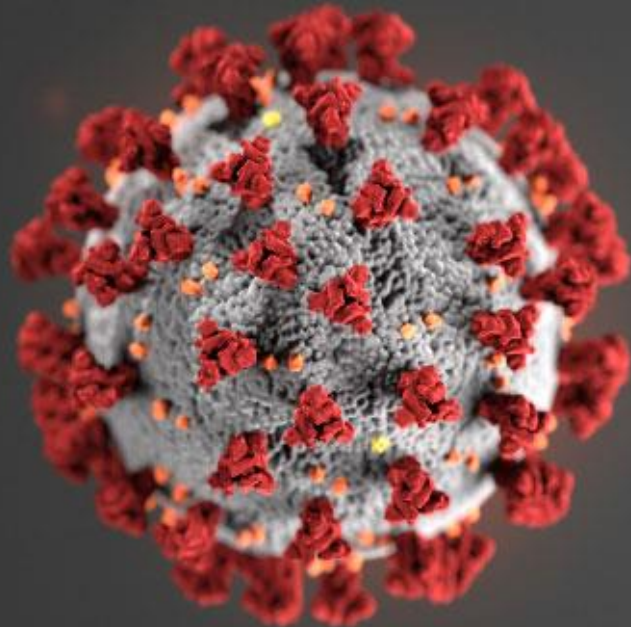


SARS-CoV-2 Report - Portugal

José Luis Pires

30 November 2021

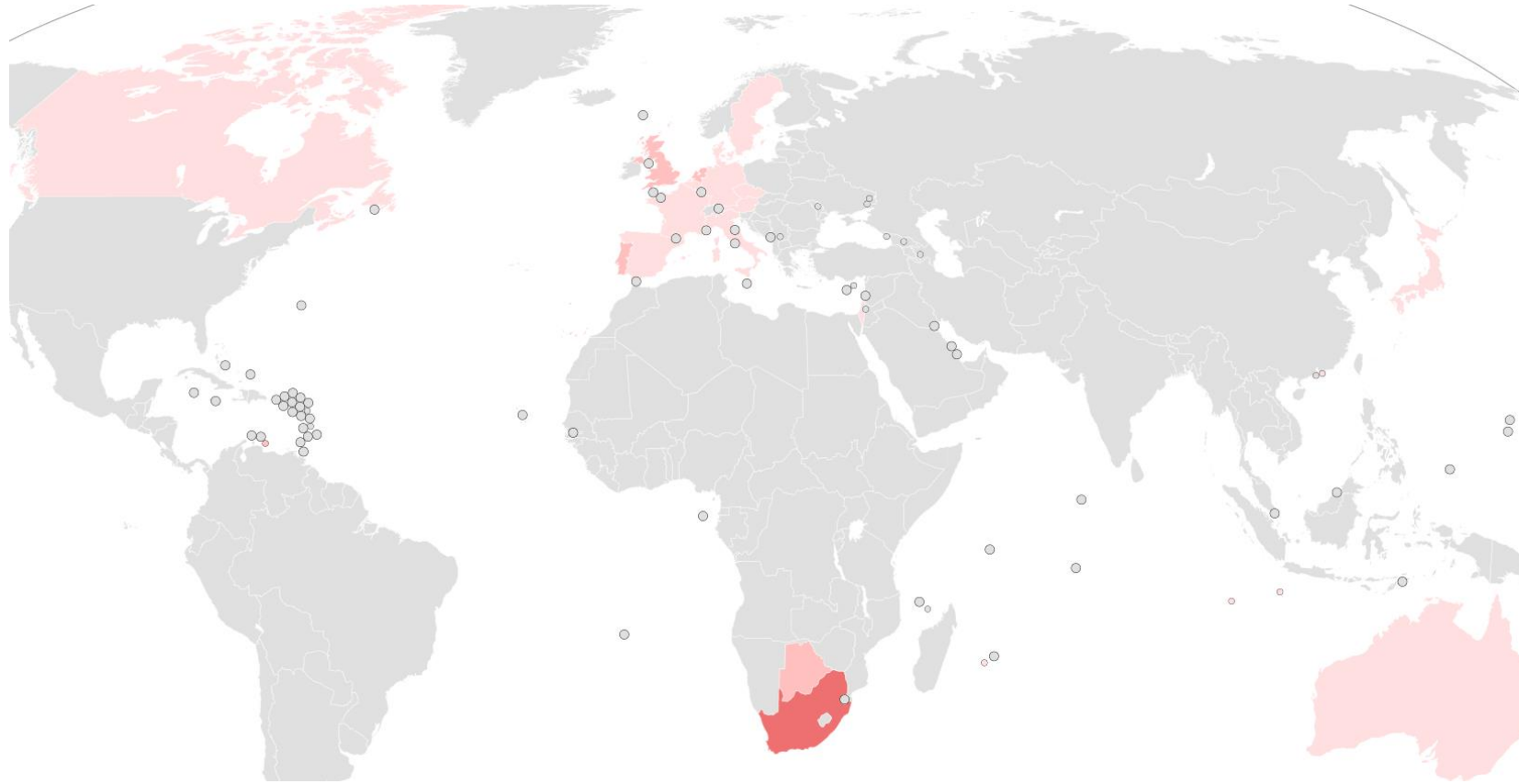


Portugal - Coronavirus (SARS-CoV-2 / COVID 19)

- Omicron – Confirmed Cases by Country
- Portugal – Rates of COVID-19 Hospitalizations, ICU and Deaths by Vaccination Status
- US - Rates of COVID-19 Hospitalizations, Cases and Deaths by Vaccination Status
- US - COVID-19 Vaccine Effectiveness
- Covid-19 Daily Infection Projections in Portugal
- Portugal – New cases per week, Deaths, Hospitalizations and ICU
- Portugal – Fatality Rate
- Coronavirus (SARS-CoV-2 / COVID 19) – Loures
- Coronavirus (SARS-CoV-2 / COVID 19) – Lisbon
- Coronavirus (SARS-CoV-2 / COVID 19) – Lisbon and Tagus Valley - New cases per week
- Portugal Vaccination Plan
- Portugal - cases per 100.000
- Transmission Rate - $R(t)$ in Portugal
- Worldwide – Confirmed cases and deaths by country
- Number of COVID-19 cases reported weekly by WHO Region, and global deaths, as of 21 November 2021
- Cases and Deaths by TOP 10 Countries
- Latest News

Omicron – Confirmed Cases by Country

2021.11.30

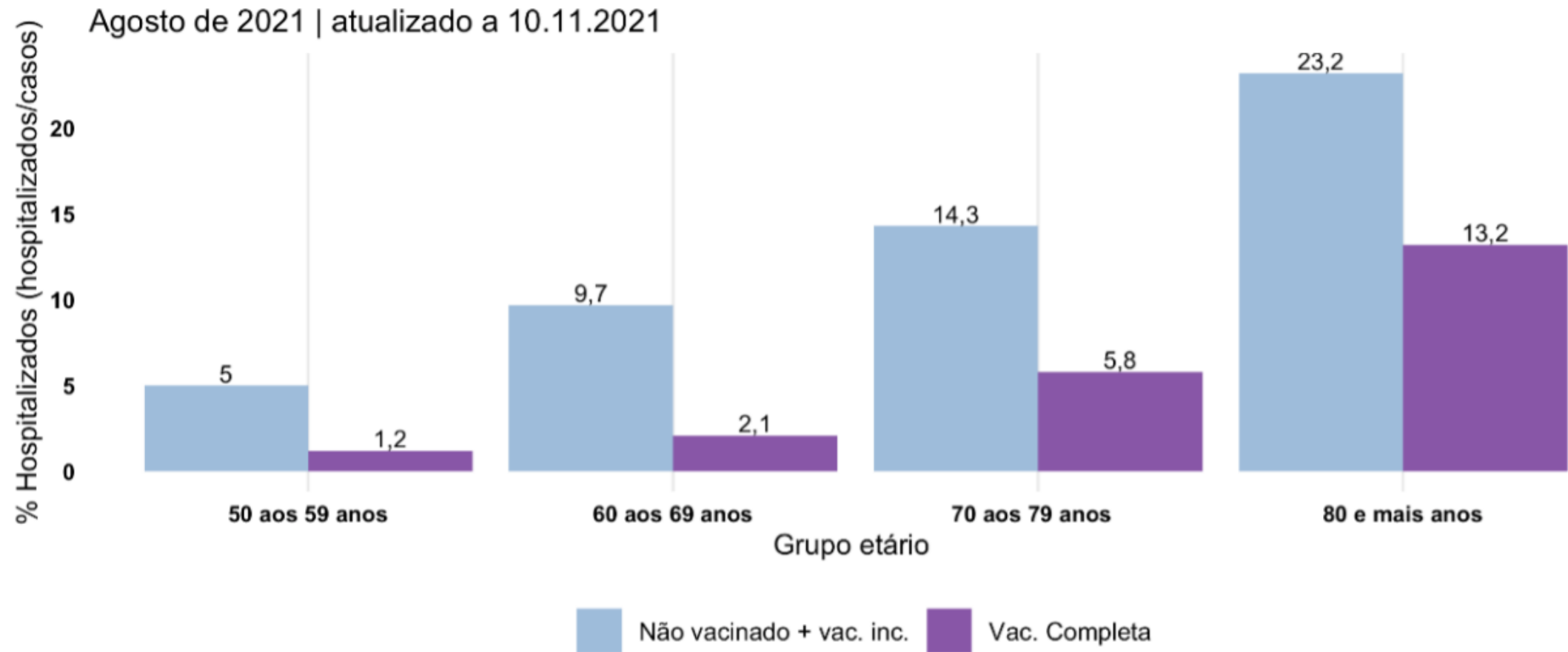


Cumulative confirmed Omicron variant cases by country | 100–999 | 10–99 | 1–9 | 0

Country	Confirmed cases
South Africa	124
United Kingdom	22
Botswana	19
Netherlands	14
Portugal	13
Australia	6
Canada	5
Israel	4
Italy	4
Germany	3
Hong Kong	3
Denmark	2
Austria	1
Belgium	1
Czech Republic	1
Japan	1
Spain	1
Reunion	1
Sweden	1
World (18 countries and Territories)	Total: 223

