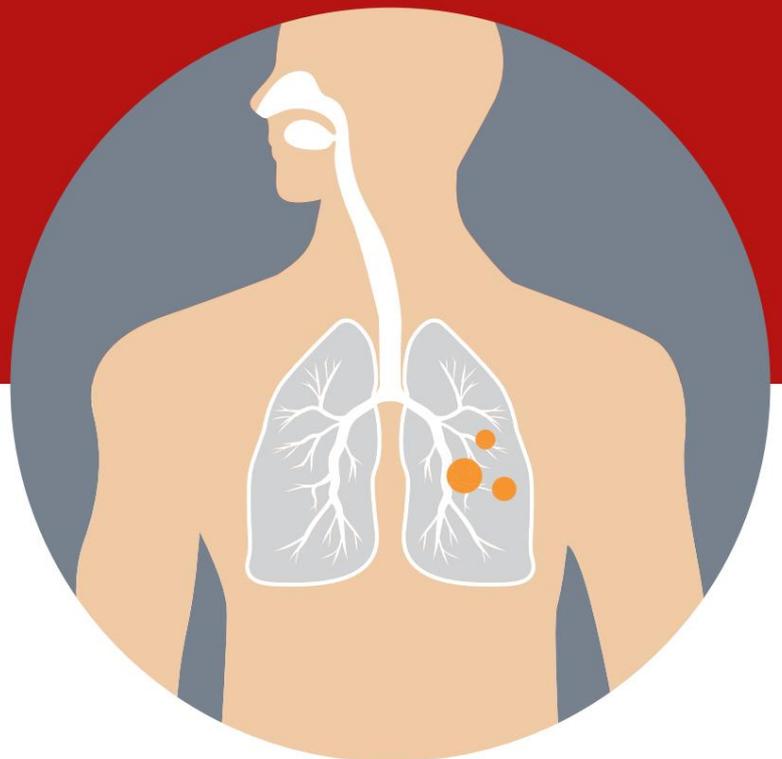


Weekly trends: covid-19 and other respiratory infections

Week 12 | 2022





The epidemiological development of covid-19 and other respiratory infections in Denmark from week 10 to week 11

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Overall assessment

Please note that The Danish Health Authority on Thursday of week 10 changed their test recommendations for COVID-19. Testing is only recommended for those at risk of serious disease and for those where it is clinically relevant based on a medical assessment. The data for this report is thus expected to change as the new recommendations are implemented. In general, it is expected that a substantially smaller proportion of infections will be registered than before and that data will primarily reflect infections among vulnerable groups and among patients admitted to hospital. All comparison with data before week 10 should be interpreted with caution and for the same reason some data will be omitted from next week's report.

Case numbers continue to decrease from week 10 to 11. The test activity has also continued declining and in parallel to the decrease in number of new cases, a small decline in positive percentage is also seen. This pattern is general for all five regions. The fall in test activity has happened steadily and has reached an average of 30,000 daily PCR tests in week 11. The fall in new case numbers is supported by a continuing decrease in the concentration of SARS-CoV-2 in waste water samplings in three regions (Capital Region, Region of Southern Denmark and Region of Central Denmark), while a stagnation is seen in the Region of North Denmark and a rise is seen in Region Zealand in week 11.

Case numbers are falling in all age groups still with the highest numbers among the 50-69 years old in week 11. In week 11, a 16% decrease is seen in number of new hospitalizations and falling across age groups except for the age groups 40-49 and 80-89 years old. There is a fall in the number admitted to intensive care units and a tendency to a small increase in the proportion in intensive care units receiving COVID-specific treatment.

In week 9, the proportion of SARS-CoV-2 positive patients who were hospitalized because of (as opposed to *with*) a COVID-19 diagnosis has fallen to 44%, with a higher proportion (52%) among those older than 60 years in week 9. The number of COVID-related deaths has fallen from week 10 to 11. In week 11 there is a decline in the proportion of COVID related deaths, which are not estimated to be caused by COVID-19. There are continued signs of a low excess general mortality, especially among those above 85 years of age.

Case numbers on influenza continue to rise very late in the season for influenza and is at a higher level than the previous seasons. This should be seen in the light of a markedly higher test activity this season. However, the positive percentage of 23% is at level with beginning of earlier seasons and the high number of cases can thus not solely be ascribed to a higher test activity. The high number of new cases is also reflected in a rise in the number of hospitalizations with a positive test for influenza in week 11.

Overall, infections with SARS-CoV-2 are expected to decrease further over the coming weeks. As the number of new cases among the older age groups expectedly declines, the number of derived COVID-19-related hospitalizations and deaths are also expected to de



decline. As test activity falls, the proportion of hospitalizations and deaths from causes other than COVID-19 is also expected to decrease further among those with a SARS CoV-2 positive test. A continuous rise in influenza has been seen as infections with SARS-CoV-2 goes down and the number of new cases on a weekly level is now above the level of the latest influenza season between 2015 and 2021.



Summary

It should be noted that the National Board of Health on Thursday in week 10 has changed their test recommendations, and that tests are now only recommended for vulnerable people at risk of serious illness and in people where it is clinically relevant after a medical assessment. The data basis for the trend report is therefore expected to change as the new recommendations are implemented. In general, it must be expected that a significantly smaller proportion of cases of infection than before will be registered, and that the data base in future will primarily reflect the infection in the group of vulnerable and among hospitalized patients. Therefore, reservations must be made when comparing in relation to data before week 10, and for the same reason, parts of the report's content will be phased out in next week's report.

- The number of new cases with covid-19 has decreased between week 10 and week 11, corresponding to the incidence in week 11 being 870 cases per 100,000 inhabitants. The positive percentage decreased from 31% in week 10 to 29% in week 11, despite the fact that the number of PCR tests decreased by 31% in the same period.
- The incidence is highest in the Region of Southern Denmark (1,019 per 100,000 inhabitants), and declining incidences are seen in all five regions from week 10 to week 11.
- The positive percentage is still highest in the Central Jutland Region (34.0%), and it remains to be seen declining positive rates in all five regions from week 10 to week 11.
- At the national level, the incidence is highest among the 60-69-year-olds (1,286 per 100,000 inhabitants) and the 70-79-year-olds (1,283 per 100,000 inhabitants). There is still a decline in all age groups. The test rate and positive percentage have also decreased in all age groups in recent weeks, however with a smaller decrease in the positive percentage for the 50+ year olds than the age groups below.
- The number of new admissions related to covid-19 has decreased to 1,468 in week 11, and there is a decrease in all age groups except the 40-49-year-olds, where a small increase is seen from week 10 to week 11. The 80 -89-year-olds are the age group that makes up the largest group among the newly admitted, followed by the 70-79-year-olds.
- The proportion of admissions among persons admitted due to a covid-19 diagnosis (as opposed to *with* a covid-19 diagnosis) has fallen from 48% in week 8 to 44% in week 9. In week 9, the proportion is admitted due to a covid-19 diagnosis 34% for the 0-59 year olds and 52% for the 60+ year olds.
- Data from the Danish covid-19 intensive care database show that the number of patients admitted to the intensive care unit is declining, however, reservations must be made for ongoing post-registrations. In parallel with



the decrease in the number of inpatients, a slight increase is seen in the proportion of patients receiving intensive covid-19 treatment in intensive care, which in week 11 was 68%. Link: [Danish Intensive Database](#).

- The number of covid-19-related deaths has dropped from 268 in week 10 to 216 in week 11.
- There is still a low excess mortality rate in Denmark, especially among the elderly aged 85+. However, the mortality rates of recent weeks must be taken with reservations due to post-registration.
- At week 11, there is a 33% decrease in the proportion of deaths with a positive SARS-CoV-2 test within 30 days, which is estimated to have occurred for a reason other than covid-19. The proportion is estimated on the basis of probability calculations.
- In the inventory of validated causes of death for the entire pandemic, it is seen that the proportion of deaths with covid-19 (and not due to covid-19) has increased as the high level of societal infection due to the omicron variant. In week 11, deaths that have occurred for a reason other than covid-19 account for about 73% of covid-19-related deaths where there is a validated cause of death. However, it must be taken into account that there is a large degree of ongoing post-registration of death certificates and that there is still a lack of validation corresponding to 41% in week 11.
- Infection among nursing home residents has decreased from 1,288 cases in week 10 to 976 in week 11. There were 93 deaths among residents with covid-19 in nursing homes in week 11 compared to 109 in week 10.
- Infection among employees in the health, social and education sectors continues to decline from week 10 to week 11, but also continues over the overall incidence.
- BA.2 constitutes almost all cases (approx. 99%), of which BA.2 with the mutation H78Y constitutes a slightly decreasing proportion in week 11. It should be noted that the latest figures on variants for week 11 must be interpreted with reservations, as the number of sequences is still low.
- In week 11, a decrease in SARS-CoV-2 concentration in the wastewater is seen nationally level. Divided into regions, there is also a decrease in SARS-CoV-2 concentration in the wastewater in the Capital Region, the Central Jutland Region and the Region of Southern Denmark. In Region North Jutland, a stagnation is seen in the concentration of SARS-CoV-2, and in Region Zealand a slight increase has been observed this week.
- The proportion of COVID-meter user panel suspected of being infected with covid-19 at week 11 is 1.7%, a decrease since week 10. The most frequent symptoms reported at week 11 were runny or stuffy nose (7,6%), more tired, debilitated or exhausted (7.1%) and headache (7.1%).



