COVID-19 EPIDEMIOLOGICAL UPDATE



Weekly Report / Week 52 / 6 January 2022

As part of its surveillance, alert, and prevention missions, Santé publique France analyses and publishes COVID-19 data obtained from its network of partners¹ as well as its own studies and surveys. This report is based on data reported to Santé publique France up to 5 January 2022.

Key numbers

In week 52 (27 December 2021-2 January 2022)

Compared to week 51 (20–26 December 2021)



1,908* (vs 835* in W51)
Incidence rate (/100,000 inhabitants) **1,176,209** new confirmed cases
(vs 514,641 in W51)













for suspected COVID-19



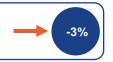














1,275 (vs 1,200 in W51)

Deaths** (in hospitals, nursing homes and long-term care facilities)



On 4 January 2022

Compared to 28 December 2021



Key points

Epidemiological situation

In week 52, circulation of SARS-CoV-2 accelerated dramatically due to the very rapid progression of the Omicron variant and hospital admissions increased.

- Metropolitan France:
 - Very sharp increase in the incidence rate* in all age groups
 - Incidence rate highest among 20-29 year-olds (>3,600/100,000 inhabitants) and 30-39 year olds (>2,900)
 - Rise in new hospital admissions more pronounced in the under 40s, especially the 0-9 age group
- Overseas France:
 - Hospital admission rates were high and rising in Mayotte, French Guiana and Reunion Island.

Variants

 74% of screened tests showed a profile compatible with the Omicron variant in week 52

Omicron accounted for 49% of the interpretable sequences in the Flash Survey of 20 December for week 51

Prevention

- Vaccination on 4 January 2022 (Vaccin Covid data):
 - 77.2% of the French population had received a complete primary vaccination series (vs 77.0% on 28/12/21)
 - 48.4% of the 18+ age group (representing 59.4% of those eligible) and 72.9% of the 65+ age group (82.4% of those eligible) had received a booster shot
- Importance of combining measures: full vaccination series
 with a booster at 3 months, compliance with preventive
 measures including wearing masks and reducing
 contacts, along with other precautionary
 recommendations such as frequent ventilation of
 enclosed spaces, working from home and adherence to
 contact tracing.

Dashboard

InfoCovidFrance

Key figures and evolution of COVID-19 in France and worldwide

^{*}Rates corrected for the effect of public holidays. **Unconsolidated data for W52.

¹Santé publique France acknowledges the large public health network that contributes to COVID-19 surveillance: healthcare professionals working in private practice and hospitals, emergency departments, hospital and private biology laboratories, learned societies for infectious diseases, resuscitation, and emergency medicine, CNAM, INSERM, and INSEE.

Week 52 (27 December 2021 to 2 January 2022)

SITUATION UPDATE

In week 52, a sharp increase in the circulation of SARS-CoV-2 was observed throughout the country (+129%), linked to the very rapid spread of the Omicron variant. The incidence rate (corrected for the effect of the Jan. 1st holiday) reached 1,908 cases per 100,000 inhabitants, i.e., almost 2% of the population tested positive in week 52. It reached 3,606 (+103%) among 20-29 year-olds and 2,905 (+112%) among 30-39 year-olds. The largest increases in incidence rate were observed in overseas France, notably in Mayotte (870, +664%) and Guadeloupe (1,218, +486%). Hospital admissions were rising in almost all regions, most markedly among the under 40s and particularly the under 10s. On 4 January, 77.2% of the French population had completed a primary vaccination series. Among people aged 18 and over, 48.4% had received a booster dose (72.9% among the 65+ age group). With the extremely rapid propagation of the Omicron variant (74% of screened samples are now compatible with this variant), strict adherence to all preventive measures, including wearing masks and reducing contacts, as well as frequent ventilation of enclosed spaces and teleworking, are more necessary than ever to curb the number of contaminations and protect the most vulnerable. Intensified vaccination, including the 3-month booster, and compliance with all recommended measures in case of symptoms, positive test or risk exposition, are essential to limit the impact on the healthcare system.