Source: GISAID, 30 November 2021

Portugal – Rates of COVID-19 Hospitalizations by Vaccination Status

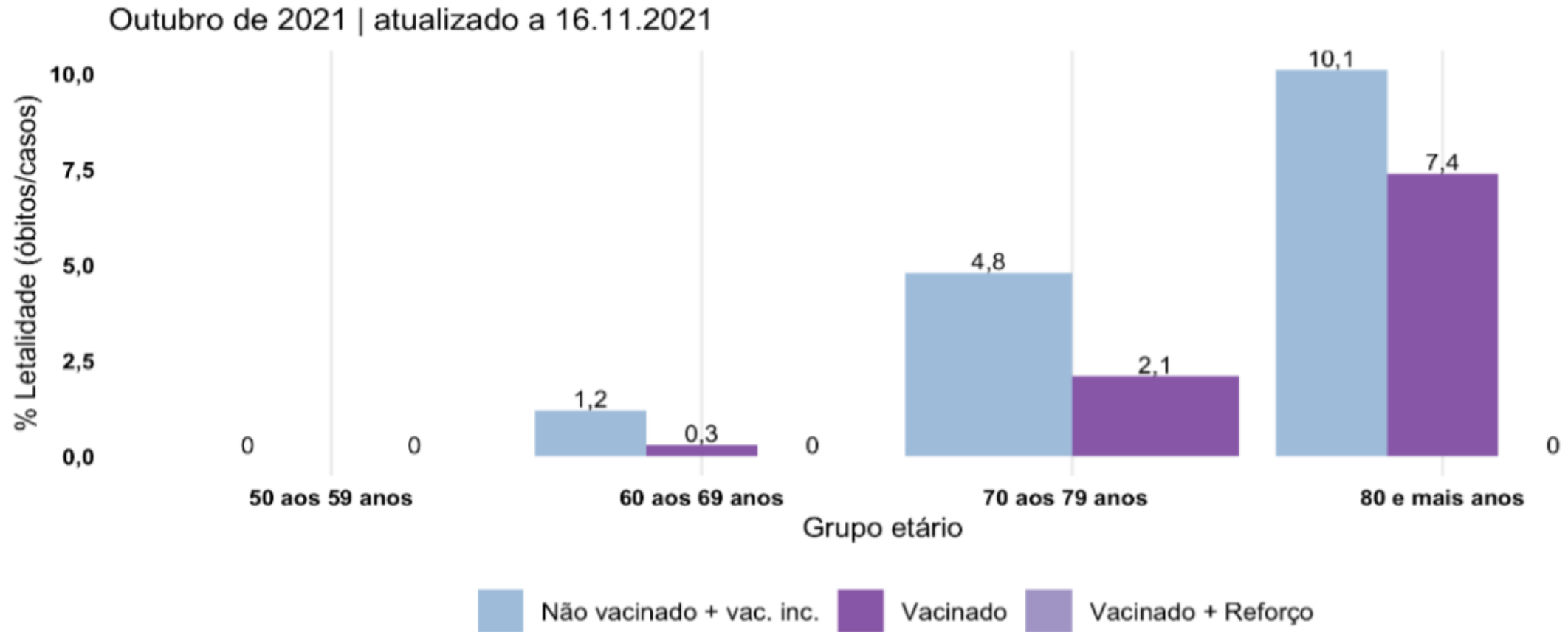


Vac. Completa é definida como esquema vacinal completo há mais de 14 dias

Últimos dados: 2021-11-07

Fonte: BI SINAVE e SICO | Autoria: DGS

Portugal – Rates of COVID-19 Deaths by Vaccination Status

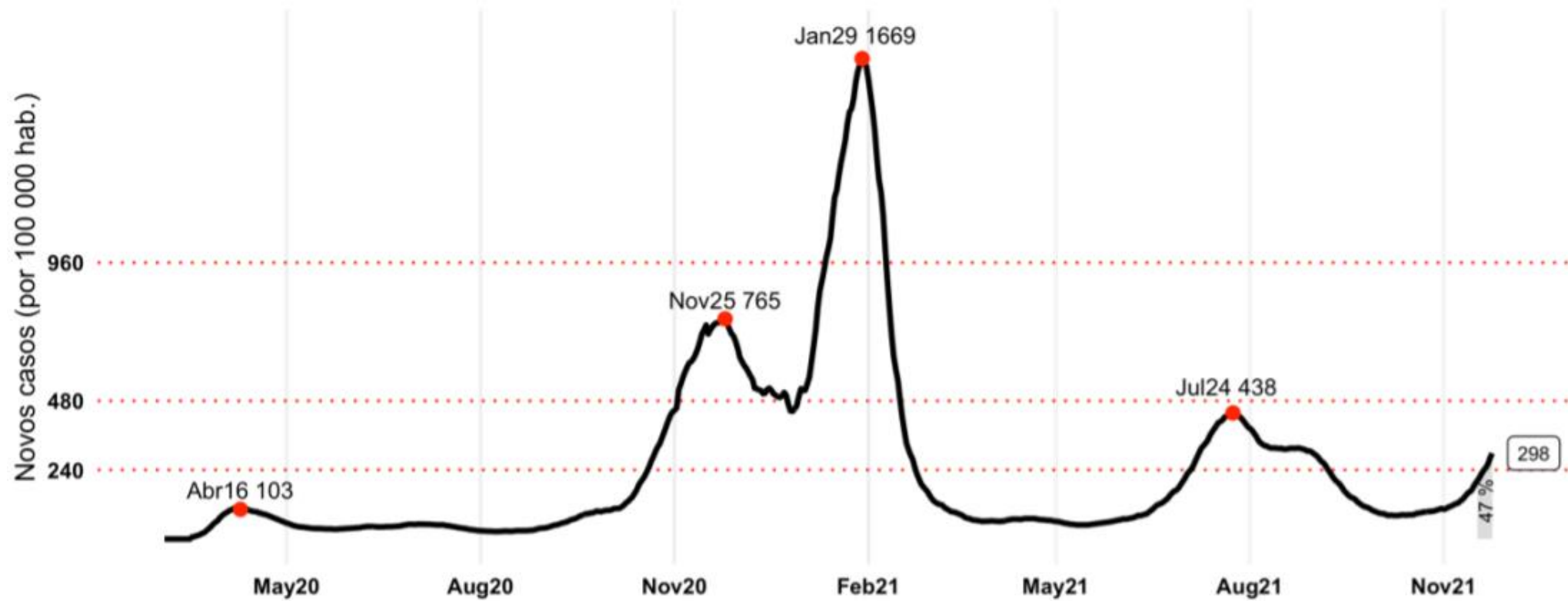


Vacinado é definido como esquema vacinal completo há mais de 14 dias

Últimos dados: 2021-11-14

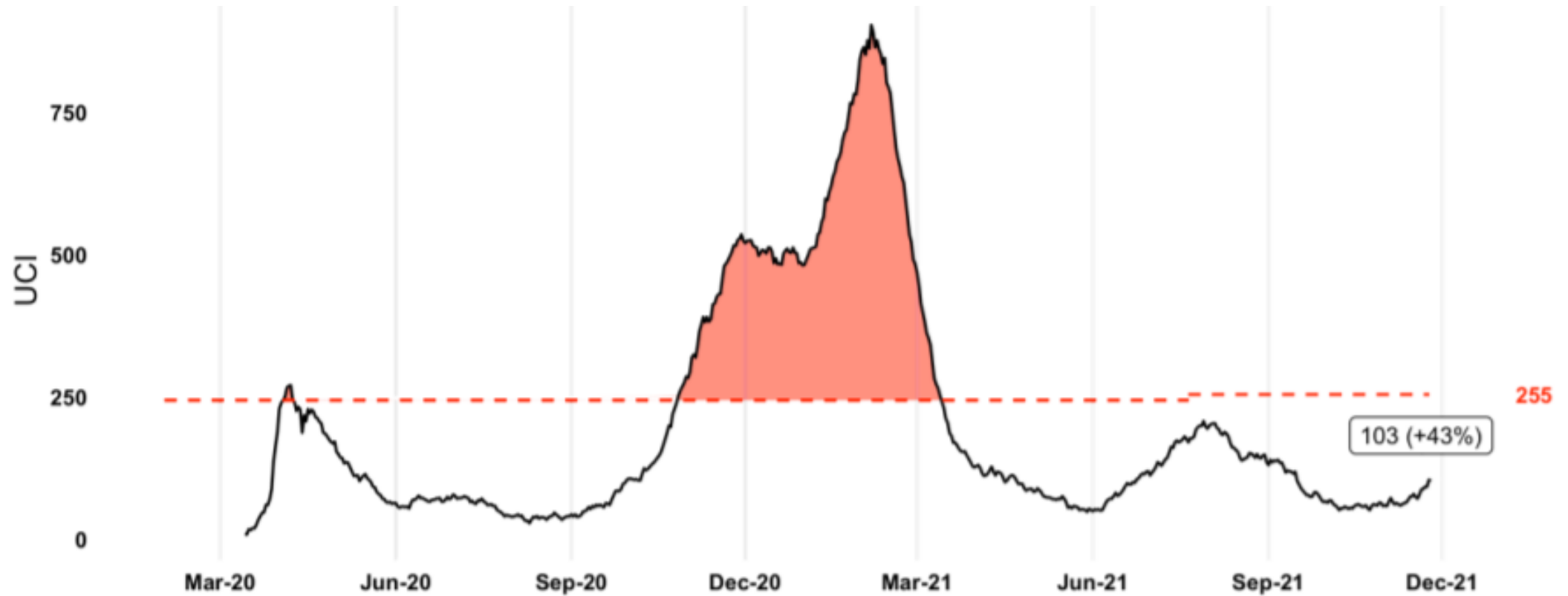
Fonte: BI SINAVE e SICO | Autoria: DGS

Portugal - 14 day cumulative incidence per 100,000 population



Últimos dados: 2021-11-24
Fonte: BI SINAVE | Autoria: DGS

Portugal - Evolution of ICU admissions in hospitals

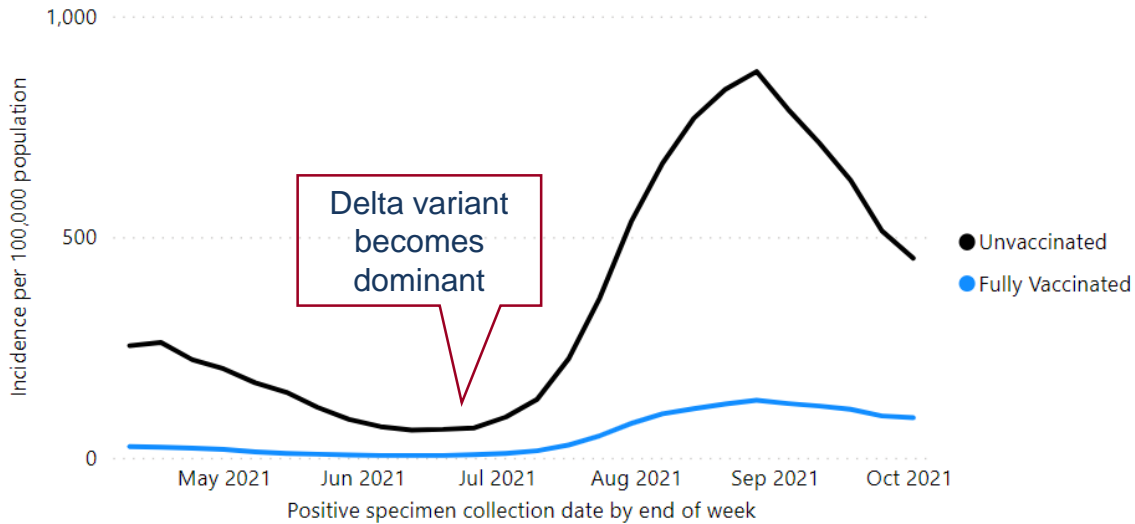


Últimos dados: 2021-11-24
Fonte: ACSS | Hospitais | Autoria: DGS

US - Rates of COVID-19 Cases and Deaths by Vaccination Status

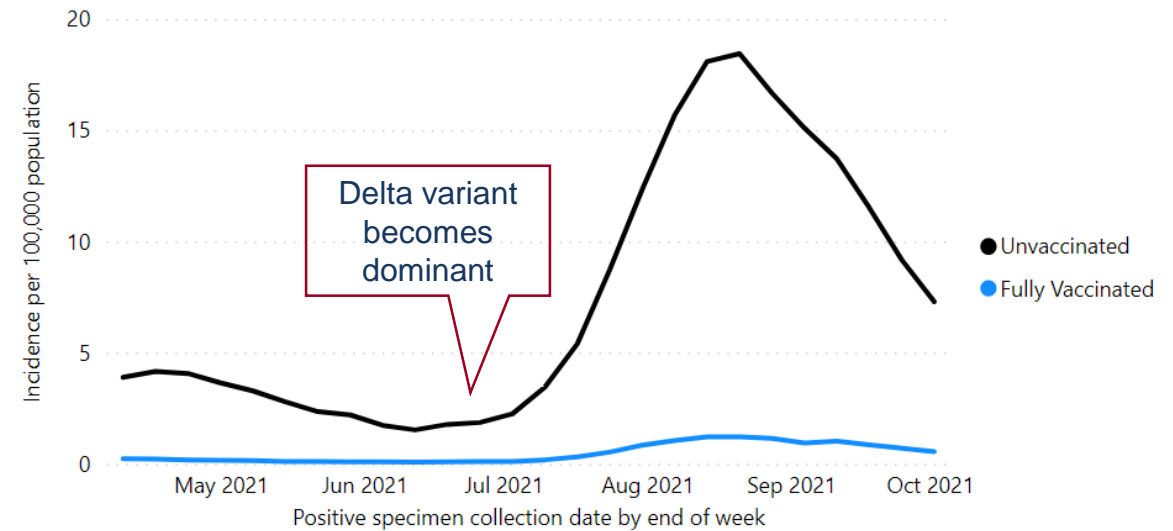
Rates of COVID-19 Cases by Vaccination Status

April 04 - October 02, 2021 (24 U.S. jurisdictions)



Rates of COVID-19 Deaths by Vaccination Status

April 04 - October 02, 2021 (20 U.S. jurisdictions)



In September, unvaccinated persons had:

5.8X

Risk of Testing Positive for COVID-19

AND

14X

Risk of Dying from COVID-19

compared to fully vaccinated persons

Source: CDC



2021

In September, unvaccinated persons had:

5.8X

Risk of Testing Positive for COVID-19

AND

14X

Risk of Dying from COVID-19

compared to fully vaccinated persons

Confidential Hovione © 2021

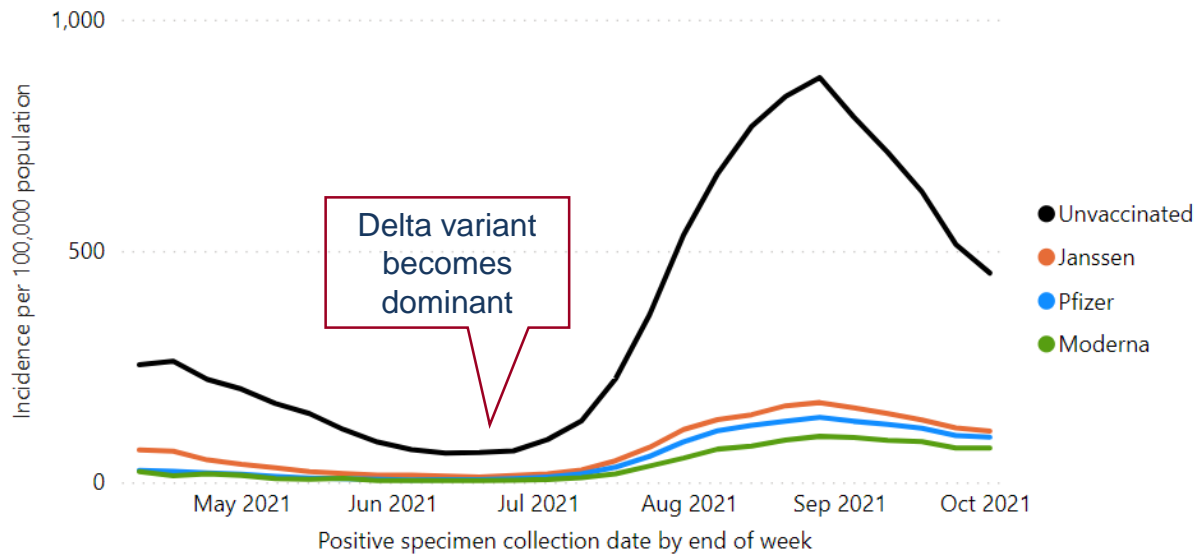
9

In it for life

US - Rates of COVID-19 Cases and Deaths by Vaccination Status and vaccine product

