



ENFRENTANDO A VARIANTE DELTA DA COVID-19

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ENFRENTANDO A VARIANTE DELTA DA COVID-19



Contextualização

Secretaria de Vigilância em Saúde - SVS | Ministério da Saúde

- ❑ Mutações: esperadas no processo evolutivo de qualquer vírus RNA
- ❑ Milhares de variantes do SARS-CoV-2 em circulação no mundo → muitas ainda irão surgir ao longo do tempo
- ❑ A maioria das mutações emergentes → não tem impacto na disseminação do vírus
- ❑ Algumas mutações ou suas combinações podem fornecer ao vírus uma vantagem seletiva → maior transmissibilidade ou capacidade de evadir a resposta imune do hospedeiro
- ❑ Se mutações ocasionam alterações com relevância clínico-epidemiológica: **VOC (variant of concern) – VARIANTE DE ATENÇÃO**

❖ Vigilância genômica: importante para a saúde pública no enfrentamento da covid-19



Figura 1: Esquema didático para profissionais de saúde sobre classificações genéticas dos vírus



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ENFRENTANDO A VARIANTE DELTA DA COVID-19

Variantes de preocupação (VOC)

Definição de trabalho:

Uma variante do SARS-CoV-2 que atende à definição de um VOI (veja abaixo) e, por meio de uma avaliação comparativa, demonstrou estar associada a uma ou mais das seguintes alterações em um grau de significância para a saúde pública global:

- Aumento da transmissibilidade ou alteração prejudicial na epidemiologia da COVID-19; OU
- Aumento da virulência ou mudança na apresentação clínica da doença; OU
- Diminuição da eficácia das medidas sociais e de saúde pública ou diagnósticos, vacinas, terapêuticas disponíveis.

Variantes de interesse (VOI)

Definição de trabalho

Uma variante SARS-CoV-2:

- com alterações genéticas que são previstas ou conhecidas por afetar as características do vírus, como transmissibilidade, gravidade da doença, escape imunológico, escape diagnóstico ou terapêutico; E
- Identificado para causar transmissão significativa na comunidade ou múltiplos clusters COVID-19, em vários países com prevalência relativa crescente juntamente com o aumento do número de casos ao longo do tempo, ou outros impactos epidemiológicos aparentes para sugerir um risco emergente para a saúde pública global.



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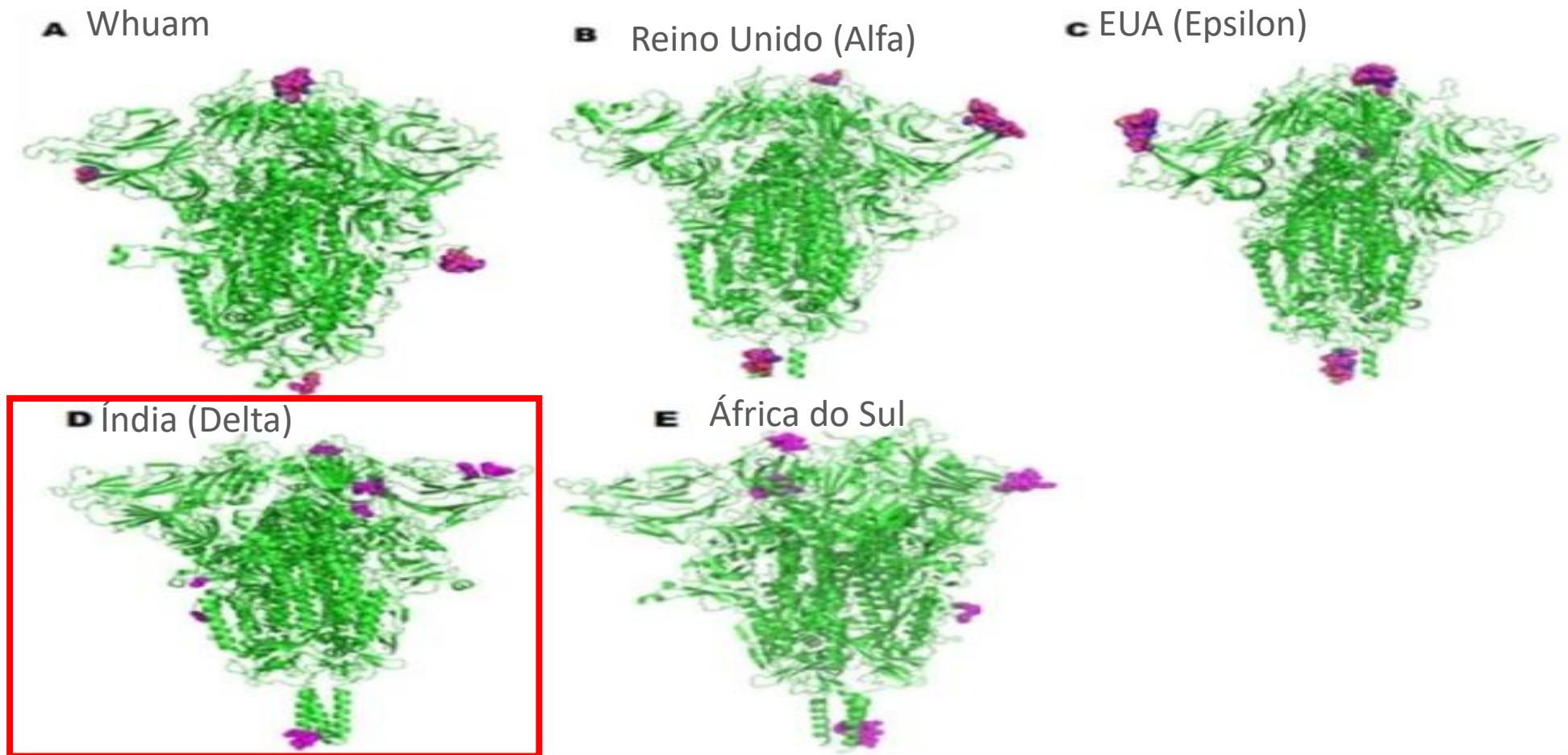
Variantes de preocupação atualmente designadas:

Rótulo OMS	Pango linhagens	Clado GISAID	Nextstrain clado	Alterações adicionais de aminoácidos monitoradas *	Documentado anteriormente amostras	Data de designação
Alfa	B.1.1.7	GRY	20I (V1)	+ S: 484K + S: 452R	Reino Unido, setembro de 2020	18 de dezembro de 2020
Beta	B.1.351 B.1.351.2 B.1.351.3	GH / 501Y.V2	20H (V2)	+ S: L18F	África do Sul, maio de 2020	18 de dezembro de 2020
Gama	P.1 P.1.1 P.1.2	GR / 501Y.V3	20J (V3)	+ S: 681H	Brasil, Nov-2020	11 de janeiro de 2021
Delta	<u>B.1.617.2</u> AY.1 AY.2 AY.3	G / 478K.V1	21A	+ S: 417N	Índia, outubro de 2020	VOI: 4 de abril de 2021 VOC: 11 de maio de 2021

* Alterações notáveis de aminoácidos de pico (S) sob monitoramento, que atualmente são relatadas em uma minoria de amostras sequenciadas.



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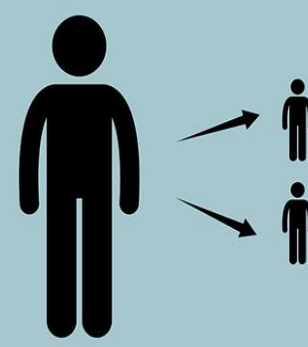
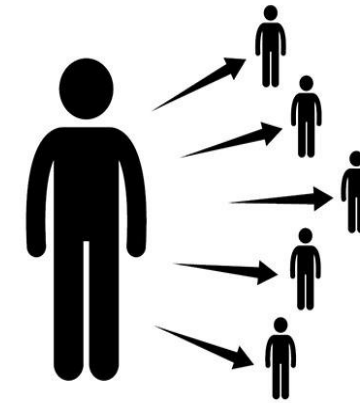
Representations of potential discontinuous B-cell epitopic regions mapped onto the spike protein of the SAR-SCoV-2 variants: (A) Wuhan original L strain, (B) England - B.1.1.7 Alpha, (C) USA - B.1.429, B.1.427 Epsilon, (D) India - B.1.617.1 Kappa, and (E) South Africa - B.1.351 Beta, highlighted as spheres.



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- A variante Delta causa mais infecções e se espalha mais rapidamente do que as formas iniciais SARS-CoV-2
- **A variante Delta é mais transmissível:** a variante Delta é altamente transmissível, quase duas vezes mais contagiosa que as variantes anteriores.
- Alguns dados sugerem que a variante Delta pode causar doença mais grave do que as variantes anteriores em pessoas não vacinadas.
- Pessoas totalmente vacinadas com infecção pela variante Delta podem espalhar o vírus para outras pessoas. No entanto, as pessoas vacinadas parecem transmitir por um período mais curto.
- As pessoas não vacinadas continuam sendo a maior preocupação.

The Delta variant is more contagious than previous strains—it may cause more than **2x as many infections**

ORIGINAL COVID-19 STRAIN	DELTA VARIANT
	

Vaccines protect you from hospitalization, severe infections, and death

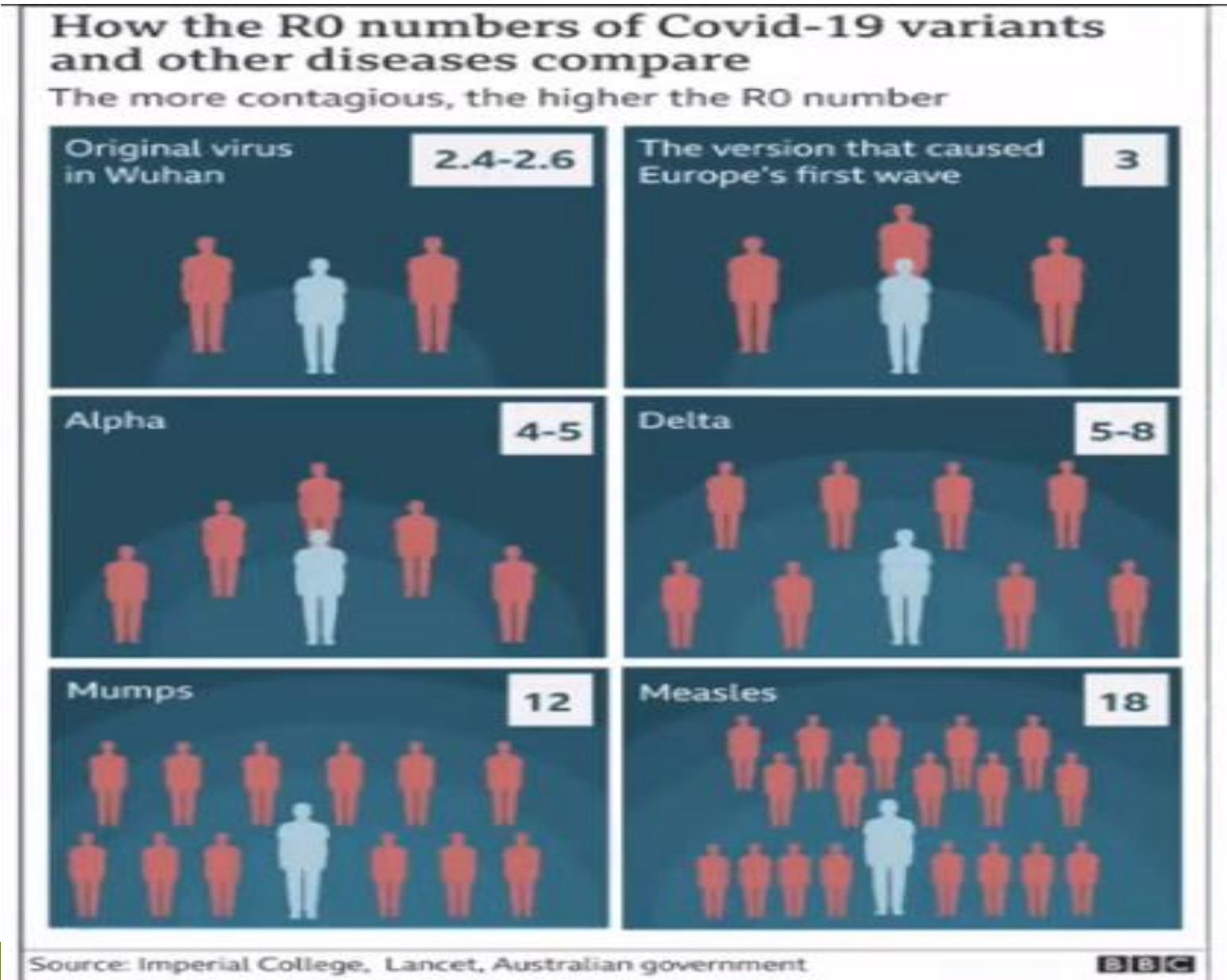


[cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)

CS 322041-AA 08/02/2021

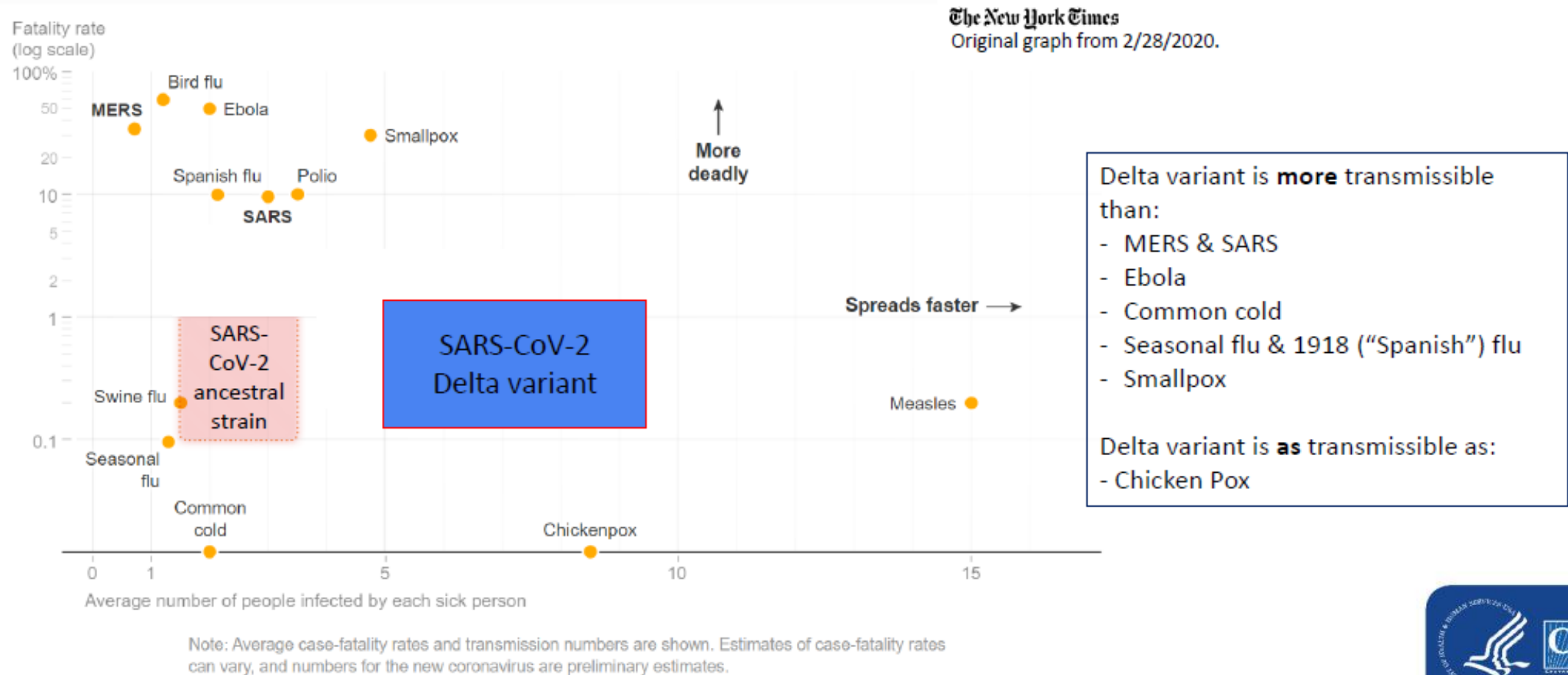


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Transmission of Delta variant vs. ancestral strain and other infectious diseases





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Delta infections associated with higher viral load and duration of shedding: Published evidence

- India report of lower cycle threshold (Ct) values in Delta breakthrough cases in HCW (n=47, mean Ct 16.5) compared to non-Delta breakthrough cases (n=22, mean Ct 19); also larger cluster size with Delta breakthrough
- Delta infection associated with longer duration of Ct values ≤ 30 [median 18 days vs. 13 days for ancestral strains]
- Risk of reinfection with Delta may be higher [aOR 1.46 (CI 1.03-2.05)] compared to Alpha variant, but only if prior infection ≥ 180 days earlier