EPIDEMIOLOGICAL UPDATE

Nationally, there was a strong surge in the corrected incidence rate (adjusted for the effect of the Jan. 1st public holiday) for week 52, reaching 1,908 cases per 100,000 inhabitants (vs 835 in week 51, +129%). On average, more than 168,000 cases were diagnosed per day. The effective reproduction rate reached 1.61 on 1 January (compared to 1.22 on 25/12/21), indicating a significant acceleration in viral circulation. The corrected incidence rate had at least doubled in all age groups. It was three times higher among 70-79 year olds (771, +207%) and 80-89 year olds (622, previous +212%) compared to the It reached 3,606 (+103%) among 20-29 year-olds and 2,905 (+112%) among 30-39 year-olds. The corrected screening rate (11,189/100,000, +17%) increased in all age groups, except for 0-9 year-olds where it fell again (5,635, -4%), owing to the school holidays. The positivity rate rose sharply and reached its highest level since the beginning of the epidemic (17.1%, +8.4 points).

The number of consultations for suspected COVID-19 was on the rise for the second consecutive week in SOS-Médecins organisations (5,908 consultations, +46%) and in emergency departments (14,545 visits, +49%).

The number of new hospitalisations (9,982, +18%) increased while intensive care admissions (1,822, -3%) remained stable (unconsolidated data). On 4 January, 20,252 COVID-19 patients were hospitalised, including 3,678 in intensive care. The number of deaths continued to rise (1,275, +6%), including 59 in long-term care facilities (unconsolidated data). There was a continued excess in the rate of all-cause mortality in week 51.

In **metropolitan France**, the corrected incidence rate was up throughout the country, reaching 3,036 (+115%) in Île-de-France, 2,444 in Corsica (+135%) and 2,072 (+106%) in Auvergne-Rhône-Alpes. The number of new hospital admissions increased in almost all regions. The largest increases were seen

in the under-40s, especially among 0-9 year olds. The number of paediatric cases in critical care units remained low, but there has been a marked increase in the number of such cases over the past 2 weeks.

In overseas France, the corrected incidence rate has risen sharply in all regions. It reached 1,281 (+92%) in Reunion Island and 1,218 (+486%) in Guadeloupe. Mayotte experienced the greatest increases in incidence rate (870, +664%) and in new hospitalisations. New admissions to hospital were also rising in French Guiana and Reunion Island.

VARIANTS

In S52, 74% of screened tests reported mutation profiles consistent with an Omicron variant (vs 42% in week 51). The Flash Survey of 20/12/21 confirms the rapid spread of Omicron in metropolitan France, with 49% of interpretable sequences in week 51 (unconsolidated data) vs 11% in week 50. Investigations carried out in France on the first detected cases of Omicron infection, as well as initial surveillance data, suggest a lesser severity of infection with this variant, in line with international data.

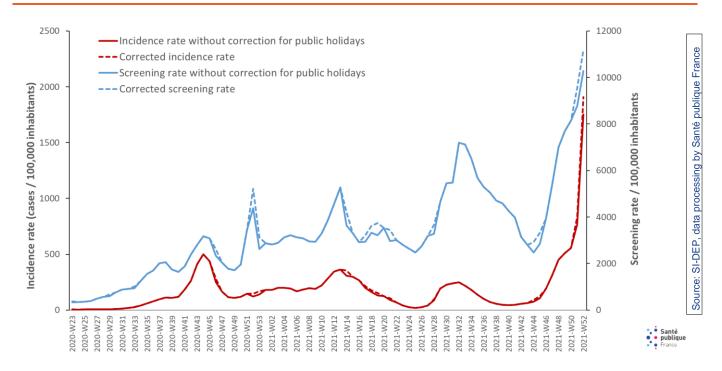
PREVENTION

On 4 January, 77.2% of the French population had completed a primary vaccination series. Among adults aged 18 years and over, 48.4% had received a booster shot (representing 59.4% of people eligible at that date); this proportion reached 72.9% in the 65+ age group (82.4% of people eligible at that date). In the overseas regions, vaccination coverage remained lower than in mainland France.

Confirmed cases, incidence, and screening

Nationally, the <u>incidence rate</u>, corrected for the effect of the Jan. 1st holiday, reached 1,908 cases per 100,000 inhabitants in week 52 (vs 835 in week 51, +129%). The corrected <u>screening rate</u> was also on the rise (11,189/100,000 vs 9,546 in week 51, +17%), as was the <u>positivity rate</u> (17.1%, +8.4 points). Among the 6,321,837 tested individuals who had reported their symptom status, 82% were asymptomatic, a decrease from the previous week (87%). An increase in the positivity rate was observed among both symptomatic (44% vs 30% in week 51) and asymptomatic (10.8% vs 5.4%) cases. The proportion of symptomatic positive cases decreased (47% vs 45%).