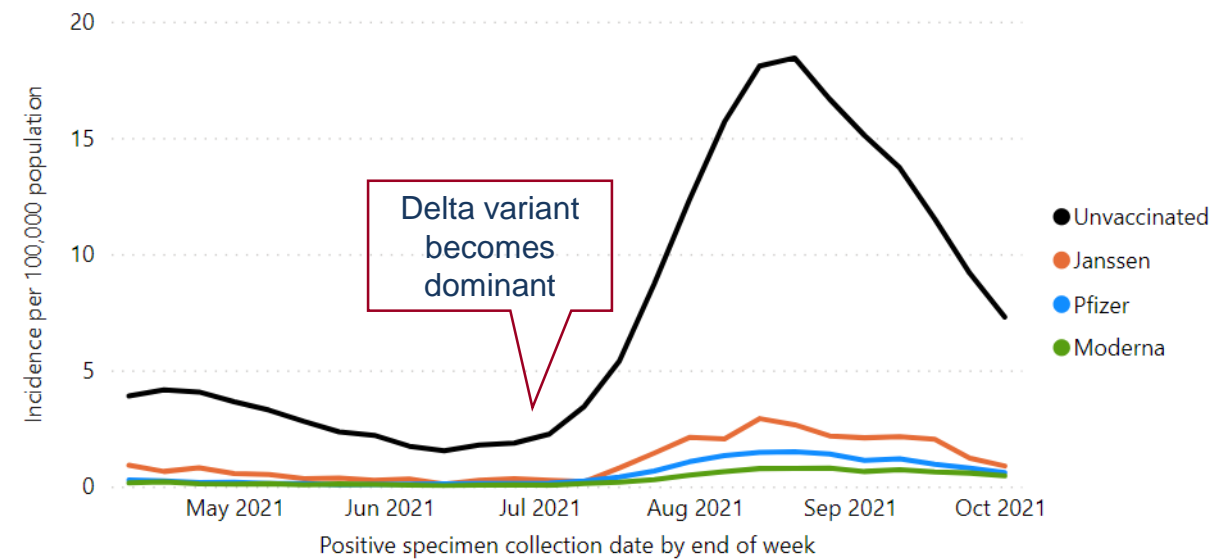
Rates of COVID-19 Cases by Vaccination Status and Vaccine Product

April 04 - October 02, 2021 (24 U.S. jurisdictions)



Rates of COVID-19 Deaths by Vaccination Status and Vaccine Product

April 04 - October 02, 2021 (20 U.S. jurisdictions)



In September, unvaccinated persons had:

5.8X

Risk of Testing Positive for COVID-19

AND

14X

Risk of Dying from COVID-19

compared to fully vaccinated persons

Source: CDC



2021

In September, unvaccinated persons had:

5.8X

Risk of Testing Positive for COVID-19

AND

14X

Risk of Dying from COVID-19

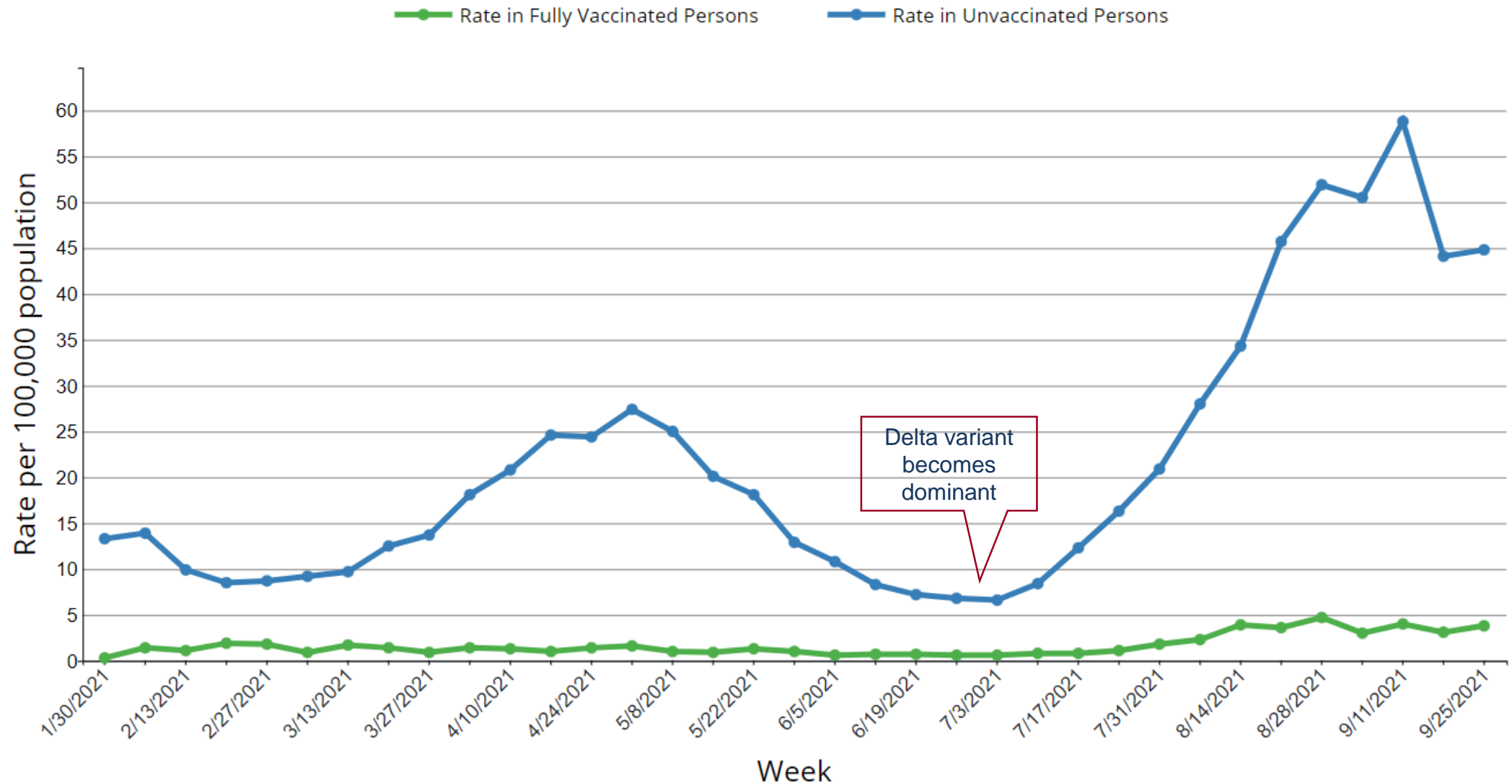
compared to fully vaccinated persons

Confidential Hovione © 2021

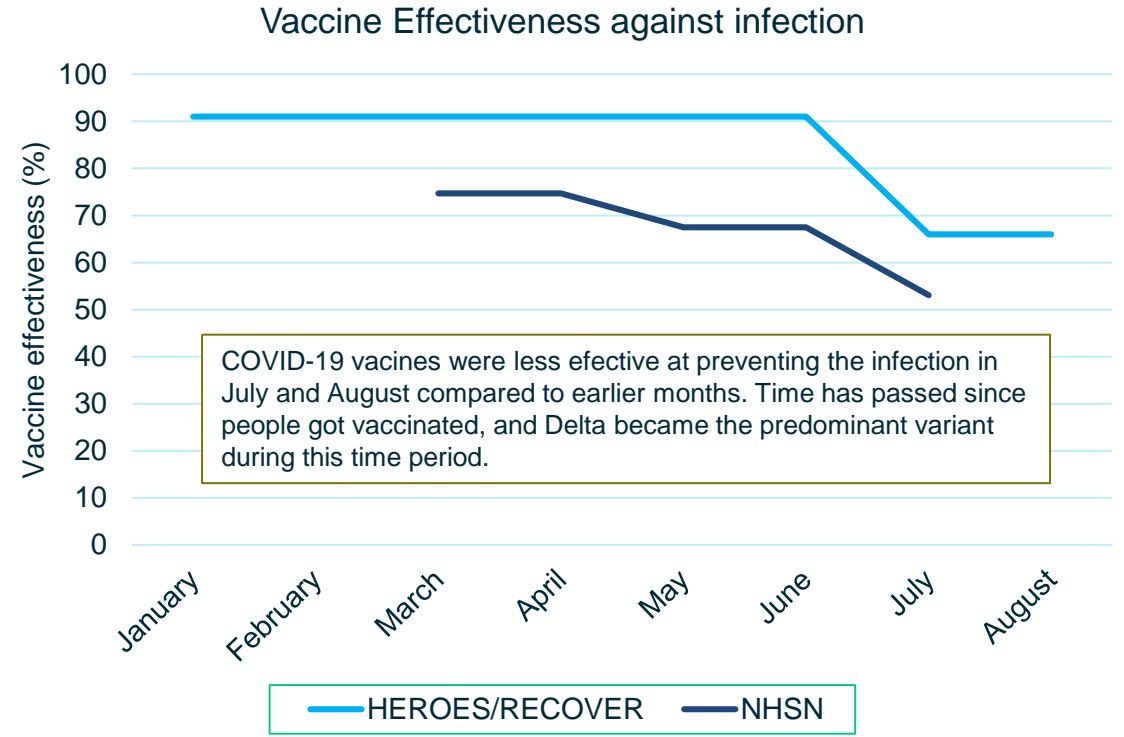
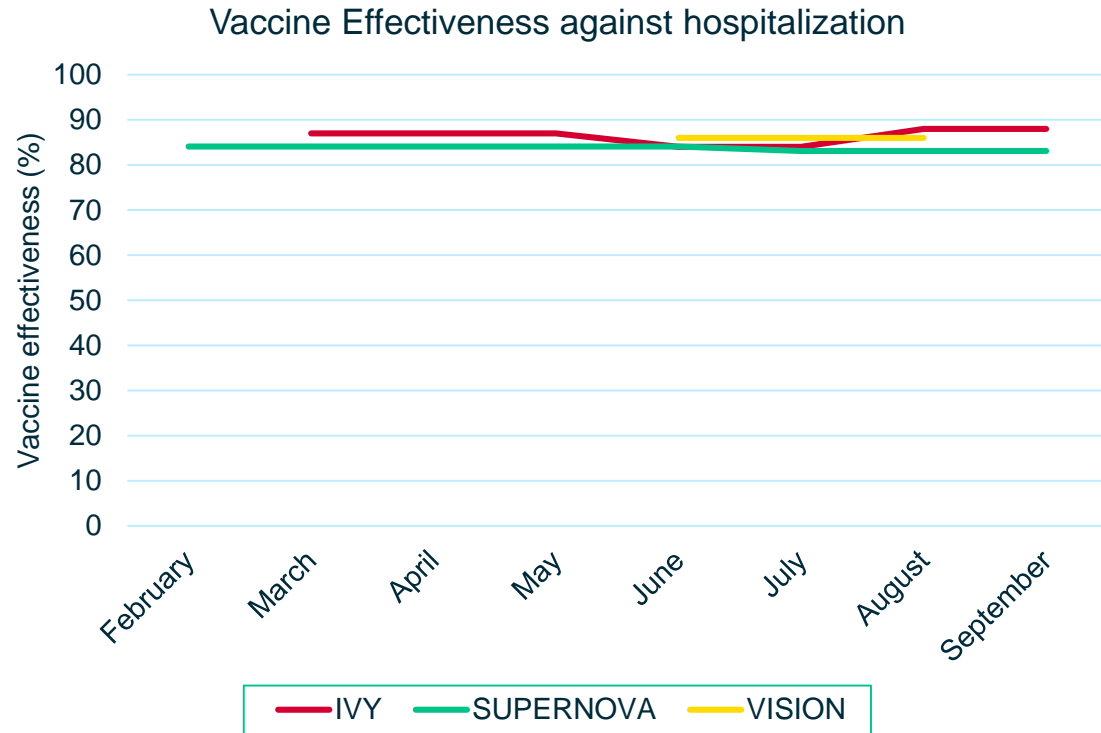
10

In it for life

US - Rates of COVID-19-Associated Hospitalizations by Vaccination Status



US - COVID-19 Vaccine Effectiveness



Outcome monitored	Population monitored	Monitoring system
Infection	Long-term care facility residents	NHSN
Infection	Healthcare providers, first responders and frontline workers	HEROES/RECOVER
Hospitalization and deaths	Hospitalized adults aged 18 years or older	IVY
Hospitalization	Hospitalized Veterans aged 18 years or older	SUPERNOVA
Hospitalization and deaths	Hospitalized people (all ages)	VISION

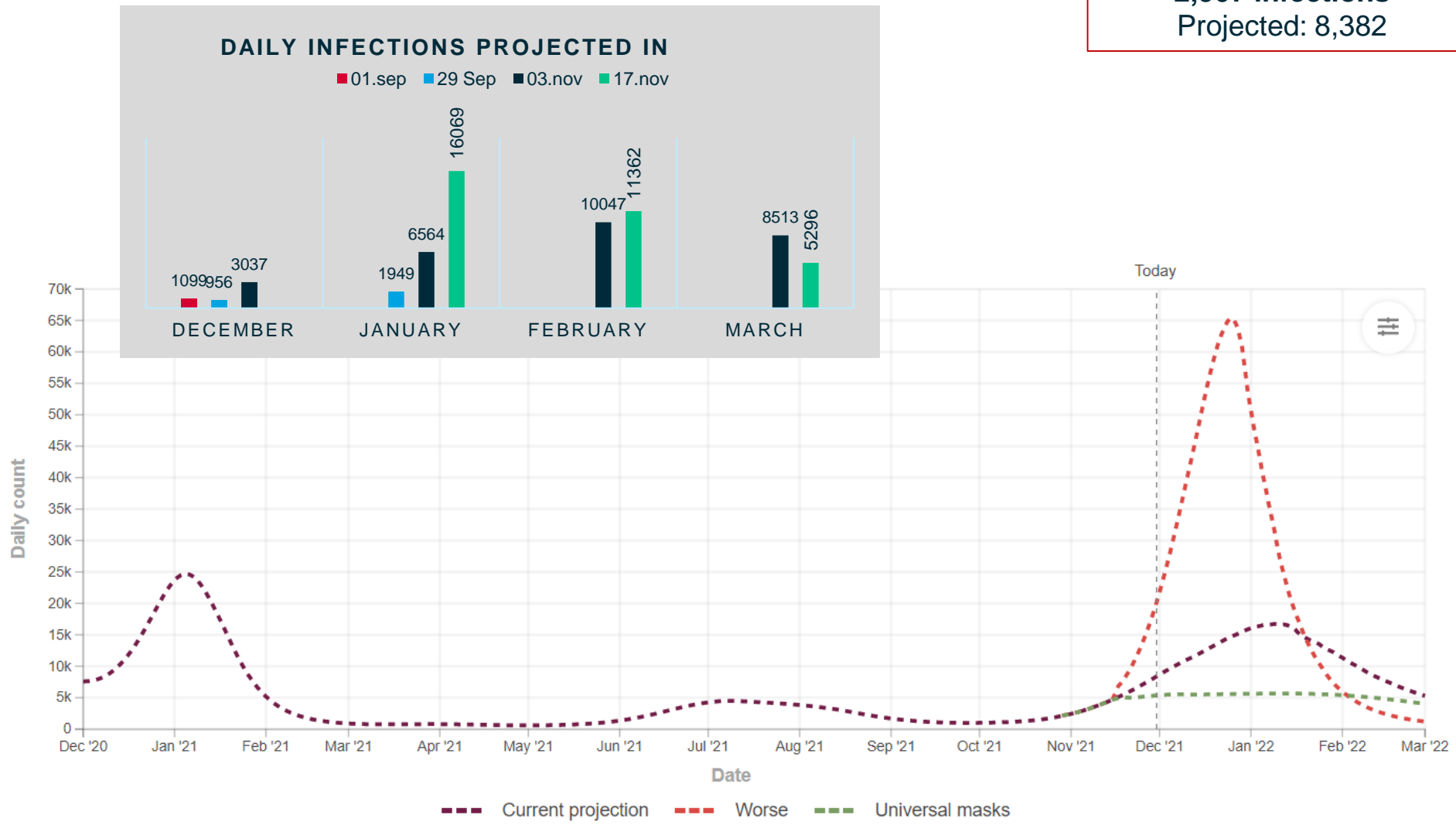
Covid-19 Daily Infection Projections in Portugal

30 Nov 2021
2,907 infections
 Projected: 8,382

Current projection : Vaccine distribution is scaled up over 90 days. Variant B.1.1.7 continues to spread in certain locations.

