

# COVID-19 EPIDEMIOLOGICAL UPDATE

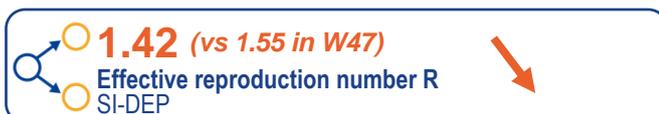
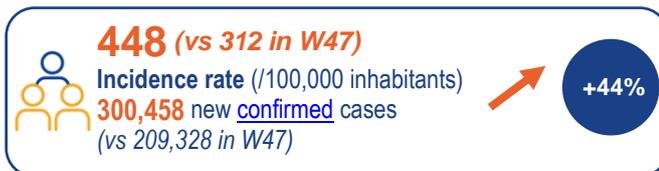
Weekly Report / Week 48 / 9 December 2021

As part of its surveillance, alert, and prevention missions, Santé publique France analyses and publishes COVID-19 data obtained from its network of partners<sup>1</sup> as well as its own studies and surveys. This report is based on data reported to Santé publique France up to 9 December 2021.

## Key numbers

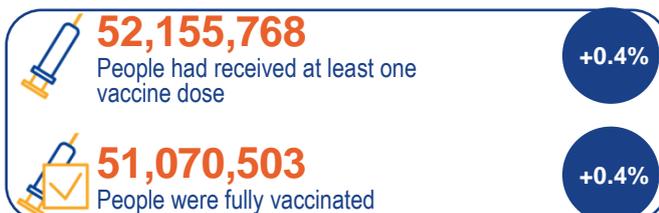
In week 48 (29 November-5 December 2021)

Compared to week 47 (22-28 November 2021)



On 7 December 2021

Compared to 30 November 2021



\*Due to a national strike of SOS Médecins and the cessation of data transmission since 24 November 2021, the data are unavailable.

\*\*Unconsolidated data.

<sup>1</sup>Santé 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.

## Key points

### Epidemiological situation

In week 48, the intense circulation of SARS-CoV-2 continued to accelerate in metropolitan France, with sharp rises in new hospital and intensive care admissions.

#### Metropolitan France:

- Incidence rate higher than the peaks of the third and fourth waves
- Incidence rate above 600 cases per 100,000 inhabitants among 30-39 year-olds and 900 among 6-10 year-olds
- New hospital and intensive care admissions increasing in almost all regions

#### Overseas France:

- Reunion Island: rising incidence rate and new hospital admissions
- Martinique: active circulation of the virus and increase in hospital admissions

### Variants

- Delta variant identified in more than 99% of sequenced samples in the Flash Survey from week 46 (15-17 November)
- 59 confirmed cases of Omicron variant in France as of 4 pm on 9 December
- Moderate circulation of the B.1.640 variant across the country

### Contact tracing

- Decrease in the proportion of cases being investigated (in week 47) due to the high incidence
- Fewer new cases linked to known transmission chains

### Prevention

- Vaccination on 7 December 2021 (Vaccin Covid data):
  - 77.7% of the French population had received at least one vaccine dose, and 76.1% were fully vaccinated
  - 51.4% of people aged 65 years and older had received a booster shot, representing 76.4% of the eligible population in this age group
- Importance of combining measures: vaccine and booster shots, adherence to contact tracing, and respect of preventive measures, notably by reducing contacts and working from home

## Week 48 (29 November to 5 December 2021)

### SITUATION UPDATE

In week 48, the already intense circulation of SARS-CoV-2 continued to surge (+44%) in metropolitan France. The incidence rate of 448 cases per 100,000 inhabitants exceeds the peaks of the third and fourth waves. New hospital and intensive care admissions rose sharply but were below the levels observed during the first three waves when vaccines were not yet widely available. In Reunion Island, the incidence rate increased once again, exceeding 300 cases per 100,000 inhabitants. As of 4pm on 9 December, the Omicron variant had been detected in 59 patients in France. Contact tracing data in week 47 indicated a notable fall in the proportion of confirmed cases that could be investigated on account of their sheer number. On 7 December, 76.1% of the French population were fully vaccinated. Among the population aged 65 years and older, 51.4% had received a booster dose. In the current context marked by the high circulation of the virus, screening, rapid self-isolation in the case of symptom onset or positive test results, and contact tracing all remain crucial to limit the transmission of the virus. Vaccine and booster shots as well as the strict adherence to preventive measures, the ventilation of enclosed spaces, and especially working from home are essential in the current epidemiological situation to slow down the spread of SARS-CoV-2 and preserve the healthcare system.