- In a collaboration between SSI and the Danish blood banks, donor blood for anti-nucleocapsid IgG antibodies against SARS-CoV-2 infection is examined. This sero prevalence is compared with the cumulative number of PCR-positive cases from covid-19 monitoring. The monitoring runs every two weeks and the results can be found here: [Dark numbers for covid-19](#). There are no new data [this week](#).
- In week 10, there is still an increase in the number of infected and the number of new patients with influenza, especially in the Capital Region, Region Zealand and the Region of Southern Denmark. This is Influenza A H3N2.



Overall assessment

The infection continues to decrease between week 10 and week 11. At the same time, the test activity has decreased further, and in parallel with the decrease in the number of new cases, there has also been a small decrease in the positive percentage. This pattern can be seen in all five regions. The test activity is steadily declining, and has dropped to just over an average of 30,000 PCR tests daily in week 11. The decrease in the number of new cases is supported by a continued decrease in the concentration of SARS-CoV-2 in the wastewater in three regions (Capital Region, Region Southern Denmark and the Central Jutland Region), but there is a stagnation in the North Jutland Region and an increase in Region Zealand in week 11.

The infection decreases in all age groups, and remains highest among the 50-69 year olds in week 11. There is a decrease in the number of new admissions of 16% in week 11, and the decrease occurs across all age groups except among the 40-69 49 year olds and 80-89 year olds. There is a decrease in the number of inpatients in intensive care, but a tendency for a slight increase in the proportion in intensive care who receive covid-specific treatment.

In week 9, the proportion of patients admitted due to a covid-19 diagnosis had dropped to 44%, and a higher proportion is still seen among the older age groups over 60 years, corresponding to 52% in week 9. The number of covid -related deaths have fallen in week 11 compared to week 10. For week 11, there is a decrease in the proportion of covid-related deaths that is estimated to occur for a reason other than covid-19.

There are still signs of a low overall excess mortality, especially among the elderly over 85 years of age.

There are still signs of an increasing incidence of influenza very late in the flu season.

The number of cases of influenza detected is now at a higher level than in previous seasons, which must be seen in the light of a significantly higher test activity this season. However, the positive percentage is 23%, which is on a par with the level of the positive percentage initially in previous seasons, and the high number of cases can thus not only be attributed to a higher test activity. The high number of new cases is also reflected in a continued increase in the number of inpatients with a positive flu test in week 11.

It is still expected that the infection with SARS-CoV-2 will decrease further over the coming weeks. As the number of new cases among the older age groups decreases the number of covid-19-related admissions and deaths is also expected to decrease. In line with the decrease in test activity, the proportion of inpatients and deaths that occur for reasons other than covid-19 is also expected to decrease further. There is still an increase in flu activity in line with the declining infection with SARS-CoV-2, and the number of new cases on a weekly basis is now above the level of recent seasons from 2015-2021.

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 6-11	
	6	7	8	9	10	11		
Incidence pr. 100,000 inhabitants * 5,395		4,081	3,288 in most common	1,889	1,376	870		
Number of tests performed (PCR)	1,023,574	766,439	546,574	415,952	339,591	234,089		
Confirmed cases (PCR)	316,181	239,265	152,217	110,778	80,651		51,003	
Positive Percentage (PCR)	39.8	40.1	35.8	34.5	31.3	29.3		

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 6-11
	6	7	8	9	10	11	
New hospital admissions	2,774	2,340 in most common	2,544 in most common	2,169	1,748 in most common	1,468	
Number of new hospitalized, unvaccinated (+ 12-year-olds)	332	283	236	185	141	124	
Number admitted on Monday morning	1,465	1,717 in most common	1,751	1,644 in most common	1,587 in most common	1,408	
Number admitted to intensive care on Monday morning	2 5	4 4	4 2	3 7	2 6	2 4	
Number of dead *	209	224	275	294	268	216	

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



Other respiratory diseases

Data is updated backwards.

Follow the development of influenza on SSI's [influenza dashboard](#).

Table 3. Influenza: Key numbers and trends, weekly, 2022

Table 3. Influenza: key figures and trends *, broken down by week, 2022

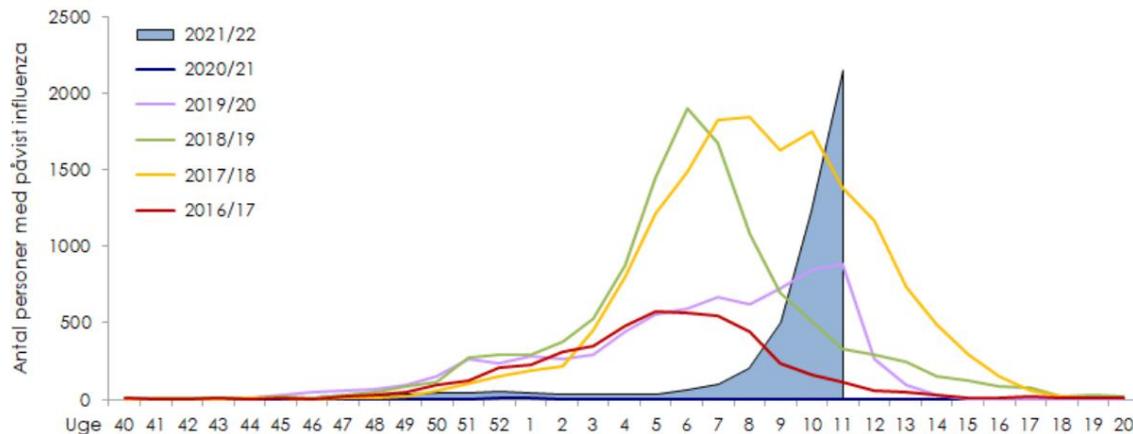
Flu	2022 week						Trend week 6-11
	6	7	8	9	10	11	
Incidence pr. 100,000 inhabitants	1.1	1.7	3.5	8.6	20.9	36.7	
Number of people tested	6,622	6,418	6,230	6,251	8,383	9,407	
Positive percentage	1.0	1.6	3.3	8.1	14.6	22.9	
Number of new admissions	9	28	36	83	236	339	

* Children between 2 and 6 years of age who have received the live attenuated vaccine and who test positive for influenza A or B within 14 days after vaccination, do not count as positive influenza cases.

Figure 1. Influenza: Laboratory confirmed influenza this season compared to the last five seasons, 2016-2022

Figure 1. Influenza: Laboratory-proven influenza this season compared to the previous five seasons, 2016-2022

Laboratoriepåvist influenza i denne sæson sammenholdt med de fem forrige sæsoner





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 6-11
		6	7	8	9	10	11	
Incidence pr. 100,000 inhabitants	The capital	3795 2,889		1,910	1,396	1,544 # most common	664	
	Central Jutland	6567 4,879		3,014 2,249		1,530 # most common	937	
	North Jutland	7259 5,717		3,667 2,385		1,603	1,004	
	Zealand	4670 3,501		2,287	1,616 # most common	1,259	883	
	Southern Denmark	6076 4,581		2,842 2,169		1,627 # most common	1,519 # most common	
Positive percentage	The capital	36.4	37.1	32.7	30.7	27.5	25.3	
	Central Jutland	43.6	44.3	39.5	39.4	35.0	34.0	
	North Jutland	44.0	43.7	41.8	38.2	34.6	33.9	
	Zealand	35.3	35.4	32.1	31.1	29.5	28.1	
	Southern Denmark	39.7	39.8	34.8	34.4	32.1	29.1	
New hospital admissions	The capital	934	911	740	643	473	406	
	Central Jutland	546	538	494	420	341	263	
	North Jutland	274	349	339	273	221	182	
	Zealand	454	472	424	362	297	253	
	Southern Denmark	554	558	530	460	401	354	
	Unknown region	1 2	2 1	1 7	1 1	1 5	1 0	



Age-distributed incidence, test rates and positive percentage

Data is updated backwards.