Micochova et al. doi: 10.21203/rs.3.rs-637724/v1

Ong et al. doi:10.2139/ssrn.3861566; PHE technical briefing 19:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005517/Technical_Briefing_19.pdf



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Delta variant may cause more severe disease than Alpha or ancestral strains: Published evidence

- Canada: Higher odds of hospitalization [aOR 2.20 (CI 1.93-2.53)], ICU admission [aOR 3.87 (CI 2.98-4.99)], and death [aOR 2.37 (CI 1.50-3.30)]¹
- Singapore: Higher odds of oxygen requirement, ICU admission, or death [aOR 4.90 (CI 1.43-30.78)] and pneumonia [aOR 1.88 (CI 0.95-3.76)]²
- Scotland: Higher odds of hospitalization [HR 1.85 (CI 1.39-2.47)]³

1. Fisman and Tuite, [doi:10.1101/2021.07.05.21260050](https://doi.org/10.1101/2021.07.05.21260050); 2. Ong et al. [doi:10.2139/ssrn.3861566](https://doi.org/10.2139/ssrn.3861566); 3. Sheikh et al. [doi:10.1016/S0140-6736\(21\)01358-1](https://doi.org/10.1016/S0140-6736(21)01358-1)





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Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

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Morbidity and Mortality Weekly Report (MMWR)

CDC



Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings — Barnstable County, Massachusetts, July 2021

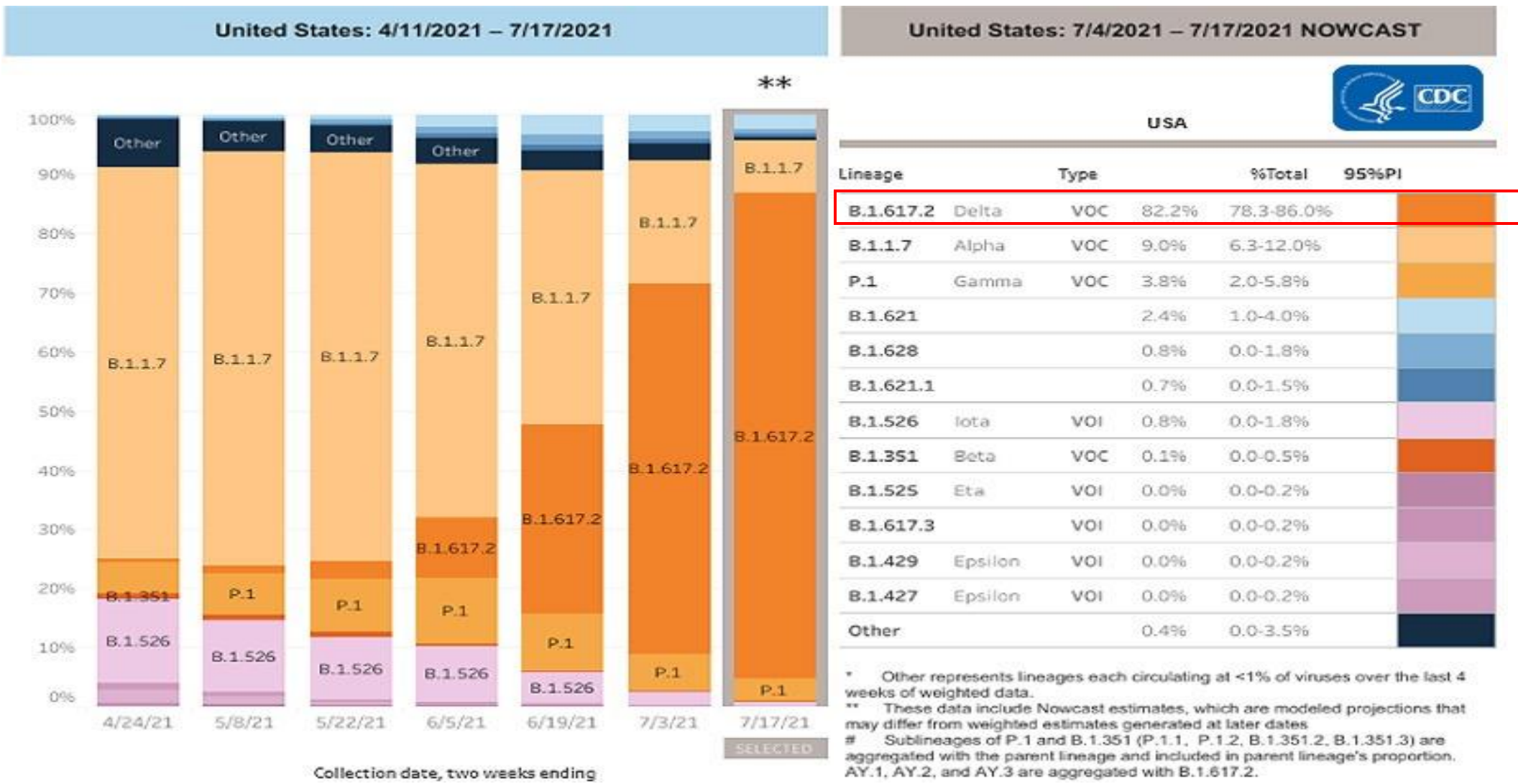
Weekly / August 6, 2021 / 70(31);1059-1062

On July 30, 2021, this report was posted online as an MMWR Early Release.

Em julho de 2021, após vários grandes eventos públicos em um condado de Barnstable, Massachusetts, cidade, 469 casos de COVID-19 foram identificados entre residentes de Massachusetts que viajaram para a cidade de 3 a 17 de julho; 346 (74%) ocorreram em pessoas totalmente vacinadas. Os testes identificaram a variante Delta em 90% das amostras de 133 pacientes. Entre cinco pacientes com COVID-19 que foram hospitalizados, quatro foram totalmente vacinados; nenhuma morte foi relatada, Os valores do limite do Ct foram semelhantes entre as amostras de pacientes que foram totalmente vacinados e aqueles que não foram.



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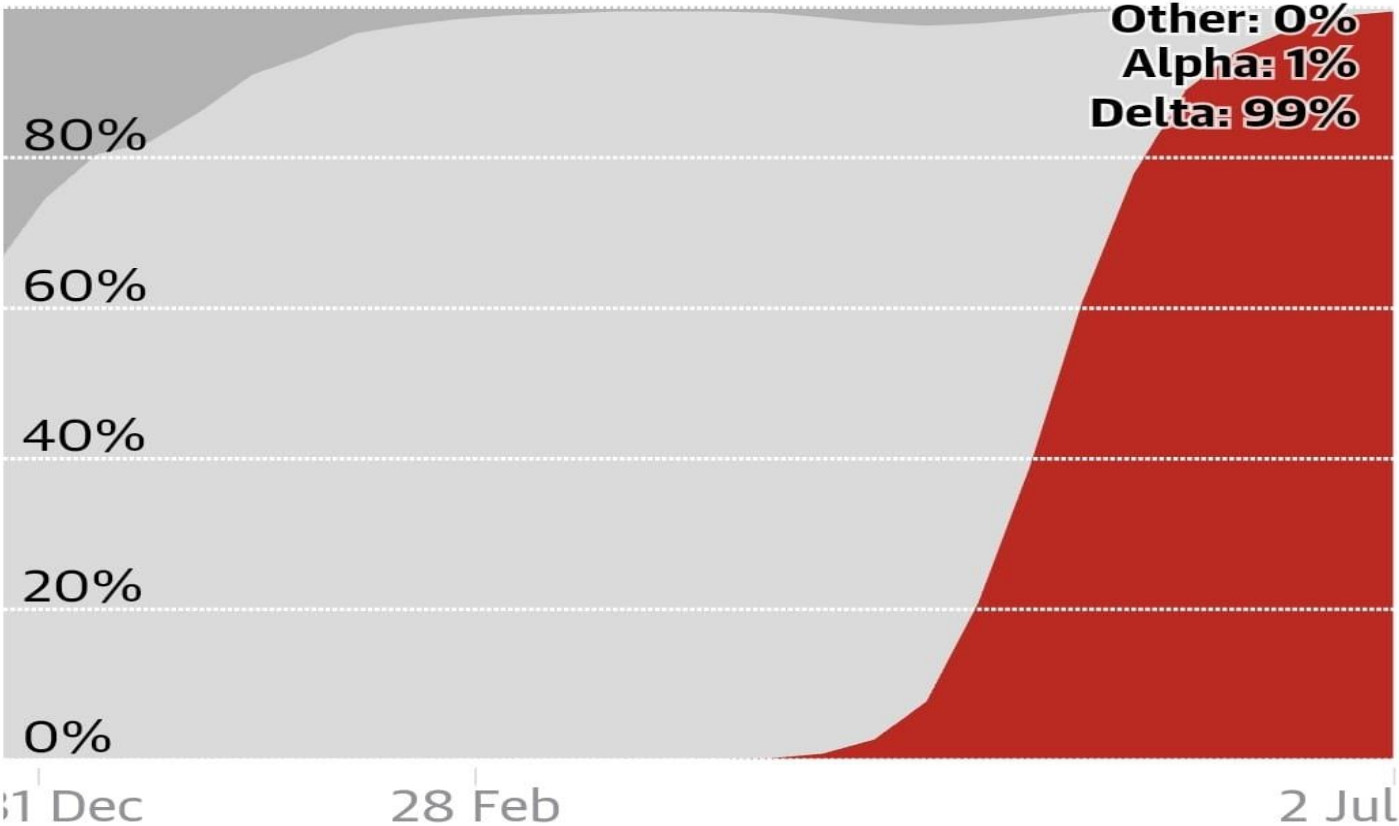


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Covid-19 variants in England

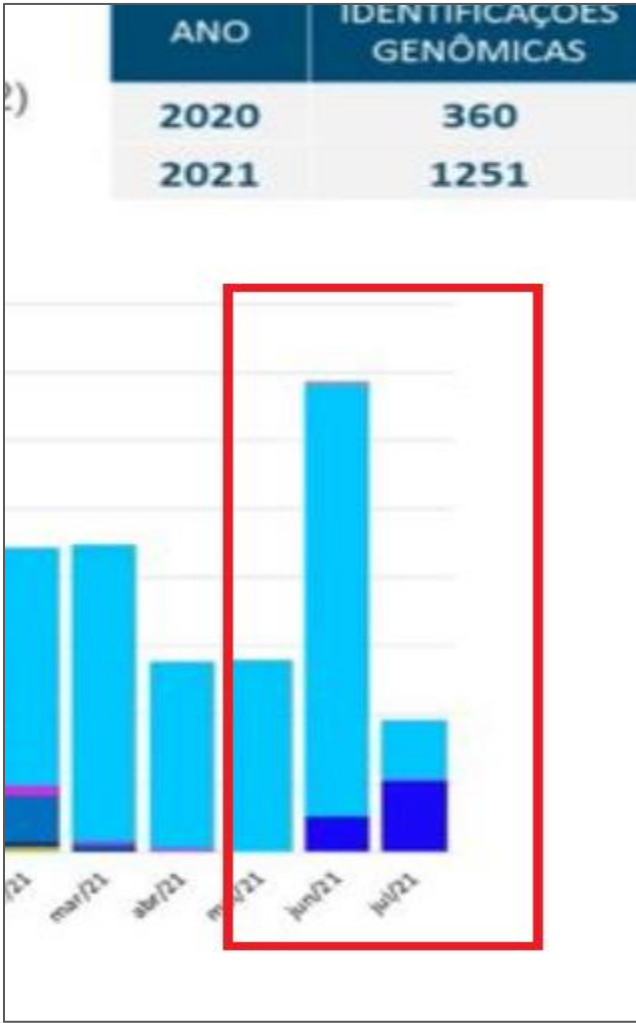
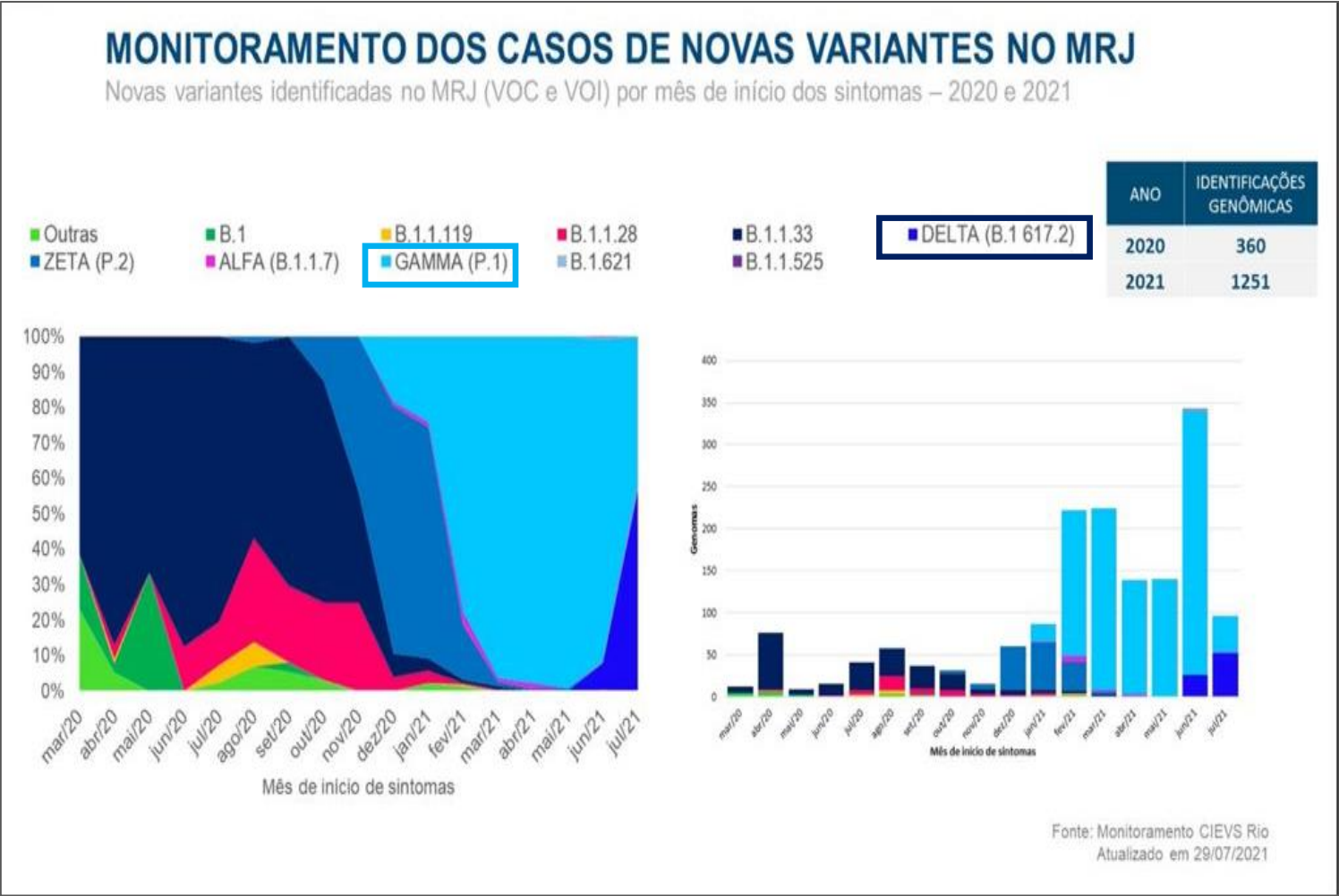
Delta (B.1.617.2) Alpha (B.1.1.7) Other



Positive Covid-19 tests sequenced in England and the percentage that belong to a particular lineage. Data added weekly. Excludes data from travellers and surge testing. Data: provisional data from covid19.sanger.ac.uk, latest: 2 July, 2021, fetched: 16 July, 2021



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Esse é o dado do município..... mas eles fizeram o alerta que o ultimo dado ainda é com um numero bem pequeno de amostras sequenciadas - ainda falta chegar muito resultado



Município do Rio de Janeiro

Tabela 1. Distribuição das Variantes de Preocupação (VOC) identificadas em Residentes do MRJ por mês de início dos sintomas – 2021

Identificação de VOC Sars-Cov-2 - 2021	Jan		Fev		Mar		Abr		Mai		Jun		Jul		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<i>GAMMA (P.1, P.1.2, P.1.4, P.1.7, P.1.8)</i>	6	85,7	143	95,3	181	98,9	98	98,0	127	100,0	260	91,2	55	42,6	870	88,7
DELTA (B.1.617.2)	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	25	8,8	73	56,6	98	10,0
<i>ALFA (B.1.1.7)</i>	1	14,3	7	4,7	2	1,1	2	2,0	0	0,0	0	0,0	1	0,8	13	1,3
Total	7	100,0	150	100,0	183	100,0	100	100,0	127	100,0	285	100,0	129	100,0	981	100,0