### EPIDEMIOLOGICAL UPDATE

**Nationally**, the incidence rate increased by 44% in week 48 to reach 448 cases per 100,000 inhabitants (vs 312 in week 47). On average, almost 43,000 cases were diagnosed per day. The effective reproduction rate nevertheless fell to 1.42, indicating a slight decline in the circulation of the virus. Rising in all age groups, the incidence rate was the highest among people under 50 years. It reached 628 (+49%) among 30-39 year-olds and 546 (+46%) among 40-49 year-olds. In children, the highest rates were observed among 6-10 year-olds (988, +48%) and 11-14 year-olds (609, +55%). Screening rates were especially high among kindergarten (11,500 for 3-5 year-olds, +46%) and primary school students (18,977 for 6-10 year-olds, +44%). For the entire population, the screening rate rose sharply in week 48, reaching 6,990 per 100,000 inhabitants (+29%). The positivity rate increased to 6.4% (+0.6 points).

The number of consultations for suspected COVID-19 climbed substantially in emergency departments (6,345, +36%) in all age groups.

The number of new hospital admissions continued to rise (5,856, +27%), as did new intensive care admissions (1,369, +33%) (unconsolidated data). On 7 December, 12,778 COVID-19 patients were hospitalised, including 2,364 in intensive care.

**In metropolitan France**, the incidence rate exceeded 400 cases per 100,000 inhabitants in nine regions, being the highest in Auvergne-Rhône-Alpes (599, +52%) followed by Provence-Alpes-Côte d'Azur (586, +40%), where the screening rate was also the highest (above 8,000/100,000 inhabitants). New hospital and intensive care admissions increased in the majority of regions and age groups.

**In overseas France**, the incidence rate continued to climb in Reunion Island (311, +22%) accompanied by an increase in new hospital admissions this week. In Martinique, the incidence rate rose in week 48 despite the lower use of screening due to the social unrest. The rate of new hospital admissions was high and on the rise.

### VARIANTS OF CONCERN

The Delta variant represented 99.8% of interpretable sequences in the latest Flash Survey (15-17 November). As of 4 pm on 9 December, the Omicron variant had been identified in 59 samples in France. Moreover, the B.1.640 variant was detected in several different regions. Data on variants are updated daily on the dashboard [InfoCovidFrance](#).

### CONTACT TRACING

In week 48, the number of new cases increased (+43%), as did the number of new [contacts](#) though at a slower pace (+6%). As the percentage of investigated cases diminished (81% in week 47 vs 96% in week 45) due to the rapid rise in the incidence, the contacts of these uninvestigated cases could not be identified and did not receive health recommendations. This could partly explain the small increase in the number of new contacts in addition to the fall in the percentage of cases previously identified as contacts (15.0% in week 48). Moreover, the number of cases participating in a group event (sport and cultural activities, private or professional gatherings) was down, which could reflect a behavioural change linked to the fifth wave and/or the less comprehensive identification of group events among investigated cases.