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

Figure 5. COVID-19: Age-specific incidence per 100,000 inhabitants

Figure 5. Covid -19: Age-specific incidence per 100,000 inhabitants

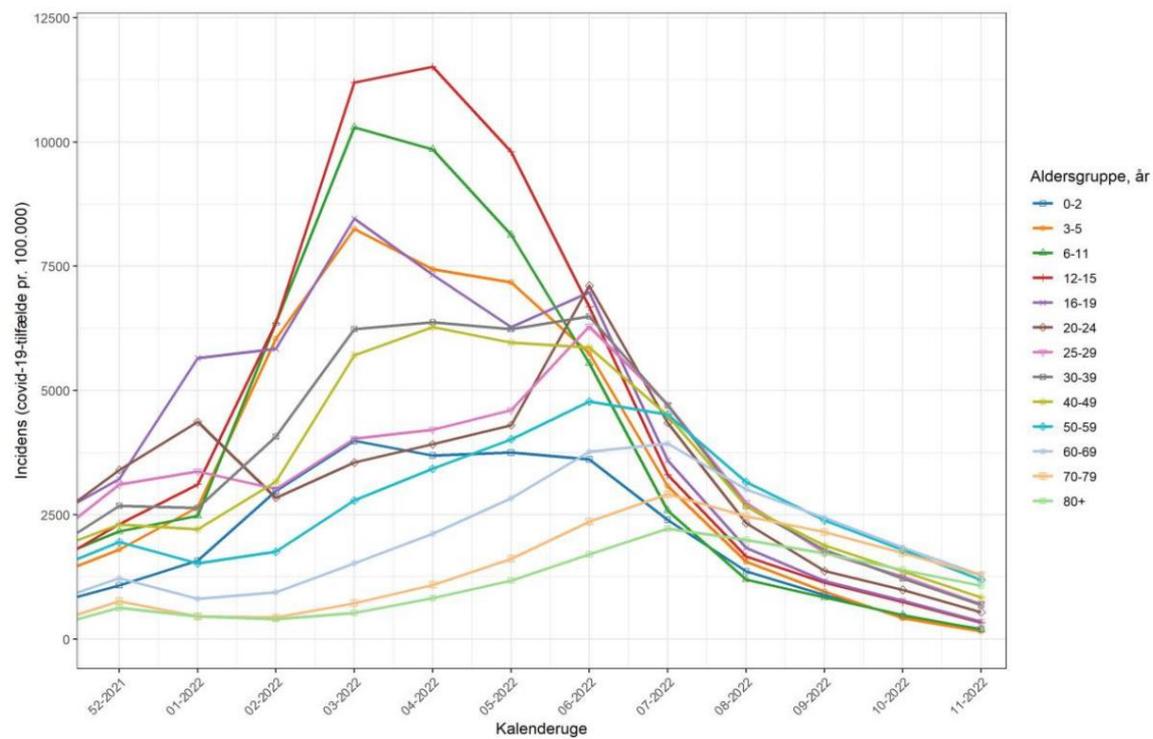




Table 5. Covid-19: Age-specific incidence per 100,000 inhabitants, test rate and positive percentage

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					
		6	7	8	9	10	11
0-2 years	Incidence	3,198	2,126	1,210	778	404	177
	Test rate	8.0	5.1	3.0	2.1	1.3	0.7
	Positive percentage	40	42	40	37	31	25
3-5 years	Incidence	5961	3184	1617	998	442	170
	Test rate	15.7	8.7	4.7	3.3	2.0	1.0
	Positive percentage	38	36	34	31	22	16
6-15 years	Incidence	6502	3150	1559	1089	678	290
	Test rate	14.9	7.9	4.5	3.5	2.8	1.6
	Positive percentage	44	40	35	31	24	18
16-19 years	Incidence	7556	3877	2009	1280	848	380
	Test rate	15	8.6	5.4	4.0	3.4	2.0
	Positive percentage	50	45	37	32	25	19
20-24 years	Incidence	7,702	4,722	2,519 <small>in most common</small>	1,489	1,075 <small>in most common</small>	600
	Test rate	18.5	12.4	7.9	5.2	4.7	3.1
	Positive percentage	42	38	32	28	23	19
25-29 years	Incidence	6811	5096	2964	1879	1372	771
	Test rate	18.9	14.7	9.5	6.5	5.5	3.6
	Positive percentage	36	35	31	29	25	21
30-39 years	Incidence	6909	5017	2886	1930	1322	755
	Test rate	20.0	14.2	9.1	6.5	5.0	3.3
	Positive percentage	34	35	32	30	26	23
40-49 years	Incidence	6236	4793	2867	2033	1476	912
	Test rate	21.4	14.7	10.2	7.6	5.9	3.8
	Positive percentage	29	33	28	27	25	24
50-59 years	Incidence	4,985 <small>in most common</small>	4,718	3,313	2,496	1,878 <small>in most common</small>	1,253
	Test rate	20.8	17.3	12.9	9.7	7.6	5.1
	Positive percentage	24	27	26	26	25	24
60-69 years	Incidence	3869	4042	3108	2509	1901	1331
	Test rate	15.9	14.3	11.4	9.0	7.2	5.1
	Positive percentage	24	28	27	28	26	26
70-79 years	Incidence	2412	2982	2530	2203	1777	1314
	Test rate	9.4	9.3	7.9	6.7	5.8	4.3
	Positive percentage	26	32	32	33	31	30
80+ years	Incidence	1,802	2,341	2,104	1,821 <small>in most common</small>	1,480	1,140 <small>in most common</small>
	Test rate	12.0	11.7	10.0	8.5	7.3	5.9
	Positive percentage	15	20	21	21	20	19



Newly admitted

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

Figure 6. 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 6. Covid-19: Newly admitted, hospitalized Monday morning and confirmed cases

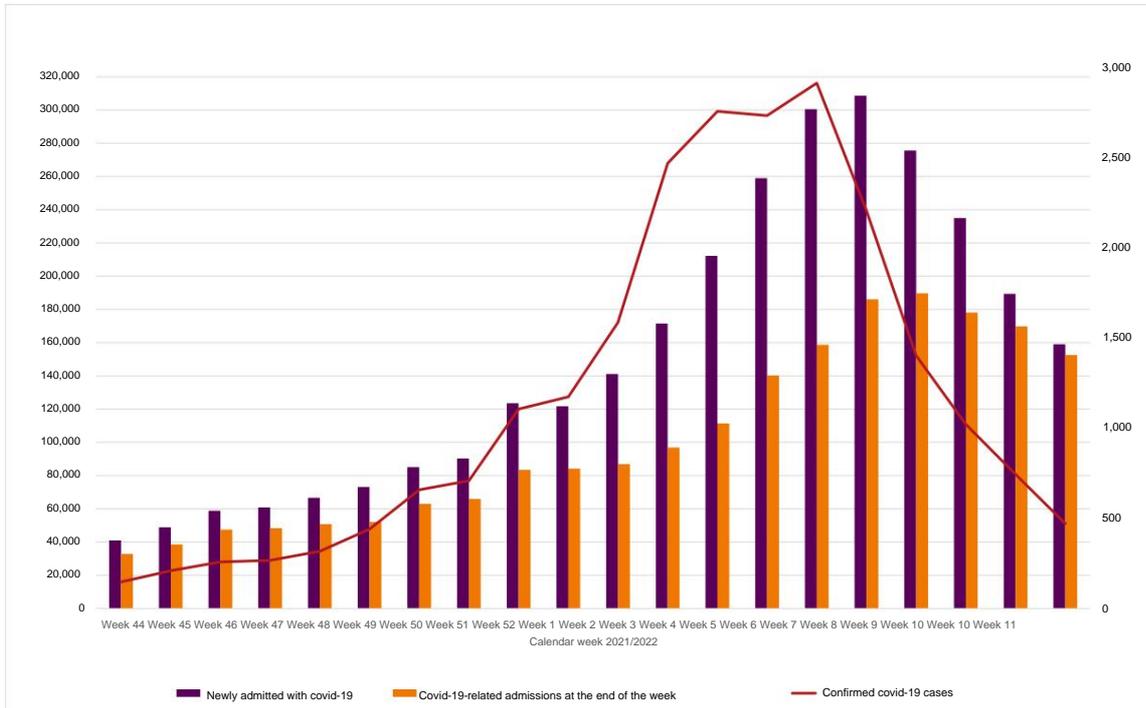
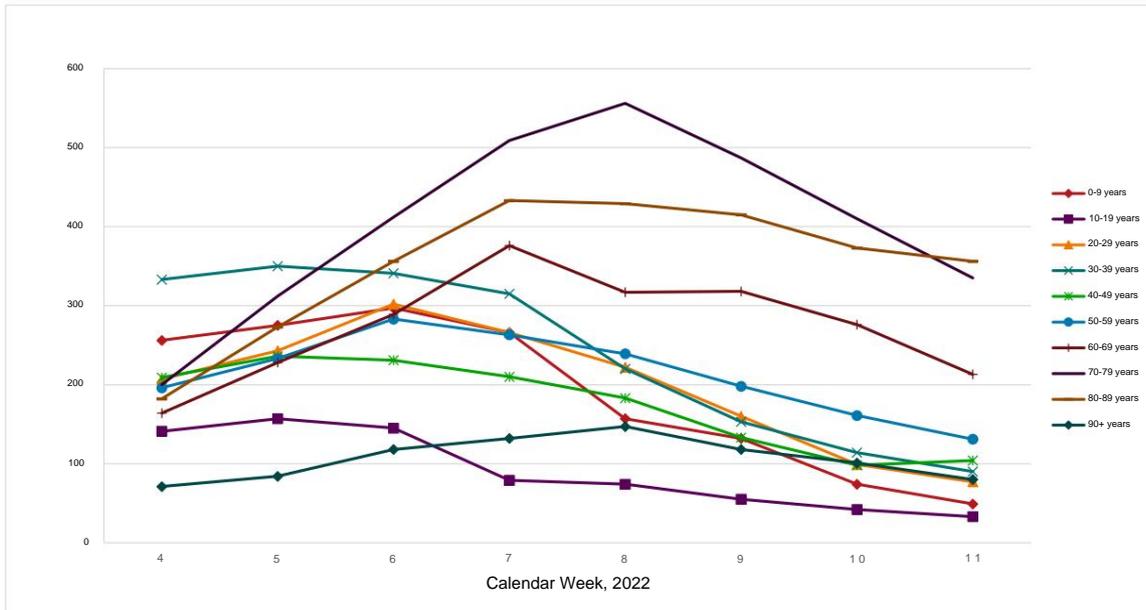