Fonte: Monitoramento CIEVS Rio

Atualizado em 15/08/2021

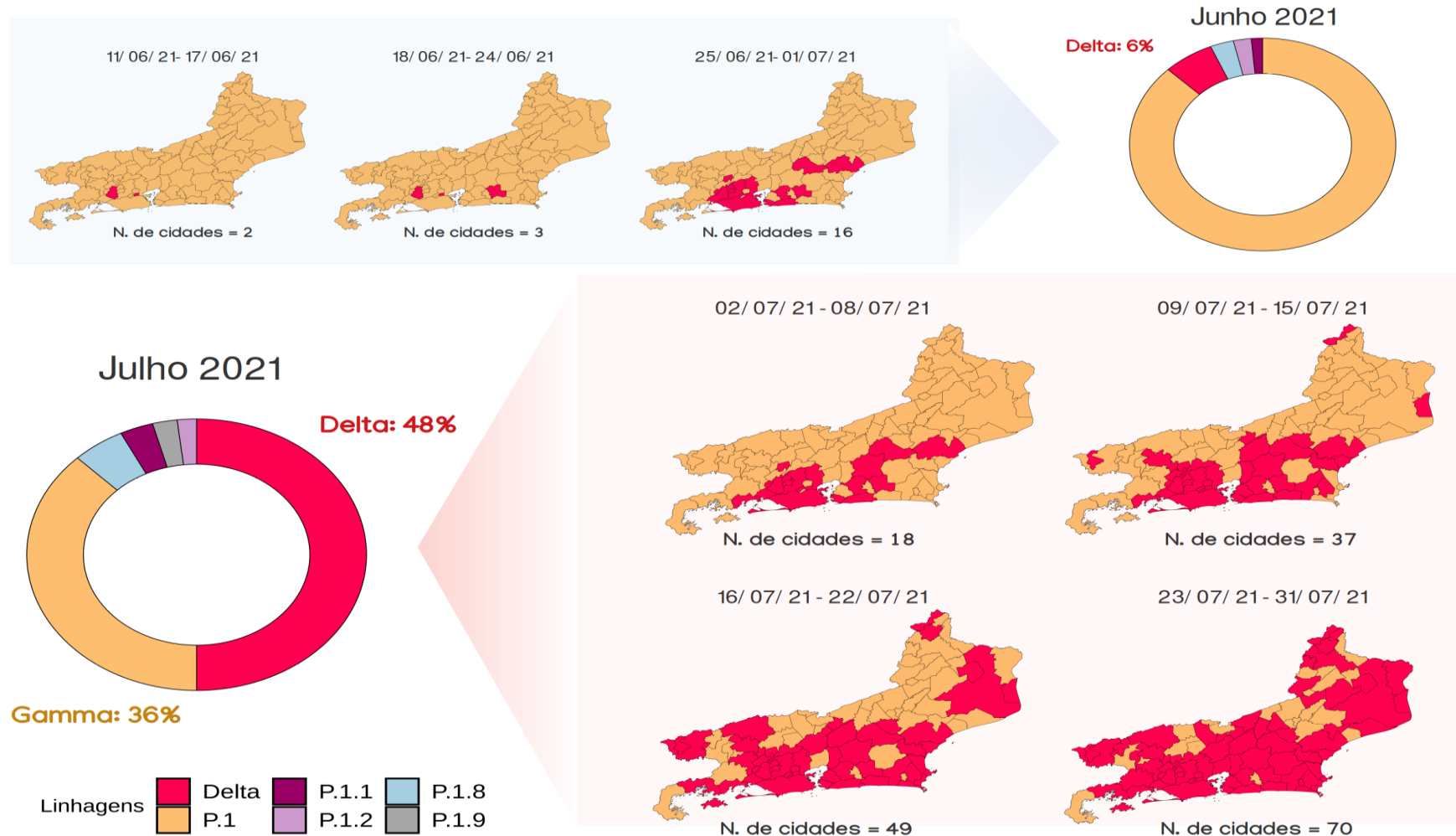


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Vigilância Genômica de SARS- CoV- 2 no Estado do Rio de Janeiro

Distribuição espaço-temporal da variante Delta nos municípios do estado entre os meses de Junho e Julho de 2021





ENFRENTANDO A VARIANTE DELTA DA COVID-19



THE NEW ENGLAND JOURNAL OF MEDICINE

ORIGINAL ARTICLE

DOI: 10.1056/NEJMoa2108891

Effectiveness of Covid-19 Vaccines against the B.1.617.2 (Delta) Variant

Table 2. Vaccine Effectiveness against the Alpha Variant or S Target–Negative Status and the Delta Variant or S Target–Positive Status, According to Dose and Vaccine Type.*

Vaccination Status	Test-Negative Status		Alpha Variant or S Target–Negative Status		Delta Variant or S Target–Positive Status		
	Controls no.	Cases no.	Case:Control Ratio	Adjusted Vaccine Effectiveness (95% CI) %	Cases no.	Case:Control Ratio	Adjusted Vaccine Effectiveness (95% CI) %
Unvaccinated	96,371	7313	0.076	Reference	4043	0.042	Reference
Any vaccine							
Dose 1	51,470	2226	0.043	48.7 (45.5–51.7)	1493	0.029	30.7 (25.2–35.7)
Dose 2	23,993	143	0.006	87.5 (85.1–89.5)	340	0.014	79.6 (76.7–82.1)
BNT162b2 vaccine							
Dose 1	8,641	450	0.052	47.5 (41.6–52.8)	137	0.016	35.6 (22.7–46.4)
Dose 2	15,749	49	0.003	93.7 (91.6–95.3)	122	0.008	88.0 (85.3–90.1)
ChAdOx1 nCoV-19 vaccine							
Dose 1	42,829	1776	0.041	48.7 (45.2–51.9)	1356	0.032	30.0 (24.3–35.3)
Dose 2	8,244	94	0.011	74.5 (68.4–79.4)	218	0.026	67.0 (61.3–71.8)

* The adjusted analysis of vaccine effectiveness was adjusted for period (calendar week), travel history, race or ethnic group, sex, age, index of multiple deprivation, clinically extremely vulnerable group, region, history of positive test, health or social care worker, and care home residence. CI denotes confidence interval.



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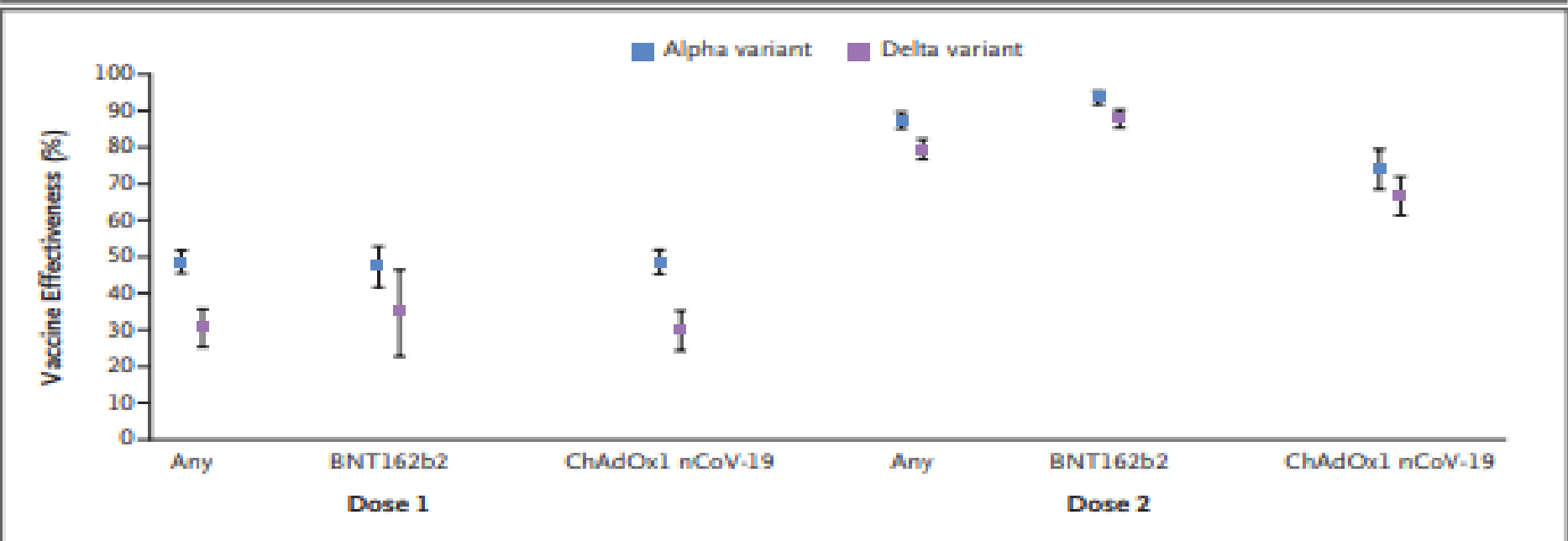


Figure 1. Vaccine Effectiveness against the Alpha and Delta Variants, According to Dose and Vaccine Type.

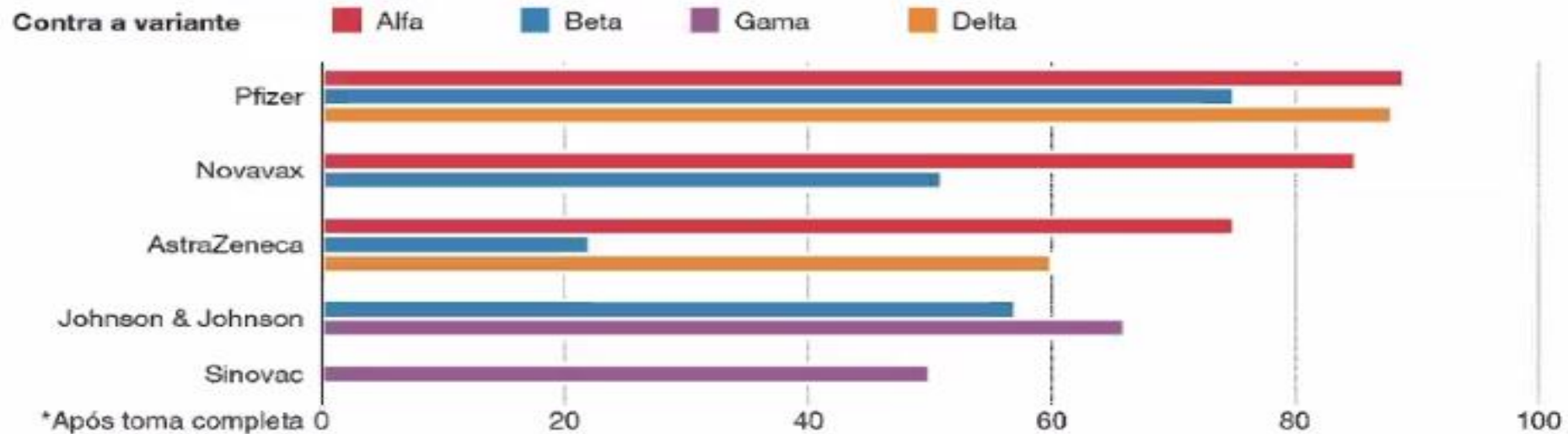
Shown is the effectiveness of one dose and two doses of the BNT162b2 and ChAdOx1 nCoV-19 vaccines, or either vaccine ("any"), against symptomatic disease with the B.1.1.7 (alpha) or B.1.617.2 (delta) variant of the severe acute respiratory syndrome coronavirus 2. I bars indicate 95% confidence intervals.



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	Alfa	Beta	Gama	Delta
Variante	B.1.1.7	B.1.351	P1	B.1.617.2
País da descoberta	Reino Unido	África do Sul	Brasil / Japão	Índia
Deteção	Setembro 2020	Outubro 2020	Dezembro 2020	Dezembro 2020
Transmissibilidade	Aumentada em 43% a 90%	Aumentada em cerca de 50%	Aumentada	Aumentada, ainda a ser avaliada
Gravidade	Possível aumento do risco de hospitalização e mortalidade	Possível aumento de risco de 20% de mortalidade hospitalar	Sob investigação, impacto limitado	Informação insuficiente

EFICÁCIA ESTIMADA DAS VACINAS DA COVID-19 (%)*





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Cotejamento com outras avaliações de VE

Effectiveness of an Inactivated SARS-CoV-2 Vaccine in Chile (n.d.). Jara et al., NEJM <https://doi.org/10.1056/nejmoa2107715>

	Age range	Infection	Hosp	ICU	Death
Coronavac Chile	≥ 60	66.6 (65.4-67.8)	85.3 (84.3-86.3)	89.2 (87.6-90.6)	86.5 (84.6-88.1)
Coronavac BR	60-69	58 (57-60)	79 (78-81)	81 (78-83)	81 (79-84)
	≥ 90	33 (25-39)	33 (23-42)	37 (18-51)	35 (24-45)
Vaxzevria SP	≥ 60	77.9 (69.2 - 84.2)	87.6 (78.2 - 92.9)	89.9 (70.9 - 96.5)	93.6 (81.9 - 97.7)
Vaxzevria BR	60-69	81 (76-85)	95 (88-98)	97 (81-100)	93 (73-98)
	≥ 90	55 (40-66)	63 (45-75)	48 (0-73)	71 (51-83)

Effectiveness of the ChAdOx1 vaccine in the elderly during SARS-CoV-2 Gamma variant transmission in Brazil. Matt D.T. Hitchings et al., <https://doi.org/10.1101/2021.07.19.21260802>doi: medRxiv preprint



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Neutralisation of SARS-CoV-2 lineage P.1 by antibodies elicited through natural SARS-CoV-2 infection or vaccination with an inactivated SARS-CoV-2 vaccine: an immunological study.

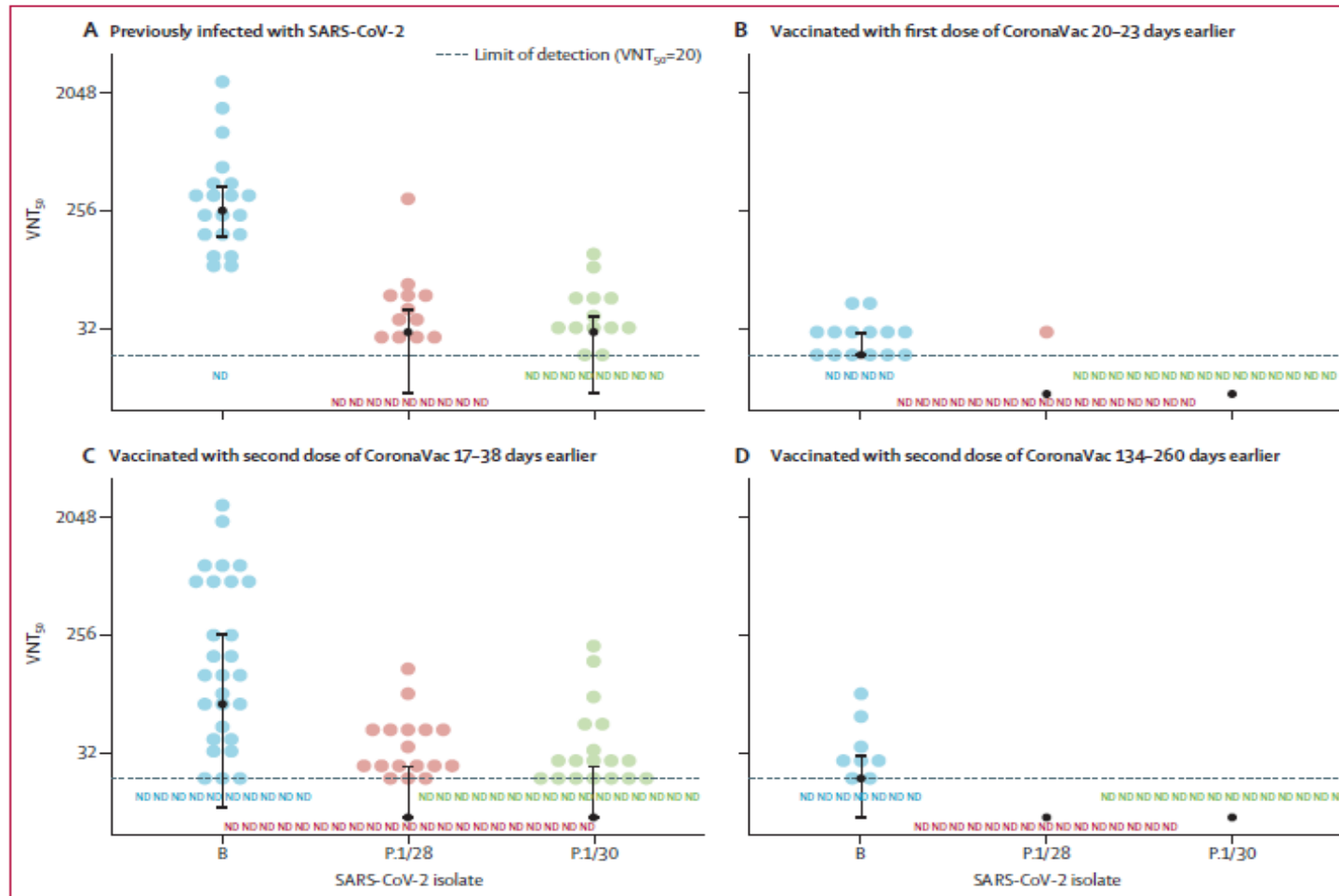


Figure 2: Neutralisation of SARS-CoV-2 lineages B and P.1 by plasma from previously infected or vaccinated individuals, according to VNT...