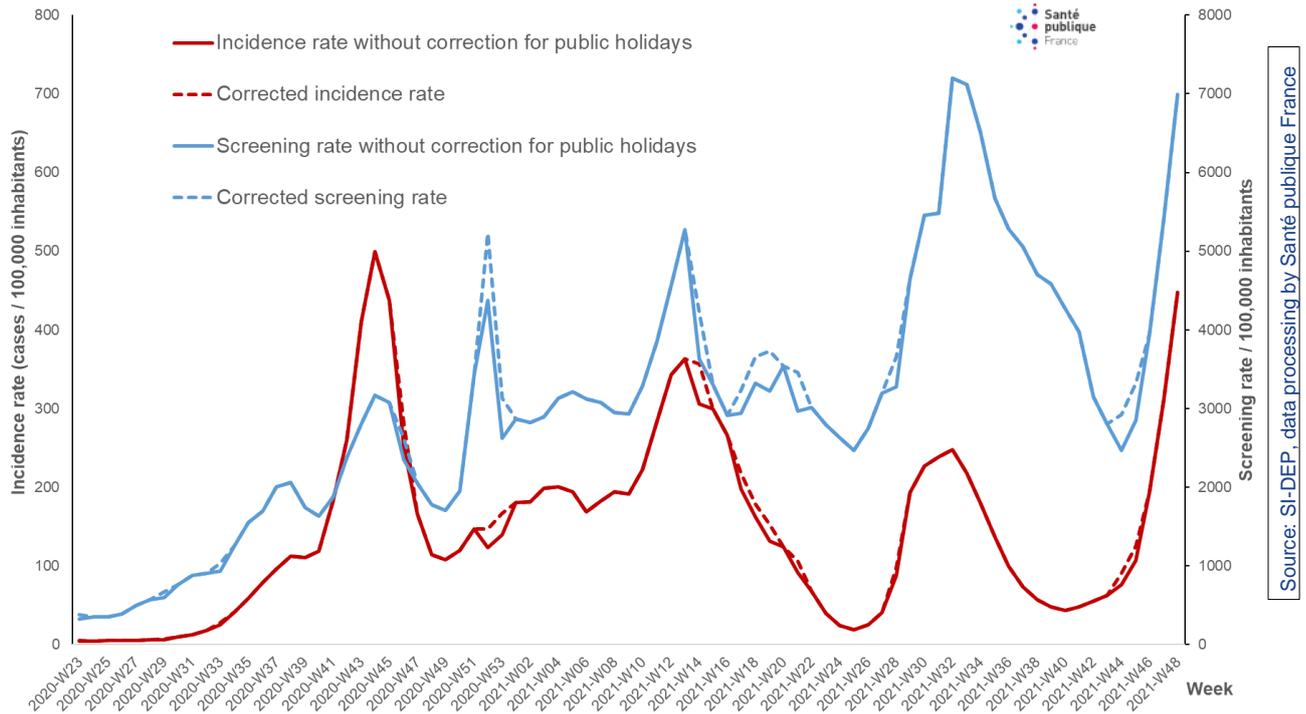
### PREVENTION

On 7 December, 77.7% of the total population had received at least one vaccine dose, and 76.1% were fully vaccinated. Furthermore, 51.4% of people aged 65 years and older had received the booster shot, representing 76.4% of those eligible.

## Confirmed cases, incidence, and screening rates

Nationally, the [incidence rate](#) surged in week 48 to reach 448 cases per 100,000 inhabitants (vs 312 in week 47, +44%). The [screening rate](#) was also on an upward trend (6,990/100,000 vs 5,422 in week 47, +29%), as was the [positivity rate](#) (6.4%, +0.6 points). Among the 4,279,984 tested individuals who provided information about the possible presence of symptoms, 84% were asymptomatic, a stable proportion compared to the previous week. The positivity rate increased among both symptomatic (20.2% vs 18.6% in week 47) and asymptomatic individuals (3.8% vs 3.4%). Nevertheless, the proportion of symptomatic cases has fallen over the past few weeks (50% vs 52% in week 47 and 54% in week 44).

### Weekly trends in the incidence and screening rates, with or without correction for the effect of public holidays, since 1 June 2020, France (data on 8 December 2021)



### Incidence and screening rates by age group

In week 48, the [incidence rate](#) increased sharply in all age groups (from +21% for 70-79 year-olds to +53% for 10-19 year-olds). The incidence rate exceeded 400 cases per 100,000 inhabitants among those under 50 years and reached 628 among 30-39 year-olds (+49%). A rise in the [screening rate](#) was observed in every age group. The greatest increase occurred among 0-9 year-olds (11,998, +44%) followed by 10-19 year-olds (9,263, +34%). In other age groups, this increase ranged from +12% to +29%. The [positivity rate](#) also increased in all age groups except among 0-9 year-olds in whom it was stable (4.8%, +0.1 points). It was the highest among 40-49 year-olds (8.1%, +1.1 points) and the lowest among those aged 90 years and older (4.3%, +0.6 points).