Figure 7. COVID-19: Weekly numbers of PCR-positive hospital admissions by age group
Figure 7. Covid-19: Weekly number of new admissions by age group





The following figures in this section are updated retrospectively.

Figure 8. 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 March 6th 2022

Figure 8. 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 6 March 2022

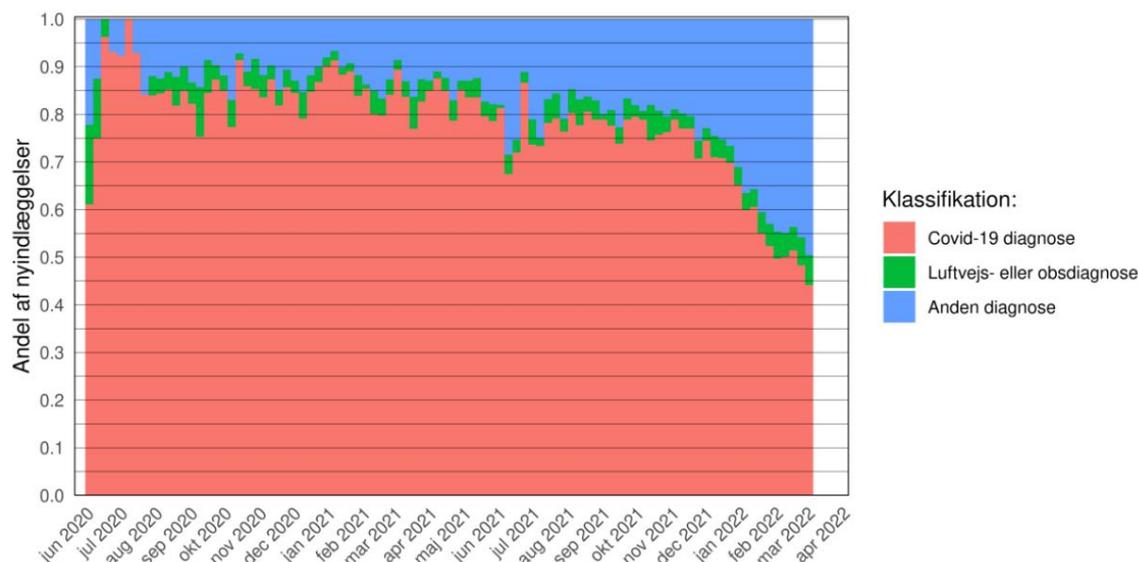


Table 6. COVID-19: Proportion of PCR-positive hospital admissions with a COVID-19 diagnosis, with a respiratory or tentative COVID-19 diagnosis, or with other diagnosis, June 1st 2020 to March 6th 2022

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, 1 June 2020 to March 6, 2022

Diagnosis	2022 week						Trend
	4	5	6	7	8	9	
Covid-19 diagnosis	52%	50%	50%	51%	48%	44%	
Respiratory or observational diagnosis	5%	6%	5%	5%	6%	6%	
Second diagnosis	43%	45%	45%	44%	46%	50%	



Figure 9. 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 March 6th 2022

Figure 9. 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 March 6, 2022

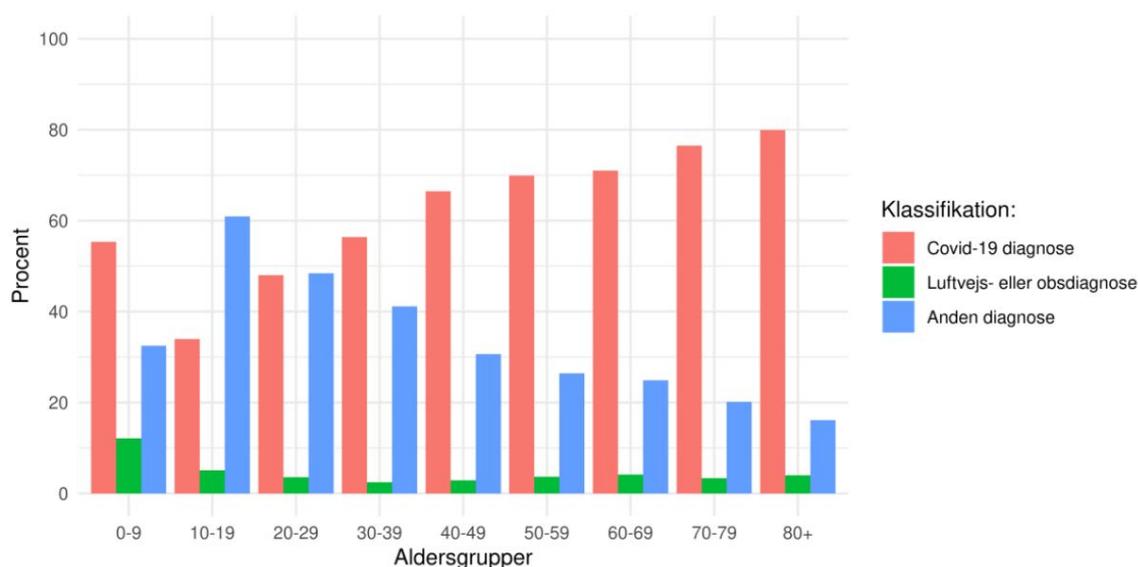


Table 7. COVID-19: Proportion of PCR-positive hospital admissions with a COVID-19-diagnosis (red), with a respiratory or tentative Covid-19 diagnosis (green), or with other diagnosis (blue), by age groups 0-59 and 60+ years old

