumed infected with covid-19 (%), test rate (%) and positive percentage	2022 week						Trend week 19-24
		19	20	21	22	23	24	
40-49 years	Number of participants	2,127	2,180	2,107	2,045	2,087	2,080	
	Presumed infected with covid-19 (%)	1.2	1.0	0.4	0.7	0.7	1.3	
	Test rate (%) *	5.6	5.2	4.1	3.4	4.6	5.6	
	Positive percentage *	24.6	15.9	16.1	25.7	22.9	28.5	
50-59 years	Number of participants	5,097	5,236	5,131	5,011	5,133	5,080	
	Presumed infected with covid-19 (%)	0.9	0.7	0.8	0.8	1.1	0.9	
	Test rate (%) *	4.1	4.0	3.4	3.4	4.5	5.2	
	Positive percentage *	20.0	19.8	17.2	12.9	24.8	27.4	
60-69 years	Number of participants	7,664	7,866	7,781	7,539	7,854	7,799	
	Presumed infected with covid-19 (%)	0.5	0.6	0.6	0.6	0.8	0.9	
	Test rate (%) *	3.2	3.0	2.7	2.8	2.9	3.6	
	Positive percentage *	21.4	15.7	15.5	16.9	20.9	23.9	
70+ years	Number of participants	6,225	6,356	6,286	6,118	6,339	6,275	
	Presumed infected with covid-19 (%)	0.6	0.3	0.4	0.3	0.4	0.5	
	Test rate (%) *	2.0	2.0	1.6	1.5	1.7	2.0	
	Positive percentage *	24.6	19.8	13.6	23.1	20.4	19.5	

* self-reported pcr or antigen test (private and home test) (in nose or throat), with test results.



Figure 15. COVID-19: Symptoms reported to COVIDmeter by number in week 24, 2022.

Figure 15. Covid-19: symptoms reported to COVIDmeter by number in week 24, 2022.





Data basis

Covid-19

This report is based on PCR-confirmed cases.

Data for the most recent week are drawn on the preparation date. Data is not updated backwards unless otherwise stated. Data for positive PCR tests are calculated on the sample date, and therefore there may be some samples from the most recent week for which no response has yet been received. However, it is considered that the data is sufficient to assess trends and signals. It is also assessed that backward changes in data are small and insignificant in relation to the conclusions in the report.

The positive percentage is calculated so that a person can only contribute with one negative test per week. Individuals with previous covid-19 infection are not included in the calculation.

Definition of incidents in the report

In this report, the following method has been used to calculate the incidents per week:

When describing the country, region and age incidences in the report, the number of confirmed cases in the week in question (7 days calculated on a test date) per 100,000 inhabitants has been used.

Populations for calculating incidence

To be part of the underlying population, several criteria must be met, including that:

- the person must have a valid municipal code that matches an existing one commune
- gender must be stated
- the person must have a valid road code.

The persons included are therefore persons who meet the above criteria, have a valid civil registration number and are resident in Denmark. The population is based on the cpr register and is updated monthly.

Definition of covid-19-related admissions in SSI's covid 19 monitoring

From week 18, re-infections were included, and the calculation method is then also updated backwards.



For a more detailed definition of covid-19 admissions, please refer to the [Focus Report on COVID 19-related hospital admissions during the SARS-CoV-2 epidemic](#), published d.6. January, 2022.

Characterization of covid-19-related admissions based on hospital diagnoses - development of new algorithm
Covid-19-related admissions will be divided into 3 categories via this algorithm:

- Covid-19 diagnosis: Patients who have been diagnosed with covid-19 and thus have been assessed by the attending physician to be ill with covid-19.
- Respiratory diagnosis or observation (obs) for covid-19: Patients diagnosed with another respiratory disease where the symptoms are completely or partially overlapping with covid-19, or where covid-19 is suspected.
- Other diagnosis: Patients who have not been diagnosed with covid-19 or a diagnosis of respiratory disease or observation of covid-19, but instead have completely different diagnoses during hospitalization, e.g. fracture, pregnancy or concussion.