### Weekly evolution of the incidence rate per 100,000 inhabitants by age group since week 37, France (data on 8 December 2021)

45	32	35	27	29	38	48	55	80	109	142	211	90 yrs +
32	26	25	26	35	43	43	56	67	85	118	146	80-89 yrs
34	32	31	33	43	56	63	80	99	133	183	222	70-79 yrs
40	33	30	29	37	47	57	81	108	155	238	311	60-69 yrs
51	42	37	35	39	46	58	83	116	178	278	389	50-59 yrs
77	63	54	48	53	61	72	110	146	225	375	546	40-49 yrs
111	84	69	64	67	72	85	132	181	269	422	628	30-39 yrs
98	73	61	58	61	57	69	105	151	218	321	455	20-29 yrs
89	72	61	49	50	58	58	81	112	195	345	529	10-19 yrs
94	70	51	41	44	52	44	66	106	211	391	578	0-9 yrs
73	57	48	44	48	55	62	91	125	194	312	448	All ages
W37	W38	W39	W40	W41	W42	W43	W44*	W45*	W46	W47	W48	Santé publique France

\*W44 and W45: rate corrected for the public holiday effect (1 & 11 November)



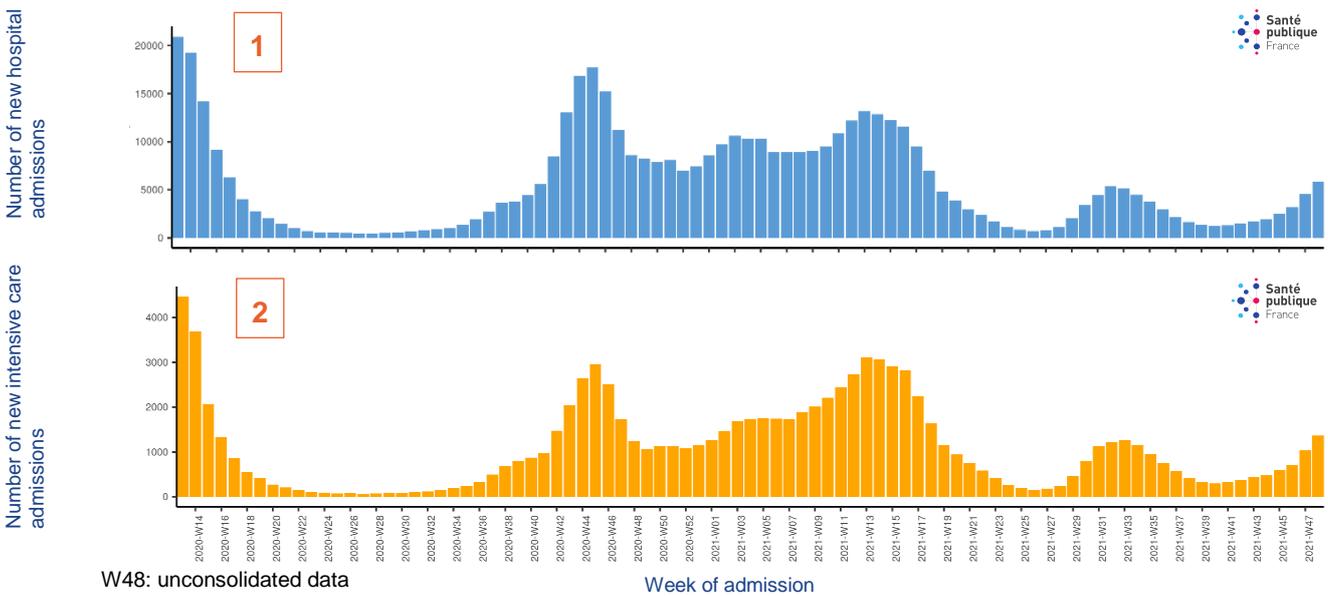
# Hospitalisations, intensive care admissions, and deaths

To better understand the hospital dynamics, 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 48, up to 7 December 2021, are not yet consolidated and may thus be underestimated.**

On 7 December 2021, 12,778 COVID-19 patients were hospitalised in France (vs 10,310 on 30 November, +24%), including 2,364 in intensive care (vs 1,837 on 30 November, +29%).