Weekly trends in the incidence and screening rates, with or without correction for the effect of public holidays, since week 23, 2020, France (up to 5 January 2022)



Incidence and screening rates by age group

In week 52, the corrected <u>incidence rate</u> has risen sharply in all age groups. The greatest increases were observed among 80-89 year-olds (+212%) and 70-79 year-olds (+207%). The corrected incidence rate exceeded 2,000 cases per 100,000 inhabitants among 10-49 year-olds and reached 3,606 among 20-29 year-olds. The corrected <u>screening rate</u> was rising across all age groups, except among 0-9 year-olds, where it fell slightly (-4%). It exceeded 10,000 per 100,000 inhabitants among 10-59 year-olds and was highest among 20-29 year-olds (19,016). The <u>positivity rate</u> was equally on the rise in all age groups. It was highest among 0-9 year-olds and 30-39 year-olds (19.2%). In school children, the corrected incidence rate was highest among 15-17 year-olds, reaching 2,289 (+176%), with a corrected screening rate of 13,210 (+26%) and a positivity rate of 17.3% (+9.4 points).

Weekly evolution of the incidence rate per 100,000 inhabitants by age group since week 41-2021, France (data on 5 January 2022)



^{*}rates corrected for the effect of public holidays

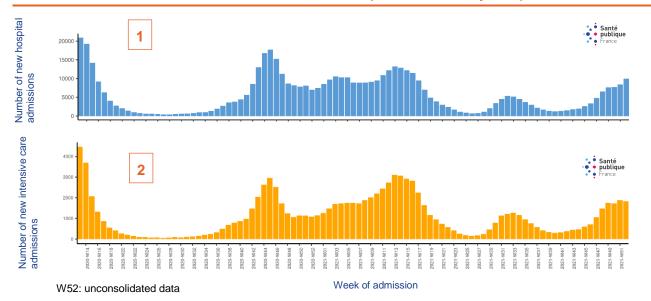
Hospitalisations, intensive care admissions, and deaths

For a better interpretation of hospital indicators, new hospital and intensive care admissions are analysed by date of patient admission to hospital. New deaths (in hospital and long-term care facilities) are analysed by date of occurrence. **Data from week 52, up to 4 January 2022, are not yet consolidated and may be underestimated.**

On 4 January 2022, 20,252 COVID-19 patients were hospitalised in France (vs 17,471 on 28 December, +16%), including 3,678 in intensive care (vs 3,429 on 28 December, +7%).

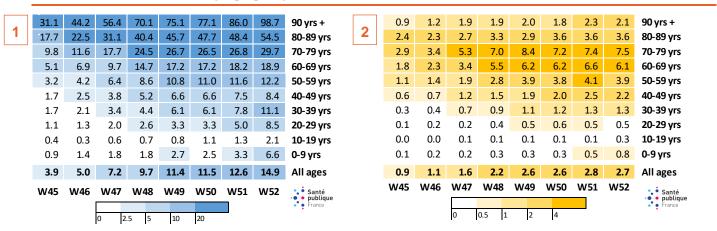
At national level, <u>new hospitalisations</u> were on the increase in week 52 (9,982, +18% in week 52 vs +9% between weeks 51 and 52) while new admissions to intensive care units have remained stable since week 49, (1,822, -3% in week 52 vs +8% between weeks 51 and 52) (unconsolidated data from week 52). Among all COVID-19 hospital patients, the proportion who were admitted for COVID-19 has been stable in recent weeks (84% in S52 vs 86% in S51 for hospitalisations and 94% vs 95% for intensive care).

Weekly number of new hospital (1) and intensive care (2) admissions for COVID-19 patients since 23 March 2020, France (data on 4 January 2022)



In week 52, an increase in weekly rates of new hospital admissions was observed across most age groups; it was more marked in the under-40s, especially among 0-9 year-olds (512 hospital admissions in week 52 vs 259 in week 51). New intensive care admissions were stable in most age groups, except among 0-9 year-olds (61 in week 52 vs 41 in week 51) and 10-19 year-olds (28 in week 52 vs 10 in week 51). The number of paediatric cases in intensive care units remained low, but a significant increase in the number of such cases has been observed over the past 2 weeks. This increase was most marked in children under 2 years of age.

