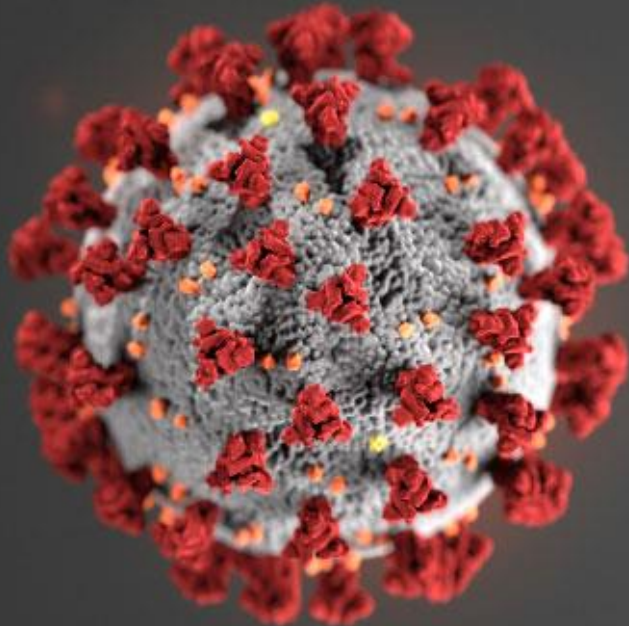


SARS-Cov-2 Report

José Luis Pires

17 November 2020



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SARS-Cov-2

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- **Portugal**
 - [Cases, Deaths and Projections](#) – per week
- **Ireland**
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- **New Jersey/US**
 - [Cases, Deaths and Projections](#) – per week
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Symptoms of:

➤ COVID-19

➤ Cold

➤ Flu

COVID-19: IDENTIFYING THE SYMPTOMS

Coronavirus
(COVID-19)

SYMPTOMS	COVID-19	COLD	FLU
	Symptoms range from mild to severe	Gradual onset of symptoms	Abrupt onset of symptoms
Fever 	Common	Rare	Common
Cough 	Common	Common	Common
Sore Throat 	Sometimes	Common	Common
Shortness of Breath 	Sometimes	No	No
Fatigue 	Sometimes	Sometimes	Common
Aches & Pains 	Sometimes	No	Common
Headaches 	Sometimes	Common	Common
Runny or Stuffy Nose 	Sometimes	Common	Sometimes
Diarrhea 	Rare	No	Sometimes, especially for children
Sneezing 	No	Common	No

Adapted from material produced by WHO, Centers for Disease Control and Prevention.

THE RELATIVE SIZE OF PARTICLES

From the COVID-19 pandemic to the U.S. West Coast wildfires, some of the biggest threats now are also the most microscopic.

A particle needs to be 10 microns (μm) or less before it can be inhaled into your respiratory tract. But just how small are these specks?

Here's a look at the relative sizes of some familiar particles >

HUMAN HAIR 50-180 μm >
FOR SCALE

FINE BEACH SAND 90 μm >

GRAIN OF SALT 60 μm >

WHITE BLOOD CELL 25 μm >

GRAIN OF POLLEN 15 μm >

DUST PARTICLE (PM₁₀) <10 μm >

RED BLOOD CELL 7-8 μm >

RESPIRATORY DROPLETS 5-10 μm >

DUST PARTICLE (PM_{2.5}) 2.5 μm >

BACTERIUM 1-3 μm >

WILDFIRE SMOKE 0.4-0.7 μm >

CORONAVIRUS 0.1-0.5 μm >

T4 BACTERIOPHAGE 225nm >

ZIKA VIRUS 45nm >



Pollen can trigger allergic reactions and hay fever—which 1 in 5 Americans experience every year.

Source: Harvard Health

The visibility limits for what the naked eye can see hovers around 10-40 μm .



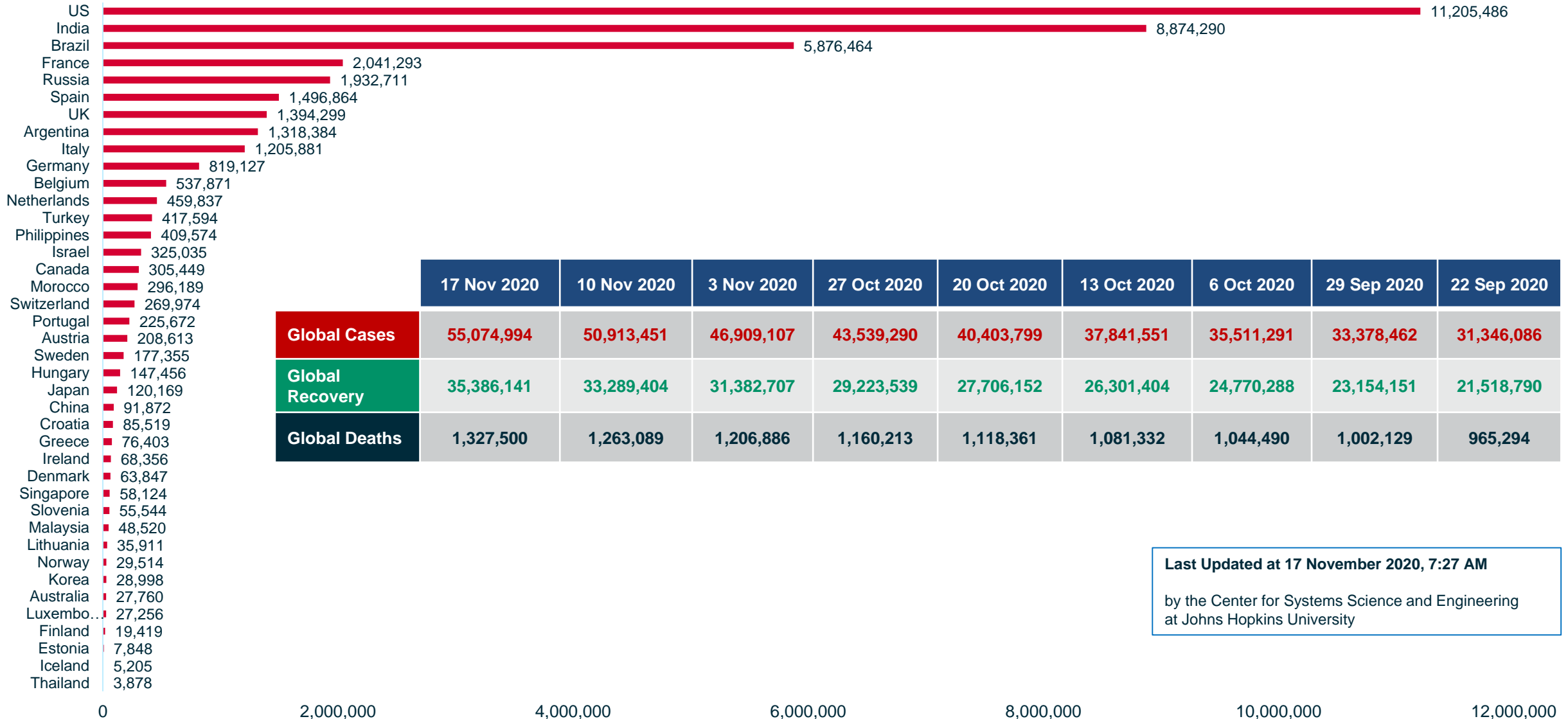
Respiratory droplets have the potential to carry smaller particles within them, such as dust or COVID-19.



Wildfire smoke can persist in the air for several days, and even months.

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

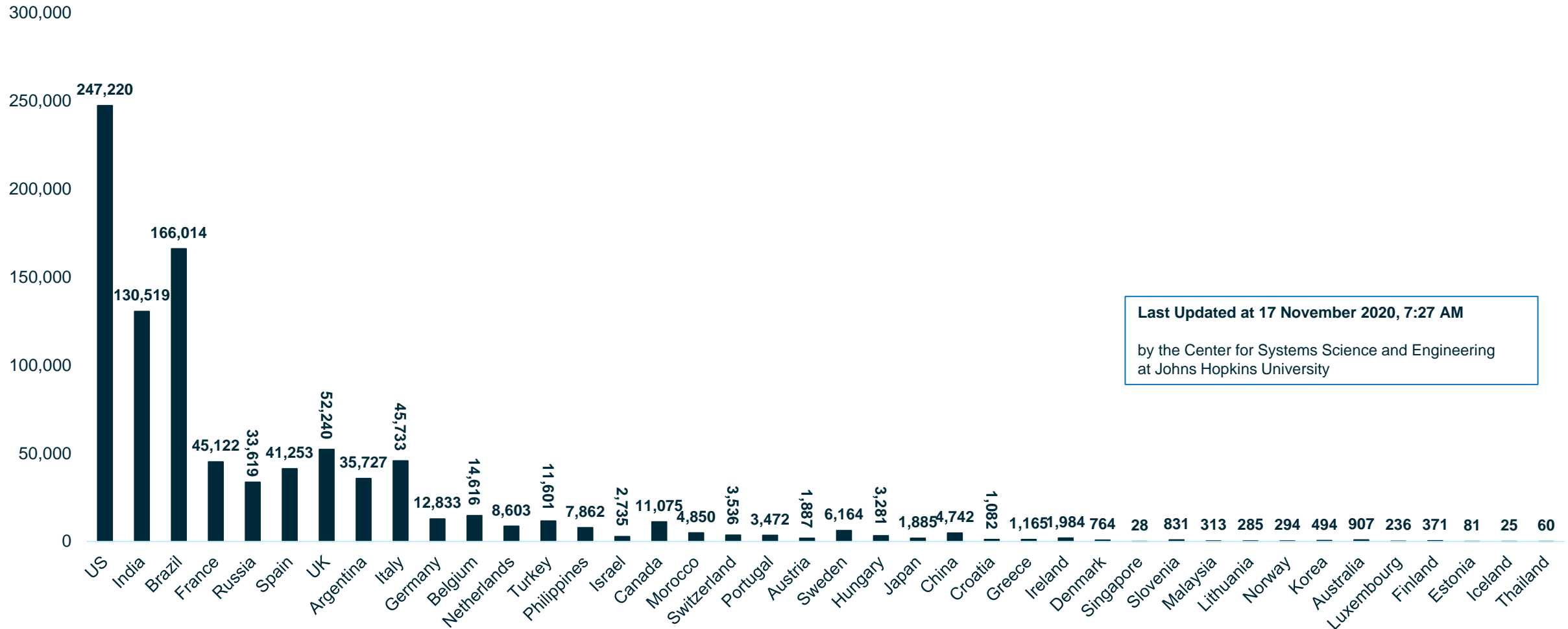
Note: Selected Countries, sorted by # of cases



Last Updated at 17 November 2020, 7:27 AM
by the Center for Systems Science and Engineering
at Johns Hopkins University