At the national level, hospital indicators based on the date of admission worsened, with 5,856 [new hospital admissions](#) in week 48 (+27% from week 47, vs +44% between weeks 46 and 47) and 1,369 new intensive care admissions (+33% from week 47, vs +45% between weeks 46 and 47) (unconsolidated data from week 48).

## Weekly number of new hospital (1) and intensive care (2) admissions for COVID-19 patients since 23 March 2020, France (data on 7 December 2021)



Source: SI-VIC, data processing by Santé publique France

In week 48, the weekly rates of new hospital and intensive care admissions increased in the majority of age groups. For intensive care admissions, a greater rise was observed among people aged between 50 and 79 years.

## Weekly rate of new hospital (1) and intensive care (2) admissions per 100,000 inhabitants, by age group, from week 41 to week 48, France

Age group	New hospital admissions (1)								New intensive care admissions (2)							
	W41	W42	W43	W44	W45	W46	W47	W48	W41	W42	W43	W44	W45	W46	W47	W48
90 yrs +	12.3	16.8	19.8	19.4	29.9	41.3	51.7	62.4	0.5	0.8	1.0	1.3	0.9	1.2	1.6	1.6
80-89 yrs	8.2	8.8	11.1	12.4	17.3	21.1	29.1	35.0	1.4	1.2	1.4	1.5	2.3	2.2	2.7	2.8
70-79 yrs	4.4	5.7	6.3	7.9	9.5	11.2	16.8	21.9	1.4	1.8	2.0	2.6	2.9	3.3	5.1	6.5
60-69 yrs	2.6	3.0	3.7	3.9	5.0	6.7	9.4	13.6	0.8	1.2	1.5	1.5	1.8	2.3	3.3	5.2
50-59 yrs	1.6	2.0	2.3	2.3	3.0	4.1	6.3	7.7	0.5	0.7	0.8	0.8	1.1	1.4	1.9	2.6
40-49 yrs	1.2	1.2	1.5	1.5	1.7	2.5	3.7	4.7	0.4	0.4	0.4	0.5	0.6	0.7	1.2	1.4
30-39 yrs	1.3	1.2	1.3	1.4	1.7	2.0	3.3	4.1	0.3	0.4	0.4	0.2	0.3	0.4	0.7	0.8
20-29 yrs	0.8	0.8	0.8	1.1	1.0	1.3	1.9	2.4	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.4
10-19 yrs	0.3	0.2	0.2	0.2	0.4	0.3	0.6	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
0-9 yrs	0.5	0.5	0.6	0.7	0.9	1.4	1.8	1.6	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
<b>All ages</b>	<b>2.0</b>	<b>2.2</b>	<b>2.6</b>	<b>2.9</b>	<b>3.8</b>	<b>4.8</b>	<b>6.9</b>	<b>8.7</b>	<b>0.5</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>	<b>0.9</b>	<b>1.1</b>	<b>1.5</b>	<b>2.0</b>

Source: SI-VIC, data processing by Santé publique France

At the national level, there were **647 deaths in hospital** in week 48 (+41% from week 47; unconsolidated data from week 48). In the previous week, this number had risen by 40% compared to week 46. There were also **25 deaths in long-term care facilities** in week 48 (vs 14 in week 47 and 5 in week 46).

## Situation at the regional level

The indicators for Guadeloupe and Martinique should be interpreted with caution due to the social unrest in these two overseas departments, which could impact the access to services and data transmission.

### Incidence, positivity, and screening rates

In **metropolitan France**, the incidence rate was on the rise, exceeding 300 cases per 100,000 habitants in all regions except for Brittany (296) and Normandy (238). The positivity rate, likewise increasing, ranged from 4.5% in Normandy to 8.3% in Auvergne-Rhône-Alpes. The screening rates climbed in all regions, being the highest in Provence-Alpes-Côte d'Azur and Île-de-France. In week 48, the incidence rate exceeded 300 cases per 100,000 habitants in 71 departments (vs 44 in week 47) and 600 in 17 departments (vs 1 in week 47). The highest rates were observed in Ardèche (871, +43%), Drôme (819, +110%), and Alpes-de-Haute-Provence (701, +64%).