Weekly rate of new hospital (1) and intensive care (2) admissions per 100,000 inhabitants, by age group, from week 45 to week 52, 2021, France



At national level, there were 1,216 deaths in hospital in week 52 (+5% from week 51; unconsolidated data from week 52). In the previous week, this number had increased by 11% compared to week 50. There were also 59 deaths in long-term care facilities (vs 47 in week 51 and 39 in week 50).

data processing by Santé publique France

SI-VIC,

Source:

Situation at the regional level

Incidence, positivity, and screening rates

In **metropolitan France**, the corrected incidence rate increased in all regions and was highest in Île-de-France, Corsica and Auvergne-Rhône-Alpes. It exceeded 1,000/100,000 for the whole country. The positivity rate varied from 14.7% in the Grand Est to 20.5% in Île-de-France, and was increasing everywhere. The corrected screening rate exceeded 10,000/100,000 inhabitants in Corsica, Île-de-France, Provence-Alpes-Côte d'Azur, Auvergne-Rhône-Alpes, Grand-Est and Occitanie. It was rising in all regions, except in Corsica, where it remained stable.

In **overseas France**, the corrected incidence rate increased sharply from week 51 in Mayotte (870, +664%), Guadeloupe (1,218, +486%), French Guiana (912, +395%), Martinique (892, +238%) and Provence-Alpes-Côte d'Azur (1,281, +92%).

Evolution of the incidence, positivity, and screening rates by region from week 46-2021, France (data on 5 January 2022)

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France

	Incidence rate per 100,000 inhabitants						Positivity rate (%)		Screening rate per 100,000 inhabitants		
Regions	W47	W48	W49	W50	W51*	W52*	W52* vs W51* (%)	W52*	W52 vs W51 (point)	W52*	W52* vs W51* (%)
Auvergne-Rhône-Alpes	394	604	683	736	1005	2072	106	19.2	8.7	10,772	13
Bourgogne-Franche-Comté	311	489	558	507	607	1561	157	16.5	8.0	9,436	33
Brittany	215	298	302	294	449	1365	204	15.6	8.9	8,757	31
Centre-Val de Loire	211	311	348	335	442	1297	193	17.0	9.5	7,627	29
Corsica	387	447	635	651	1040	2444	135	15.7	7.5	15,532	23
Grand Est	313	449	485	471	587	1479	152	14.7	7.6	10,066	21
Hauts-de-France	304	418	449	437	501	1363	172	15.1	8.1	9,036	27
Île-de-France	312	449	509	679	1412	3036	115	20.5	10.0	14,826	10
Normandy	180	238	270	302	477	1600	236	16.8	9.3	9,517	49
Nouvelle-Aquitaine	303	427	441	393	529	1279	142	15.5	7.9	8,245	18
Occitanie	332	495	586	592	722	1474	104	14.7	6.7	10,029	11
Pays de la Loire	268	370	395	369	503	1480	194	16.9	9.7	8,739	25
Provence-Alpes-Côte d'Azur	419	590	768	908	1094	1822	67	15.3	6.1	11,916	0
Guadeloupe**	42	38	52	66	208	1218	486	14.2	10.2	8,592	67
French Guiana	90	91	102	120	184	912	395	21.6	15.1	4,213	50
Martinique**	152	176	173	188	264	892	238	10.0	6.0	8,904	34
Mayotte	25	25	31	38	114	870	664	27.1	22.4	3,203	35
Reunion Island	255	312	392	580	666	1281	92	21.0	8.5	6,100	14

^{*}Data corrected for the effect of public holidays (25 December and 1 January)

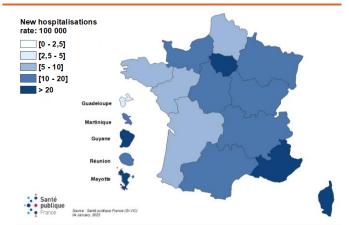
Discrepancies have been noted at departmental level between the SIDEP data received by Santé publique France in recent days and those available to the regional health agencies (ARS). Epidemiological indicators (incidence rate, positivity rate and screening rate) at the departmental level are therefore currently unavailable. Regional indicators are little affected, with the exception of Bourgogne-Franche-Comté and Martinique, and provide visibility on the dynamics of the epidemic across different parts of the country. National indicators are not impacted. All parties involved are working to resolve the issue as soon as possible.