Interpretation: SARS-CoV-2 lineage P.1 might escape neutralisation by antibodies generated in response to polyclonal stimulation against previously circulating variants of SARS-CoV-2. Continuous genomic surveillance of SARS-CoV-2 combined with antibody neutralisation assays could help to guide national immunisation programmes.

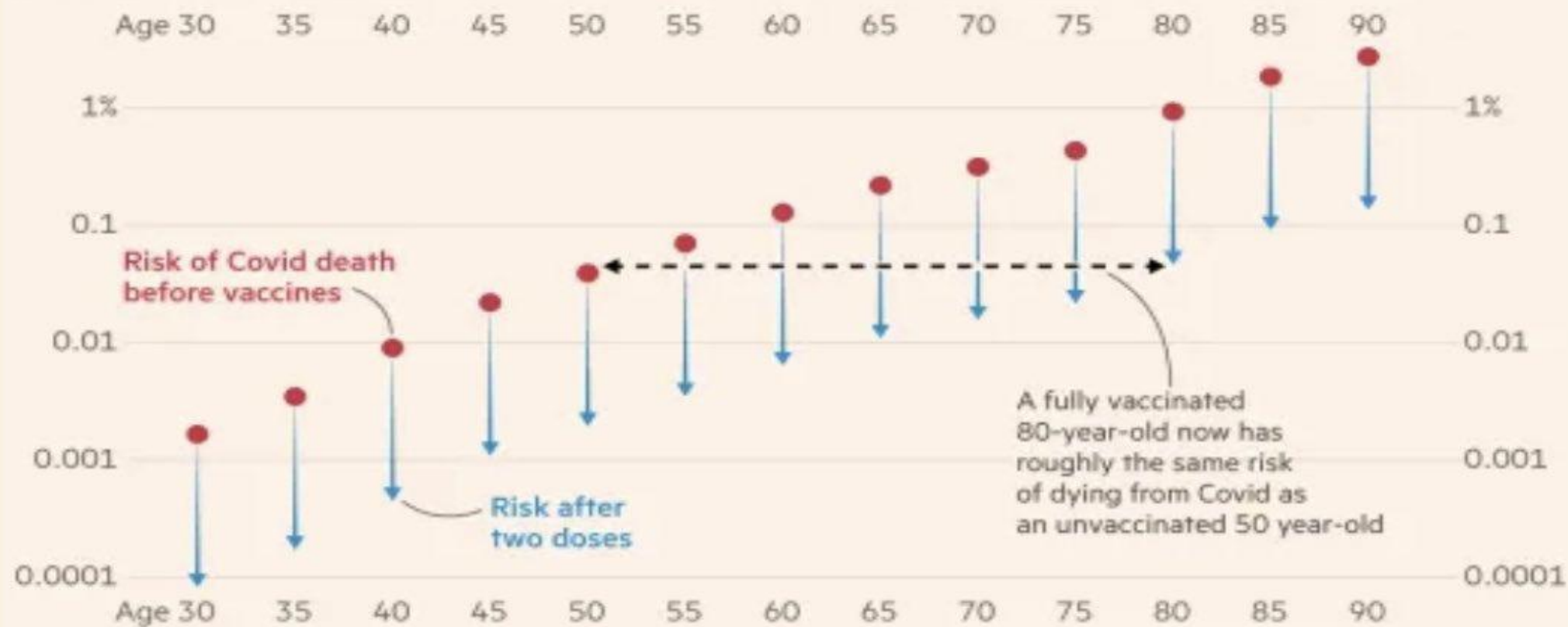


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Vaccines have made Covid-19 far less lethal. A fully-vaccinated 80-year-old now has the same mortality risk as an unvaccinated 50-year-old

Risk of catching and dying from Covid* (log scale), by age group, before and after full vaccination



*Risk is the population fatality rate, e.g. before vaccines roughly 1% of all 80-year-olds in England had died from Covid

Source: FT analysis of data from Public Health England

© FT



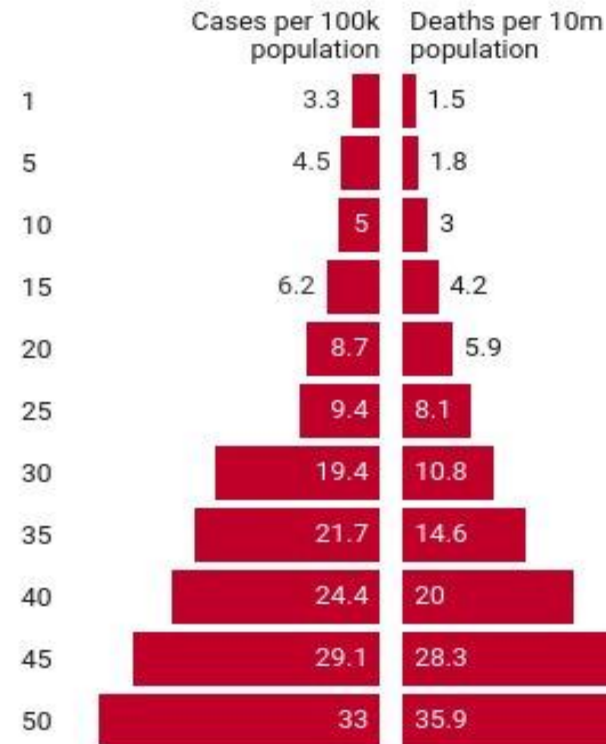
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How the UK's vaccine rollout has dramatically reduced Covid-19 deaths

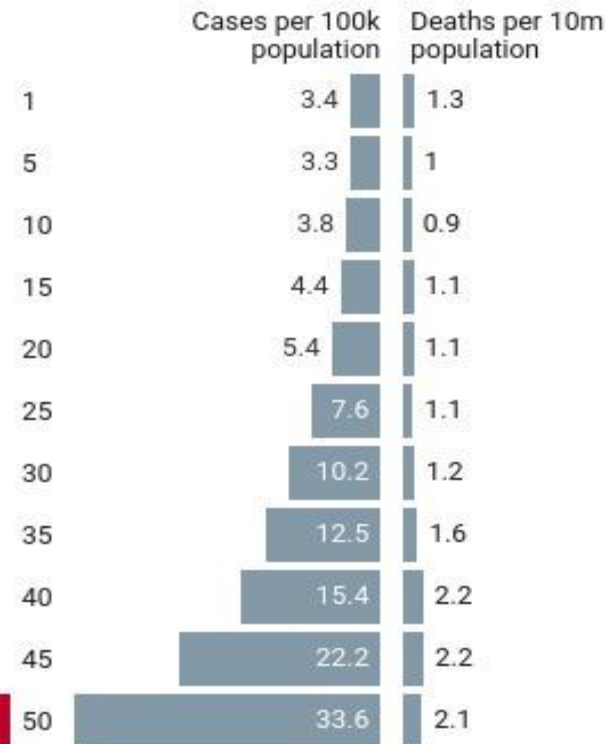
Cases versus deaths over days 1–50 of the UK's second and third Covid waves

Second Wave



[Get the data](#) • Created with [Datawrapper](#)

Third wave



[Get the data](#) • Created with [Datawrapper](#)

Calculations based on a seven-day rolling average of daily recorded cases and deaths. Second wave is recorded from 8/9/20, third wave is recorded from 14/5/21.

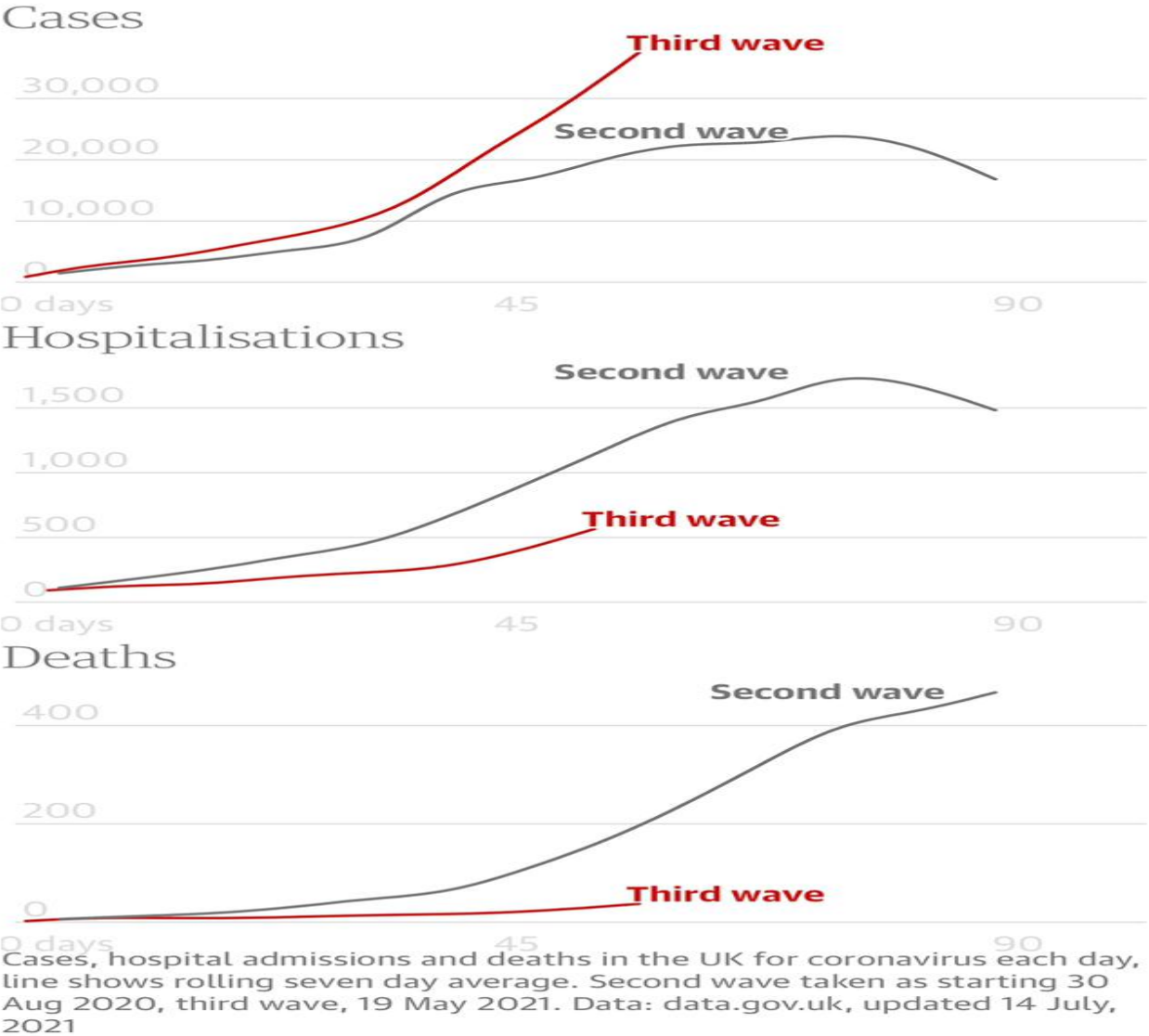
Source: UK Government, ONS



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theguardian.com

Coronavirus waves compared

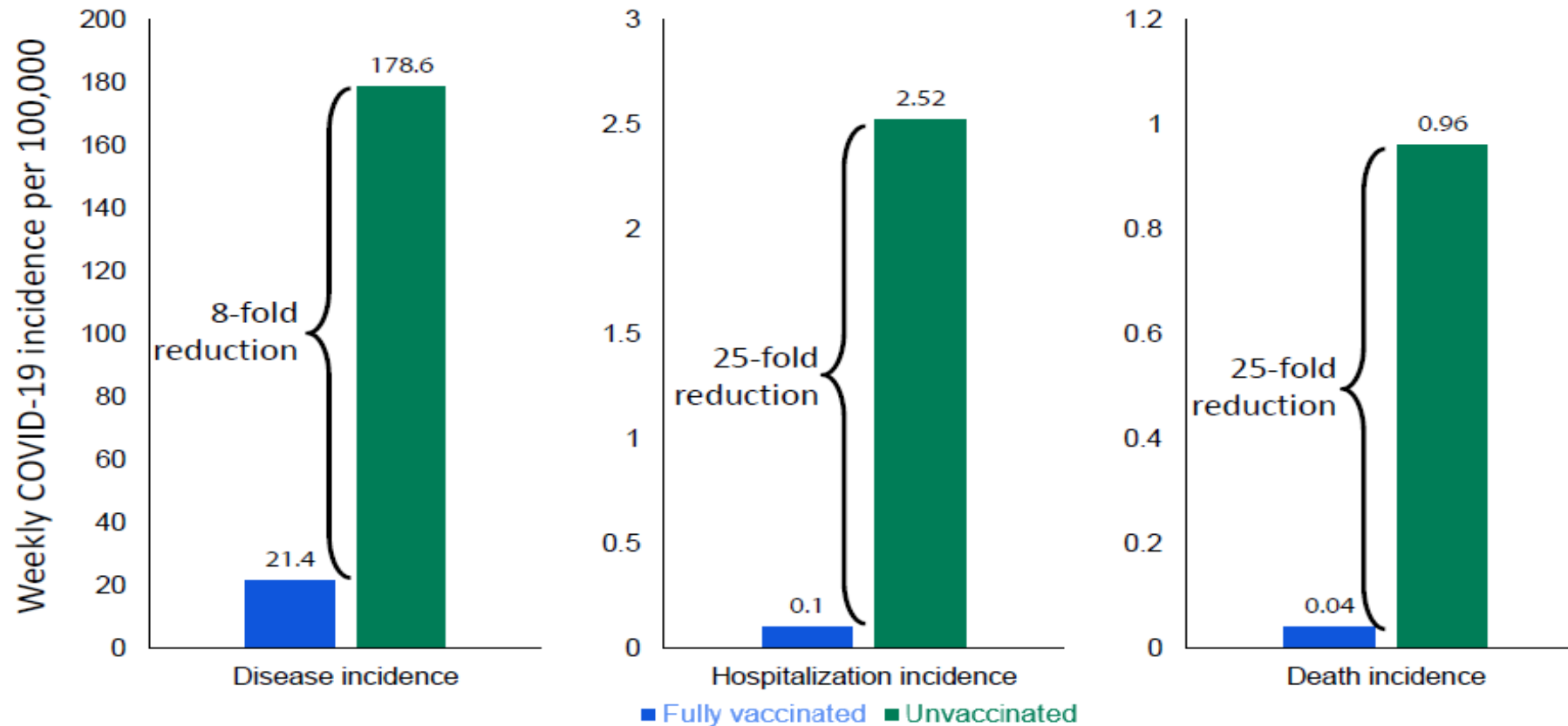




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Greater risk of disease, hospitalization and death among unvaccinated vs. vaccinated people: National estimates



Data from COVID Tracker as of July 24, 2021. Average incidence 100 cases per 100,000 persons per week. Vaccine effectiveness against symptomatic illness = 88% (Lopez Bernal et al. [NEJM 2021](#)), where risk is $[1 - VE]$ or 12%. Vaccine effectiveness hospitalization (or death) = 96% (Stowe et al. [PHE preprint](#)), where risk is $[1 - VE]$ or 4%. Rate in unvaccinated = Community rate/ $((1 - \text{fully vaccinated coverage}) + (1 - VE) * \text{fully vaccinated coverage})$. Rate in fully vaccinated = $(1 - VE) * \text{Rate in unvaccinated}$. Fully vaccinated coverage proportions were from COVID Data Tracker as of July 24, 2021 (50% for US.).



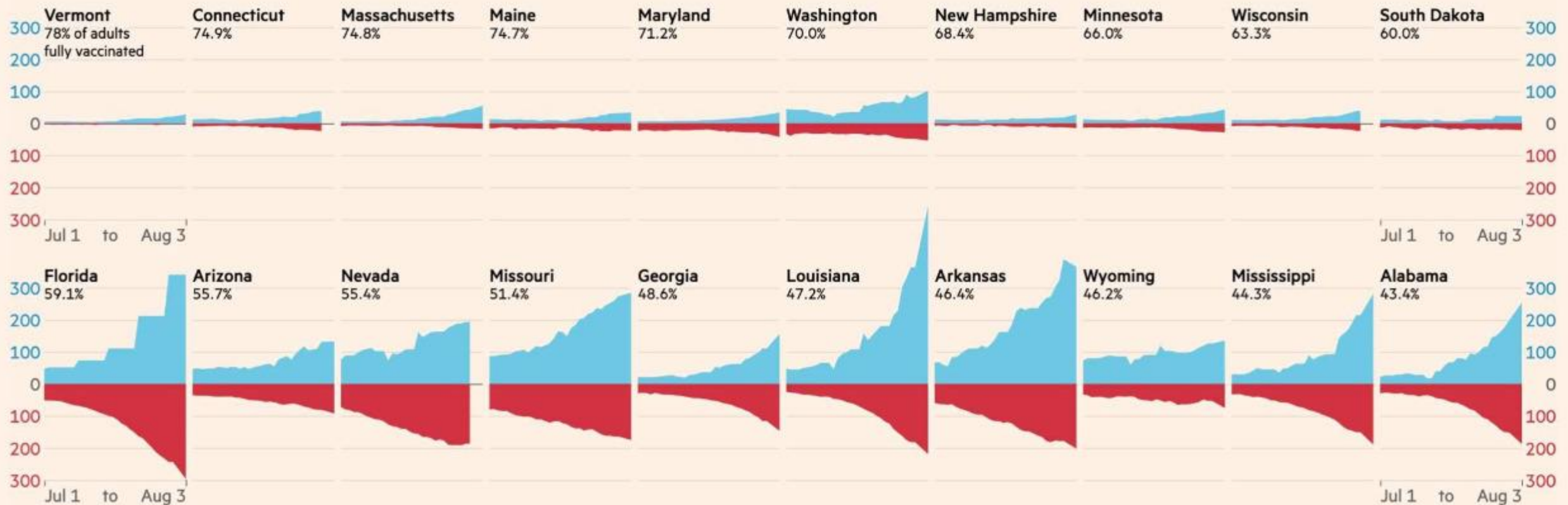
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In states with the highest vaccination rates, hospitalisations remain low.