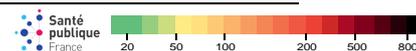
In **overseas France**, the incidence rate increased in Reunion Island (311, +22%) and was stable in French Guiana (89, +0%).

### Evolution of the incidence, positivity, and screening rates by region since week 43, France (data on 8 December 2021)

Regions	Incidence rate per 100,000 inhabitants							Positivity rate (%)			Screening rate per 100,000 inhabitants	
	W43	W44*	W45*	W46	W47	W48	W48 vs W47 (%)	W48	W48 vs W47 (points)	W48	W48 vs W47 (%)	
	Auvergne-Rhône-Alpes	55	85	131	218	394	599	52	8.3	1.0	7,231	33
Bourgogne-Franche-Comté	44	73	95	174	310	486	57	7.7	1.3	6,280	31	
Brittany	54	77	113	142	215	296	38	5.5	0.4	5,405	27	
Centre-Val de Loire	55	77	102	158	211	310	47	6.3	0.7	4,919	30	
Corsica	90	131	218	306	387	446	15	6.2	0.3	7,203	9	
Grand Est	52	85	124	204	313	447	43	6.2	0.8	7,194	25	
Hauts-de-France	55	86	123	194	304	415	37	6.1	0.6	6,758	24	
Île-de-France	74	96	117	191	311	446	44	5.7	0.4	7,877	32	
Normandy	37	55	76	120	180	238	32	4.5	0.4	5,263	20	
Nouvelle-Aquitaine	58	85	124	193	303	425	40	6.7	0.7	6,306	26	
Occitanie	54	79	117	191	332	493	49	7.0	0.8	7,024	32	
Pays de la Loire	84	108	156	199	268	369	38	6.2	0.5	5,989	27	
Provence-Alpes-Côte d'Azur	78	107	160	244	418	586	40	7.1	0.6	8,202	28	
Guadeloupe**	53	57	69	44	42	37	-13	1.6	-0.8	2,282	33	
French Guiana	172	158	118	78	89	89	0	3.6	-0.5	2,472	15	
Martinique**	116	115	139	164	151	174	15	4.4	0.8	3,955	-5	
Mayotte	30	50	34	36	24	24	0	1.4	-0.2	1,785	14	
Réunion Island	61	120	196	223	255	311	22	5.1	0.1	6,044	20	

\*Data corrected for public holidays (1 & 11 November)

\*\*Data non-interpretable due to social movements in Guadeloupe (since W46) and in Martinique (since W47)



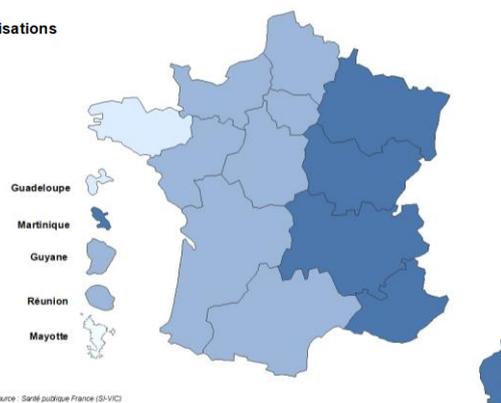
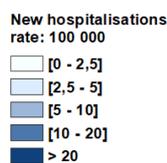
Source: SI-DEP

### Hospital and intensive care admissions by date of admission

In metropolitan France in week 48, the weekly rates of [new hospital](#) and intensive care admissions increased in all regions with the exception of Brittany where they were stable. New intensive care admissions rose in all regions, except for Brittany and Corsica where a fall was observed, and Occitanie where they were stable. The highest rates of new hospitalisations were in Provence-Alpes-Côte d'Azur, Corsica, and Bourgogne-Franche-Comté.

In overseas France, new hospital and intensive care admissions were the highest in Martinique. New hospital admissions increased in Reunion Island and slightly fell in French Guiana. A small decline in intensive care admissions was observed in Reunion Island.