Worse : In those who are vaccinated, mobility moves toward pre-COVID-19 levels.

Universal masks : 95% mask usage is adopted in public.



Projection Daily Infections

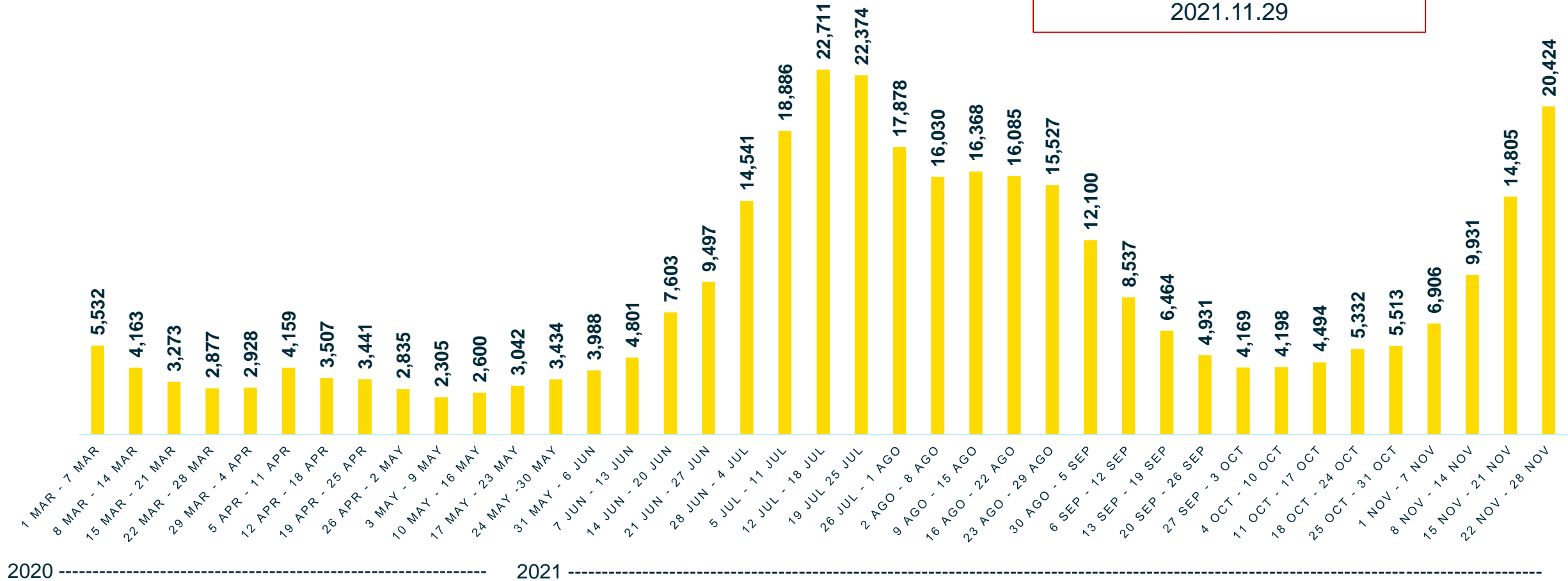
For 1 March 2022

17 Nov Projection: 5,296

Source: Institute for Health Metrics and Evaluation / University of Washington - <https://covid19.healthdata.org/portugal?view=daily-deaths&tab=trend>

Coronavirus (SARS-CoV-2 / COVID 19) – Portugal – New cases per week

Total Cases in Portugal: 1,144,342
2021.11.29

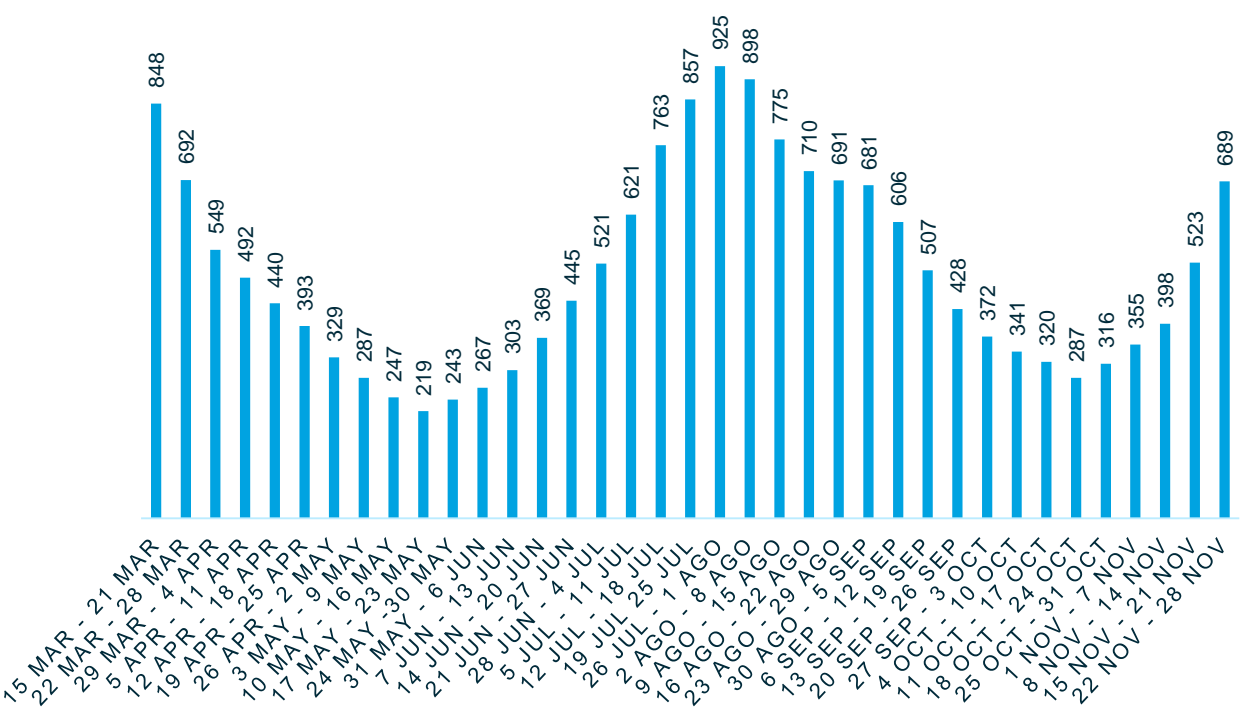


Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

Coronavirus (SARS-CoV-2 / COVID 19) – Portugal – Hospital stable/ICU per week

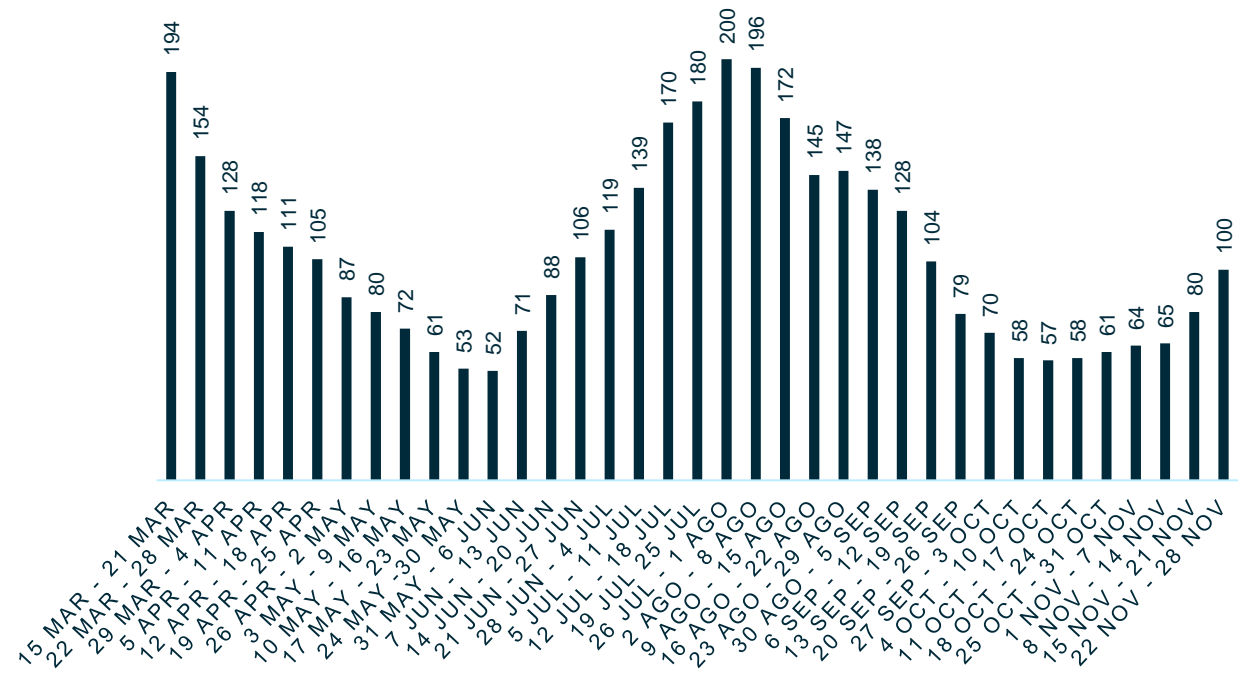
■ Average # of Patients stable in the Hospital per week

Total Patients in the Hospital: 809
2021.11.29



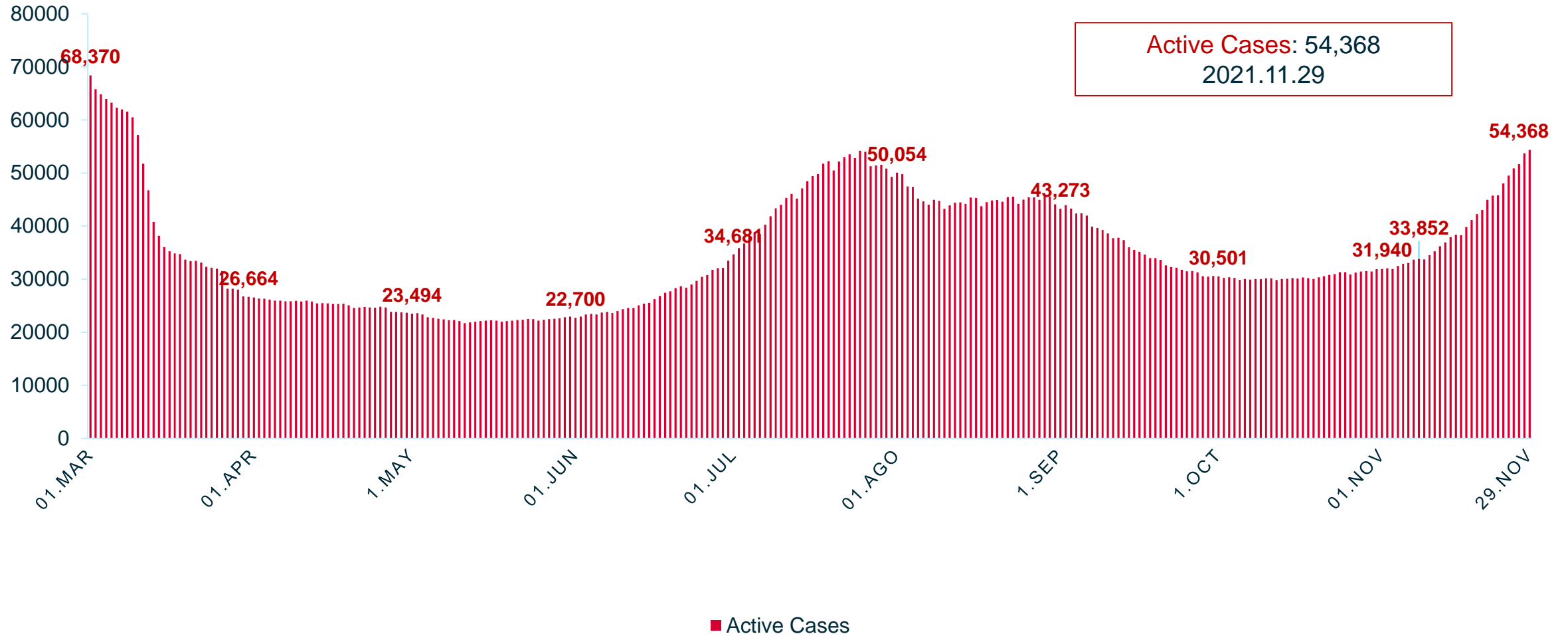
■ Average # of Patients in the ICU per week