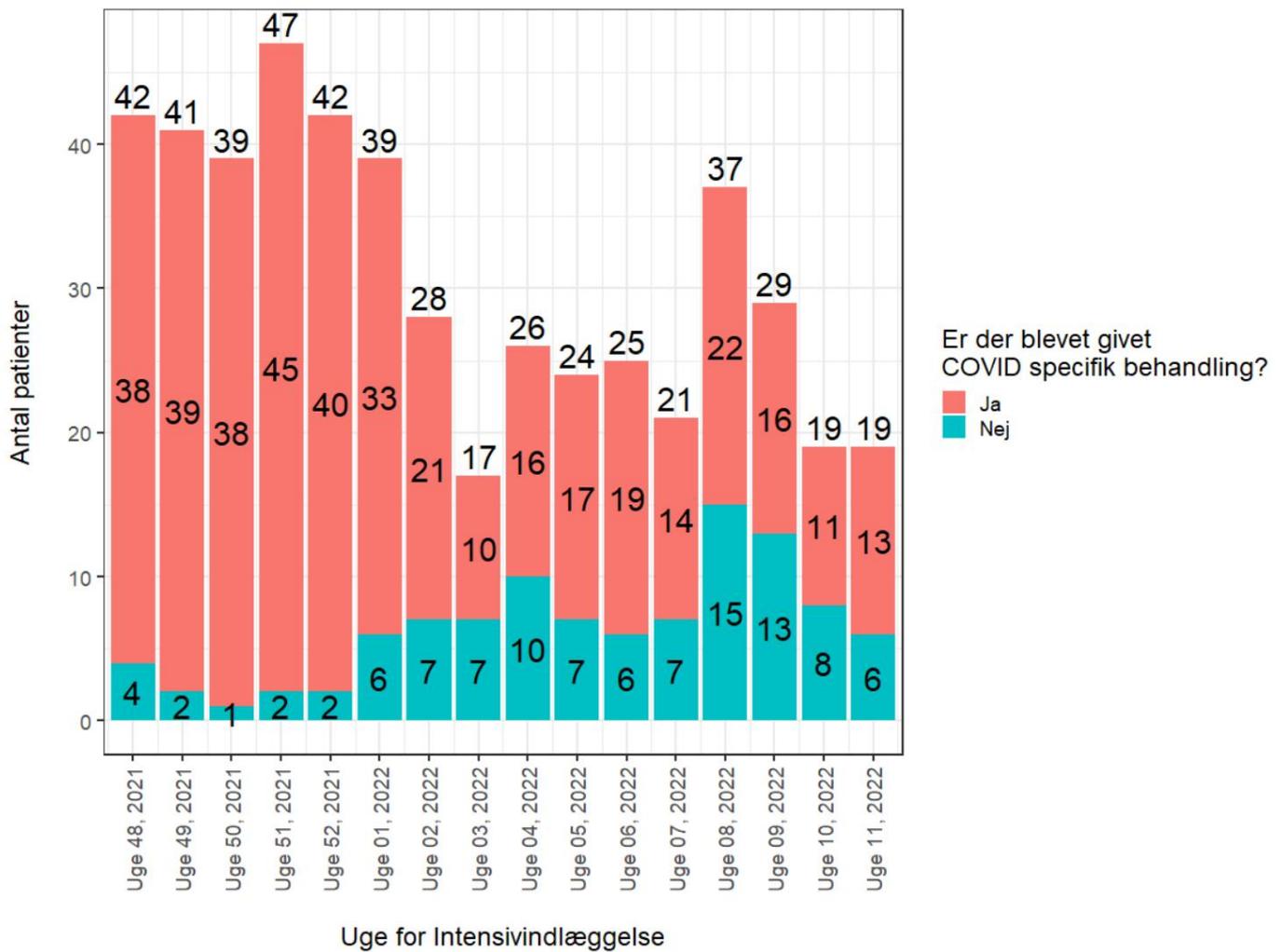
Table 7. Covid-19: Proportion of new admissions with positive SARS-CoV-2 samples admitted due to covid-19 diagnosis, or due to respiratory or obs covid-19 diagnosis, or due to other diagnosis, divided by age groups 0-59-year-olds and 60 + -year-olds

Diagnosis / age groups	2022 week						Trend
	4	5	6	7	8	9	
0-59-year-olds							
Covid-19 diagnosis	44.1%	39.8%	41.0%	41.1%	33.2%	34.4%	
Respiratory or observational diagnosis	4.9%	5.3%	4.7%	5.6%	5.3%	5.0%	
Second diagnosis	51.0%	54.9%	54.3%	53.2%	61.5%	60.6%	
60+ year olds							
Covid-19 diagnosis	66.5%	64.3%	62.8%	62.6%	57.9%	51.5%	
Respiratory or observational diagnosis	4.4%	6.6%	4.6%	4.1%	6.5%	6.6%	
Second diagnosis	29.1%	29.1%	32.6%	33.3%	35.6%	41.8%	



Figure 10. COVID-19: Numbers of intensive care admissions with a positive SARS-CoV-2 test, who received treatment specifically for COVID-19 (Yes (red), No (blue)), 2021-2022

Figure 10. Covid-19: Number of new admissions on intensive care with SARS-CoV-2 positive sample receiving covid-19 specific treatment, 2021-2022





SARS-CoV-2 variants

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

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

Figure 11. COVID-19: The 10 most frequently observed (sub) variants based on whole genome sequencing data

Figure 11. Covid-19: The 10 most frequently observed (sub) variants based on whole genome sequencing data

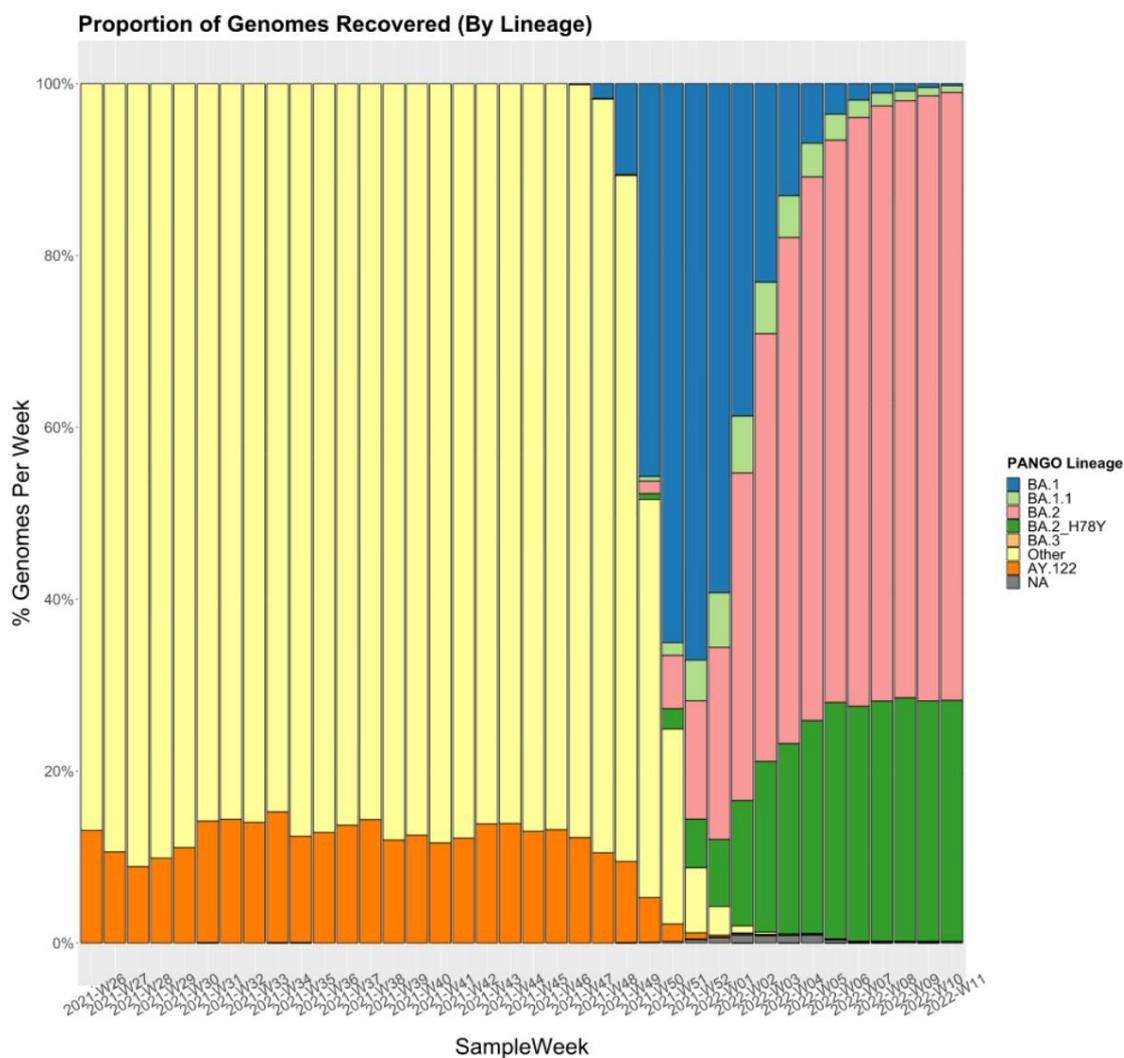




Table 8. COVID-19: The 20 most frequently observed sub (variants) based on whole-genome sequencing data for the last four weeks, 2022

Table 8. Covid-19: The 20 most frequently observed (sub) variants based on whole genome sequencing data in the last four weeks, 2022