### Weekly rate of newly hospitalised COVID-19 patients per 100,000 inhabitants, by region, in week 48



Source: Santé publique France (SI-VIC) of December, 2021

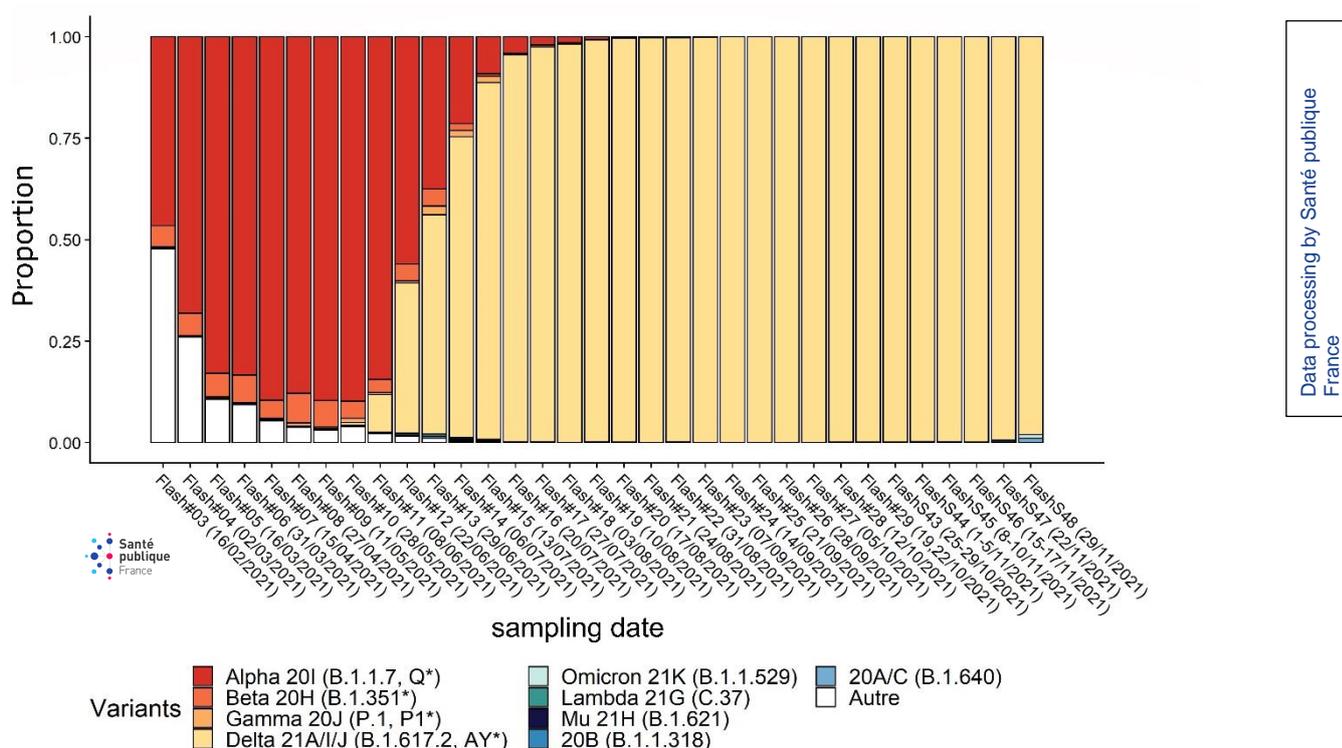
Source: SI-VIC, data processing by Santé publique France

For further information on the epidemic situation in the regions, consult the [Regional Epidemiological Updates](#) (in French only).

## Variants of concern

The **L452R** mutation (primarily driven by the Delta variant) was detected in 97.4% of screened positive samples in week 48 (vs 96.8% in week 47). [Sequencing data](#) confirmed the very clear predominance of the **Delta variant**, which was identified in **99.8% of interpretable sequences** in metropolitan France in Flash Surveys from week 45 (8-10 November, with 5,123 interpretable sequences) and week 46 (15-17 November, with 3,372 interpretable sequences, unconsolidated data). In **overseas France**, Delta was identified **100% of interpretable sequences** in Flash Surveys from week 44 (1-5 November, with 120 interpretable sequences), week 45 (8-12 November, with 108 interpretable sequences), and week 46 (15-17 November, with 137 interpretable sequences) (unconsolidated data for all three surveys). **Delta** was also the dominant strain **at the international level**, representing more than 99% of 335,413 sequenced samples between 8 November and 7 December according to the international database GISAID. The **B.1.640 variant**, classified as VUM since the [risk assessment from 12 November 2021](#), was detected in several regions of metropolitan France as well as Reunion Island. Clusters linked to B.1.640 were also identified in Normandy and Hauts-de-France.