Total Patients in the ICU: 111
2021.11.29



Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

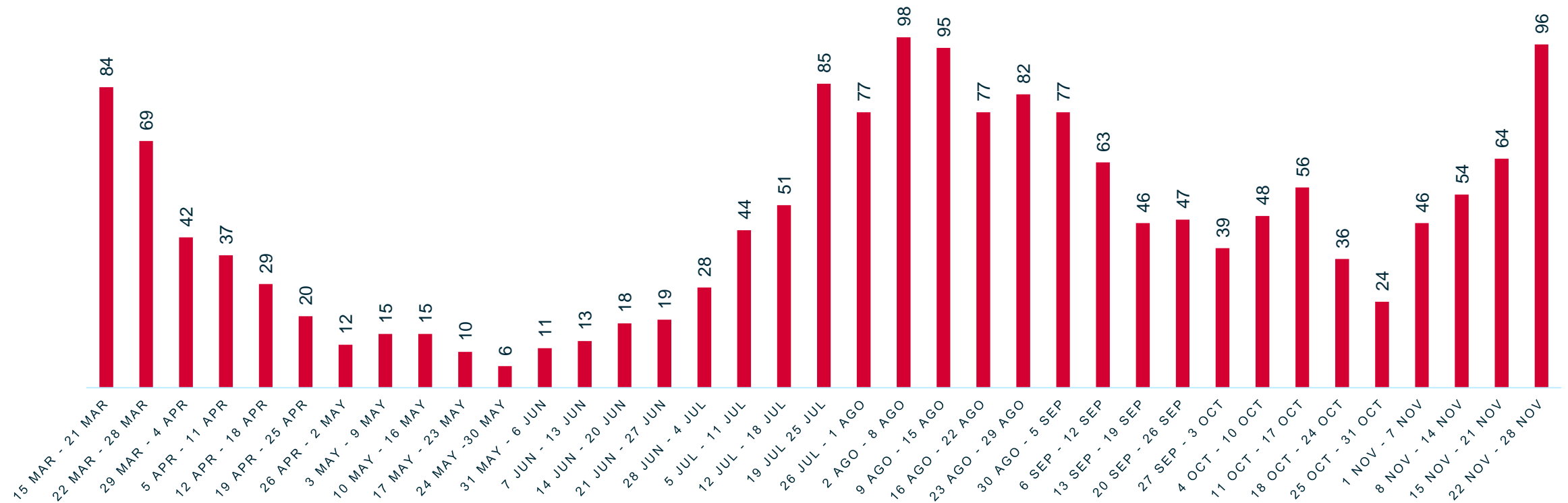
Coronavirus (SARS-CoV-2 / COVID 19) – Portugal – Active cases



Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

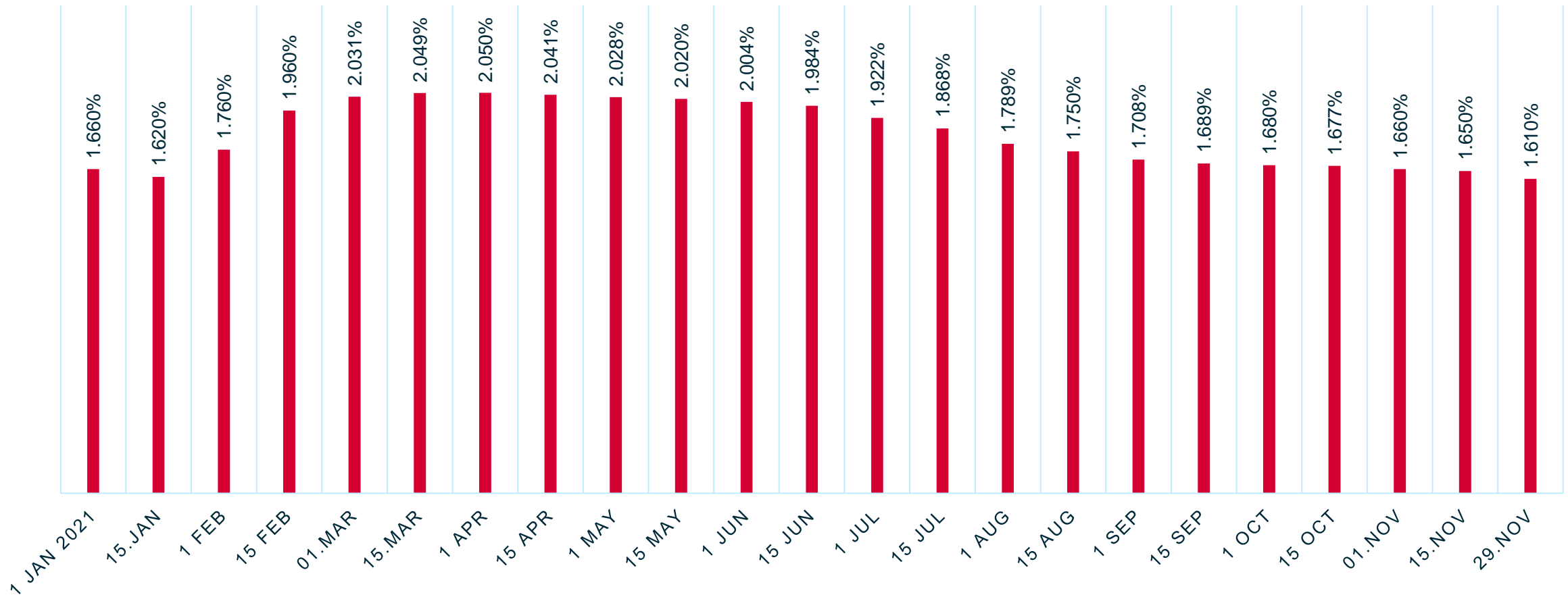
Coronavirus (SARS-CoV-2 / COVID 19) – Portugal – New deaths per week

Total Deaths: 18,430
2021.11.29



Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

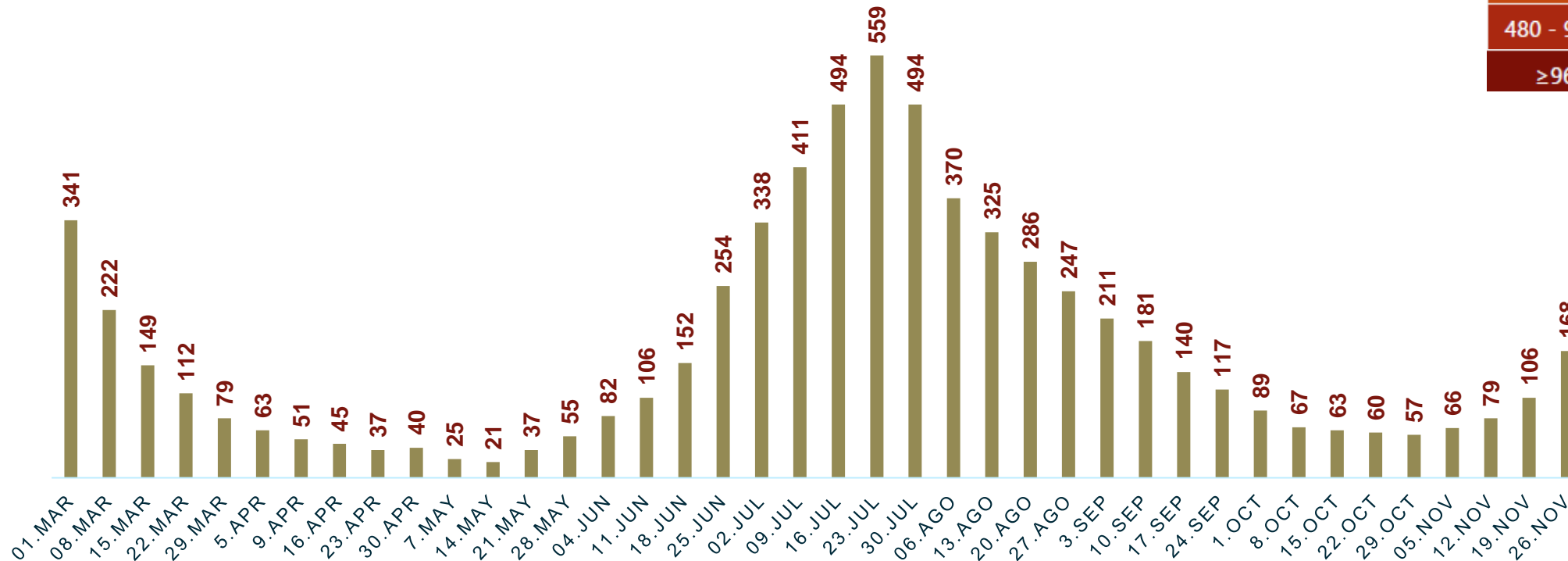
Portugal – Fatality Rate



Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

Coronavirus (SARS-CoV-2 / COVID 19) – Loures

New Cases per 100,000 population

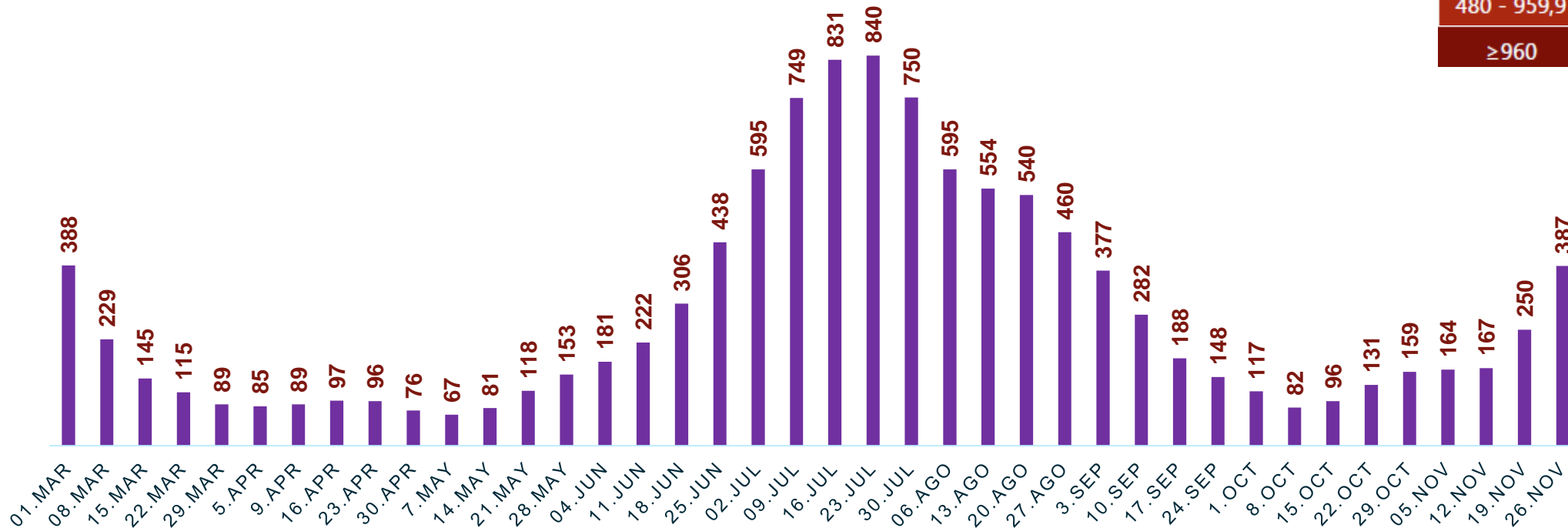


<20	
20 - 59,9	
60 - 119,9	
120 - 239,9	Moderate Risk
240 - 479,9	High Risk
480 - 959,9	Very High Risk
≥960	Extremely High Risk

Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

Coronavirus (SARS-CoV-2 / COVID 19) – Lisbon

New Cases per 100,000 population

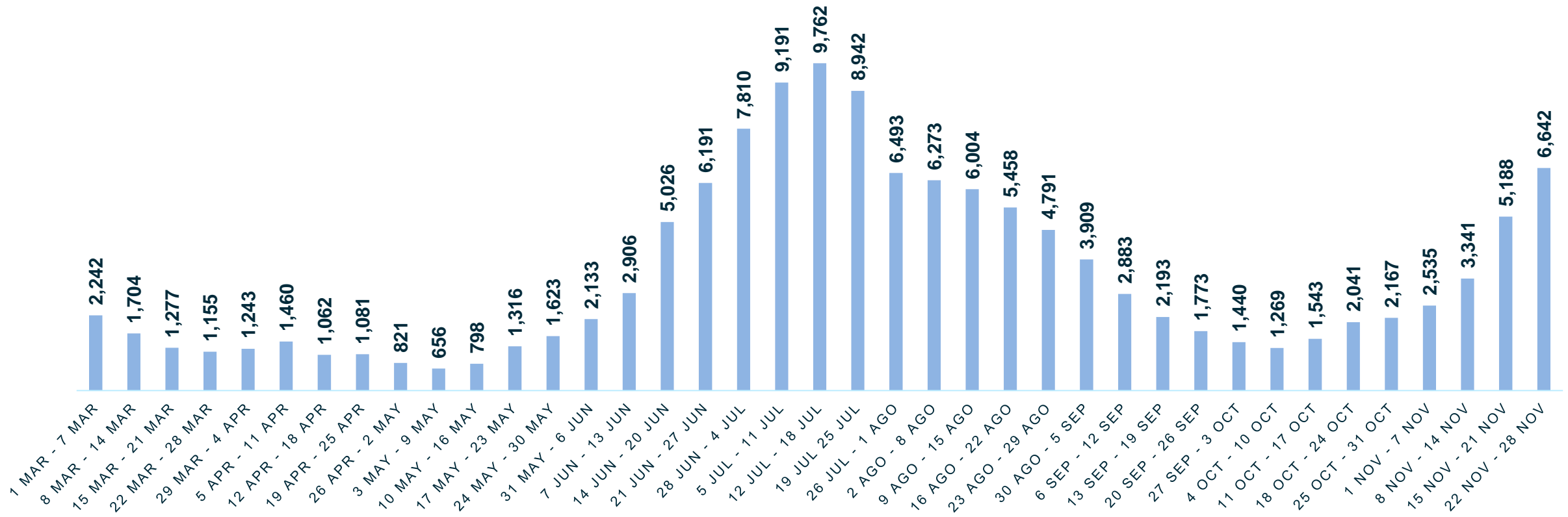


<20	
20 - 59,9	
60 - 119,9	
120 - 239,9	Moderate Risk
240 - 479,9	High Risk
480 - 959,9	Very High Risk
≥960	Extremely High Risk

Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

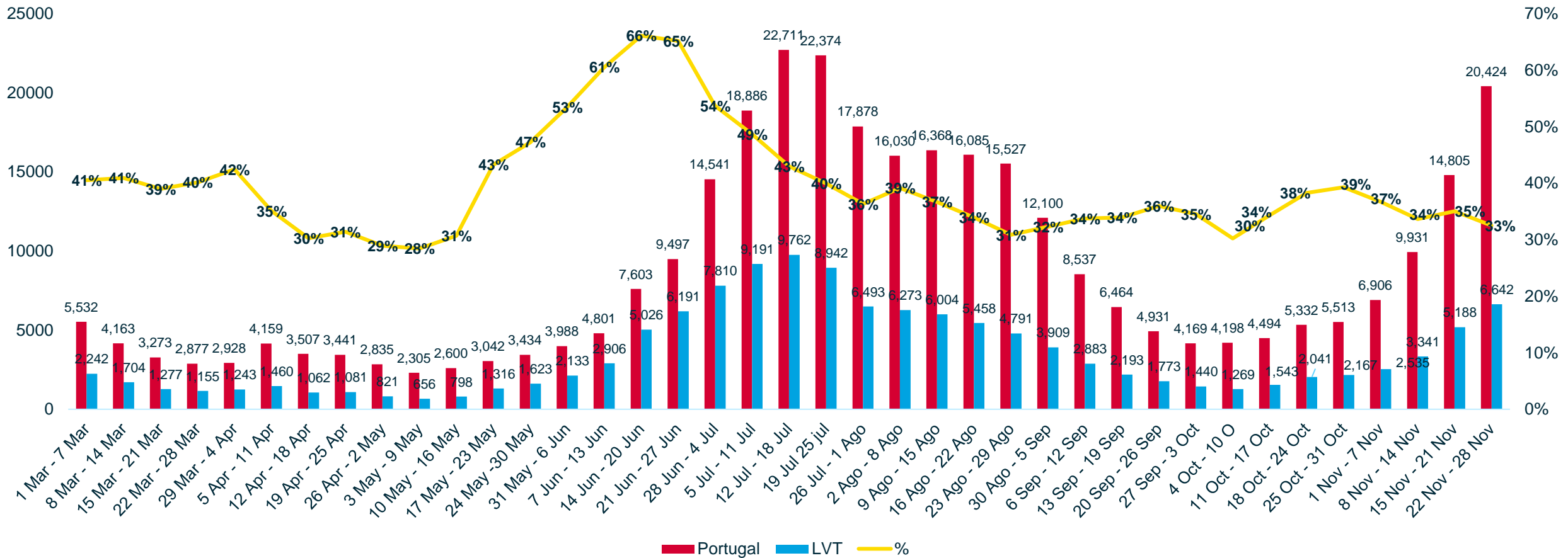
Coronavirus (SARS-CoV-2 / COVID 19) – Lisbon and Tagus Valley - New cases per week

Total Cases in Lisbon and Tagus Valley: 439,437
2021.11.29



Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

Coronavirus (SARS-CoV-2 / COVID 19) – % of new cases in Lisbon and Tagus Valley - New cases per week



Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

Portugal Vaccination Plan

From: 27 Dec 2020
To: 14 Nov 2021

Pessoas com pelo menos
uma dose ¹
9 053 901 (87%)

Pessoas com vacinação
completa ²
8 925 907 (86%)

Existem 2 344 pessoas vacinadas com dose em fase de registo (+13 na semana em análise)

Pessoas com pelo menos uma dose e pessoas com vacinação completa

Grupo Etário	Pelo menos uma dose		Vacinação completa	
	Nº	%	Nº	%
12 – 17	562 026	90%	542 632	87%
18 – 24	729 806	93%	709 115	91%
25 – 49	3 203 605	96%	3 142 142	94%
50 – 64	2 171 685	100%	2 153 029	99%
65 – 79	1 689 071	100%	1 683 474	100%
≥ 80	697 198	100%	695 354	100%

Existem pelo menos 510 pessoas com grupo etário por atribuir

Doses Recebidas



23 017 910

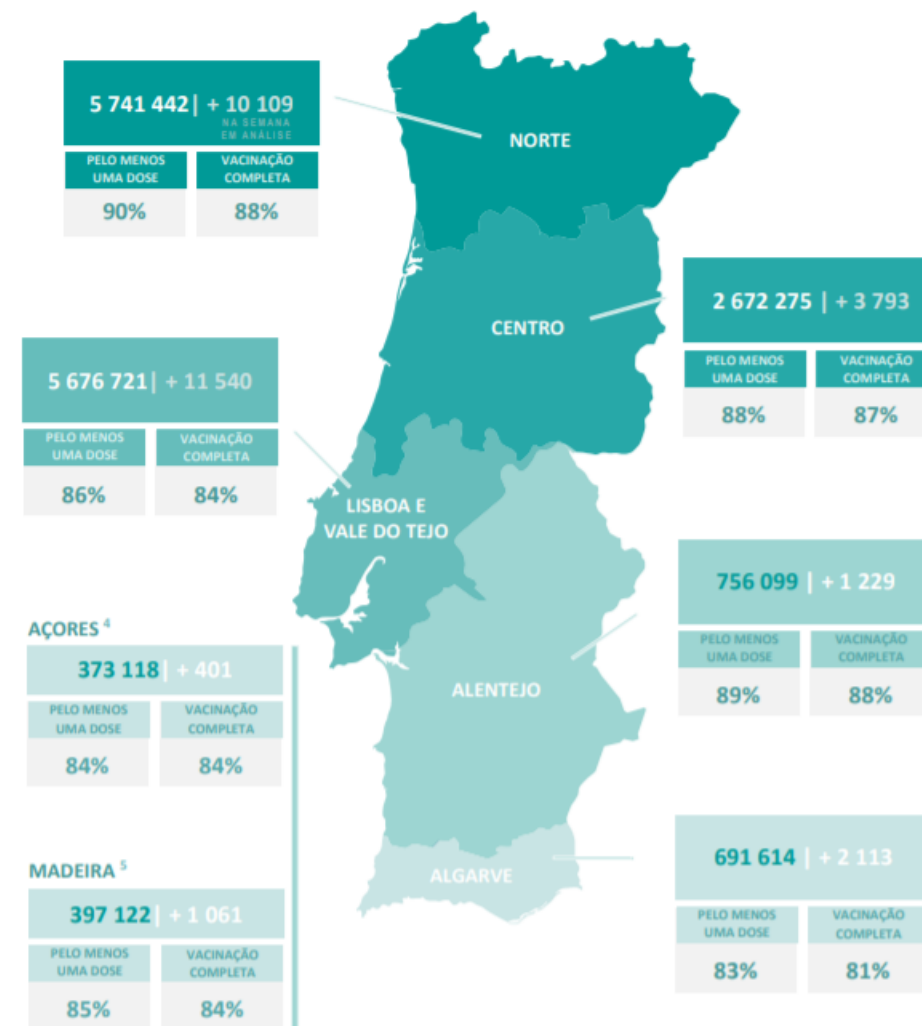
Doses Distribuídas ³



17 211 348

* Valor em atualização

Número de doses administradas e
cobertura vacinal na população residente (%) por região de Saúde



SARS-CoV-2 / COVID 19

Portugal - cases per 100.000

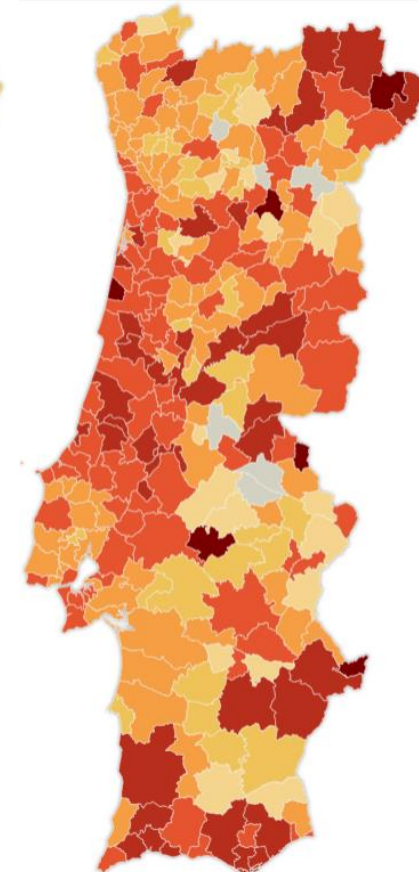
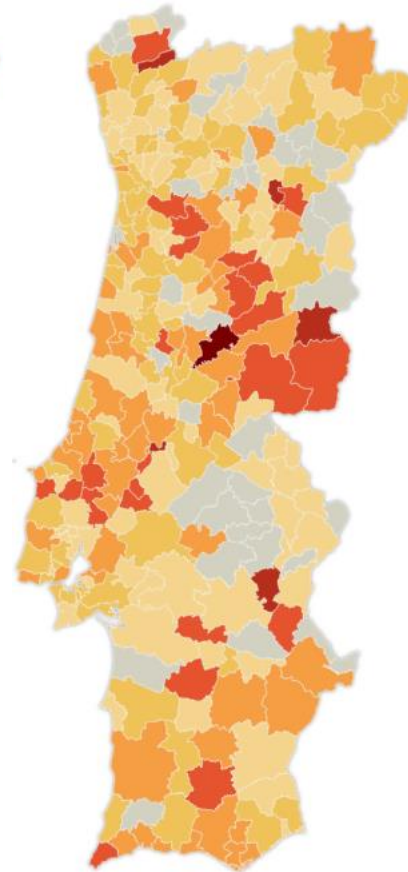
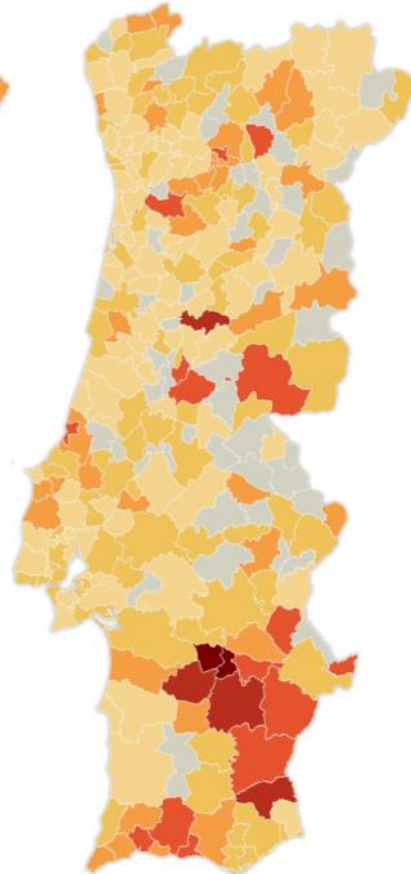
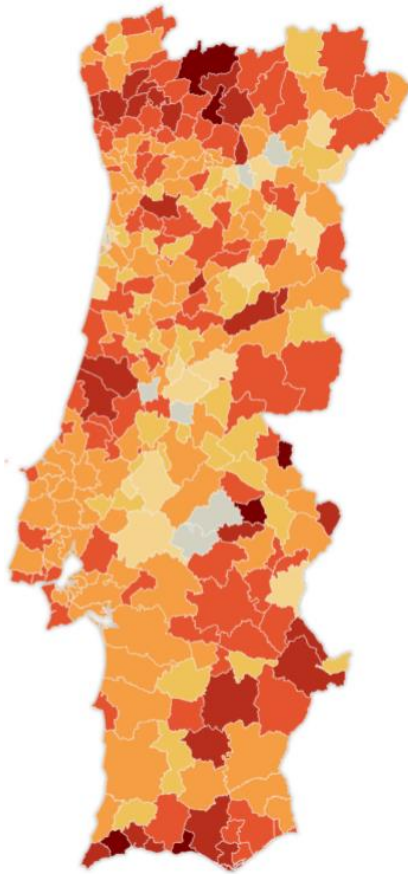
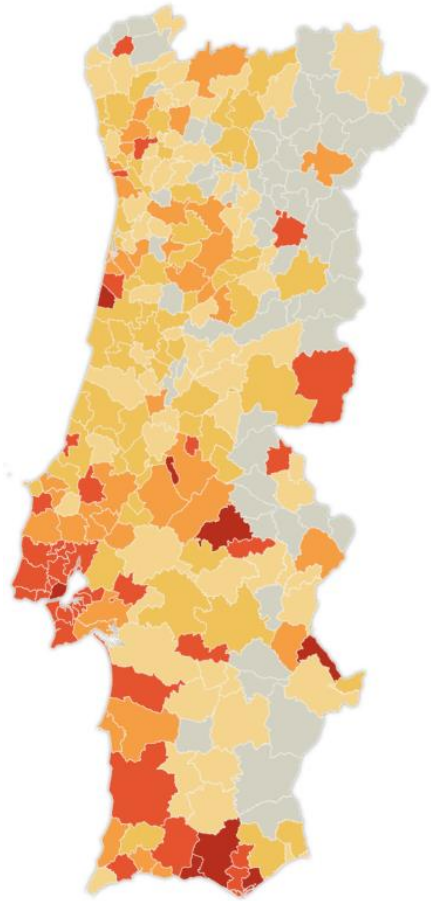
2 July