The 20 most frequently observed (sub) variants based on whole genome sequencing data in the last 4 weeks					
Lineage	WHO	8	9	10	11
BA.2	Omicron	10170 (69.25%)	9358 (69.47%)	8221 (70.27%)	642 (72.71%)
BA.2_H78Y	Omicron	4102 (27.93%)	3817 (28.34%)	3303 (28.23%)	233 (26.39%)
BA.1.1	Omicron	215 (1.46%)	148 (1.10%)	103 (0.88%)	5 (0.57%)
BA.1	Omicron	167 (1.14%)	122 (0.91%)	56 (0.48%)	2 (0.23%)
None		21 (0.14%)	19 (0.14%)	13 (0.11%)	1 (0.11%)
AY.4.6	Delta	0 (0.00%)	0 (0.00%)	1 (0.01%)	0 (0.00%)
B		4 (0.03%)	0 (0.00%)	1 (0.01%)	0 (0.00%)
BA.3	Omicron	2 (0.01%)	4 (0.03%)	1 (0.01%)	0 (0.00%)
AY.122	Delta	0 (0.00%)	1 (0.01%)	0 (0.00%)	0 (0.00%)
AY.4	Delta	(0.01%)	1 (0.01%)	0 (0.00%)	0 (0.00%)
AY.42	Delta	(0.01%)	1 (0.00%)	0 (0.00%)	0 (0.00%)
AY.43.6	Delta	(0.01%)	1 (0.00%)	0 (0.00%)	0 (0.00%)
AY.78	Delta	(0.01%)	(0.00%)	0 (0.00%)	0 (0.00%)
Total		14685	13470	11699	883

Note to table: Number of variants may change when multiple samples are sequenced and included in the table. Last week's figures are incomplete

and shall be construed with reservations.

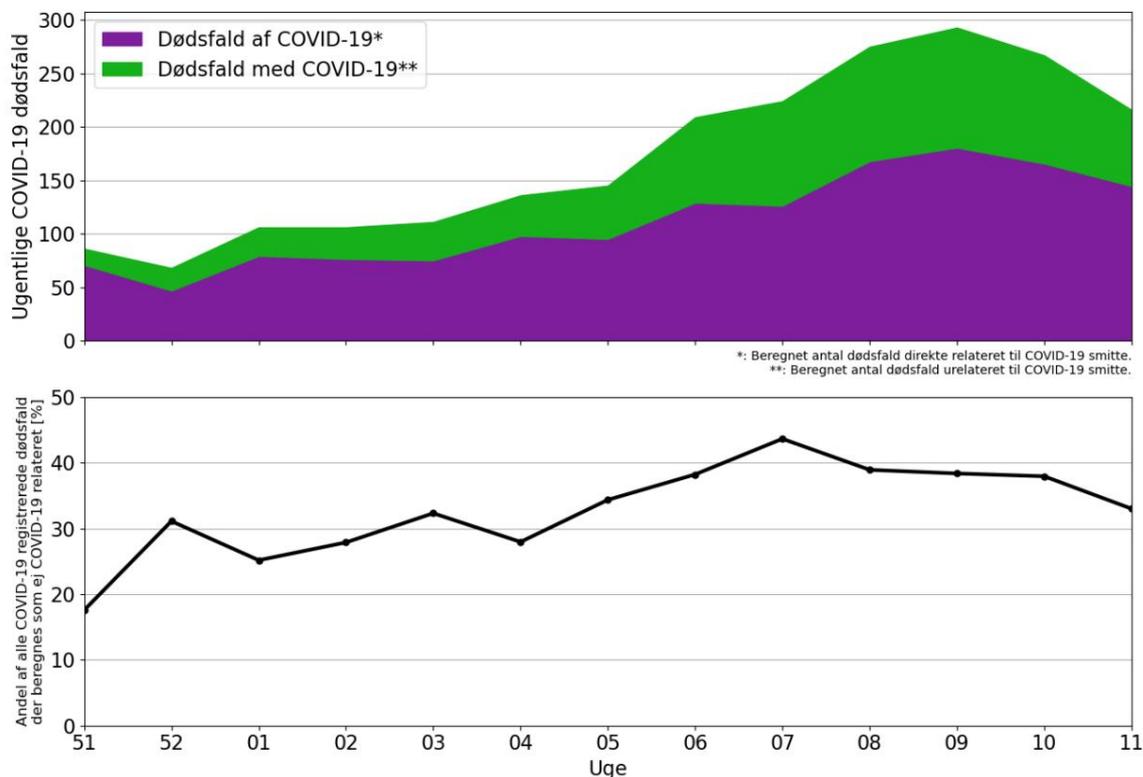


Mortality

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 12. COVID-19: Estimated deaths due to or with COVID-19 and proportion of all COVID 19-registered deaths estimated not related to COVID-19, by week. Calculated number of deaths directly related to COVID-19 infection (purple), calculated number of deaths unrelated to COVID-19 infections (green), 2021/2022

Figure 12. Covid-19: Estimated deaths of or with covid-19 and proportion of all covid-19-registered deaths calculated as non-covid-19-related, broken down by weeks, 2021/2022



Note: Calculation performed by 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

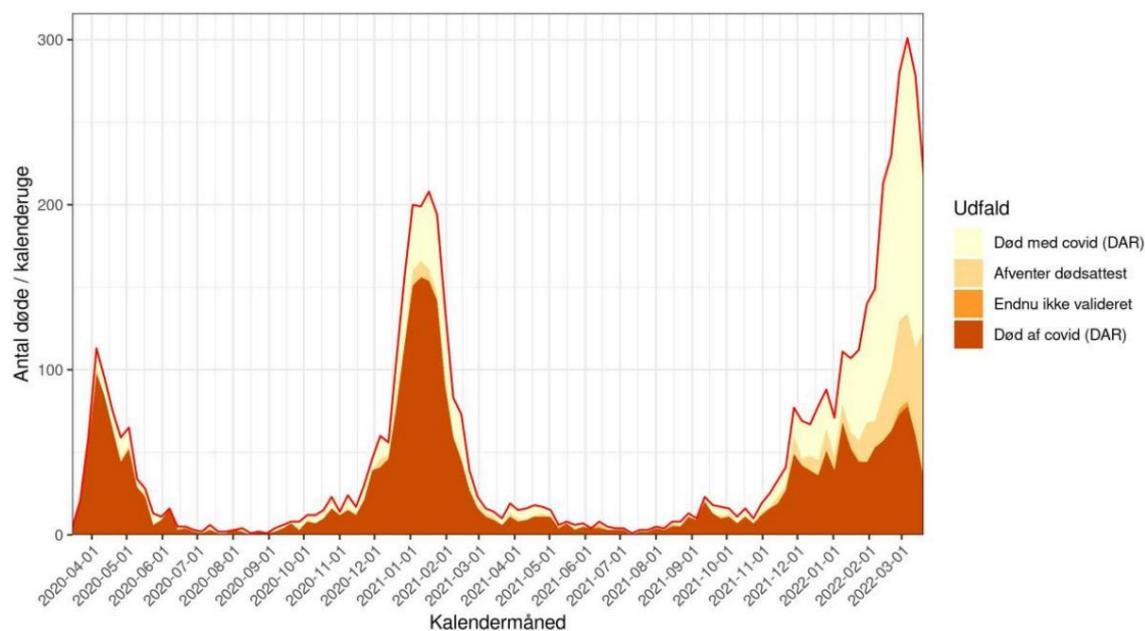
2021/2022, week	within 30 days, total	Deaths "of" covid-19	Deaths "with" covid-19	Percentage (%) of deaths "with" covid-19
51	86	71	15	17.6
52	68	47	21	31.1
1	106	79	27	25.2
2	106	76	30	27.9
3	111	75	36	32.3
4	136	98	38	27.9
5	145	95	50	34.3
6	209	129	80	38.2
7	224	126	98	43.6
8	275	168	107	38.9
9	293	181	112	38.4
10	267	166	101	37.9
11	216	145	71	33.0

Note: Calculation performed by PandemiX Research Center, RUC, in collaboration with EuroMOMO, SSI.