In the day-to-day monitoring of the SARS-CoV-2 epidemic, SSI has defined a covid-19 related hospitalization as a hospitalization among individuals with a positive SARS-CoV-2-test taken from 14 days before admission or during admission. If a positive SARS-CoV-2 test is detected in the period 14 days before to 48 hours after the time of admission, the covid-19-related admission starts at the time of admission. Patients who test positive for SARS-CoV-2 also get registered with a covid-19-related hospitalization time, but here the hospitalization date is considered to be equal to the test date (the period of 14 days before to 48 hours after is chosen as there is an expected latency period from infection to development of serious illness that may lead to hospitalization).

The inventory of covid-19-related admissions in SSI's monitoring is based on 3 data sources:

- SARS-CoV-2 test response and variant PCR response from the Danish microbiology database (MiBa).
- Information on admissions registered in the National Patient Register (LPR).
- Snapshot data from the regions that provide an overview twice daily hospitalized covid-19 patients.

When it is established whether a patient has been admitted with covid-19, another respiratory or obs diagnosis or other diagnosis, the registration will always take place with a delay in relation to the time of admission. Therefore, it must take 14 days before the data is accurate, which means that this data is older than the other data in the report.



SARS-CoV-2 variants

The "SARS-CoV-2 variants" section is based on results from whole genome sequencing.

Data for the most recent week are drawn on the preparation date. Data is continuously updated backwards as results from sequencing are added. Data are calculated on a sample date, and therefore there may be some samples from the most recent week for which no response has yet been received. However, it is considered that the data is sufficient to assess trends and signals. It is also assessed that backward changes in data are small and insignificant in relation to the conclusions in the report.

Mortality

Calculation of deaths with and by covid-19

In the daily counts of covid-19-related deaths, all deaths that have occurred among persons with at least one positive PCR test within the last 30 days are counted. The definition of covid-19-related death is international standard, has been in use since the beginning of the epidemic and is relatively easy to use in practice.

However, with a high incidence of covid-19, the definition will include a number of individuals who have tested positive but who have died of other causes. Based on the number of deaths per week and the incidence of covid-19 infection, it can be calculated using probability mathematics how many people have died "of" covid-19, and how many have died "of" covid.

The analysis assumes that all individuals in the group have the same probability of testing positive and the same probability of dying during the period - or at least that the two variables are independent. Younger (0-39-year-olds) have e.g. ca. 20% probability of testing positive during the period and at the same time very low probability of death, while the elderly (65 + - year olds) only has approx. 2.5% probability of testing positive and at the same time significantly higher risk of death. It is therefore necessary to perform the analysis for each age group separately. In the analysis, we have for practical reasons chosen to use the age groups 0-19, 20-39, 40-59, 60-69, 70-79 and 80+ -year-olds. The exact choice of age groups will not significantly affect the final result, but if the method is used without age division, answers will emerge that cannot be used.

The age-specific 30-day incidence of positive covid-19 test is taken from SSI's weekly inventories. The weekly age-specific information on the number of deaths among test-positive individuals is retrieved at the same place. The total weekly age-specific deaths are taken from SSI's contribution to the EuroMOMO monitoring and use EuroMOMO's normal method of correction for delays in the registration of deaths.

Further details on the methods used and interpretations can be requested from SSI.

Validation of Covid-19 died, cf. the Cause of Death Register

A more accurate way of determining how many have died "of" covid-19 and how many have died "of" covid-19 is by using death certificates. This method entails



however, more delay in data. Data from the Cause of Death Register via the Danish Health and Medicines Authority include deaths, where one of the following ICD10 codes on the death certificate is marked as the underlying cause:

- Covid-19 infection without indication of location
- Covid-19, severe acute respiratory syndrome
Coronavirus infection without specification
- Covid-19, virus identified
- Covid-19, virus not identified

Death is included if 30 days or less have passed since the positive SARS-CoV 2 test.

Nursing homes and special staff groups

Test and positive test data.

The data basis for the statements is a compilation of the Statens Serum Institut's overview of COVID-19 tests (MiBa), the Danish Agency for Labor Market and Recruitment's progress database, DREAM, the CPR register and the Danish Health and Medicines Authority's overview of nursing home residents. The statement was made by the Danish Health and Medicines Authority.

- The overview of COVID-19 test (MiBa) has been updated on Tuesday night
- Industry association information from the DREAM database is based on the latest possible employment information
- CPR register per date at data extraction
- The nursing home overview

The overview of COVID-19 test (MiBa) is a reflection of MiBa.