3 September

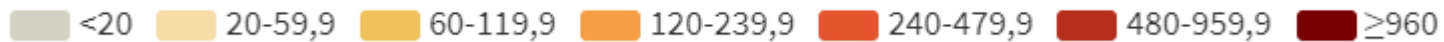
13 October

5 November

26 November

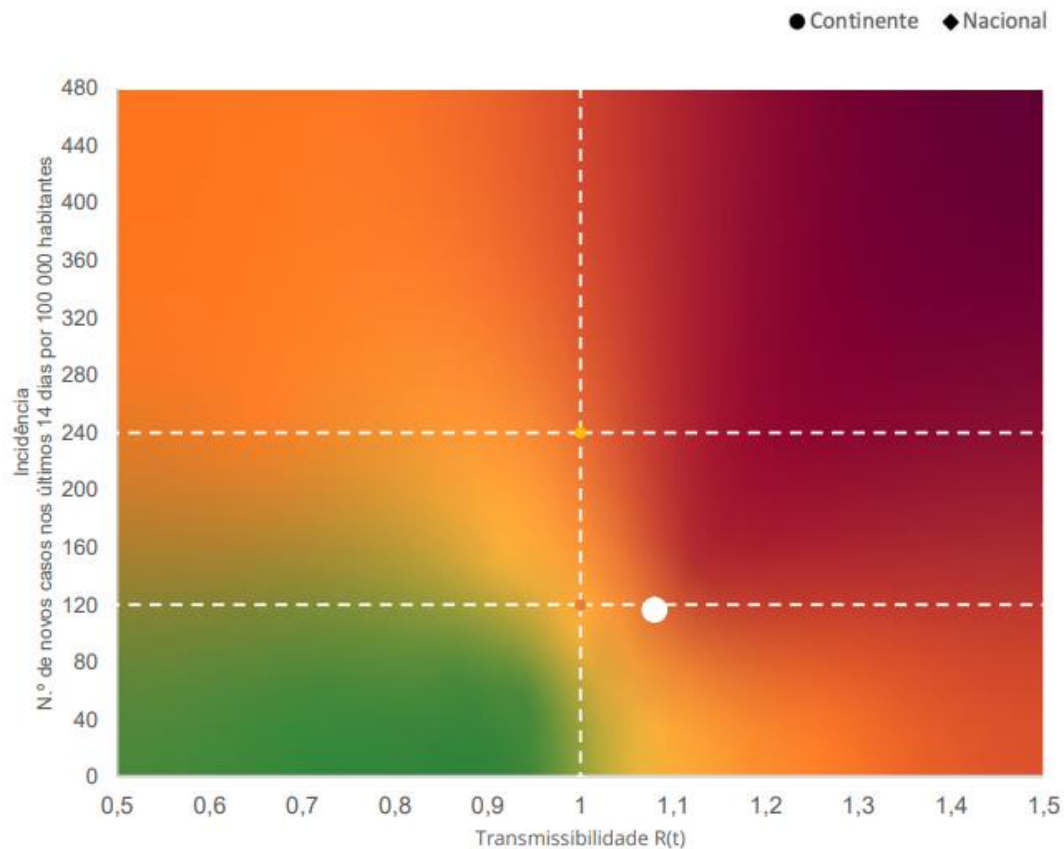


26 Nov 2021



MATRIZ DE RISCO

Realização da análise: 08-11/2021



INCIDÊNCIA

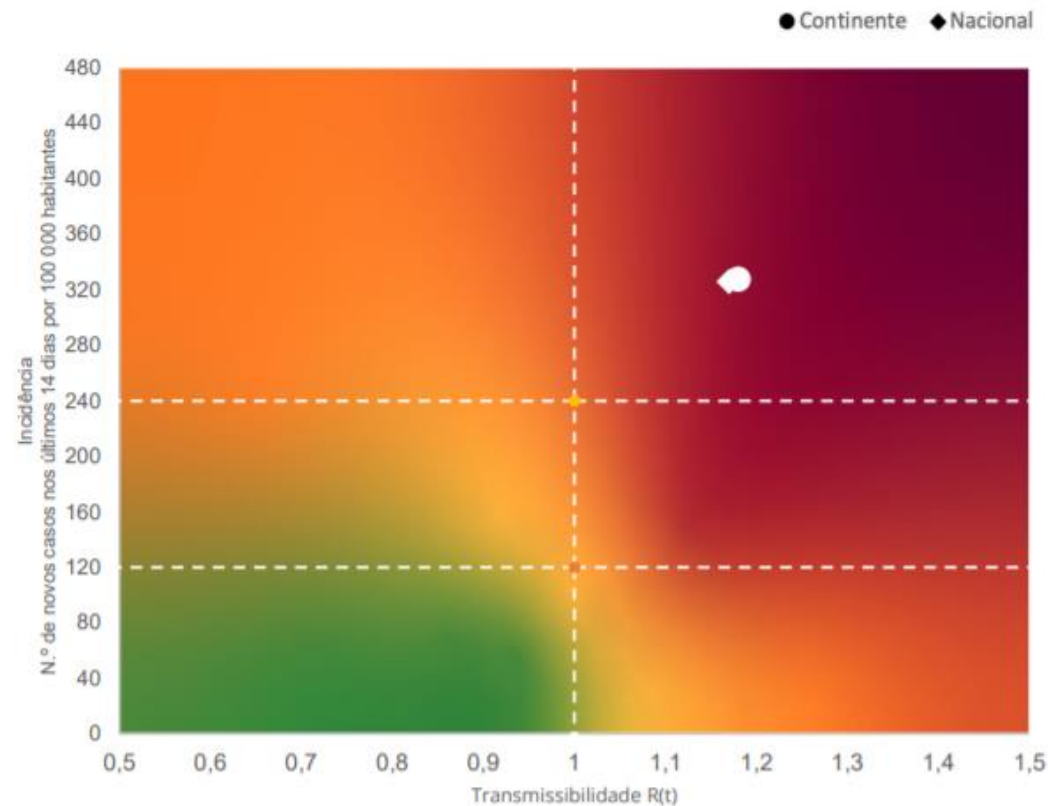
Nacional: **116,9** casos de infecção por SARS-CoV-2/ COVID-19 por 100 000 hab.
 Continte: **116,4** casos de infecção por SARS-CoV-2/ COVID-19 por 100 000 hab.

R(t)

Nacional: **1,08**
 Continte: **1,08**

MATRIZ DE RISCO

Realização da análise: 29/11/2021



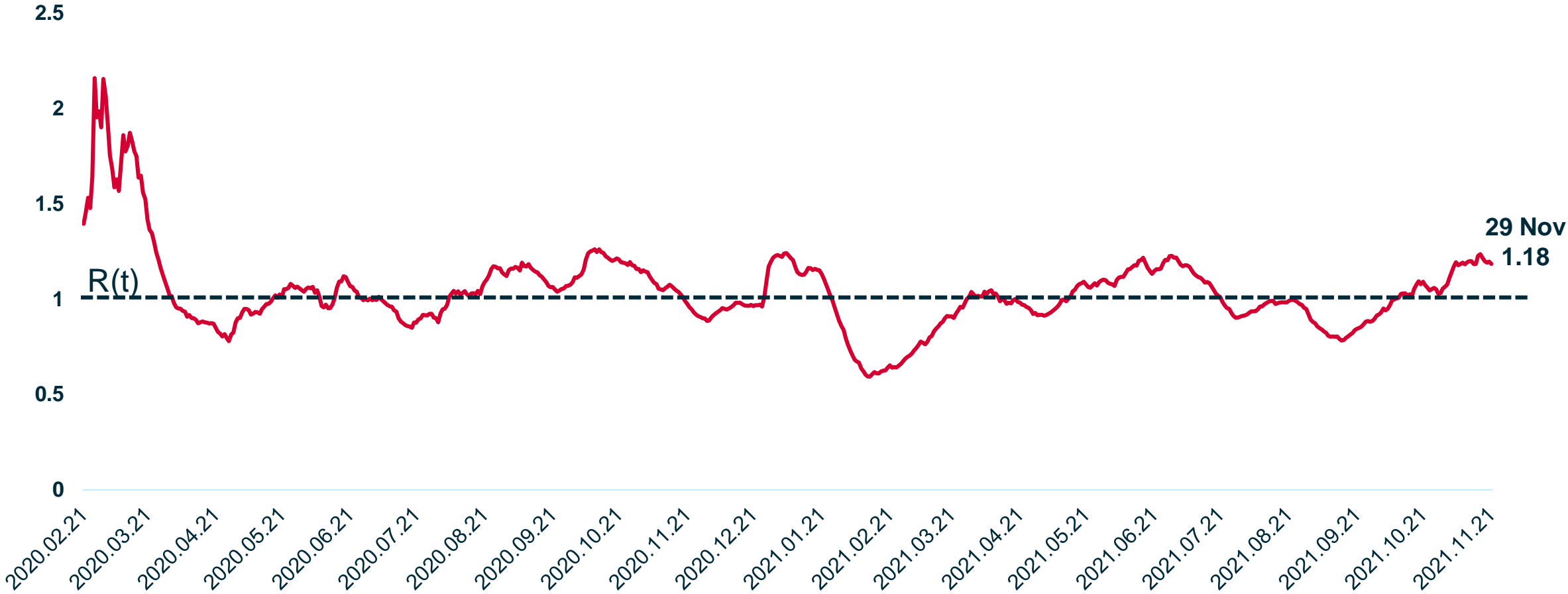
INCIDÊNCIA

Nacional: **325,9** casos de infecção por SARS-CoV-2/ COVID-19 por 100 000 hab.
 Continte: **327,5** casos de infecção por SARS-CoV-2/ COVID-19 por 100 000 hab.

R(t)

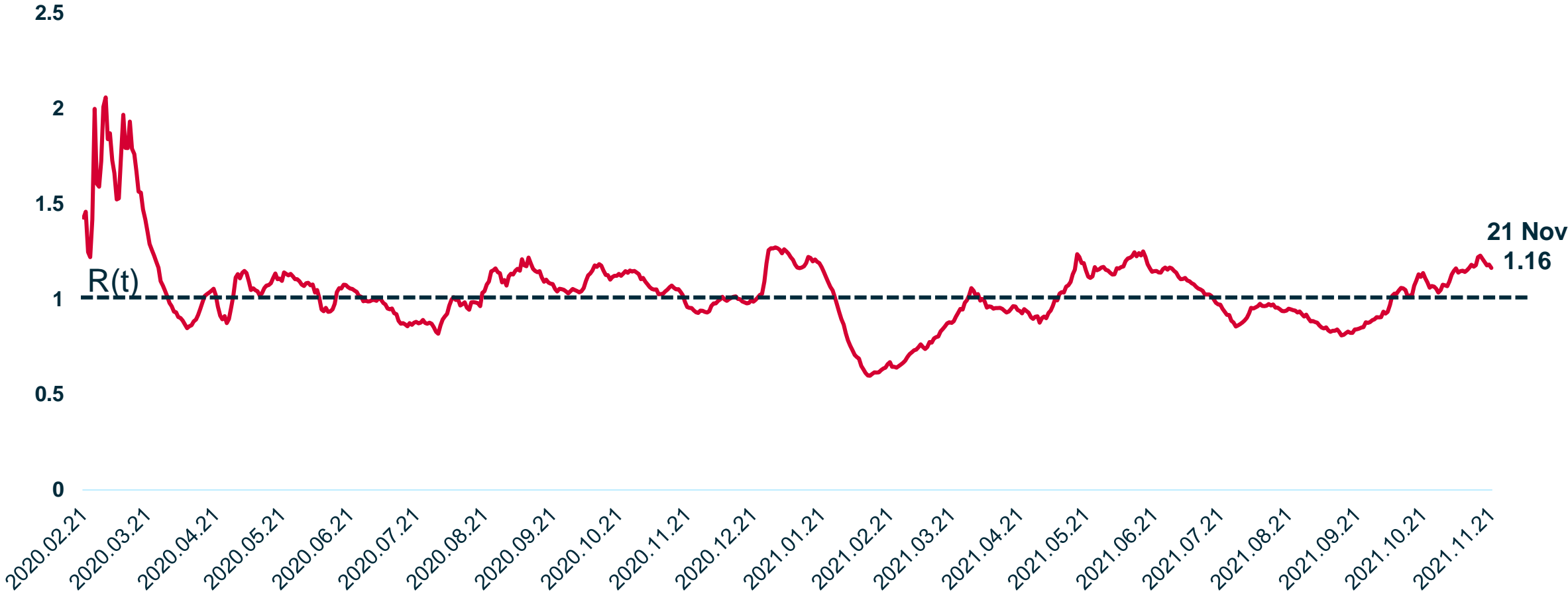
Nacional: **1,17**
 Continte: **1,18**

Transmission Rate - R(t) in Portugal



Source: SNS - <http://www.insa.min-saude.pt/category/areas-de-atuacao/epidemiologia/covid-19-curva-epidemic-a-e-parametros-de-transmissibilidade/>