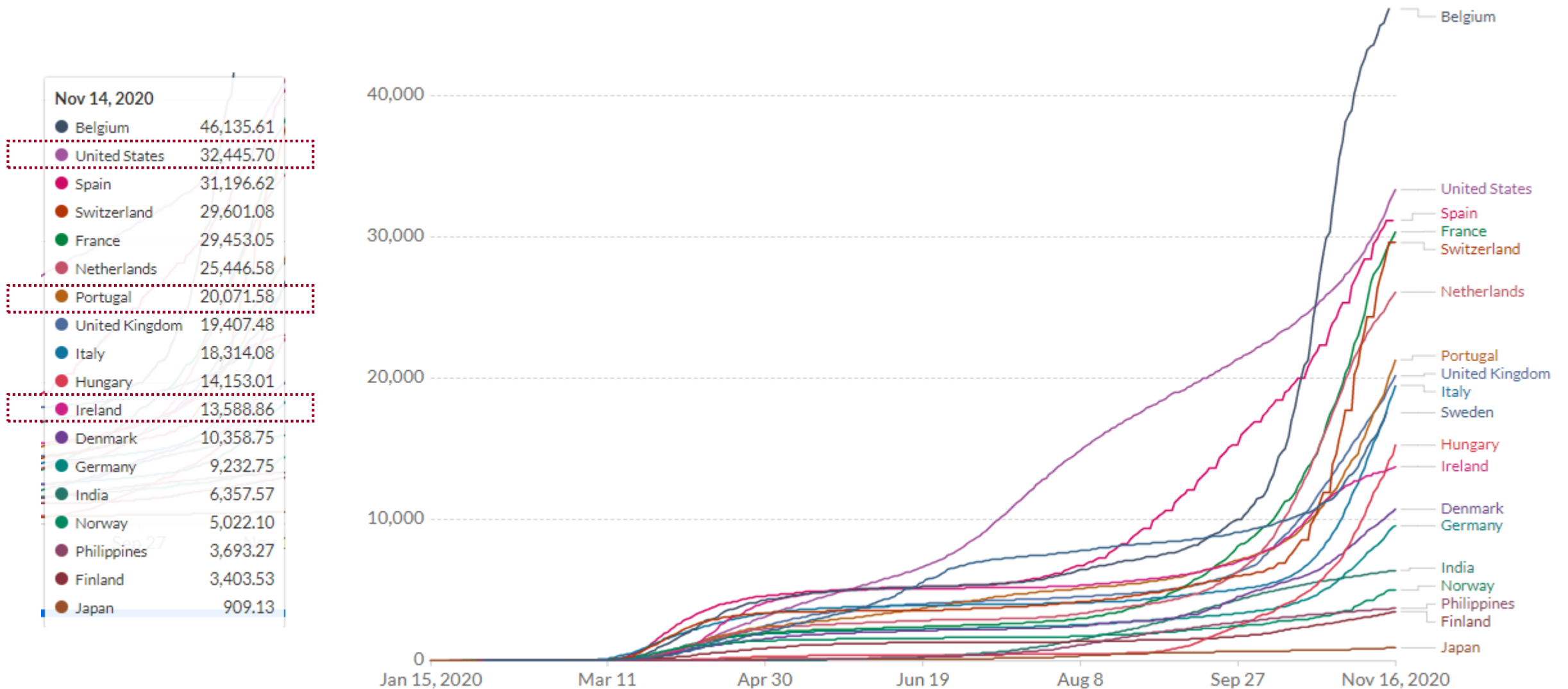
Coronavirus (SARS-CoV-2 / Covid-19) – Deaths by Country

Note: Selected Countries, sorted by # of cases



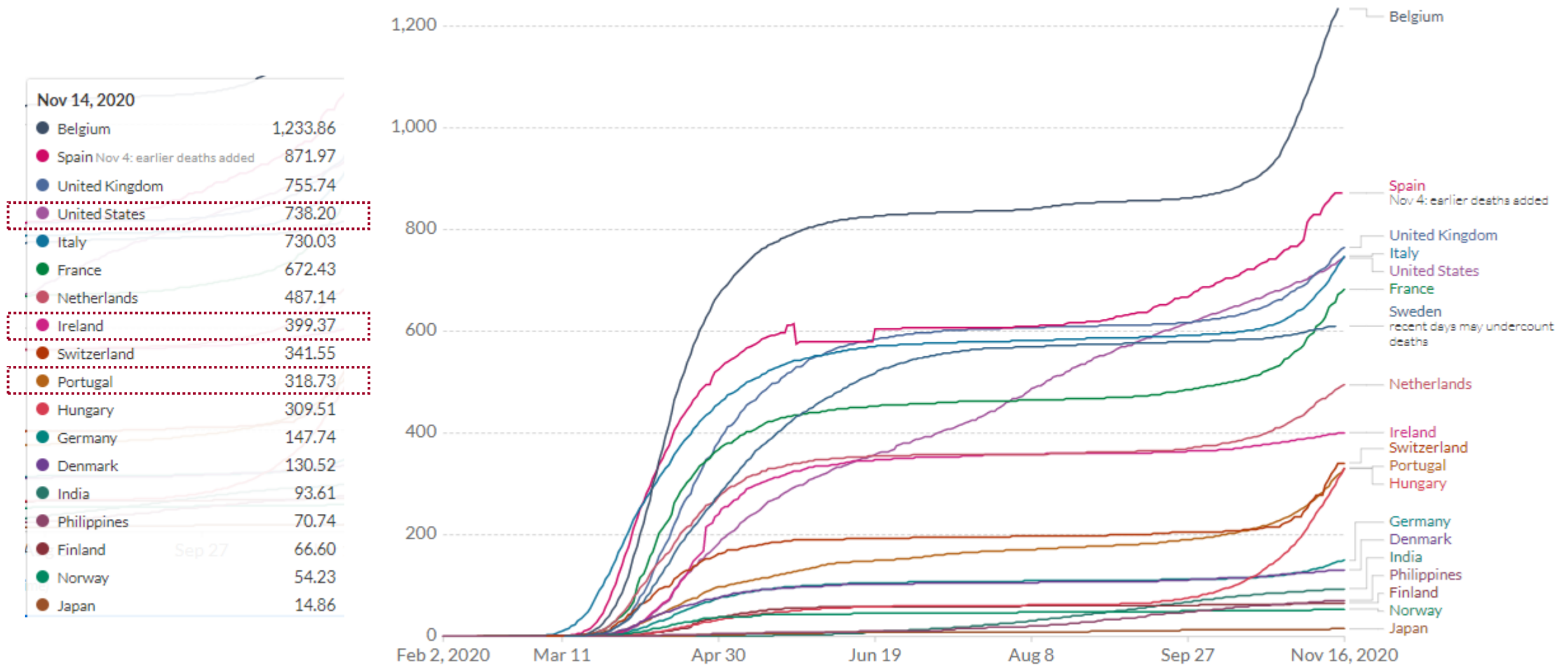
Source: <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Total confirmed Covid-19 cases per million people



Source: European CDC - Situation Update Worldwide - Last updated 16 November, 10:06 (London time)

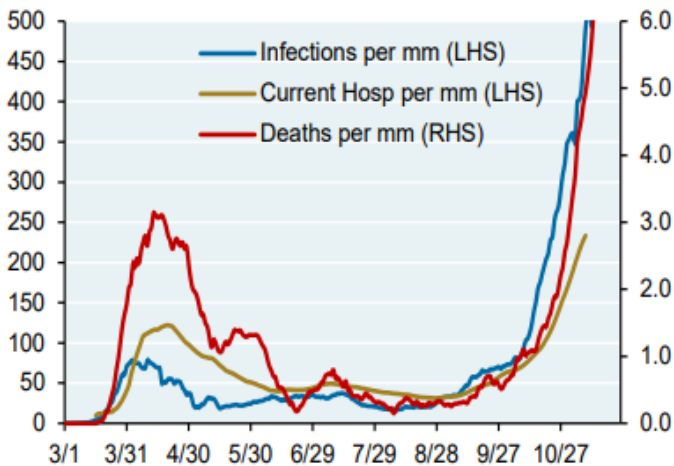
Total confirmed Covid-19 **deaths** per million people



Daily infections vs mortality per million

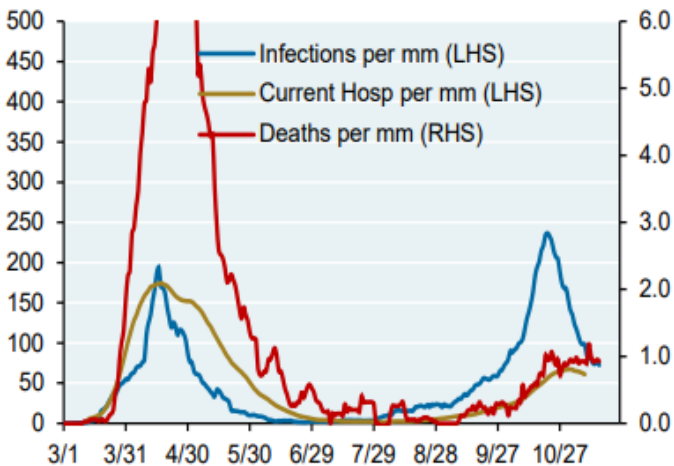
15 NOV 2020

Portugal daily infections vs mortality



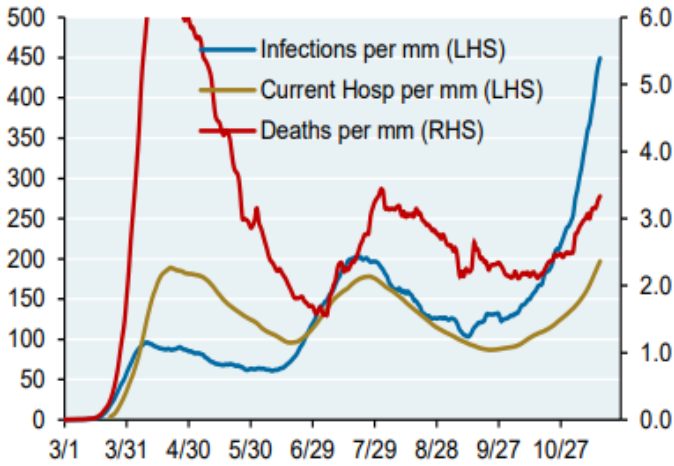
Source: JHU, ECDC, JPMAM. 11/15/2020. 7 day avg.

Ireland daily infections vs mortality



Source: JHU, ECDC, JPMAM. 11/15/2020. 7 day avg.

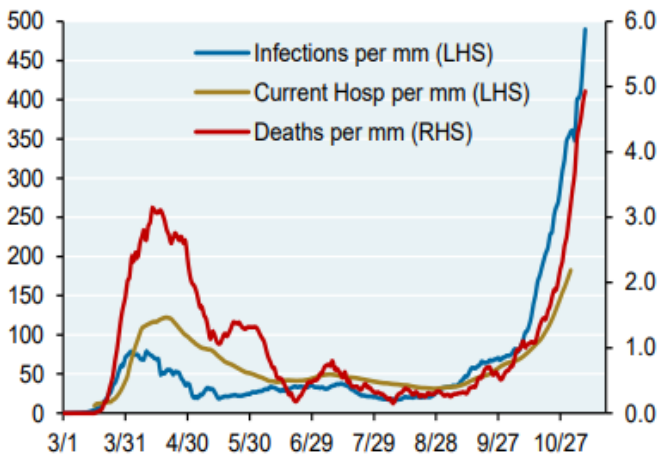
US daily infections vs mortality



Source: JHU, COVID Tracking, JPMAM. 11/15/2020. 7 day avg.