The statement is based on residents and staff who are active in CPR (not resigned on death or left) with residence in the Danish population register. Both unique tested persons are looked at in the specified week and tests performed.

Nursing home residents include persons who on Monday in the given week have an address at a nursing home that appears in the Nursing Home overview. The specified municipality is based on the nursing home address.

Nursing home employees include persons employed in the industry "87.10.10 - Nursing homes".

Home help employees include people employed in the industry "88.10.10 - Home help".



The industry affiliation is formed on the basis of the salary report to the elndkomst register and the industry at the company from which citizens have received the largest salary sum in the given month. In Statistics Denmark's Register - based Labor Force Statistics (RAS), industry affiliation is attempted to be corrected for any error reports. Data used here does not include industry association corrections.

Sewage

Trend analyzes:

From week 16, a new calculation method has been used for the wastewater results in the graphs, and the current and future graphs can therefore not be compared directly with the previously published ones. The change was introduced as of 25.04.2022 and has been implemented backwards until 03.01.2022. Until 03.01.2022, the wastewater results are calculated as the number of SARS CoV-2 RNA copies per inhabitant. As of 03.01.2022, the faeces normalized wastewater results are displayed. That is, the virus concentration of SARS CoV-2 in the wastewater is calculated as the average weekly number of SARS-CoV-2 RNA copies, relative to the average of two viruses (PMMoV and CrassphAge), which are indirect measures of the amount of feces in the wastewater. . This can be done, as from 03.01.2022 a new type of RT-PCR test has been taken into use, and the wastewater is thus analyzed simultaneously for two other harmless and naturally occurring viruses (PMMoV and CrAssphage), which are excreted with the faeces. The indirect measure of the amount of faeces in the waste water is set in relation to the amount of SARS-CoV-2. In this way, the results take into account dilution of the wastewater, eg due to rainwater.

The national graph and the regional graphs are made by weighting the wastewater results from each treatment plant, in relation to the number of residents in the catchment area, after which they are added together. The combined measurements are then presented in the graphs.

As of 3.1.2022, a new PCR test has been taken into use. Therefore, the results from before and after 3.1.2022 can not be compared directly.

COVIDmeter

Presumably infected with covid-19 and symptoms are based on data from COVIDmeter. COVIDmeter is a digital solution where citizens can sign up for a user panel and report weekly whether they have had symptoms or not. All information in COVIDmeter is self-reported.

The COVIDmeter participants are not a representative sample of the Danish population. Eg. women and people aged 40-70 are overrepresented in the user panel.



In order to be included in the analyzes, the user must have submitted at least three answers.

For COVIDmeter, a separate analysis has been made to be able to answer the question of which symptom composition is most likely due to covid-19. It is based on data from people who have had symptoms and tested positive for covid-19 and people who have had symptoms but who tested negative for covid-19. These are data from two other monitoring systems (SSI's sentinel monitoring and SSI's interviews with people who tested positive for covid-19).

If you meet the case definition two weeks in a row, you are only included as presumably infected with covid-19 in the first week.

The test rate and the positive percentage are based on self-reported negative and positive test results (PCR and home test).

Other respiratory diseases

Sentinel surveillance is an important part of the Danish and international standardized surveillance of influenza and other respiratory infections, including covid-19 and RS viruses. A fixed number of general practitioners geographically distributed throughout the country are included in the sentinel monitoring. The sentinel doctors report weekly how many patients with flu-like symptoms they see in their practice, as well as how many consultations they have had in total in their practice. In addition, they take weekly inoculations from patients with flu-like illness. The inoculations are analyzed at the Statens Serum Institut for a large number of different respiratory viruses. The results from the sentinel monitoring are used to assess the incidence of respiratory infections in the population, as well as which respiratory viruses are the cause.

Definition of incidents in the report

In this report, the following method has been used to calculate the incidents per week:

Number of confirmed cases in that week (Monday through Sunday) per 100,000 inhabitants.

The background population is the entire population of Denmark.

Links

Inventories of covid-19 in Denmark can be seen here:

[Covid-19 monitoring figures - updated every Tuesday](#)

Every Tuesday, an overview of possible outbreaks in schools is published on SSI's website .