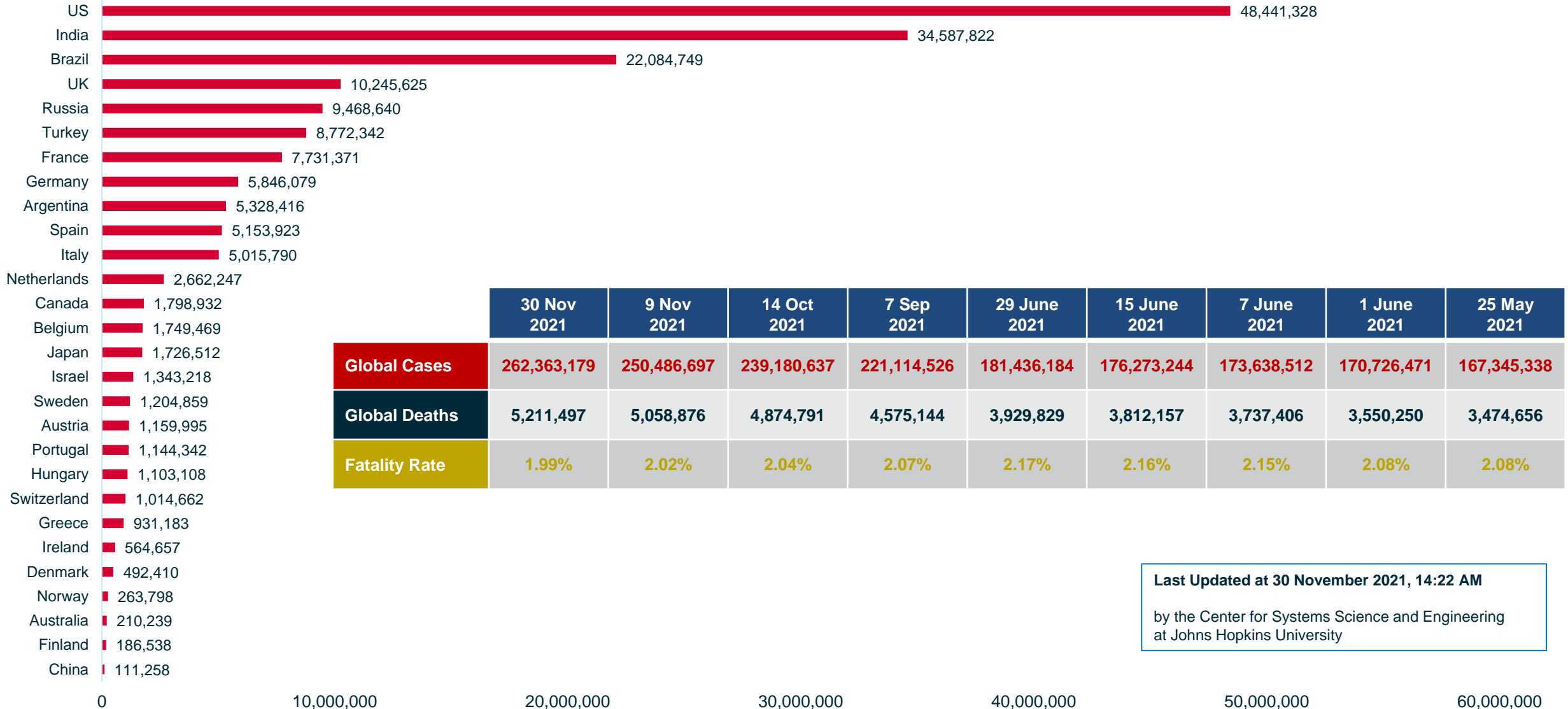
Transmission Rate - R(t) in **Lisbon and Tagus Valley**



Source: SNS - <http://www.insa.min-saude.pt/category/areas-de-atuacao/epidemiologia/covid-19-curva-epidmica-e-parametros-de-transmissibilidade/>

Coronavirus (SARS-CoV-2 / Covid-19) – Confirmed cases by country

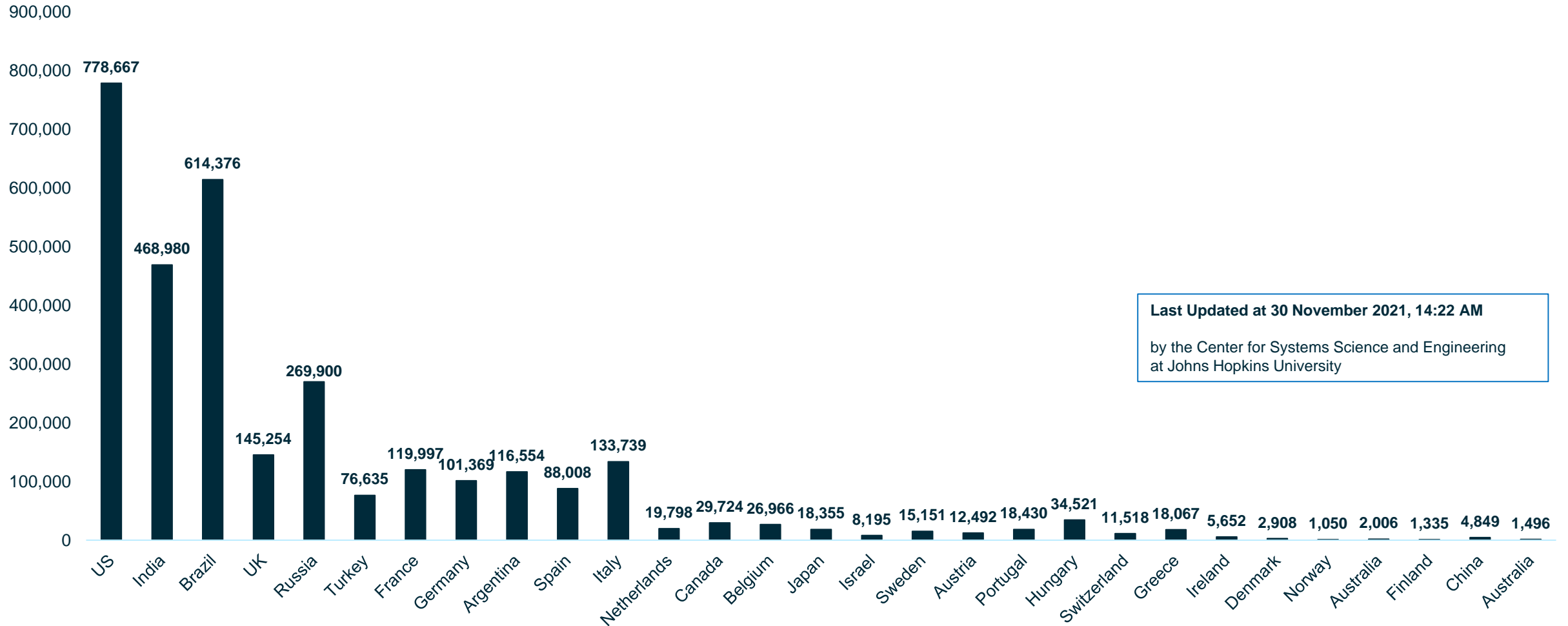
Note: Selected Countries, sorted by # of cases



Last Updated at 30 November 2021, 14:22 AM
 by the Center for Systems Science and Engineering
 at Johns Hopkins University

Coronavirus (SARS-CoV-2 / Covid-19) – Deaths by Country

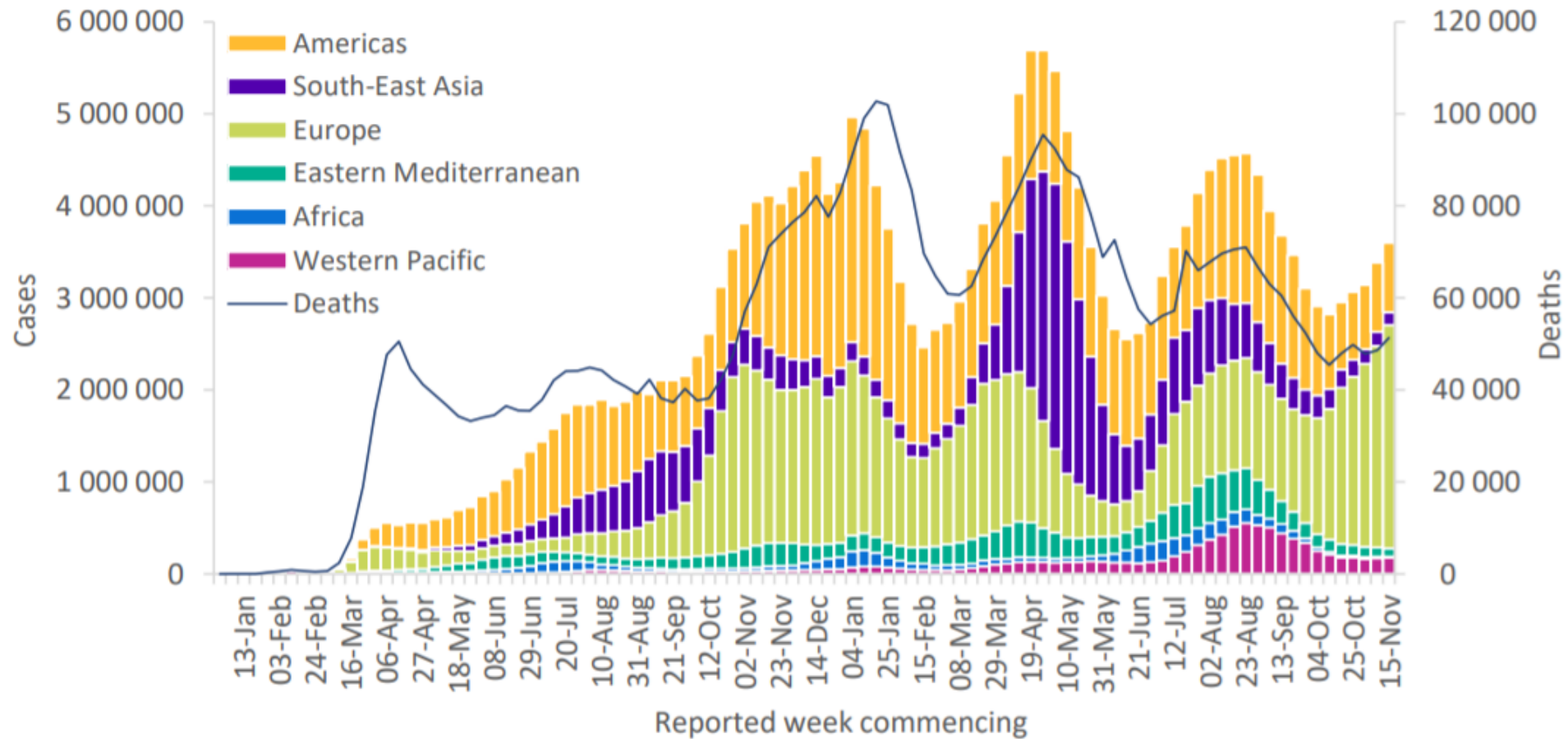
Note: Selected Countries, sorted by # of cases



Last Updated at 30 November 2021, 14:22 AM
by the Center for Systems Science and Engineering
at Johns Hopkins University

Source: <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Number of COVID-19 cases reported weekly by WHO Region, and global deaths, as of 21 November 2021



Source: WHO

Latest Cases and Deaths by TOP 10 Countries – 29 November 2021

Total Cases	
1	USA
2	India
3	Brazil
4	United Kingdom
5	Russia
6	Turkey
7	France
8	Iran
9	Germany
10	Argentina
39	Portugal

Cases in last 7 days	
1	USA
2	Germany
3	United Kingdom
4	Russia
5	France
6	Turkey
7	Poland
8	Netherlands
9	Czechia
10	Belgium
32	Portugal

Total Deaths	
1	USA
2	Brazil
3	India
4	Mexico
5	Russia
6	Peru
7	United Kingdom
8	Indonesia
9	Italy
10	Iran
39	Portugal

Deaths in last 7 days	
1	Russia
2	USA
3	United Arab Emirates
4	India
5	Poland
6	Germany
7	Mexico
8	Brazil
9	Uganda
10	Philippines
57	Portugal

Total Cases per million people	
1	Georgia
2	Slovakia
3	Slovenia
4	Czechia
5	Serbia
6	Bahrain
7	Lithuania
8	Estonia
9	Belgium
10	United Kingdom
29	Portugal

Cases in last 7 days per million people	
1	Slovakia
2	Czechia
3	Belgium
4	Austria
5	Netherlands
6	Croatia
7	Hungary
8	Slovenia
9	Georgia
10	Ireland
28	Portugal

Total Deaths per million people	
1	Peru
2	Bulgaria
3	Bosnia and Herzegovina
4	North Macedonia
5	Hungary
6	Moldova
7	Georgia
8	Czechia
9	Romania
10	Brazil
32	Portugal

Deaths in last 7 days per million people	
1	United Arab Emirates
2	West Bank and Gaza
3	Hungary
4	Georgia
5	Bulgaria
6	Croatia
7	Latvia
8	Moldova
9	Bosnia and Herzegovina
10	Slovakia
46	Portugal

Latest News

- Moderna CEO Stéphane Bancel predicts that existing COVID-19 vaccines will be much less effective at tackling the Omicron variant than earlier strains of coronavirus and warns it will take months before pharmaceutical companies can manufacture new variant-specific jabs at scale, according to the Financial Times. He says the high number of Omicron mutations on the spike protein, which the virus uses to infect human cells, and the rapid spread of the variant in South Africa suggest that the current crop of vaccines may need to be modified next year.
- The World Health Organisation recommends priority actions to nations to enhance readiness and prepare response to the newly discovered and highly transmissible Omicron variant. These include ensuring early warning systems are in place, ensuring mitigation plans are in place to maintain essential health services and necessary health care resources are in place to respond to potential surges.
- The World Health Organization's Europe office warns that the 53-country region could face another 700,000 deaths in the coronavirus pandemic by next spring, topping 2 million in total, citing the large numbers of unvaccinated people, the delta variant and easing of measures such as mask wearing and social distancing.
- Pfizer and BioNTech are set to seek authorisation from the US Food and Drug Administration for the booster Covid-19 vaccines for usage in individuals aged 16-17 years soon.
- Booster shots will be a topic of conversation when European affairs ministers meet in Brussels on Tuesday, along with a debate over whether to change the length of time during which a vaccine certificate is valid, according to EU diplomats who declined to be named on confidential preparations.
- The US Food and Drug Administration has expanded eligibility for Covid-19 booster shots to all adults amid a rise in daily cases. The regulator authorised a booster dose of Moderna and Pfizer-BioNTech Covid-19 vaccines for all adults who have completed their primary inoculation at least six months before
- The European Medicines Agency (EMA) has recommended that oral antiviral medicine Lagevrio can be used to treat high-risk Covid-19 adult patients who do not need supplemental oxygen.

Sources

- https://en.wikipedia.org/wiki/Timeline_of_the_2019%E2%80%9320_Wuhan_coronavirus_outbreak
- <https://www.seattletimes.com/seattle-news/health/coronavirus-timeline-how-the-outbreak-unfolded/>
- <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>
- <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>
- <https://www.pharmaceutical-technology.com/news/coronavirus-a-timeline-of-how-the-deadly-outbreak-evolved/>
- <https://www.cphi-online.com/updated-covid19-pharma-tracker-news082415.html>
- <https://www.dgs.pt/em-destaque.aspx>

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