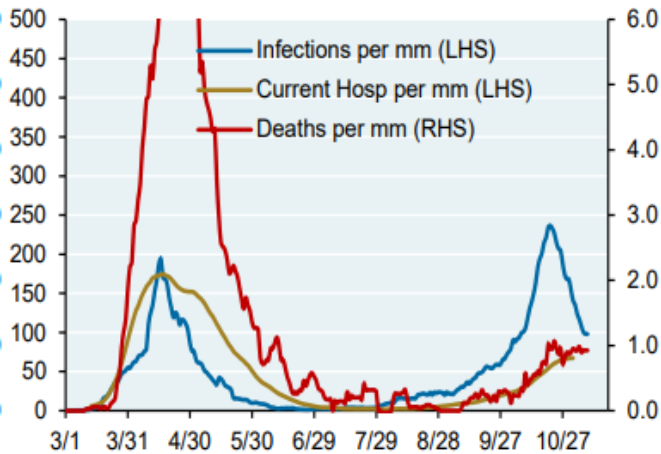
8 NOV 2020

Portugal daily infections vs mortality



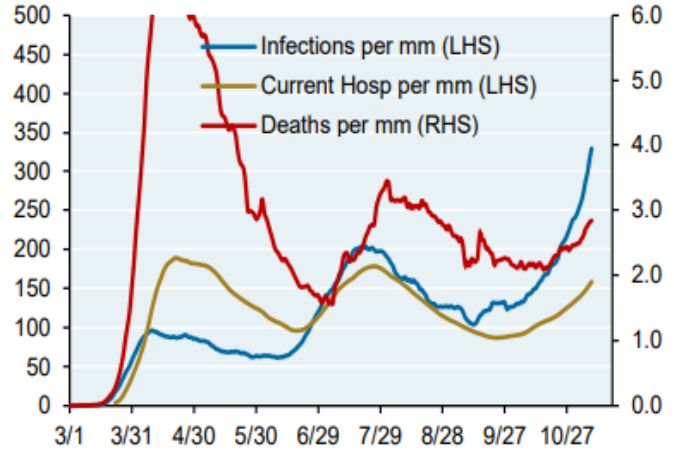
Source: JHU, ECDC, JPMAM. 11/08/2020. 7 day avg.

Ireland daily infections vs mortality



Source: JHU, ECDC, JPMAM. 11/08/2020. 7 day avg.

US daily infections vs mortality

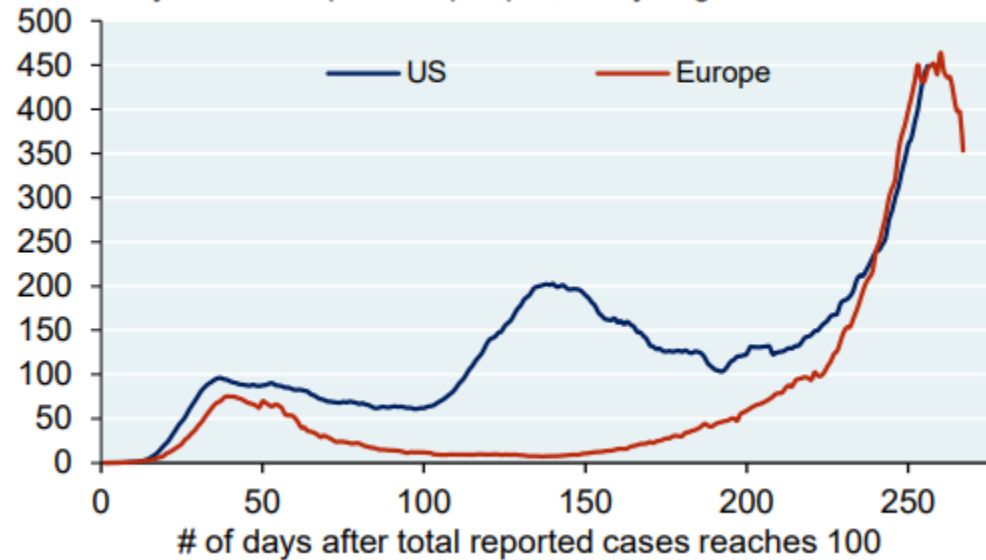


Source: JHU, COVID Tracking, JPMAM. 11/08/2020. 7 day avg.

US vs Europe infections and mortality

US vs Europe infections

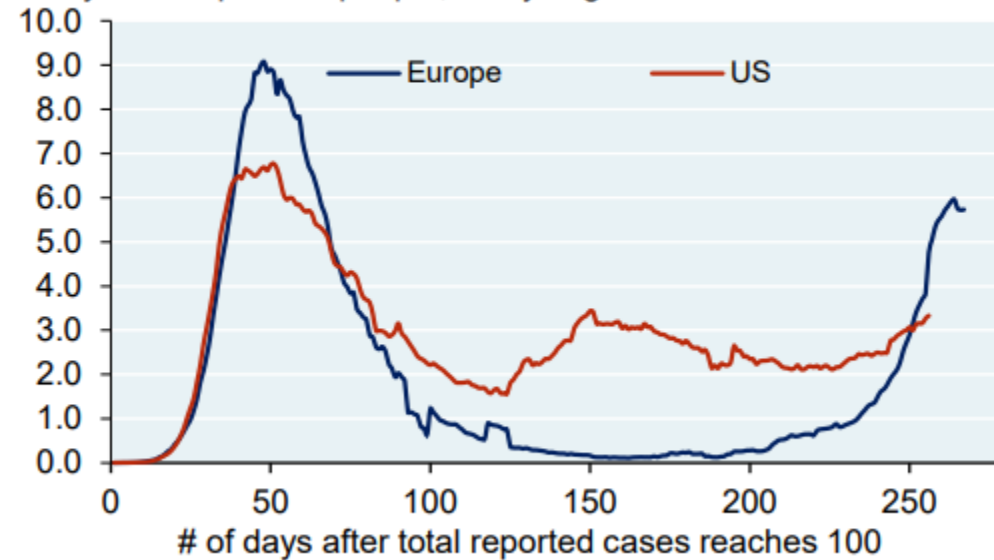
New daily infections per mm people, 7 day avg



Source: Johns Hopkins University, IMF, JPMAM. November 15, 2020

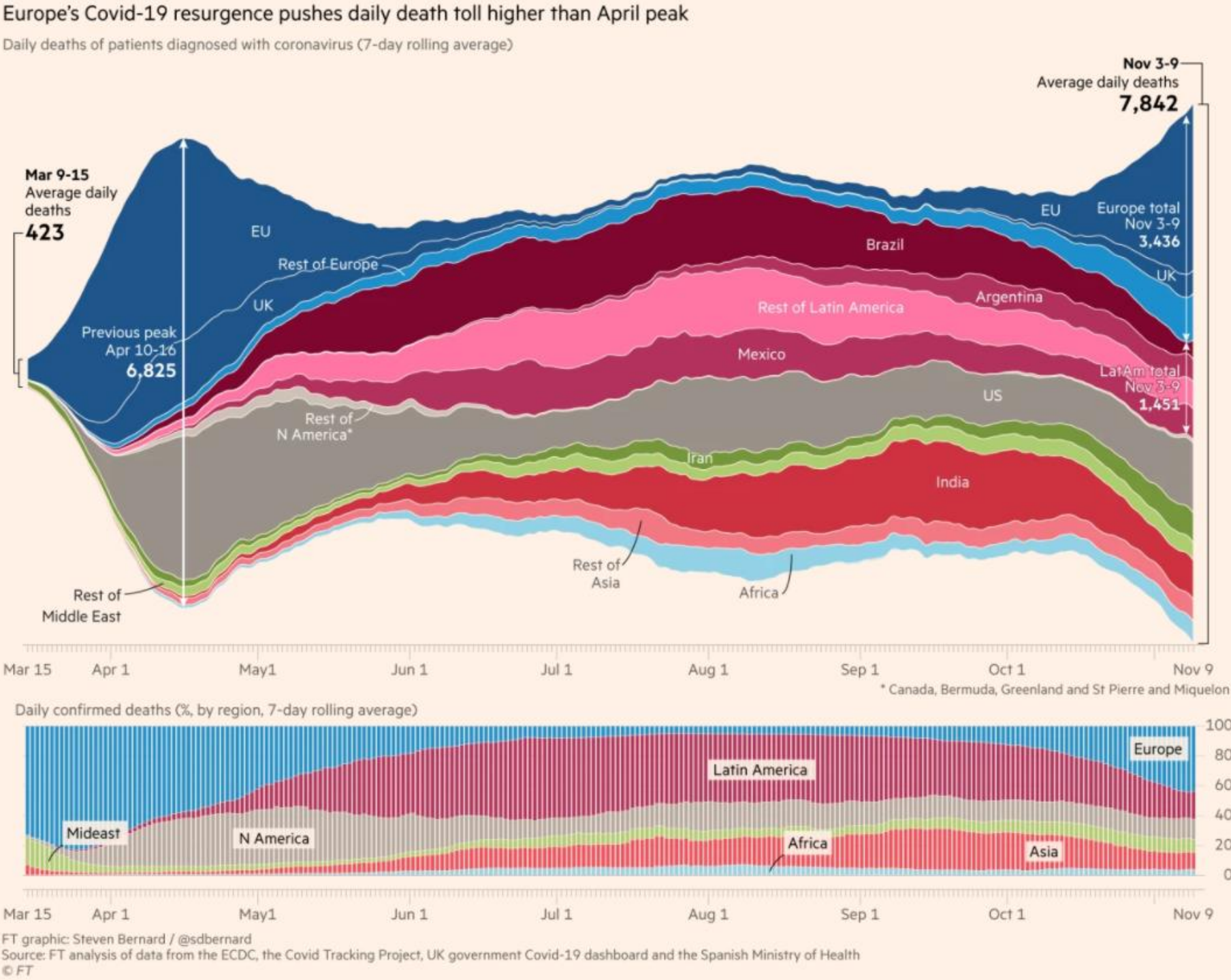
US vs Europe mortality

Daily deaths per mm people, 7 day avg



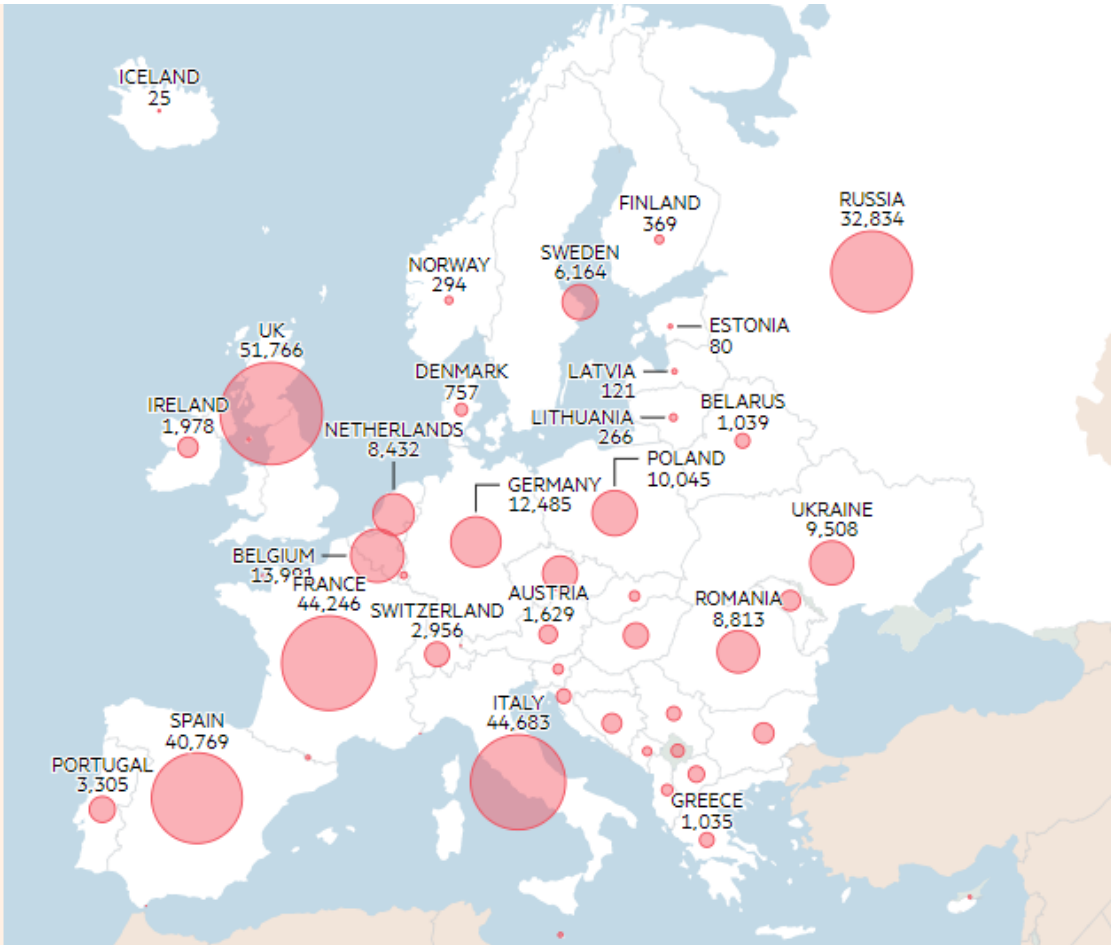
Source: Johns Hopkins University, IMF, JPMAM. November 15, 2020