Figure 13. 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 13. Covid-19: Deaths by and including covid-19 based on death certificates, 2020-2022

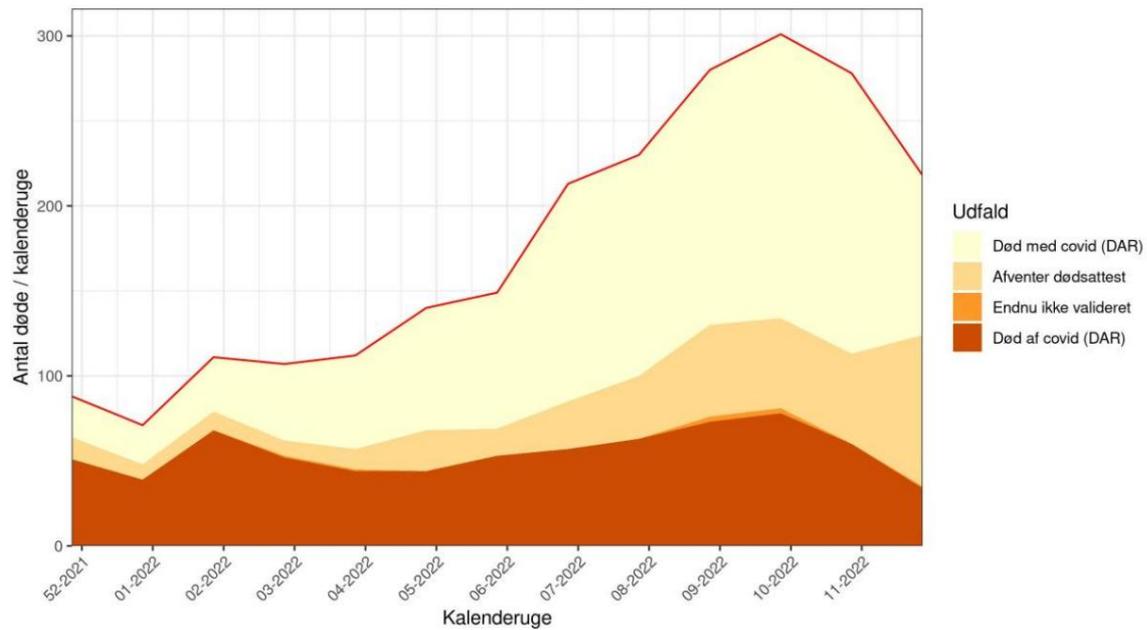


Note: Prepared on the basis of data from the Cause of Death Register (DAR) via the Danish Health and Medicines Authority



Figure 14. 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), 2021/2022

Figure 14. Covid-19: Deaths by and including covid-19 based on death certificates, 2021/2022



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					
	6	7	8	9	10	11
Number of outbreaks (out of 12 infection control units)	3	8	5	4	2	4
Of which no outbreak	0	2	3	2	1	1
Of which units with eruptions	3		2	2		3
Total number of outbreaks	8	6 16	7	6	13	3
Number of major outbreaks (> 20 infected, patients and / or staff)	0	0	1	0	0	0
Number of medium-sized outbreaks (11 to 20 infected, patients and / or staff)	3	3	2	3	0	0
Number of minor outbreaks (≤10 infected, patients and / or staff)	5	13	4	3	3	3

Nursing home

Table 11. COVID-19 at nursing homes

Table 11. Covid-19 in nursing homes

Covid-19, nursing home	2022 week				
	7	8	9	10	11
Confirmed cases among residents	2,302	2,002	1,700	1,288	976
Deaths among confirmed cases	99	134	116	109	93
Confirmed cases among residents with expected full effect after primary vaccination course	90	75	49	39	36
Confirmed cases among residents with expected full effect after revaccination	2,141	1,872 in most common	1,603	1,213	926
Nursing homes with confirmed cases	548	524	472	382	308



Special staff groups

Data is updated backwards. The groups shown cannot be further subdivided due to personal data considerations.

Table 12. COVID-19: Confirmed cases among employees in the social sector

Table 12. Covid-19: confirmed cases among employees in the social sector

Covid-19, 2022						
Business	Week 9		Week 10		Week 11	
	Number of confirmed cases	Incidence per 100,000 in the group	Number of confirmed cases	Incidence per 100,000 in the group	Number of confirmed cases	Incidence per 100,000 in the group
Day care, day centers, home help mv.	1,512	2,924	1,110 in most common	2,147	781	1,510 in most common
Nursing homes, etc.	3,994	3,142	3,097	2,436	1,941	1,527 in most common
Social in total	5,506	3,079	4,207	2,353	2,722	1,522 in most common

Table 13. COVID-19: Confirmed cases among employees in the health care sector

Table 13. Covid-19: confirmed cases among healthcare workers

Covid-19, 2022						
Business	Week 9		Week 10		Week 11	
	Number confirmed coincidence	Incidence per 100,000 in the group	Number confirmed coincidence	Incidence per 100,000 in the group	Number confirmed coincidence	Incidence per 100,000 in the group
Health care and others	1,450 in most common	2,601	1,037 in most common	1,850 in most common	741	1,329
Hospitals	3,675	2,873	2,563	2,004	1,868	1,461
Total health	5,125	2,791	3,600	1,960	2,609	1,421



Sewage

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

Please note that as of January 3, 2022, a new PCR test has been introduced. Therefore, the results from before and after this date can not be directly compared.

From week 8, the curve of SARS-CoV-2 concentration in wastewater is shown as a weekly average of RNA copies per capita. Previously, the curves showed a moving weighted average. However, this meant that the curves were adjusted slightly backwards in time, in line with new wastewater measurements.

Figure 15. COVID-19: Incidence and results from waste-water surveillance, 2021/2022

Figure 15. Covid-19: Incidence and results from wastewater measurements, 2021/2022

Covid-19 incidens og resultater fra spildevandsmålinger

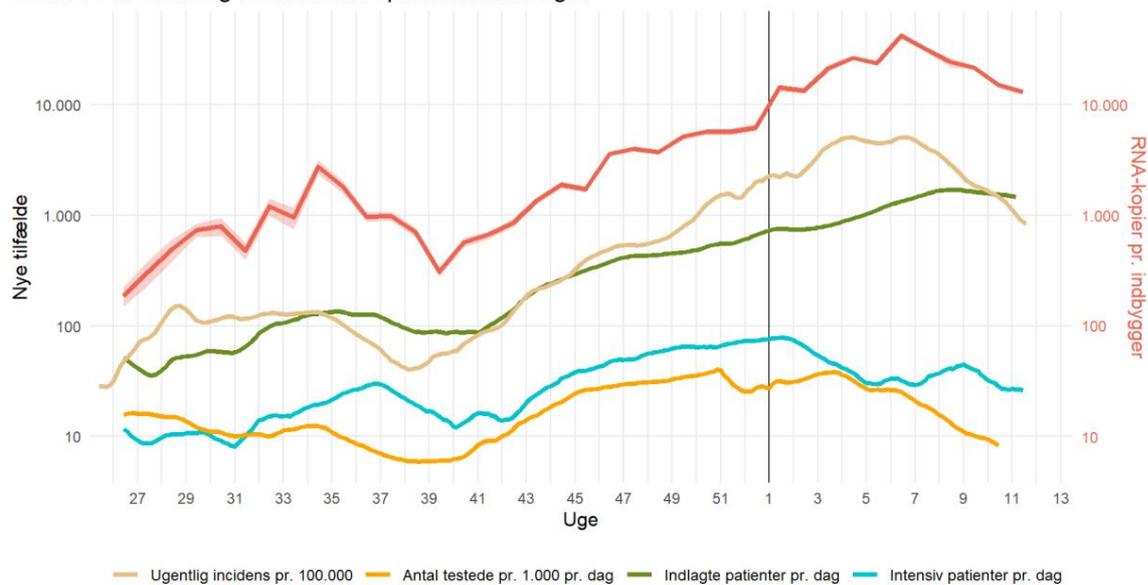
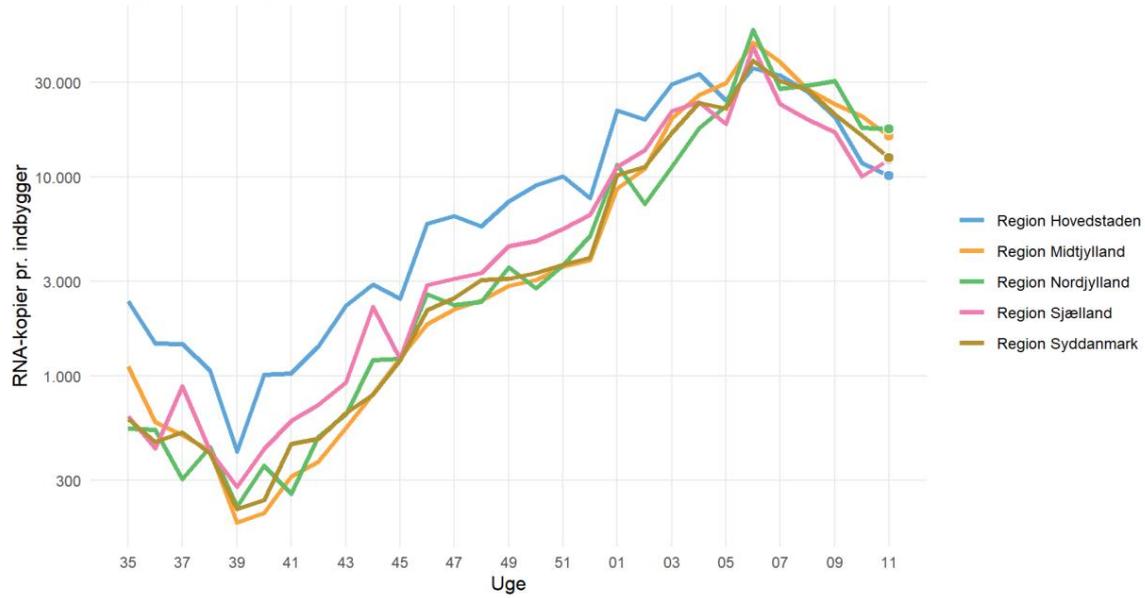




Figure 16. COVID-19. Results from waste-water surveillance by region, 2021/2022

Figure 16. Covid-19: Results from wastewater measurements by regions, 2021/2022

Resultater fra spildevandsmålinger





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

Figure 17. Proportion of responses from participants presumed infected with covid-19 per week the last 5 months. The gray color indicates the confidence interval for the calculation (dark gray 95%, light gray 99%).