### Evolution of the proportion of classified variants (VOC, VOI, and VUM) in the Flash Surveys, metropolitan France (data on 29 November 2021; unconsolidated data from weeks 46, 47, and 48)



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

The **Omicron** variant (21K, B.1.1.529) was classified as VOC by the WHO on 26 November. Many uncertainties still surround this variant, particularly with regard to its transmissibility, severity, or immune escape potential (post-vaccination or post-infection). The state of knowledge on this variant as well as the international situation are detailed in the [risk assessment from 1 December 2021](#). Preliminary data suggest that Omicron may have greater vaccine escape compared to Delta.

In France, the Omicron variant is the subject of enhanced monitoring, which is detailed in the methodological focus of the Epidemiological Update from week 47. The screening strategy has since been adapted with the development of new indicators. As this variant does not have any of the three mutations currently identified by screening (coded as A0B0C0 in SI-DEP), the proportion of screened samples with **A0B0C0** is now being monitored. This proportion was stable, being **2.6%** in week 48 compared to 3.2% in week 47. A **new code (D)** has also been included in SI-DEP to collect the results of complementary screening that targets the 69-70 deletion, N501Y mutation, and K417N mutation carried by the Omicron variant. On 8 December, **29 results with one of the three target mutations (D1)** were confirmed, representing 1% of interpretable results in which one of the three mutations was investigated. Although these two screening strategies can indicate possible infections with the Omicron variant, only sequencing can provide confirmation, as the profiles A0B0C0 and D1 can be observed with other variants. As of 4 pm on 9 December, **59 confirmed cases of infection with the Omicron variant** were detected in France (according to the sequencing database EMERGEN). The number of confirmed cases with this variant is updated daily on the dashboard [InfoCovidFrance](#).

## Vaccination

On 7 December 2021, vaccination coverage based on Vaccin Covid was estimated at 77.7% for at least one dose, **76.1% for full vaccination**, and 17.3% for the booster dose. Among the eligible population aged 12 years and older, 90.4% had received at least one vaccine dose, and 88.5% were fully vaccinated.

On 7 December, 94.0% of **residents of aged care homes and long-term care facilities** had received at least one vaccine dose, 92.7% were fully vaccinated, and 60.3% had received a booster shot.

### Vaccination coverage of healthcare professionals in France on 30 November and 7 December 2021 (in %)

	At least one dose (%)		Full vaccination (%)		Booster dose (%)	
	30 November	7 December	30 November	7 December	30 November	7 December
Professionals in aged care homes and long-term care facilities	92.5	92.7	91.7	91.9	11.4	18.5
Professionals in private practice	96.9	97.0	96.5	96.6	36.9	47.0
Salaried healthcare workers in healthcare facilities	92.5	92.7	91.8	92.0	13.8	22.0

Vaccination coverage data, previously calculated based on place of vaccination, will henceforth be expressed in terms of the place of residence of vaccinated people. Vaccination coverage estimated in this manner will be more relevant for comparing viral circulation levels throughout the country. Certain people may have been vaccinated against COVID-19 in departments outside of their place of residence, notably during the summer holidays or out of preference for a particular vaccination centre.

From 8 December 2021, the COVID-19 vaccination coverage by place of residence will be published on [Géodes](#) and [data.gouv.fr](#) the day after vaccination (D+1) and updated on a daily basis (metropolitan France only). Estimates for overseas France will be available soon. The publication of vaccination coverage estimates by place of residence will draw on the complete history of data since the start of the vaccination campaign following previously used methods.

### Check out the surveys of the week

Latest data on the [monitoring of COVID-19 cases among professionals working in healthcare establishments](#)

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](#)