Daily deaths of patients diagnosed with coronavirus (7-day average)



Total deaths as of 3.01pm November 15

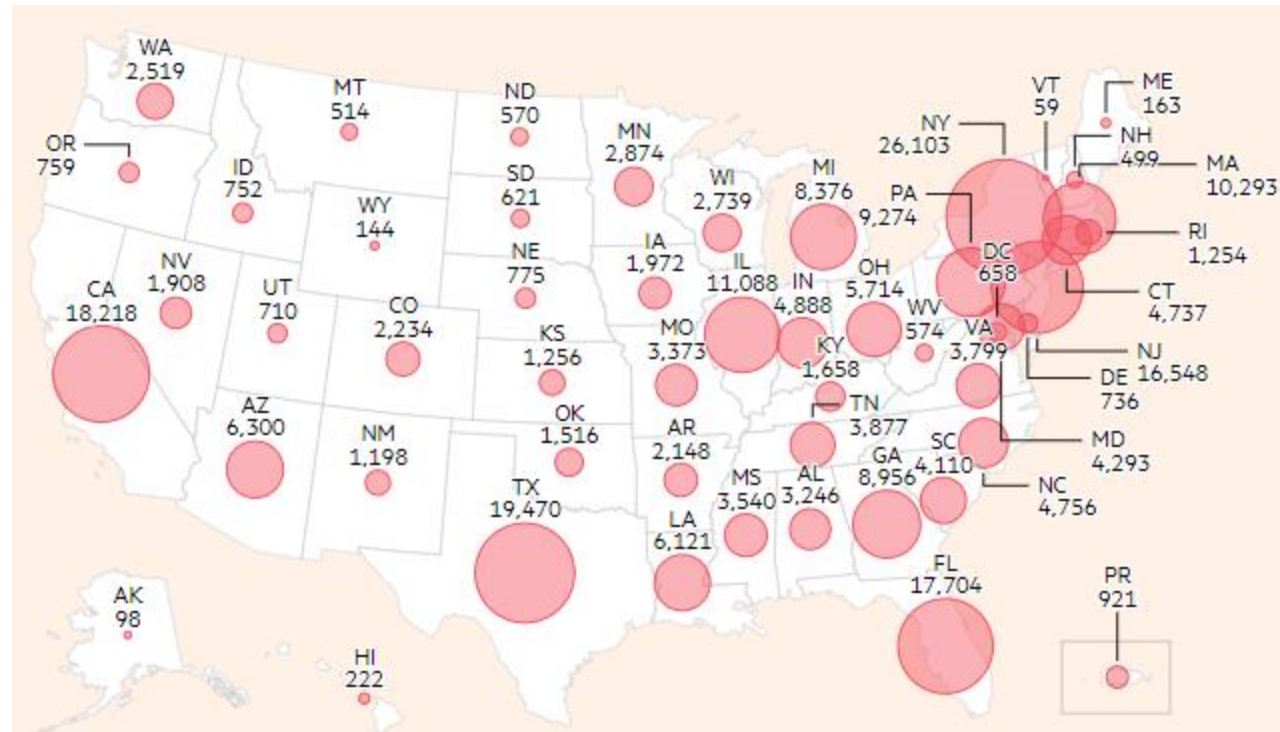
Europe



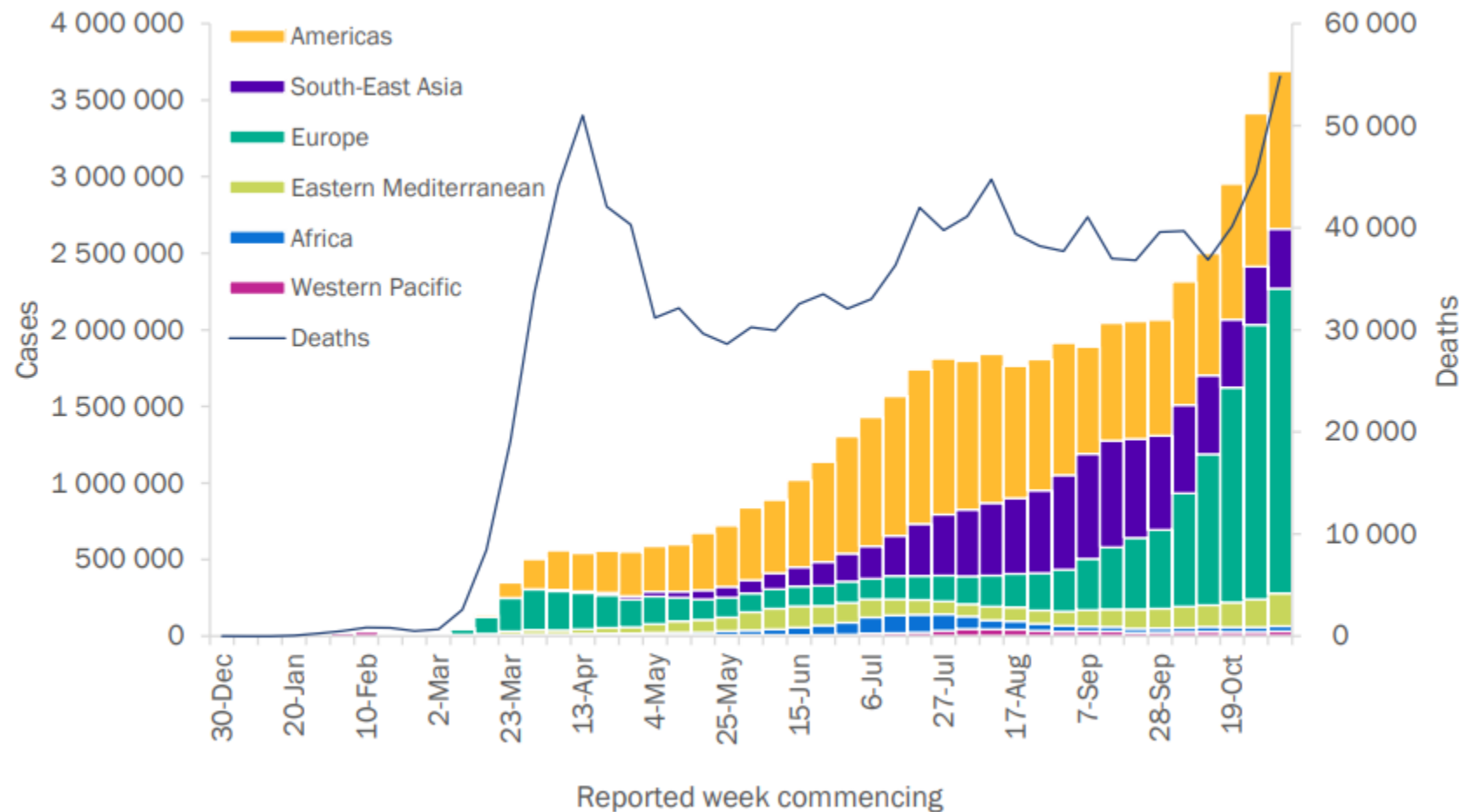
Graphic: Steven Bernard and Cale Tilford
Sources: ECDC; Covid Tracking Project; FT research
© FT

Crimea is annexed by Russia but this is not recognised by the international community

US



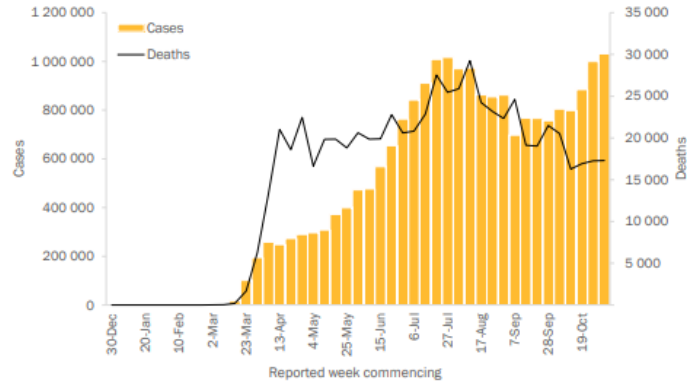
Number of COVID-19 cases reported weekly by WHO Region, and global deaths, as of 8 November 2020



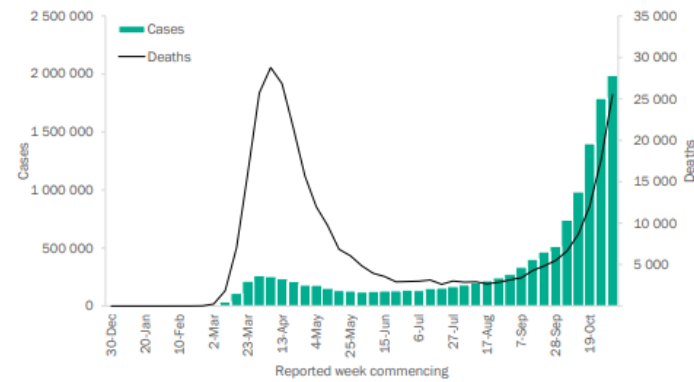
Source: WHO

Number of COVID-19 cases reported weekly by WHO Region, and global deaths, as of 8 November 2020