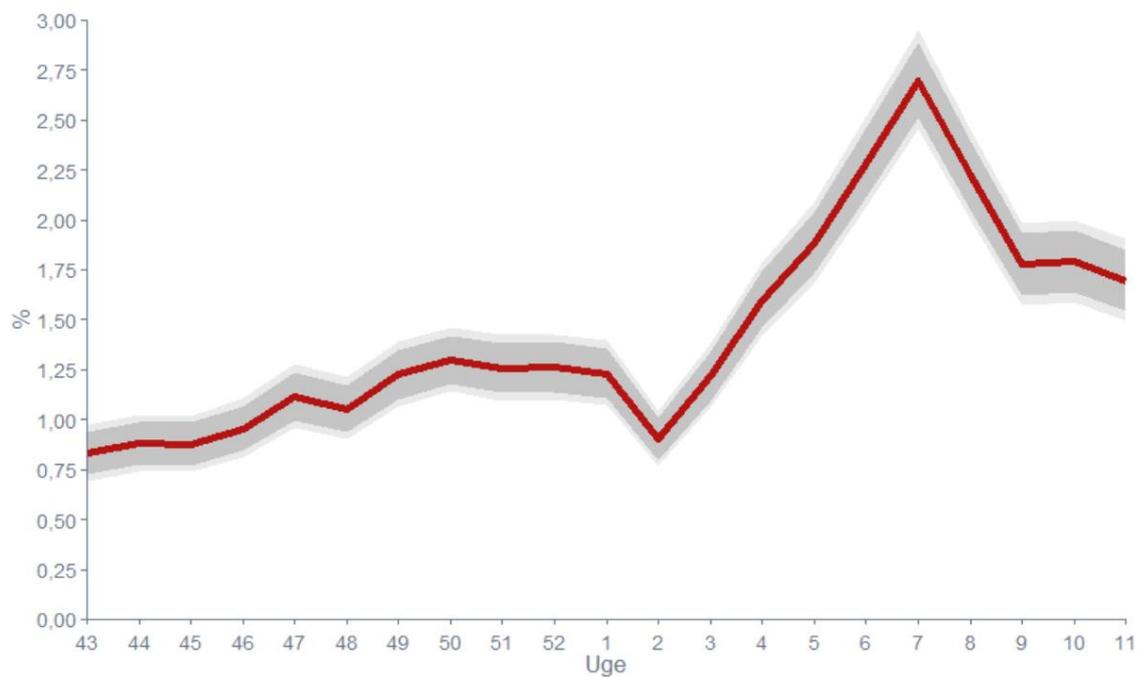
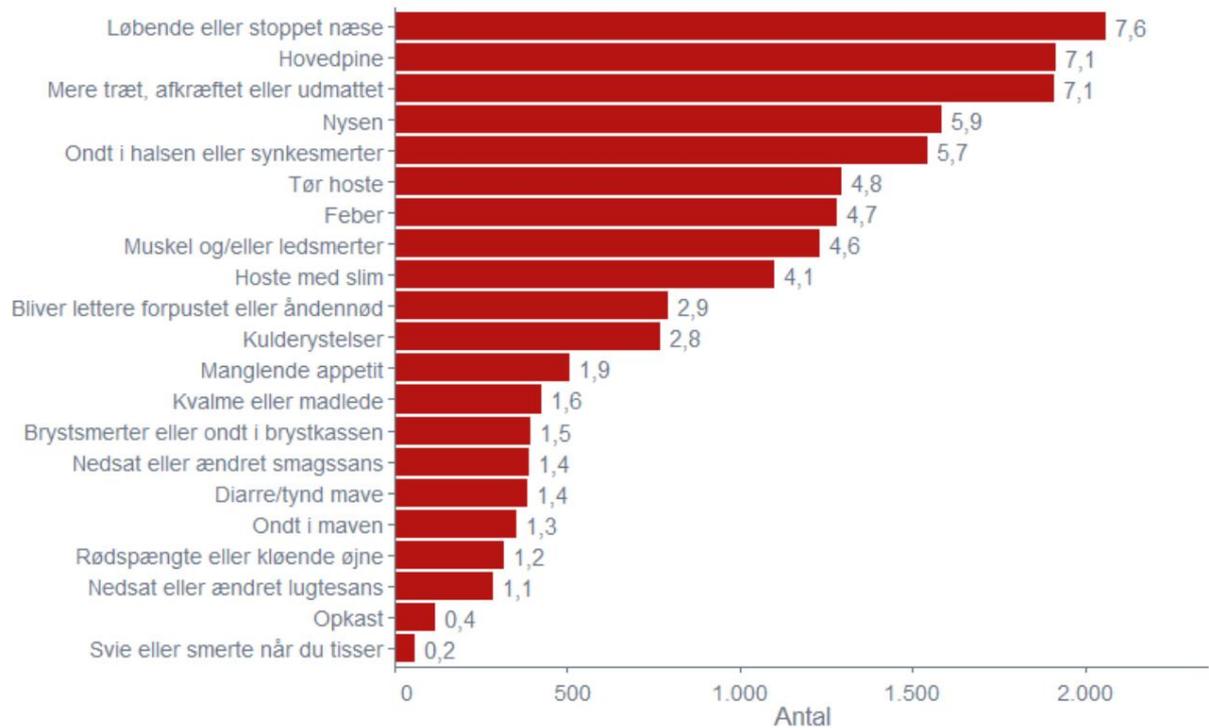




Figure 18. COVID-19: Symptoms reported to COVIDmeter by number in week 11, 2022.

Figure 18. Covid-19: Symptoms reported to COVIDmeter by number in week 11, 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 incidents 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

For a more detailed definition of covid-19 admissions, see 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, 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 results and variant PCR responses from the Danish microbiology database (MiBa).
- Information on admissions registered in the National Patient Register (LPR).
- Snapshot data from the regions that twice daily provide an overview of 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.



Data for covid-19 related treatment of new admissions to intensive care are provided from the Danish Intensive Covid Database and the Danish Intensive Database. Data are collected by manually collecting patients' medical records. For data collection [method, see http://www.cric.nu/danish-icu-covid-19-report /](http://www.cric.nu/danish-icu-covid-19-report/). Data for intensive care units by variant type are based on another database, where, for example, intensive care units also include patients who have received intensive care but have not been admitted to an intensive care unit. Therefore, there may be differences in the number of entries between the tables.

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 apply EuroMOMO's normal method of correction for delays in the registration of deaths.



Further details about the methods and interpretations used can be requested from SSI and PandemiX Research Center at Roskilde University Center.

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

A more accurate way of calculating how many have died "of" covid-19 and how many have died "of" covid-19 is by using death certificates. However, this method causes 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 home

Full effect after primary vaccination course is calculated from 14 days after the last vaccination in the primary vaccination course and until the day before the date of revaccination. Full effect after revaccination is calculated from 14 days after the date of revaccination.

Sewage

Trend analyzes:

SARS-CoV-2 virus concentrations in wastewater are measured as the number of RNA copies per liter of wastewater. The trend analyzes are carried out by giving the wastewater measurements from each treatment plant a weight, in relation to the number of residents in the catchment area, after which they are added together. The combined measurements are then presented in a graph showing the results in virus concentration over time.

Pr. 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 weekly report whether they have had symptoms or not. The number of responses is fairly stable at 30,000 per week.

The COVIDmeter participants are not a representative sample of the Danish population, for example, 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 a minimum of 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.

Other respiratory diseases

This report is based on people tested.

Data for the most recent week are extracted 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 who tests positive is only included the first time he or she tests positive per week, while everyone tested in the denominator can only count once per week.

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 .