Where vaccinations are lagging, the virus is surging once again

Weekly **cases** per 100k people, and **hospital patients** per 500k



Source: FT analysis of data from Johns Hopkins CSSE and US HHS. Cases shifted forward to account for lag between infection and hospitalisation

© FT

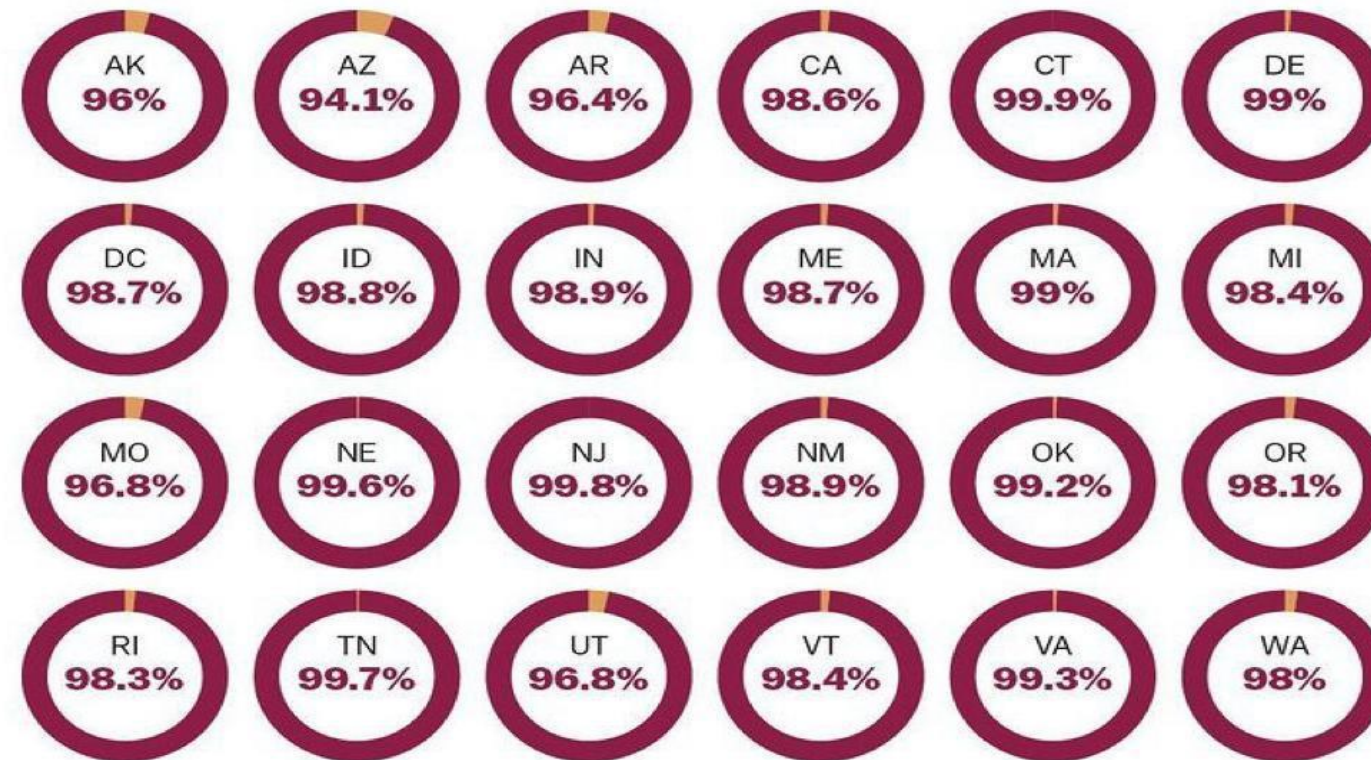


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Breakthrough cases are not driving the US Covid-19 surge

■ Reported cases among not fully vaccinated ■ Reported cases among fully vaccinated



Source: Kaiser Family Foundation
Note: Case data in recent months, as of July

Vox



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COVID-19 in Virginia: Cases by Vaccination Status



Dashboard Updated: 7/30/2021, Updated Weekly on Friday

Select Health Region

All

Select Date Range (Click on Dates for Calendar Icon)

June 1, 2021

July 24, 2021

Fully Vaccinated People: **4,602,156**

Percent of Cases In People Not
Fully Vaccinated

96.66%

15,477

Total Cases Not Fully Vaccinated^

Percent of Hospitalizations In
People Not Fully Vaccinated

94.71%

681

Total Hospitalizations Not Fully
Vaccinated

Percent of Deaths In People
Not Fully Vaccinated

93.42%

71

Total Deaths Not Fully Vaccinated

Total Breakthrough* Cases

536

0.012%

Percent of Fully Vaccinated People
who Developed COVID-19

Total Breakthrough
Hospitalizations

38**

0.0008%

Percent of Fully Vaccinated People
Who Were Hospitalized for COVID-19

Total Breakthrough Deaths

5

0.0001%

Percent of Fully Vaccinated People
Who Died of COVID-19

Total Cases: **16,048**

Total Hospitalizations: **719**

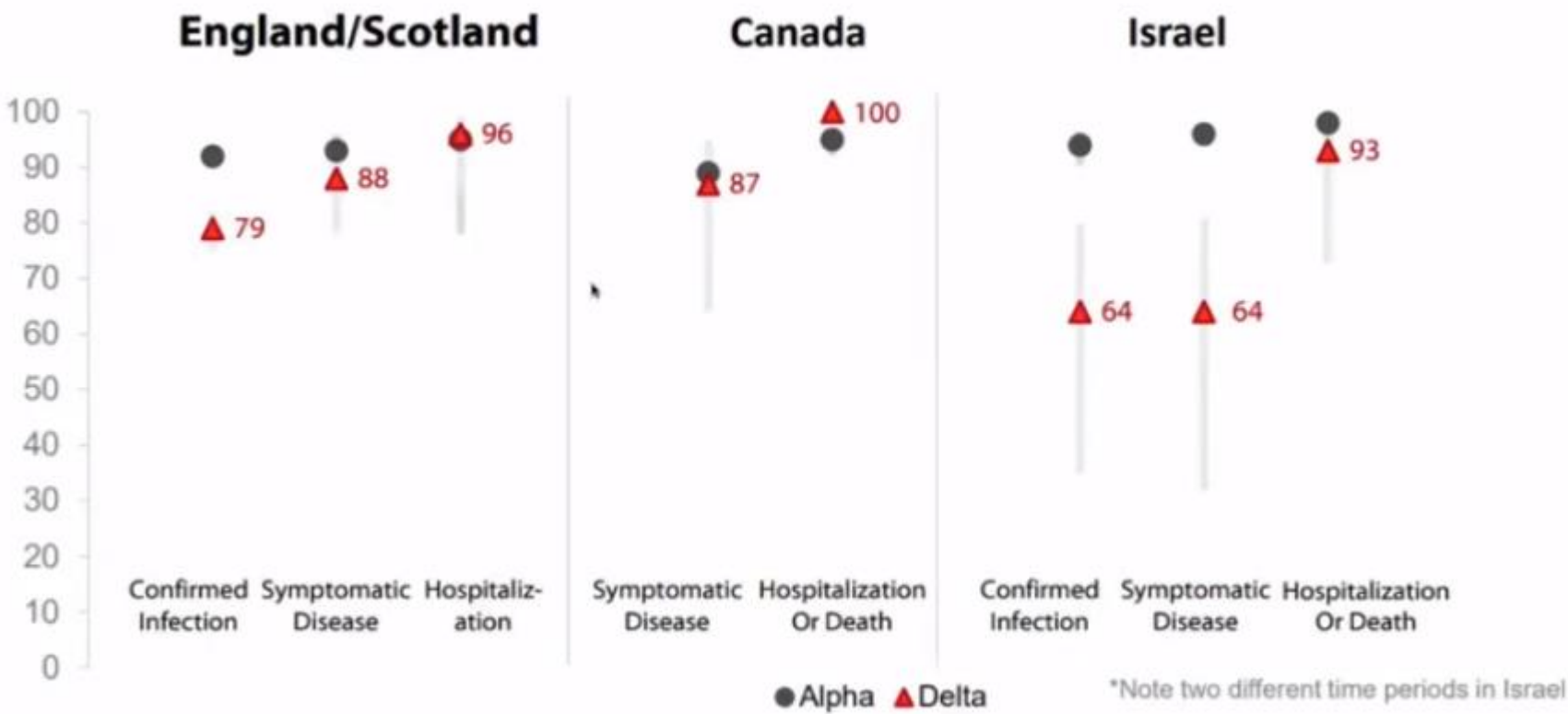
Total Deaths: **76**



ENFRENTANDO A VARIANTE DELTA DA COVID-19



Pfizer 2-Dose Vaccine Effectiveness for Alpha vs. Delta

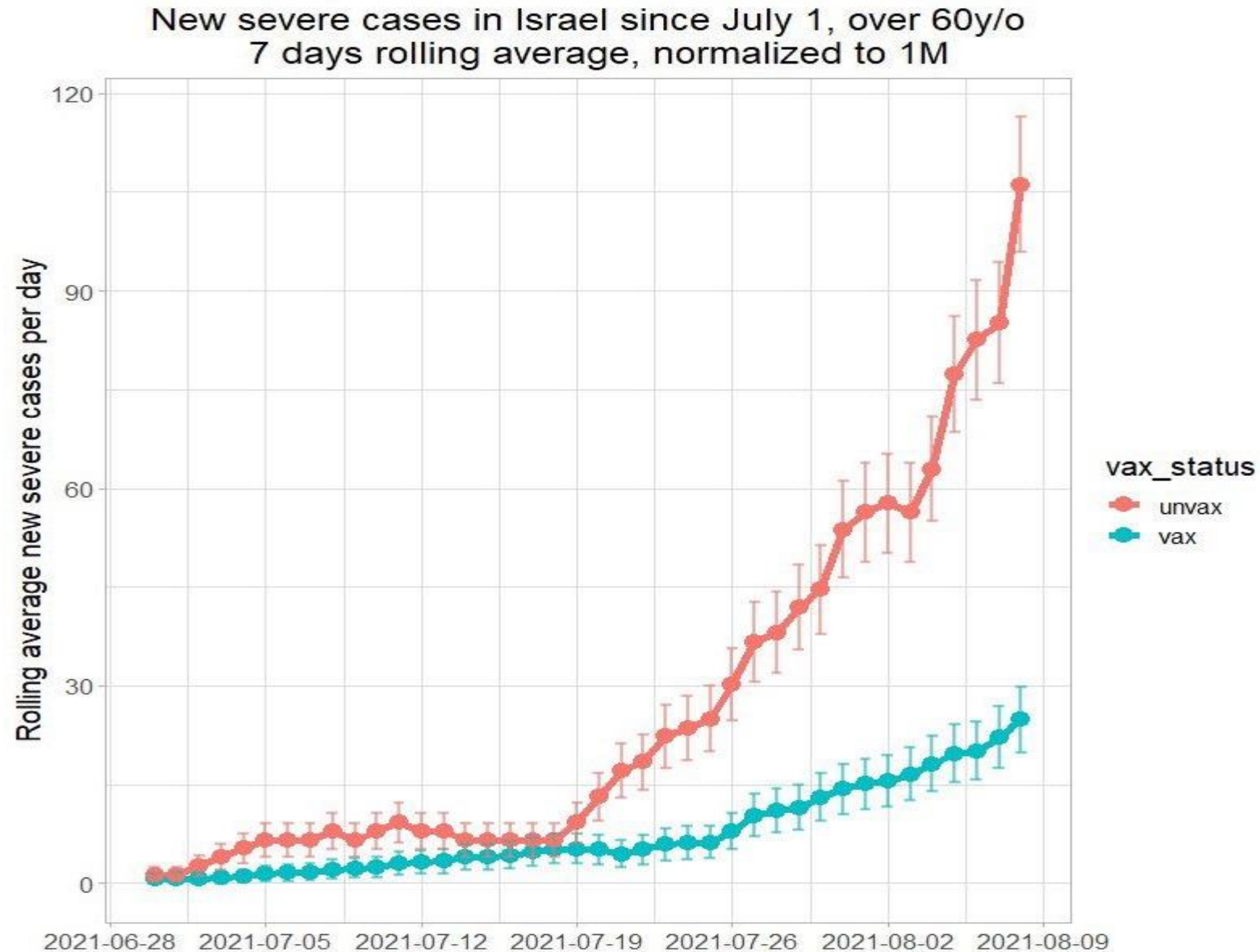


Sheikh et al. Lancet (2021): [https://doi.org/10.1016/S0140-6736\(21\)01358-1](https://doi.org/10.1016/S0140-6736(21)01358-1); Lopez Bernal et al. medRxiv preprint: <https://doi.org/10.1101/2021.05.22.21257656>; Stowe et al. PHE preprint: https://hub.net/web/phe-national/public-library/document_library/v2WvR63Z8Iq/view/479607266; Nasreen et al. medRxiv preprint: <https://doi.org/10.1101/2021.06.28.21259420>; <https://www.gov.uk/en/departments/news/06072021-04>





ENFRENTANDO A VARIANTE DELTA DA COVID-19





ENFRENTANDO A VARIANTE DELTA DA COVID-19



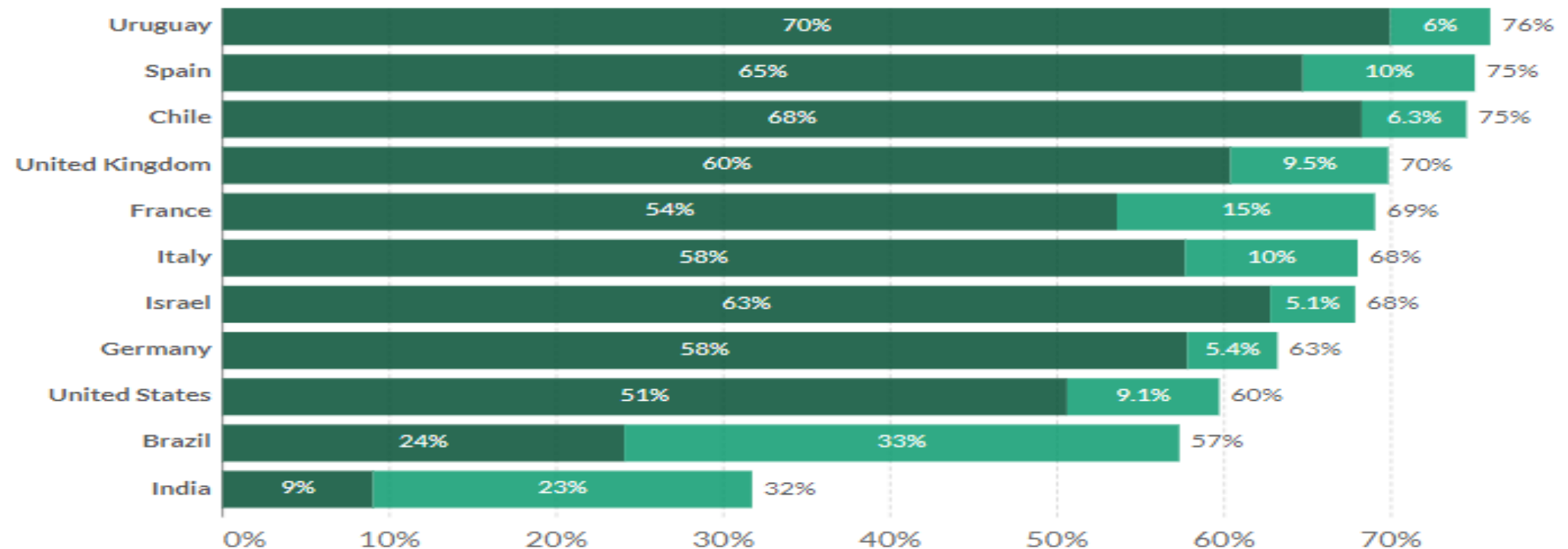
Share of people vaccinated against COVID-19, Aug 18, 2021

Our World
in Data

+ Add country

■ Share of people fully vaccinated against COVID-19

■ Share of people only partly vaccinated against COVID-19



Source: Official data collated by Our World in Data. This data is only available for countries which report the breakdown of doses administered by first and second doses in absolute numbers.