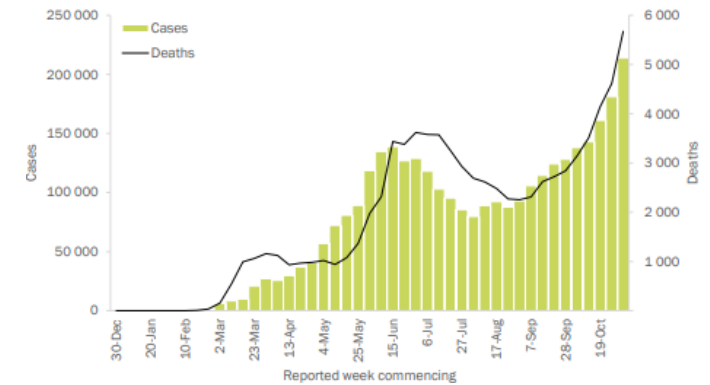
America



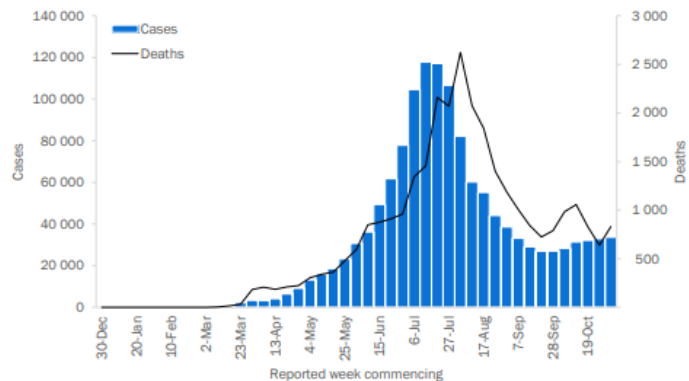
Europe



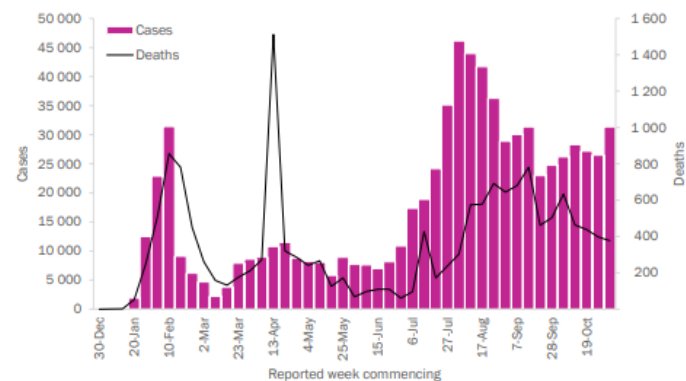
Eastern Mediterranean



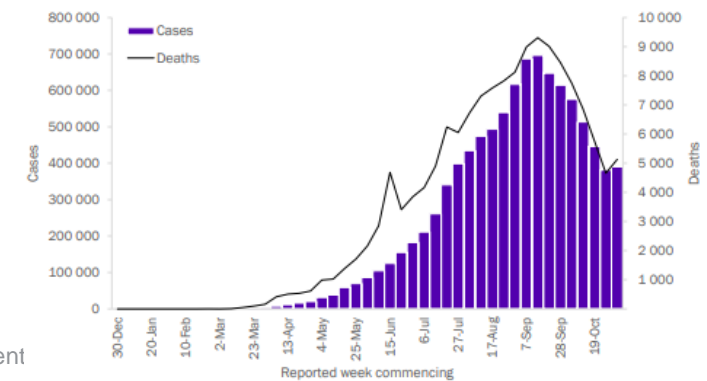
Africa



Western Pacific



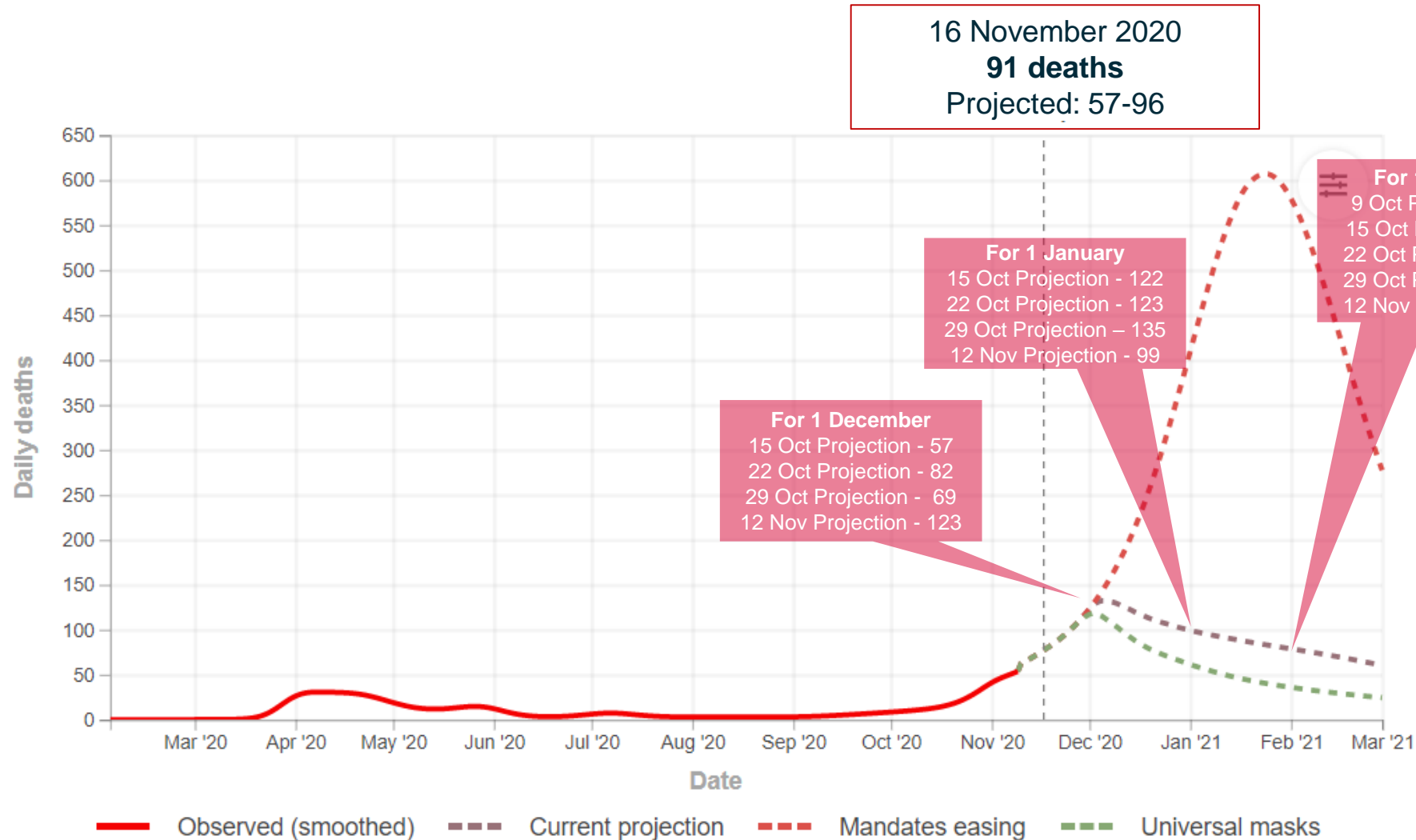
South-East Asia



Confident

Portugal

Covid-19 Daily Deaths Projections in Portugal



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

Projection
Daily Deaths

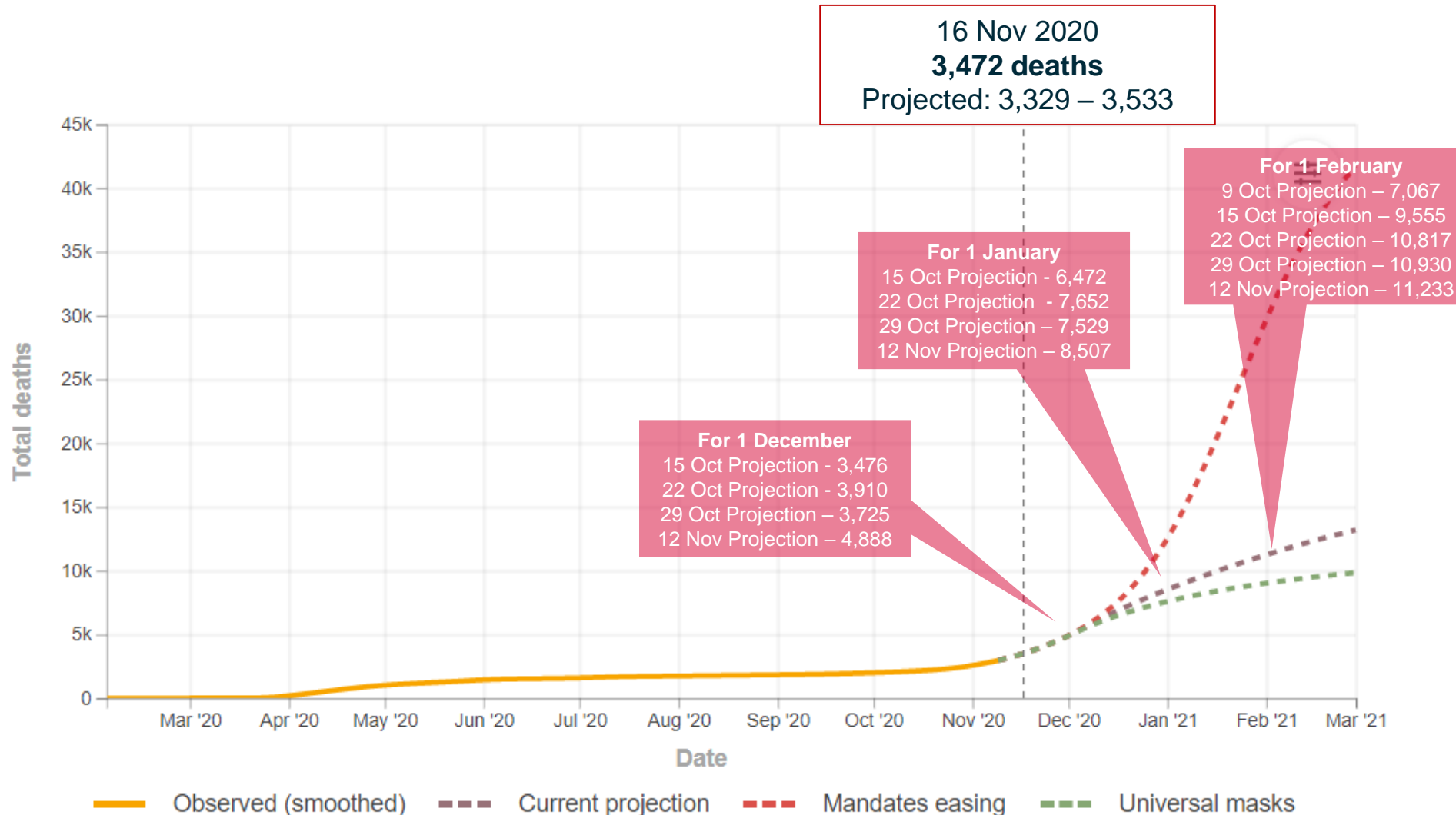
For 1 March 2021
Projection: 60

Projections in:

- 12 November: 60

Mar 2021

Covid-19 Total Deaths Projections in Portugal



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

Projection Total Deaths

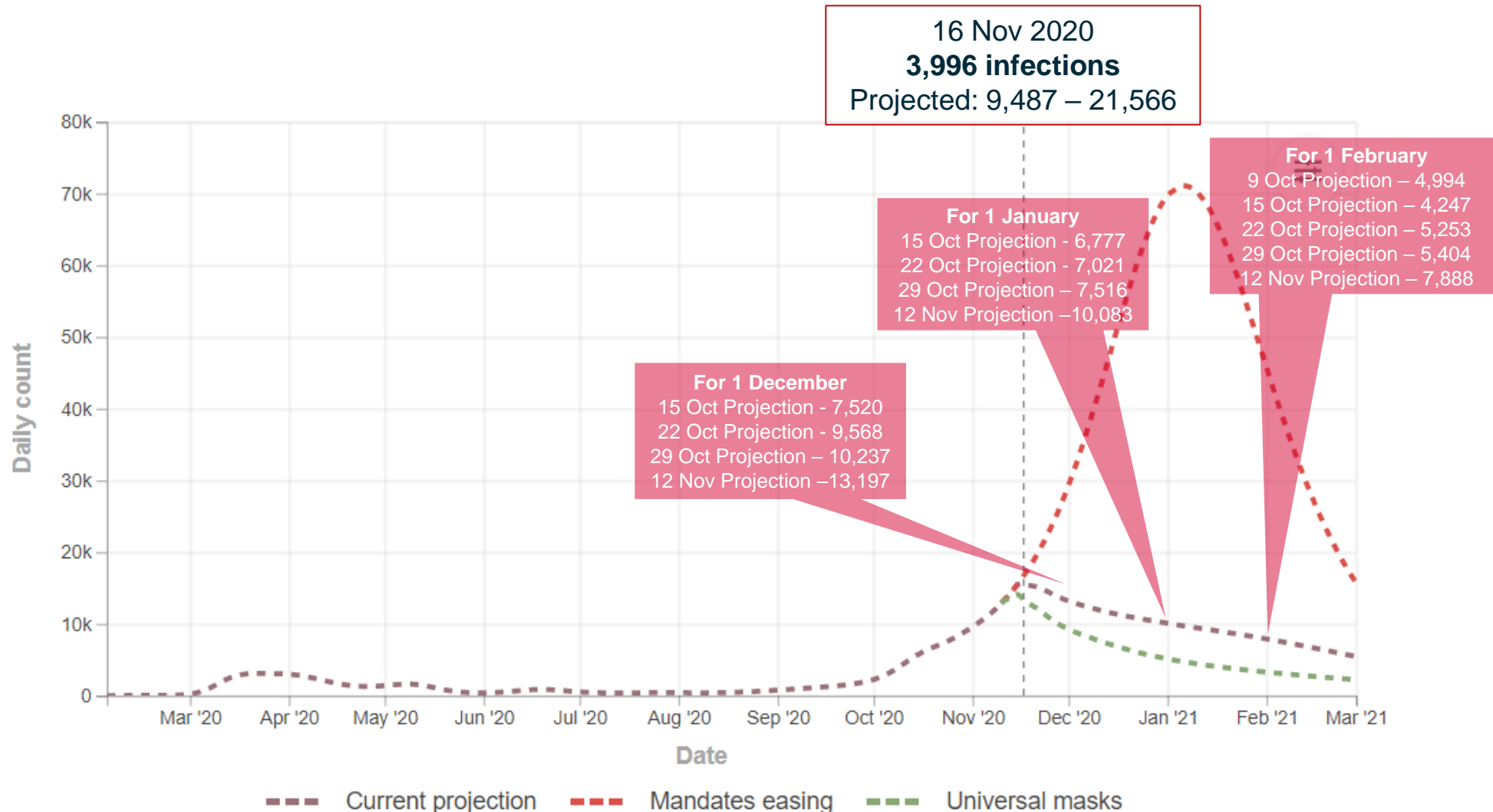
For 1 March 2021
Projection: 13,180

Projections in:

- 12 November – 13,180

Mar 2021

Covid-19 Daily Infection Projections in Portugal



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

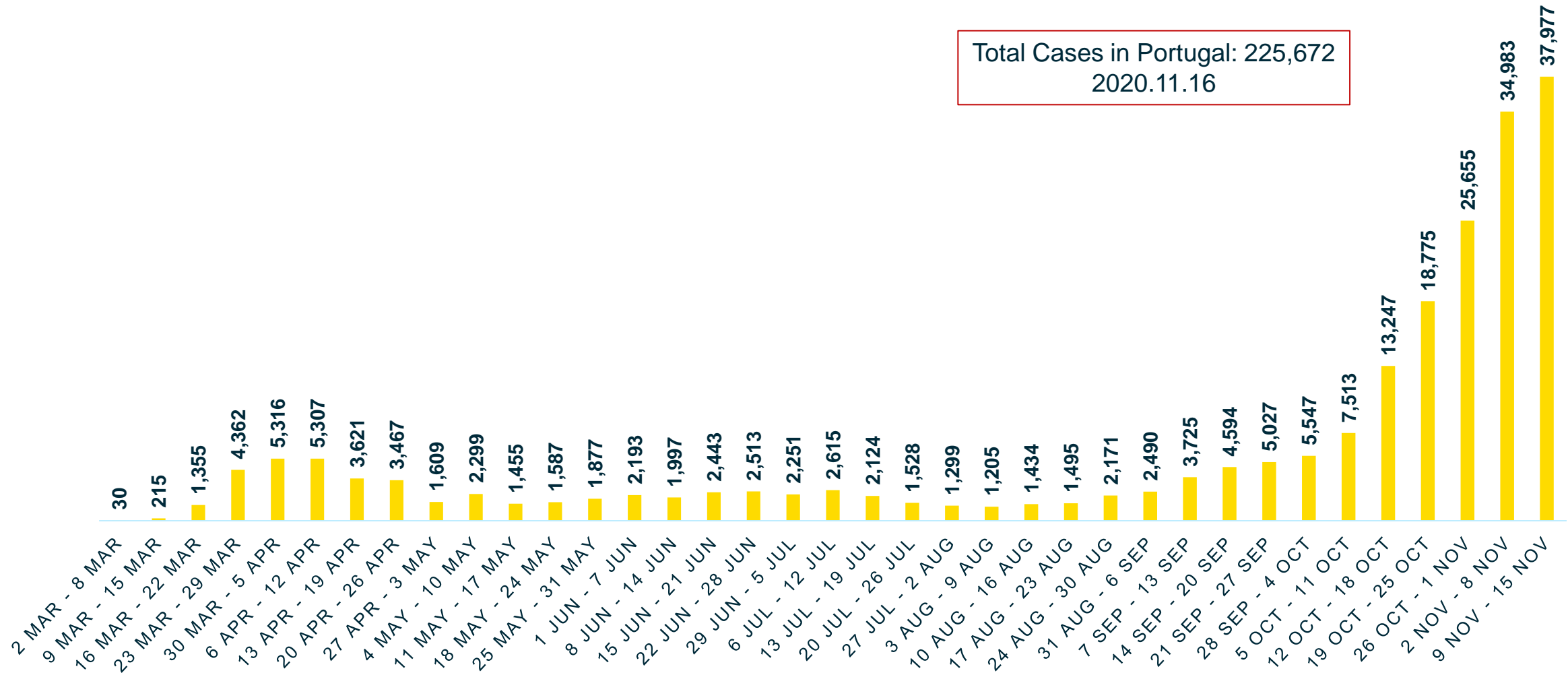
Projection Daily Infections

For 1 March 2021
Projection: 5,439

Projections in:

- 12 November – 5,439
- Mar 2021

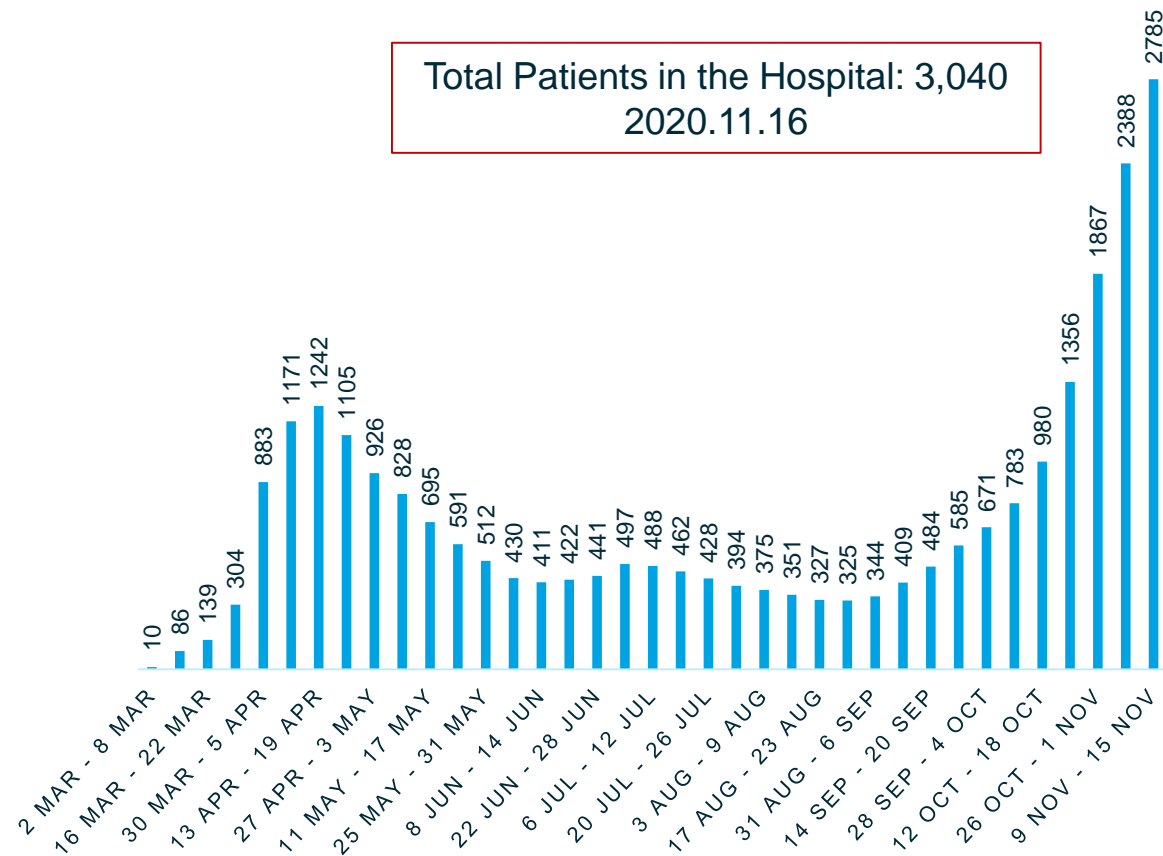
Coronavirus (SARS-CoV-2 / COVID 19) – Portugal – New cases per week



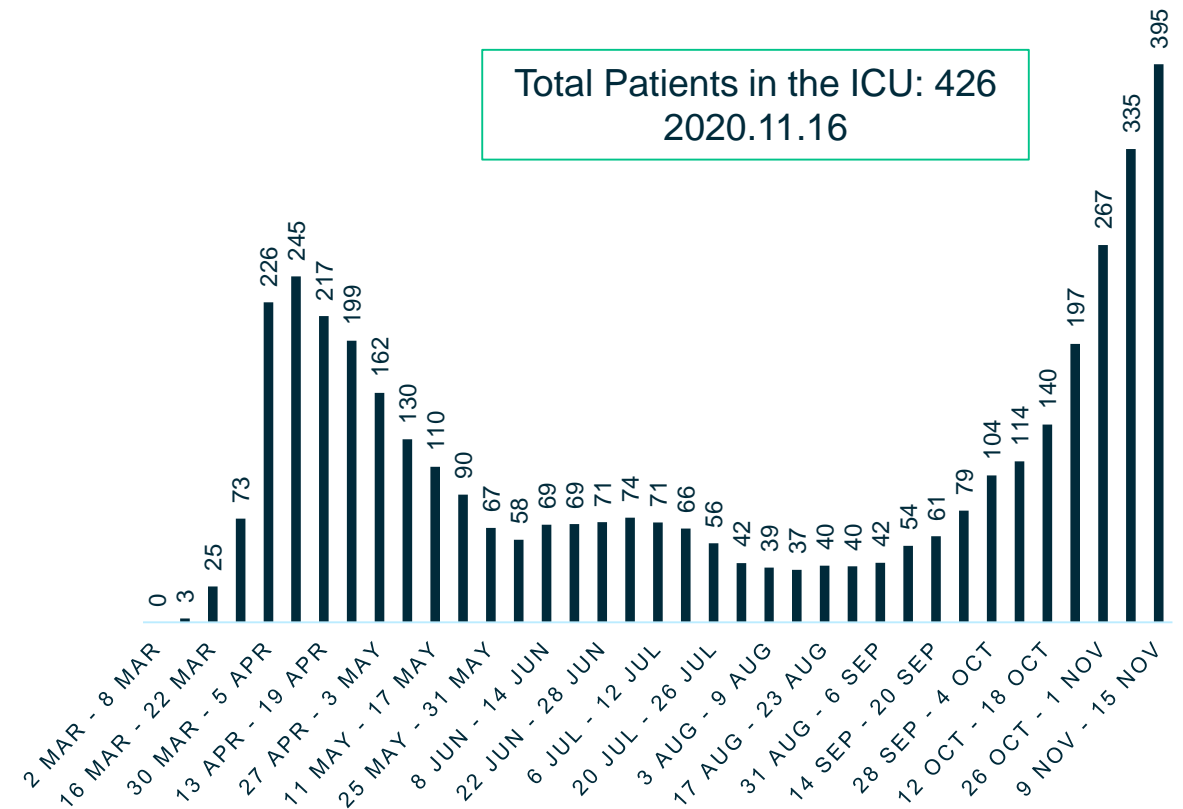
Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