Hospital and intensive care admissions

In metropolitan France in week 52, the weekly rates have increased in the majority of regions. The highest rates of new hospitalisations were still observed in Provence-Alpes-Côte d'Azur, followed by Île-de-France and Corsica. New intensive care admissions were stable or slightly lower in the majority of regions. They were increasing in Centre-Val de Loire (+36%), Occitanie (+17%) and Nouvelle-Aquitaine (+16%) compared to week 51.

In overseas France, new hospital admissions were highest and rising in Mayotte. They were rising across all departments, except in Martinique where they fell. New intensive care admissions were highest in Martinique.

Weekly rate of newly hospitalised COVID-19 patients per 100,000 inhabitants, by region, in week 52-2021, France



For further information on the epidemic situation in the regions, consult the Regional Epidemiological Updates.

^{**}Data uninterpretable in week 47 due to social movements in Guadeloupe and Martinique

Variants

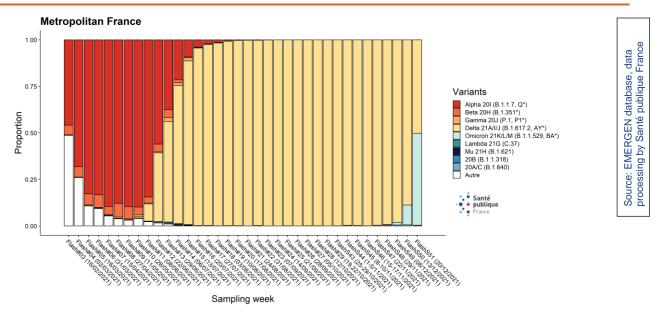
The <u>screening strategy</u> deployed in France aims to reactively detect mutations related to transmissibility, severity or immune escape. Certain mutation profiles suggest the presence of specific variants. The screening strategy is regularly adapted to monitor circulating viruses as closely as possible. As of 20 December 2021, this strategy searches for **E484K** (coded A in the SI-DEP database) and **L452R** (coded C) mutations, and a panel of more specific Omicron mutations (coded D). Screening for mutations included in the D-code is only just being implemented in the laboratories, so this indicator should be analysed with caution.

In week 52, the proportion of **A0C0** samples (compatible with Omicron) increased significantly (74%, i.e. 259,794 results, vs 42% in week 51), with regional disparities. In metropolitan France, the proportion of A0C0 varied between 51% in Provence-Alpes-Côte D'Azur and 90% in Île-de-France. The proportion of A0C0 was also on the rise in Guadeloupe, Martinique and Reunion Island, although it remained lower than in mainland France. Conversely, the proportion of screened positive samples showing the L452R mutation (primarily driven by the Delta variant) continued to fall (25.9% in week 52 vs 57.1% in week 51).

Analysis of results concerning Omicron-specific mutations (code D) must still be undertaken with great caution given that the new screening strategy is being progressively deployed in the laboratories, especially since these mutations were initially searched for in two stages (with preference given to A0C0 samples) in certain laboratories; their proportion is therefore overestimated. In week 52, 114,476 results indicated the presence of a targeted Omicron mutation (D1), representing 76% of interpretable results (vs 53.5% in week 51). All of these indicators are consistent and point to a strong acceleration in the spread of Omicron.

Sequencing data confirm the rapid increase in the spread of the Omicron variant in metropolitan France: it represented 10.7% and of interpretable sequences in the week 50 Flash Survey (13/12/21, based on 3,399 interpretable sequences) and 49% in the week 51 Flash Survey (20/12/21, based on 922 interpretable sequences, unconsolidated data). On 3 January, the Omicron variant had been detected in all regions of metropolitan and overseas France (according to the sequencing database EMERGEN and feedback from regional units). This rapid progression is observed in other countries, notably in Europe. Les données internationales et nationales sur Omicron, en particulier sa présentation clinique, font l'objet d'un Focus dans ce point épidémiologique.

Evolution of the proportion of classified variants (VOC, VOI, and VUM) in the Flash Surveys, metropolitan France (data on 3 January 2021; Flash Surveys from weeks 49, 50, and 51 unconsolidated)



*VOC: variant of concern; VOI: variant of interest; VUM: variant under monitoring.

The **Delta variant** was still identified in 50% of 922 interpretable sequences in the week 51 Flash Survey (unconsolidated data), although this proportion had fallen rapidly from 89% in the week 50 Flash Survey (on 13/12/21, out of 3,399 interpretable sequences) and 98% in the week 49 Flash Survey (on 06/12/21, out of 4,749 interpretable sequences).