CC BY

▶ Dec 27, 2020 ○ Aug 18, 2021

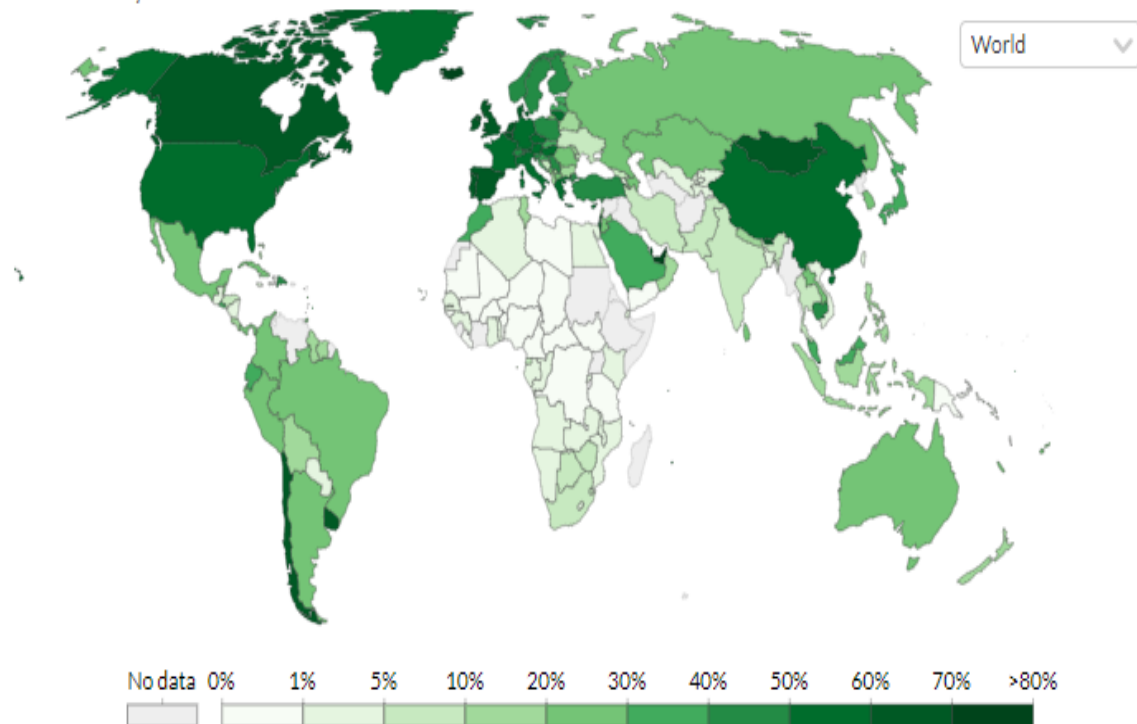


ENFRENTANDO A VARIANTE DELTA DA COVID-19

Share of the population fully vaccinated against COVID-19, Aug 18, 2021

Our World in Data

Total number of people who received all doses prescribed by the vaccination protocol, divided by the total population of the country.



Source: Official data collated by Our World in Data - Last updated 19 August 2021, 12:40 (London time)

Note: This data is only available for countries which report the breakdown of doses administered by first and second doses. Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

OurWorldInData.org/coronavirus • CC BY

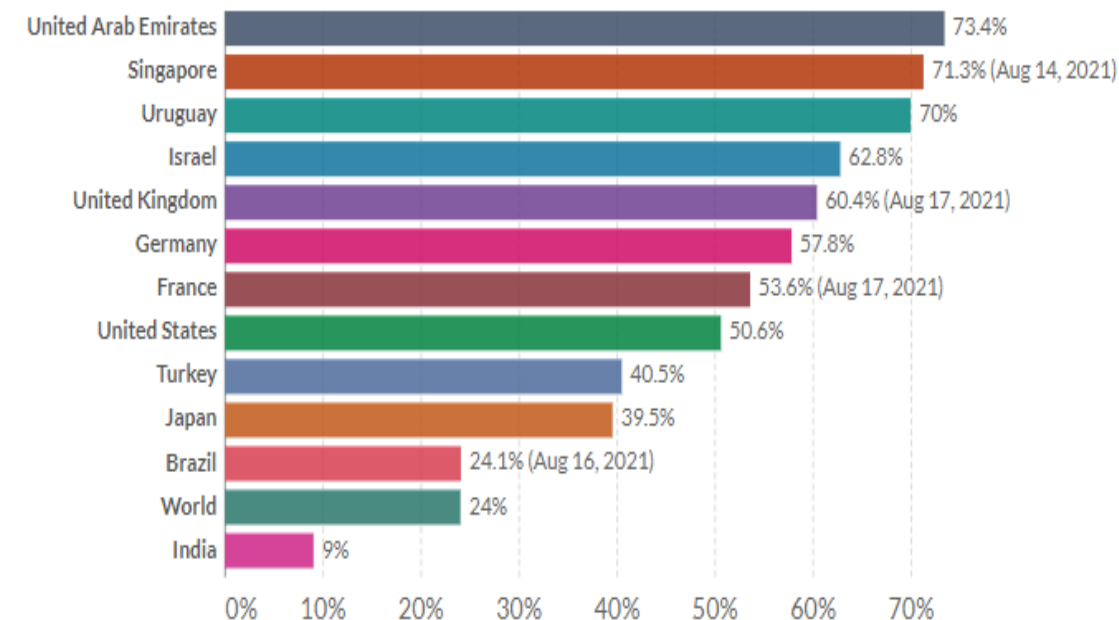
▶ Dec 27, 2020 ◯ Aug 18, 2021

Share of the population fully vaccinated against COVID-19, Aug 18, 2021

Our World in Data

Total number of people who received all doses prescribed by the vaccination protocol, divided by the total population of the country.

+ Add country



Source: Official data collated by Our World in Data - Last updated 19 August 2021, 12:40 (London time)

Note: This data is only available for countries which report the breakdown of doses administered by first and second doses. Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

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▶ Dec 27, 2020 ◯ Aug 18, 2021



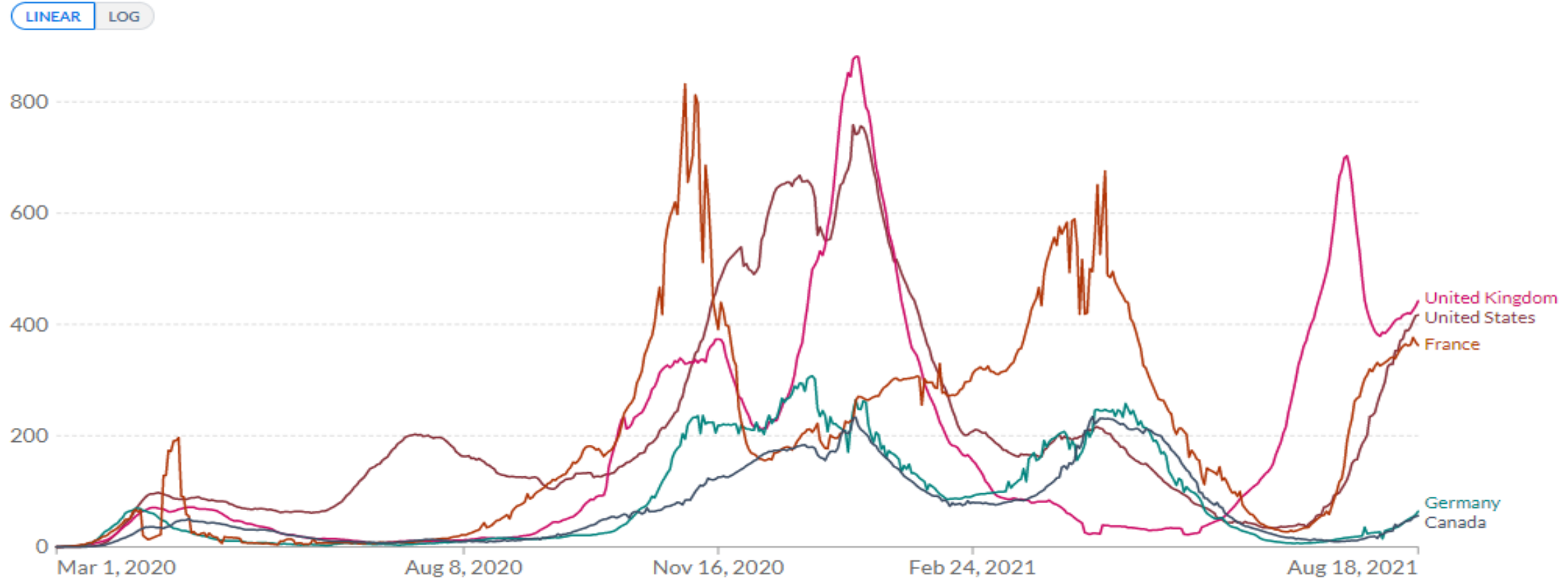
ENFRENTANDO A VARIANTE DELTA DA COVID-19



Daily new confirmed COVID-19 cases per million people

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

Our World
in Data



Source: Johns Hopkins University CSSE COVID-19 Data

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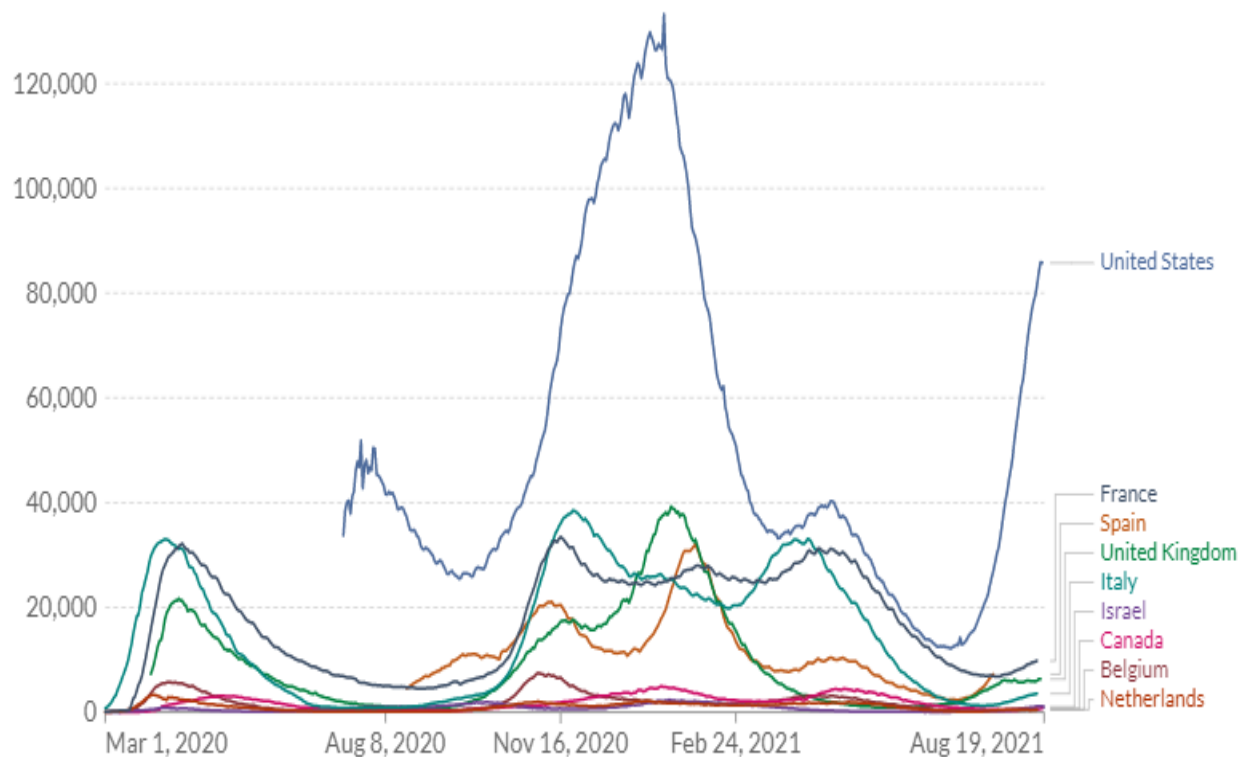
▶ Jan 28, 2020 ———— ○ Aug 18, 2021



ENFRENTANDO A VARIANTE DELTA DA COVID-19

Number of COVID-19 patients in hospital

LINEAR LOG + Add country

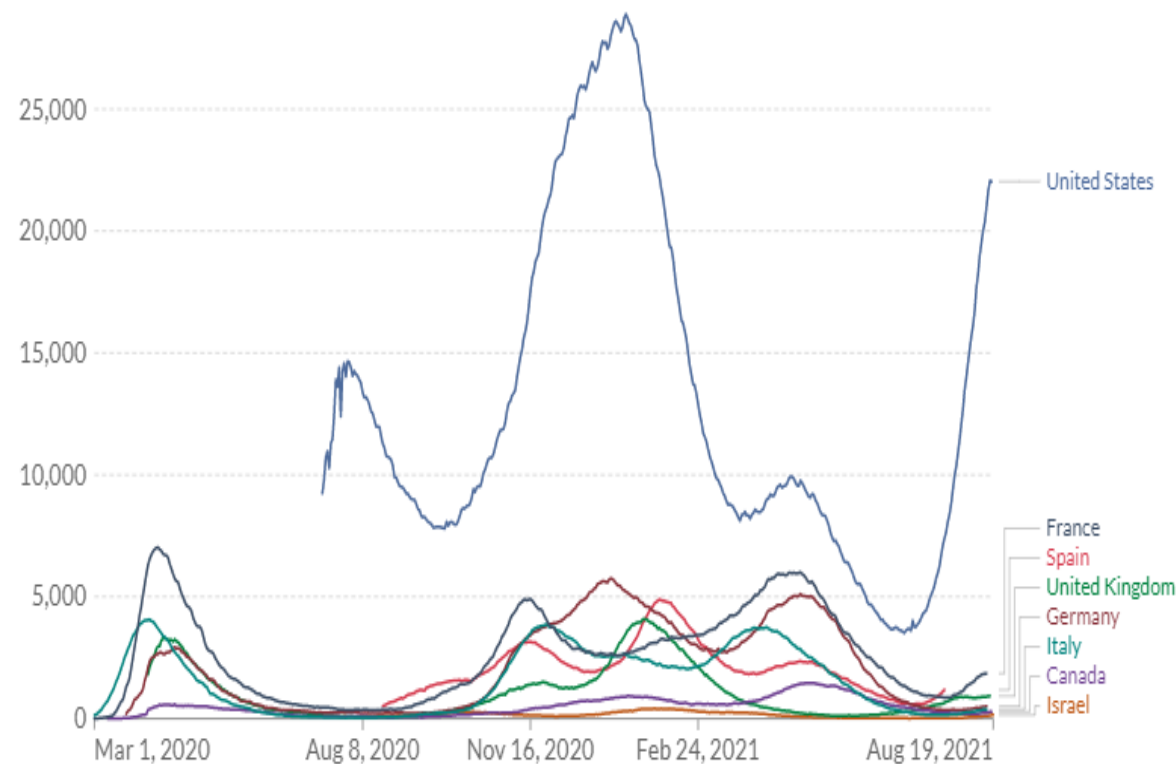


Source: European CDC for EU countries, government sources for other countries - Last updated 19 August, 16:00 (London time)
OurWorldInData.org/coronavirus • CC BY

► Jan 24, 2020 ◯ Aug 19, 2021

Number of COVID-19 patients in intensive care (ICU)

LINEAR LOG + Add country



Source: European CDC for EU countries, government sources for other countries - Last updated 19 August, 16:00 (London time)
OurWorldInData.org/coronavirus • CC BY