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

■ Average # of Patients stable in the Hospital per week

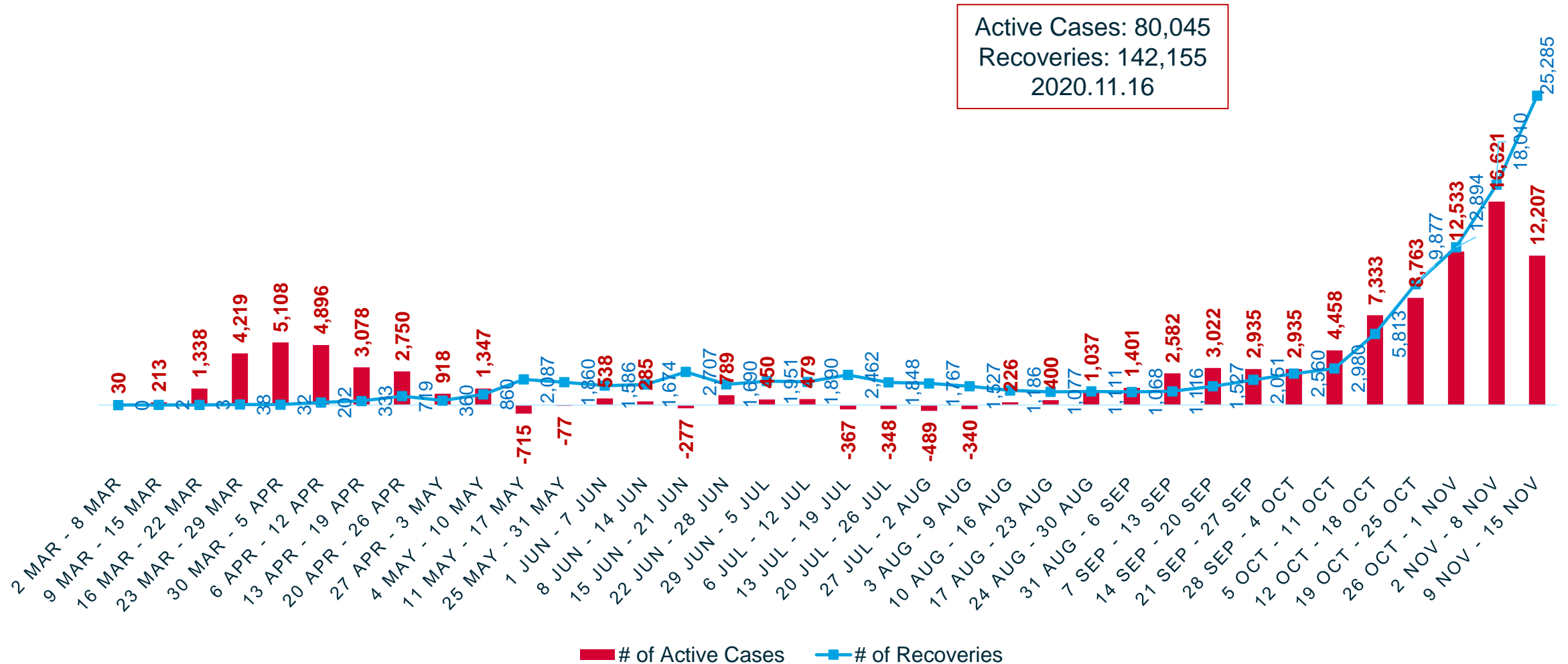


■ Average # of Patients in the ICU per week



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

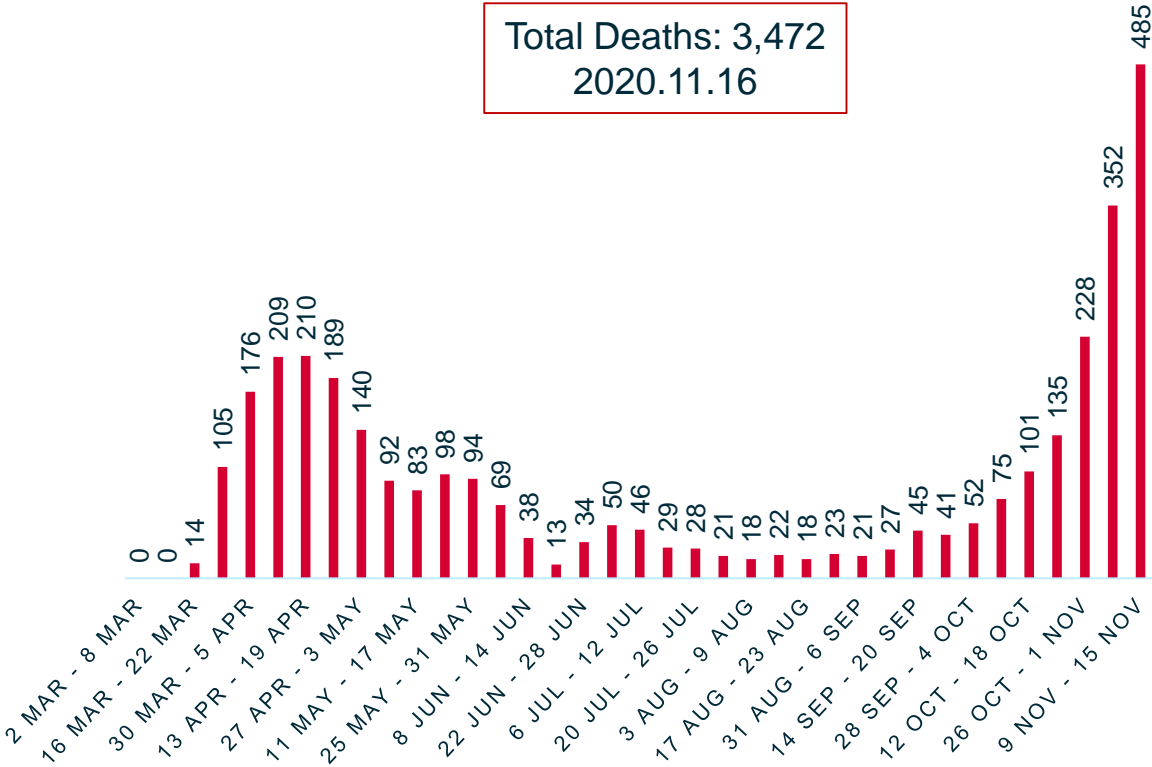
Coronavirus (SARS-CoV-2 / COVID 19) – Portugal – New Active cases vs Recoveries per week



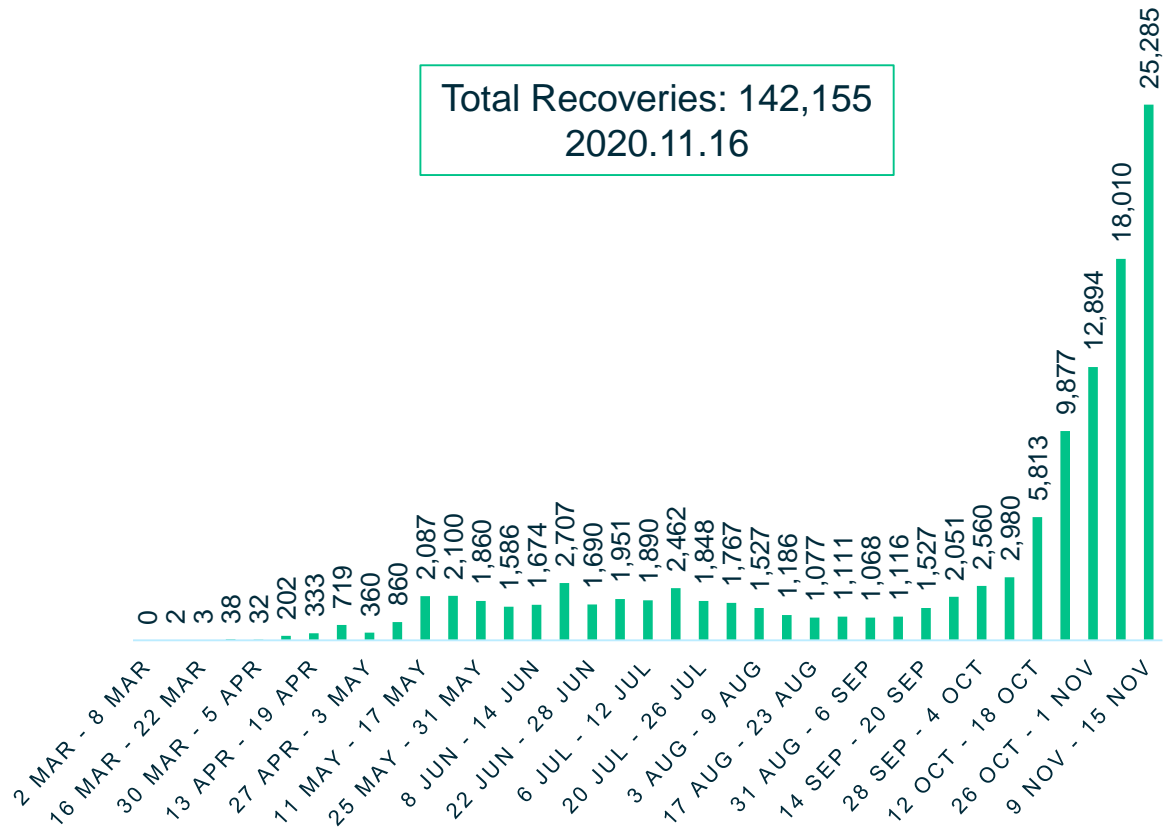
Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