Circulation of the variant **B.1.640**, classified as VUM* since the risk assessment on 12 November 2021, continued in metropolitan France: 0.6% and 0.1% in Flash Surveys from weeks 50 and 51, respectively (unconsolidated data). Several cases have also been detected in Reunion Island. The regions reporting the highest number of cases as of 3 January 2022 are Hauts-de-France (189), Île-de-France (185) and Normandy (152), according to the EMERGEN database.

A full update on Omicron and B.1.640 (available knowledge and epidemiological situation) is available in the <u>updated risk assessment from 15/12/2021</u>.

Source: Vaccin Covid, CNAM, data processing by Santé publique France

Vaccination

On 4 January 2022, vaccination coverage in France based on Vaccin Covid was estimated at 77.2% for a complete primary vaccination series* and 38.1% for the booster shot**. Among the population aged 12 years and older, 89.8% had received a complete primary vaccination series. In adults aged 18 years and older, 48.4% had received a booster shot, representing 59.4% of those eligible for the booster** at the time. In the 65+ age group, 72.9% had received a booster shot, representing 82.4% of those eligible for it at the time. In addition, 2.5% of children aged 10-11 years had received a first dose of vaccine (0.6% for 5-9 year olds).

Vaccination coverage for the booster shot and percentage of the eligible population that has received the booster, by age group, France, 4 January 2022

Age group (years)	Vaccination coverage for booster shot (%)	Percentage of eligible population that has received booster
18-24	26.5	34.5
25-29	25.9	34.5
30-39	29.2	39.9
40-49	39.5	49.9
50-59	52.8	62.3
60-64	62.7	72.6
65-69	69.0	79.9
70-74	79.6	84.1
75-79	80.6	85.8
80+	66.9	81.1

On 4 January 2022, 93.0% of **residents in nursing homes and long-term care facilities** had completed a primary vaccination series and 67.1% had received a booster shot. Among the residents who were eligible for the booster, 73.5% had actually received it.

As regards **health professionals**, vaccination coverage for the booster shot was 49.2% (vs. 44.2% on 28 December) for those working in nursing homes or long-term care facilities, 71.5% (vs 68.5%) for professionals in private practice and 50.2% for employees in healthcare institutions (vs 45.3%).

In parallel, 58.6% of **professionals** working in nursing homes and long-term care facilities who were **eligible** for the booster shot had received it. This percentage was 78.6% for professionals in private practice and 59.8% for healthcare employees.

Vaccination coverage of the booster dose among residents in nursing homes and long-term care facilities and among health professionals may be underestimated due to the date the cohorts were assembled (March 2021).

Data on vaccination coverage by department are published on <u>Géodes</u> for metropolitan France. In overseas France, vaccination coverage in the general population is lower, except in Saint-Barthélemy, than that observed in mainland France (see following table).

Vaccination coverage, including booster shot, by region and overseas territory, 4 January 2022

	Vaccination coverage: Single dose (%)	Complete primary vaccination series (%)	Complete primary vaccination series and booster dose (%)
Guadeloupe	37.2	35.2	10.4
French Guiana	31.3	28.0	6.8
Reunion Island	63.7	62.0	19.8
Martinique	39.0	37.0	12.1
Mayotte	54.7	46.3	4.5
Saint Barthélemy	79.5	76.2	27.1
Saint Martin	37.0	34.5	9.1

^{*}The definition of a complete primary vaccination series has previously been <u>published</u>.

For more information on COVID-19, the surveillance systems in place, and vaccination, consult the websites of Santé publique France and Vaccination Info Service
For more information on the regional data, see Regional Epidemiological Updates.

Find all the open access data on Géodes

^{**}Objectives and calculation methods for the indicators of booster vaccination coverage and percentage of the eligible population that has received a booster shot have been <u>described</u> previously. As of December 28, 2021, the booster shot is recommended three months after a complete vaccination cycle for people who have received Pfizer-BioNTech, Moderna or AstraZeneca vaccines, and after four weeks for people who have received a single dose of the Janssen vaccine (booster with mRNA vaccine). In order to allow time for eligible individuals to arrange for their injection, the measurement point is taken to be at least 4 months after the last injection of a complete primary vaccination series for those vaccinated with Pfizer-BioNTech, Moderna and AstraZeneca, and at least 2 months for Janssen. By taking this reduced period into account, the percentages obtained cannot be compared with those previously estimated (on 6- and 2-month intervals).