► Jan 27, 2020 ◯ Aug 19, 2021



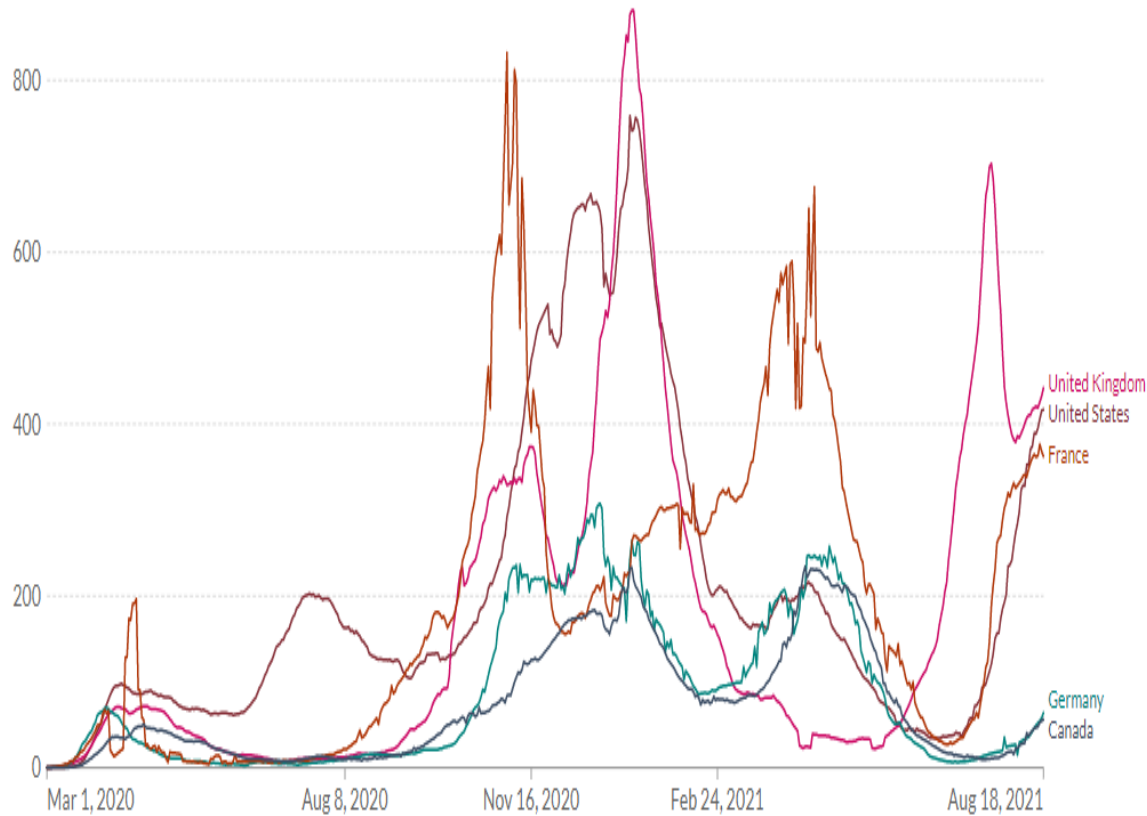
ENFRENTANDO A VARIANTE DELTA DA COVID-19

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Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

Our World in Data

LINEAR LOG



Source: Johns Hopkins University CSSE COVID-19 Data

CC BY

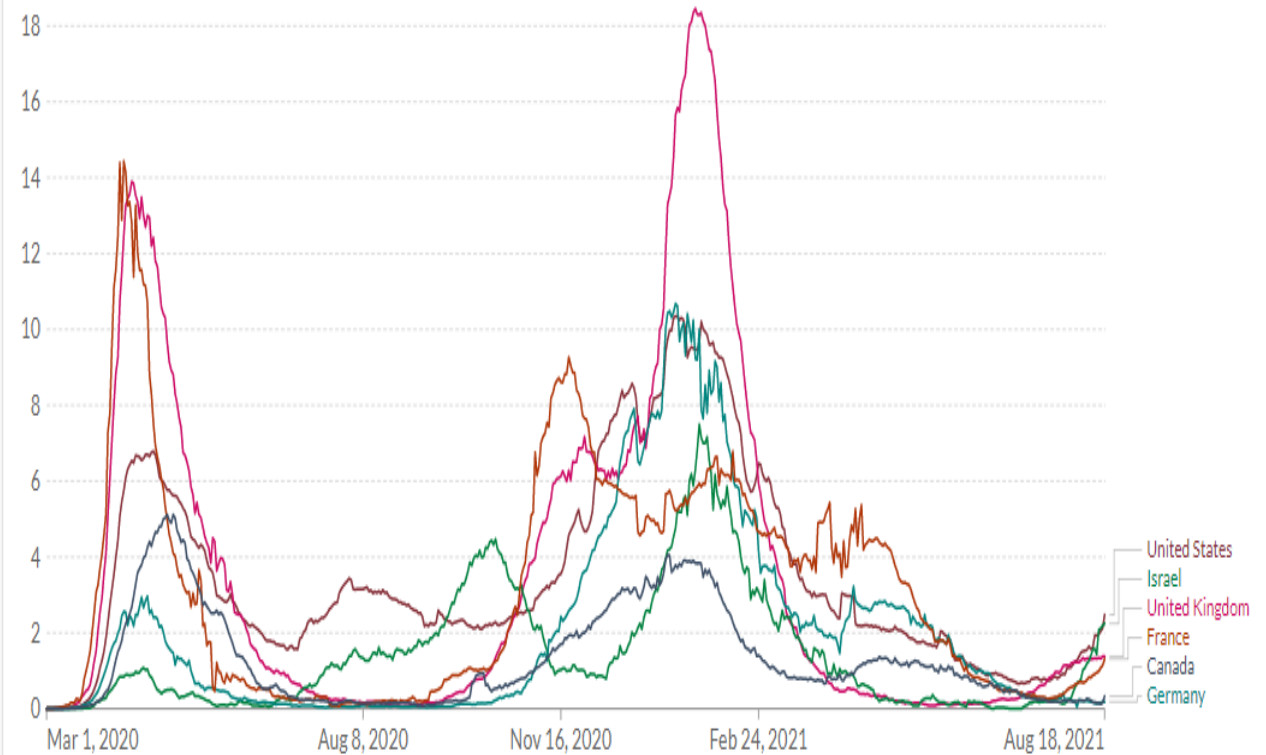


Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

Our World in Data

LINEAR LOG



Source: Johns Hopkins University CSSE COVID-19 Data

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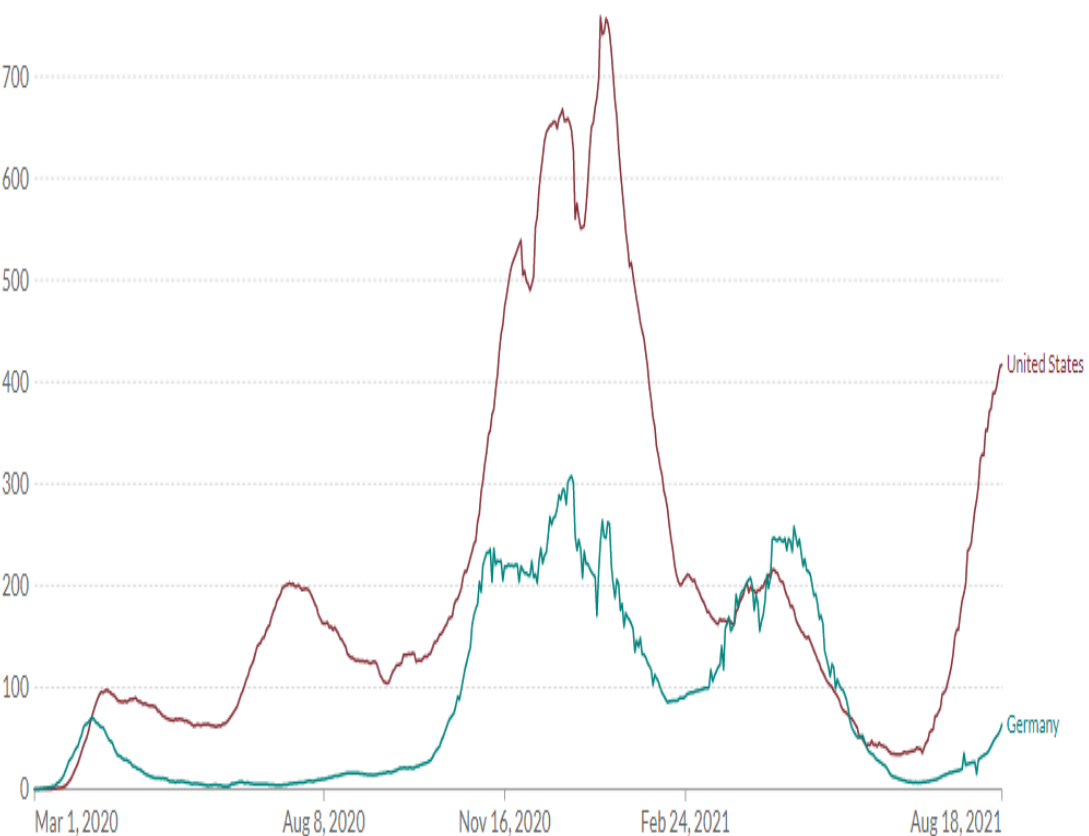


ENFRENTANDO A VARIANTE DELTA DA COVID-19

Daily new confirmed COVID-19 cases per million people

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

LINEAR LOG



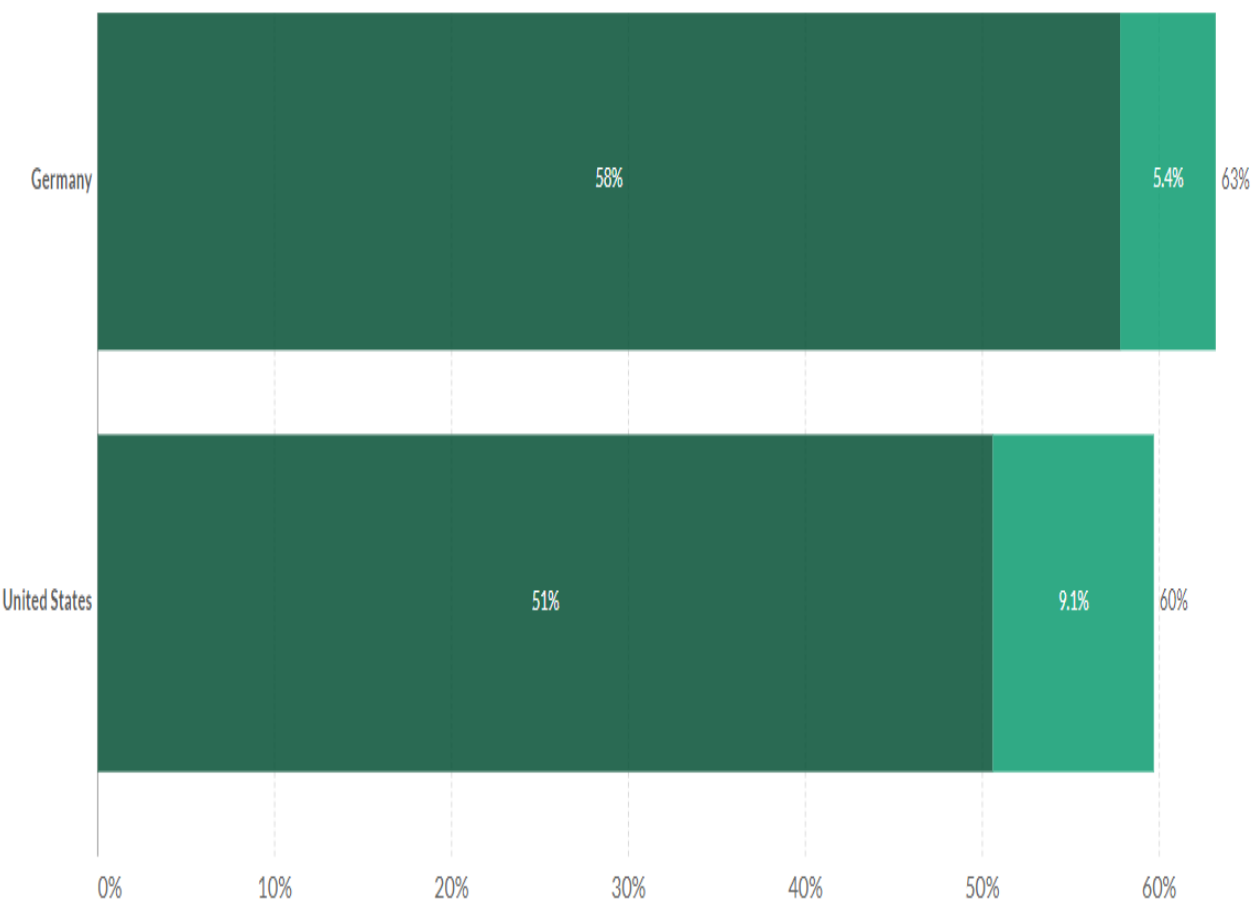
Source: Johns Hopkins University CSSE COVID-19 Data

CC BY



Share of people vaccinated against COVID-19, Aug 18, 2021

Share of people fully vaccinated against COVID-19 Share of people only partly vaccinated against COVID-19



Source: Official data collated by Our World in Data. This data is only available for countries which report the breakdown of doses administered by first and second doses in absolute numbers.

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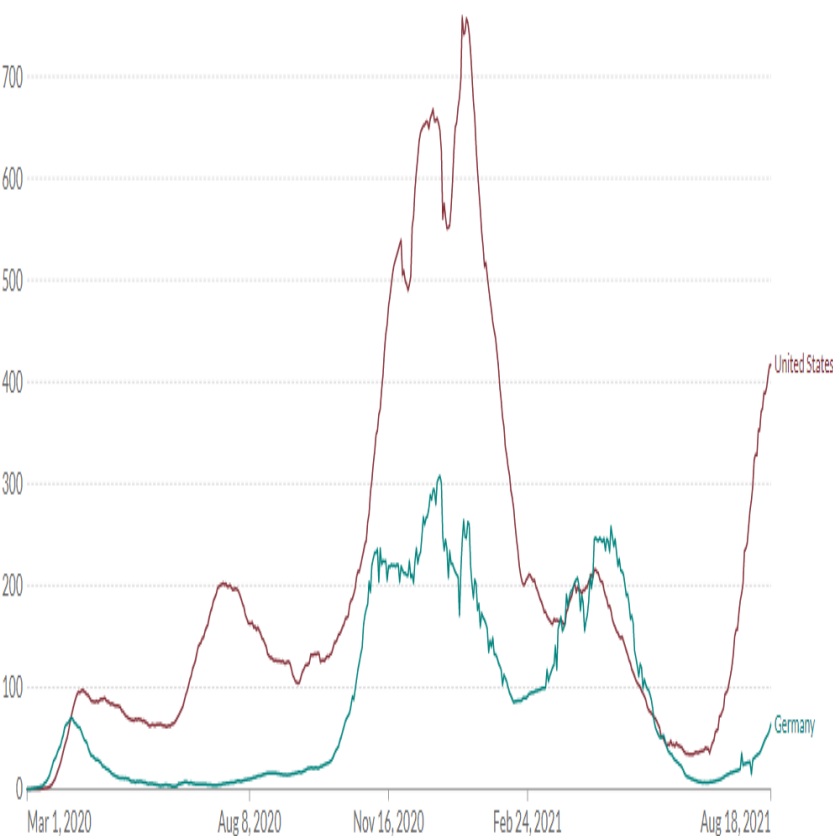


ENFRENTANDO A VARIANTE DELTA DA COVID-19

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LINEAR LOG



Source: Johns Hopkins University CSSE COVID-19 Data

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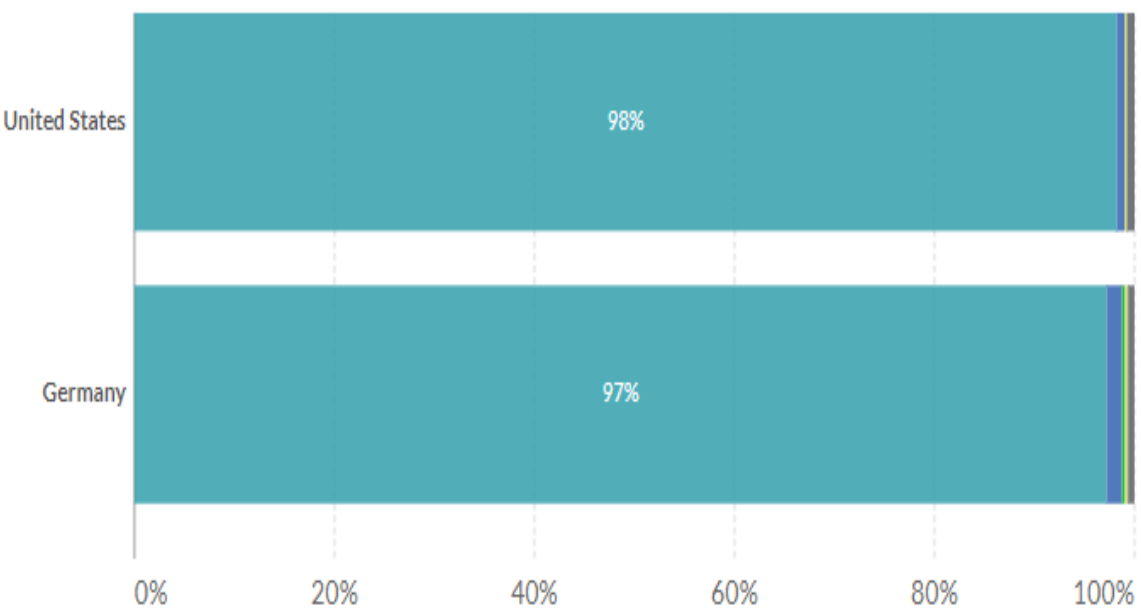
Jan 28, 2020 Aug 18, 2021

SARS-CoV-2 sequences by variant, Aug 19, 2021

The share of analyzed sequences in the last two weeks that correspond to each variant group. This share may not reflect the complete breakdown of cases since only a fraction of all cases are sequenced.

+ Add country

Delta Alpha Eta Iota Beta Epsilon Gamma Kappa Other Lambda

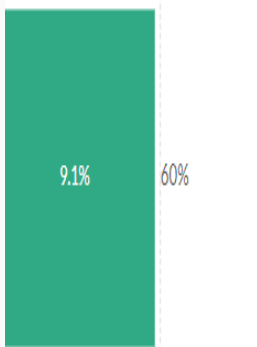
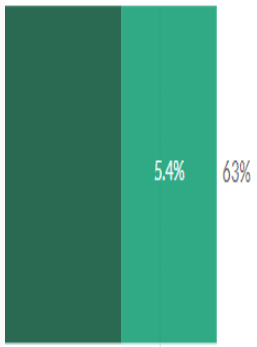


Source: CoVariants.org and GISAID - Last updated 19 August 2021, 21:00 (London time)

OurWorldInData.org/coronavirus • CC BY

Mar 8, 2021 Aug 19, 2021

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60%

s in absolute numbers. CC BY

Aug 18, 2021

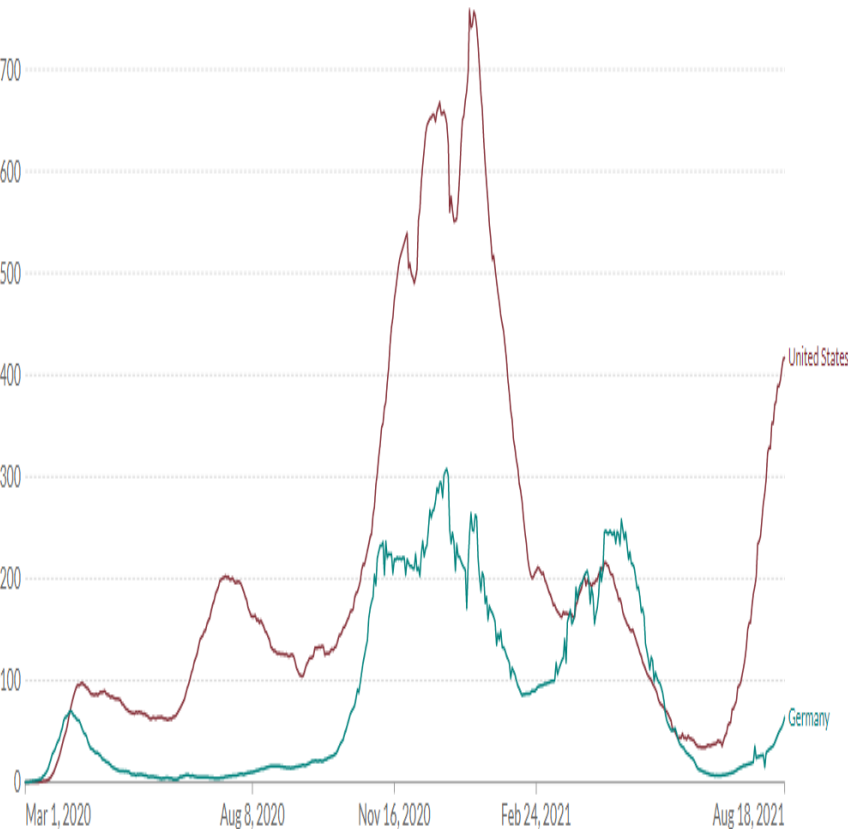


ENFRENTANDO A VARIANTE DELTA DA COVID-19

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LINEAR LOG



Source: Johns Hopkins University CSSE COVID-19 Data

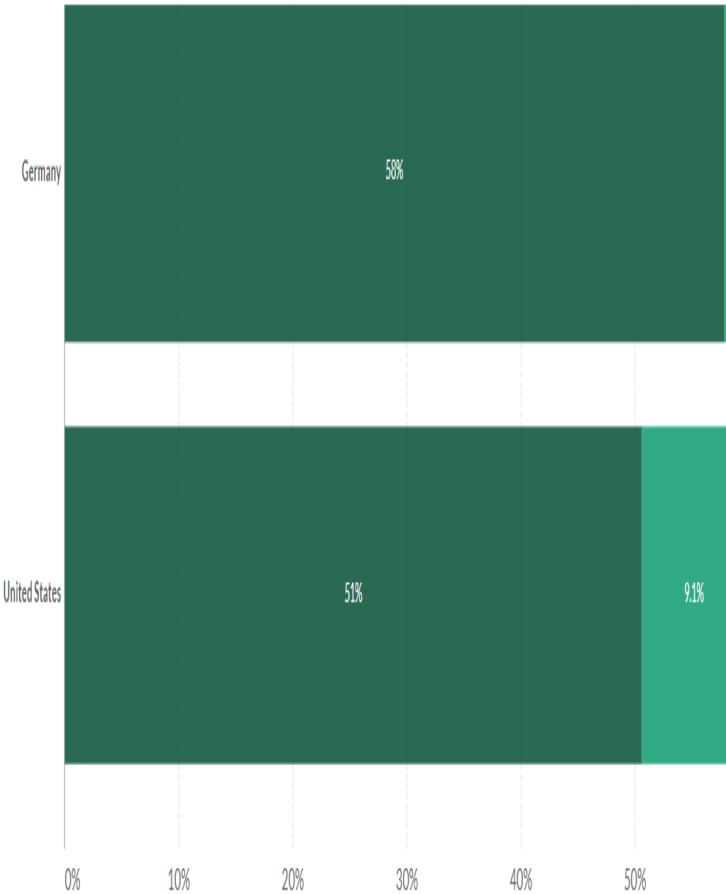
CC BY

Jan 28, 2020 Aug 18, 2021



Share of people vaccinated against COVID-19, Aug 18, 2021

Share of people fully vaccinated against COVID-19 Share of people only partly vaccinated against COVID-19



Source: Official data collated by Our World in Data. This data is only available for countries which report the breakdown of doses administered by first and second doses in absolute number

Dec 27, 2020

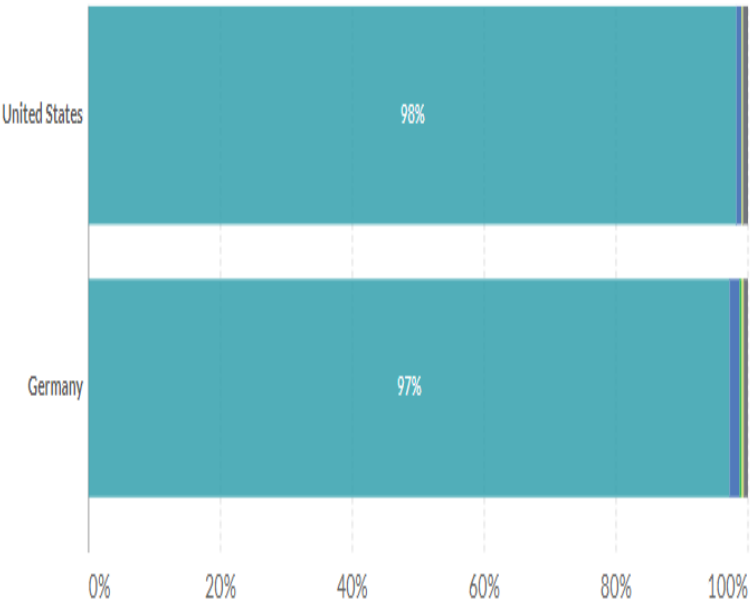
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+ Add country

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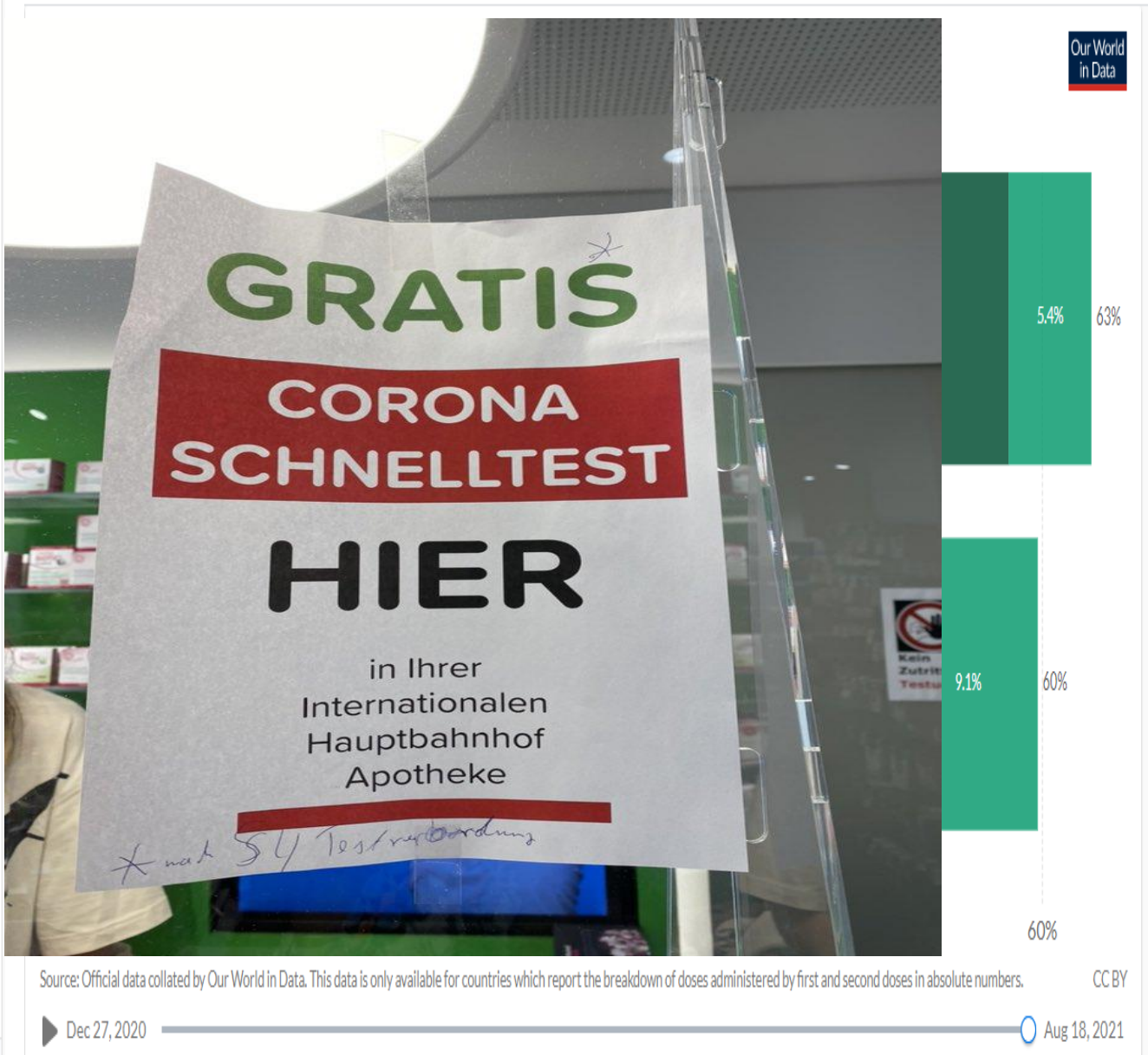
Source: CoVariants.org and GISAID - Last updated 19 August 2021, 21:00 (London time) OurWorldInData.org/coronavirus • CC BY

Mar 8, 2021 Aug 19, 2021

CHART TABLE SOURCES DOWNLOAD

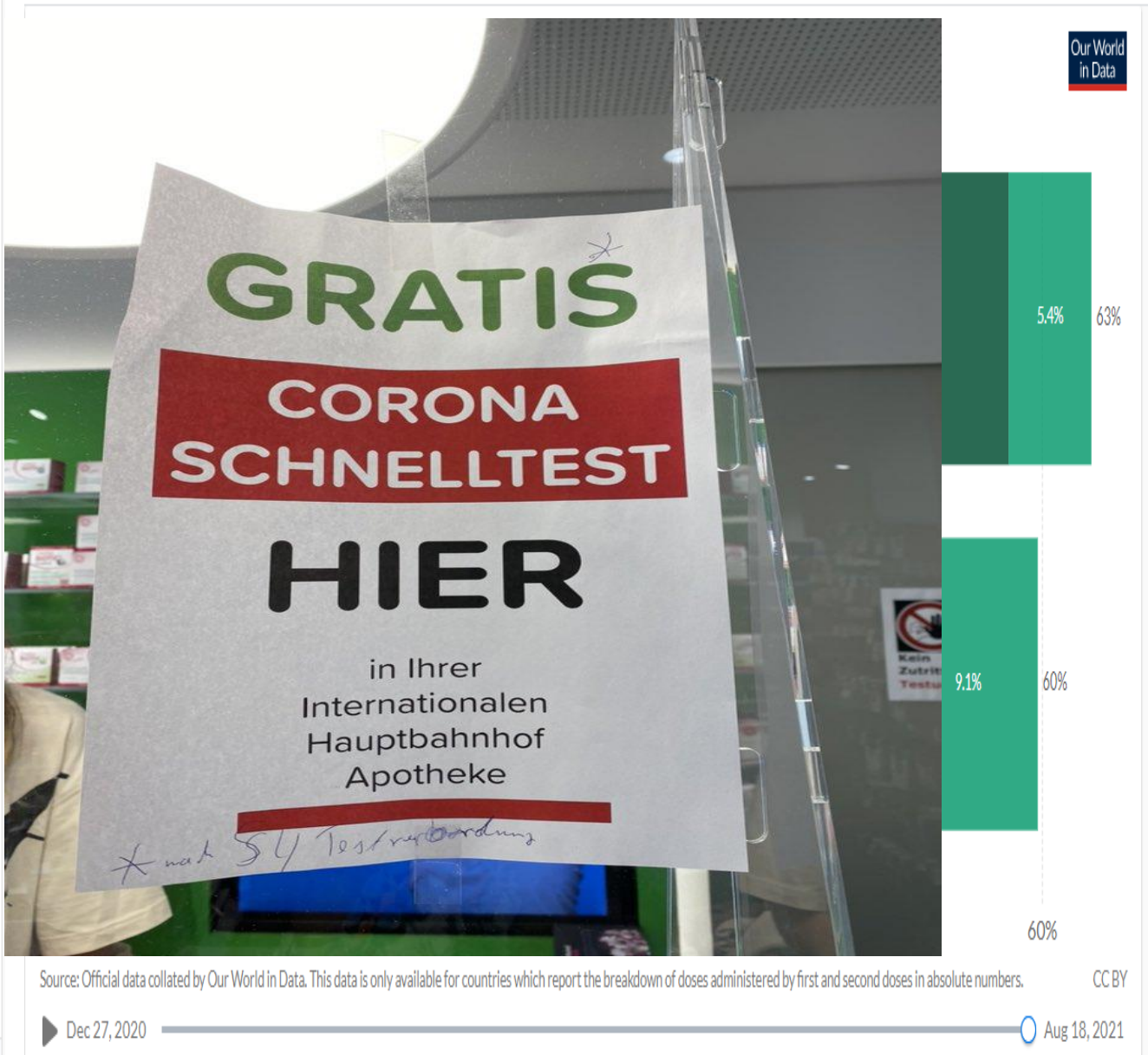


ENFRENTANDO A VARIANTE DELTA DA COVID-19





ENFRENTANDO A VARIANTE DELTA DA COVID-19





ENFRENTANDO A VARIANTE DELTA DA COVID-19



Maneiras importantes de enfrentar a disseminação da variante delta da COVID-19:

- Acelerar a vacinação no país: aumentar % vacinação completa:
 - BR: reduzir intervalo da Pfizer
 - SP: manter intervalo AZ
 - terceira dose em grupos prioritários vacinados > 6 meses*
- Manter as medidas de barreira:
 - uso correto de máscaras faciais inclusive ambientes abertos
 - máscaras com maior poder de filtração
 - evitar aglomerações
 - higienização frequente das mãos.*
- **TESTAR ***

*: opinião pessoal





ENFRENTANDO A VARIANTE DELTA DA COVID-19



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

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Morbidity and Mortality Weekly Report (MMWR)

CDC



Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings — Barnstable County, Massachusetts, July 2021

Weekly / August 6, 2021 / 70(31);1059-1062

On July 30, 2021, this report was posted online as an MMWR Early Release.

Testar é fundamental!

Em julho de 2021, em Barnstable, Massachusetts, cidade, 469 casos de COVID-19 foram identificados entre residentes de Massachusetts que viajaram para a cidade de 3 a 17 de julho; 346 (74%) ocorreram em pessoas totalmente vacinadas. Os testes identificaram a variante Delta em 90% das amostras de 133 pacientes. Entre cinco pacientes com COVID-19 que foram hospitalizados, quatro foram totalmente vacinados; nenhuma morte foi relatada, Os valores do limite do Ct foram semelhantes entre as amostras de pacientes que foram totalmente vacinados e aqueles que não foram.



ENFRENTANDO A VARIANTE DELTA DA COVID-19

OBRIGADA

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