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

■ # of deaths per week

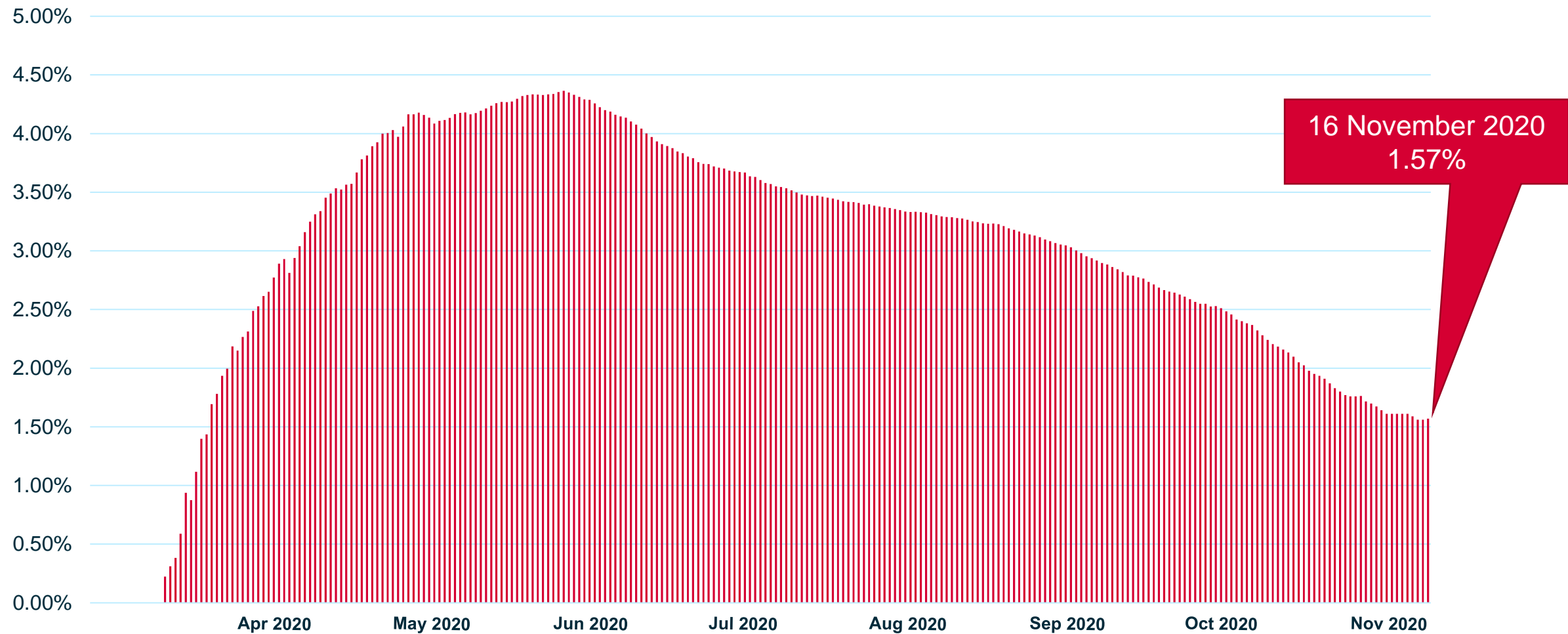


■ # of recoveries per week



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

Portugal – Fatality Rate

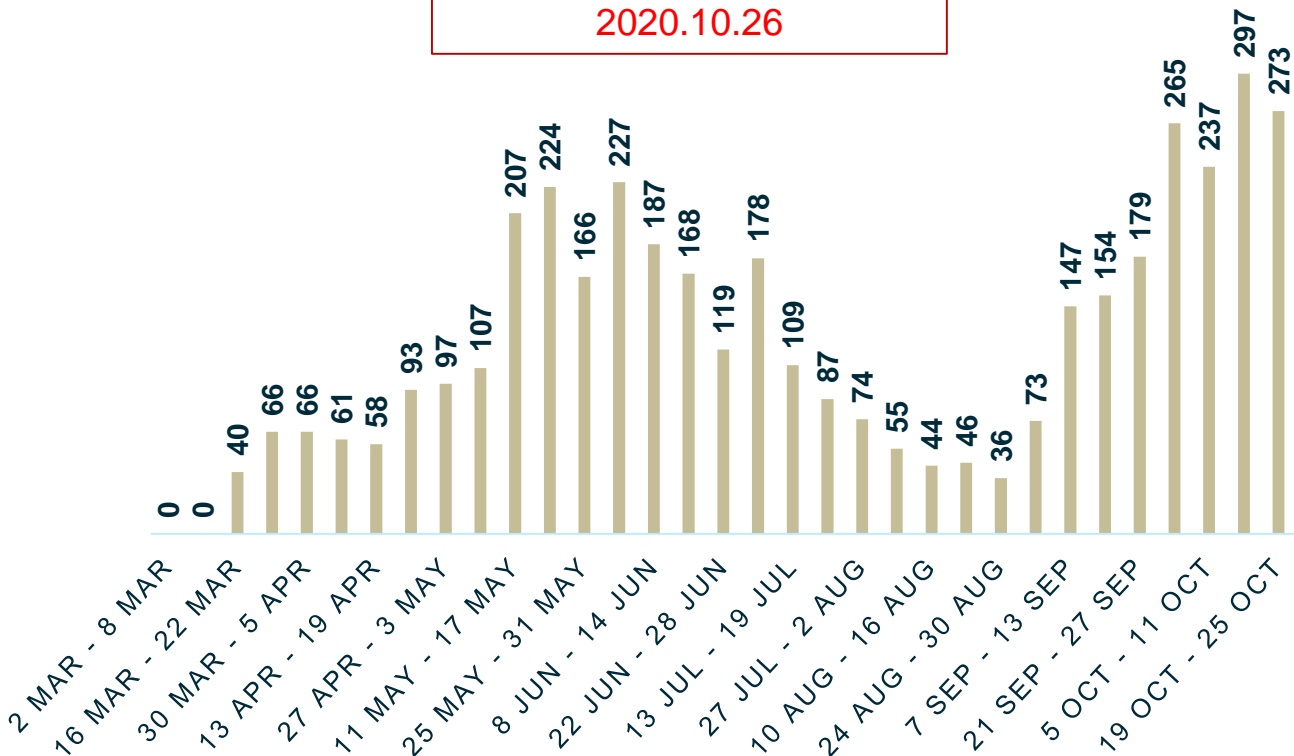


Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

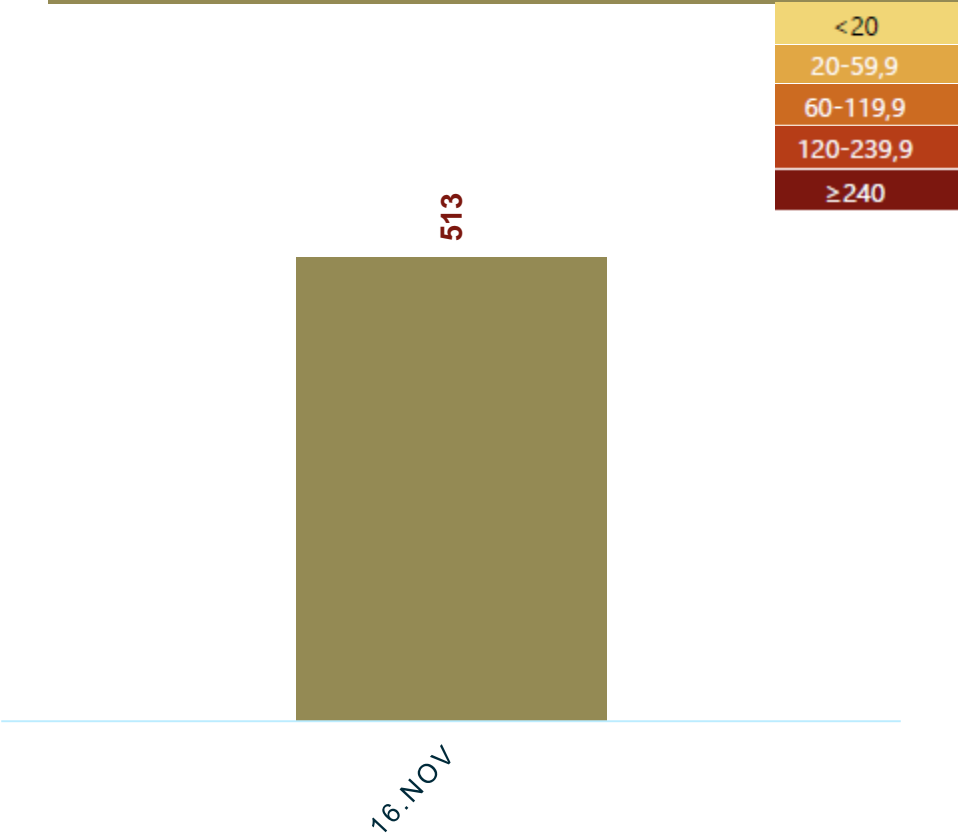
Coronavirus (SARS-CoV-2 / COVID 19)) – Loures

New Cases per Week

Total Cases in Loures: 4,164
2020.10.26



New Cases per 100,000 population

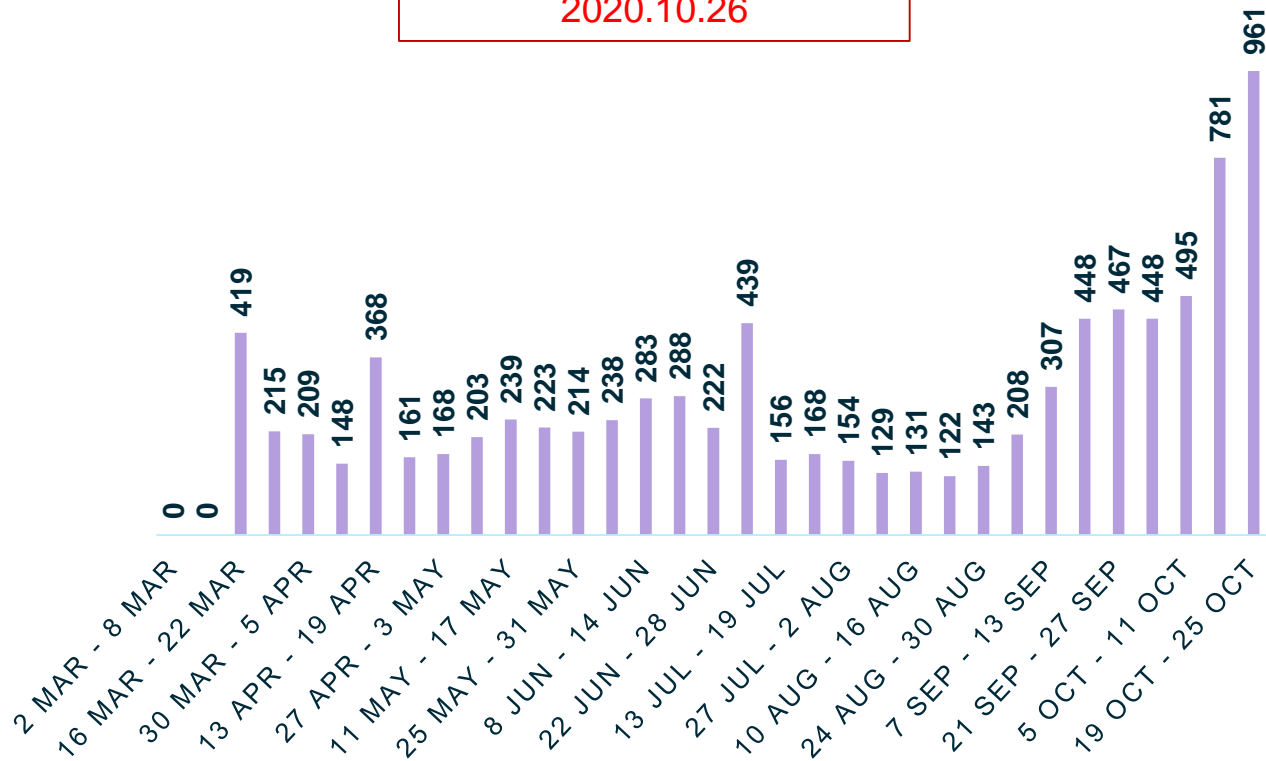


Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

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

New Cases per Week

Total Cases in Lisbon: 9,202
2020.10.26



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

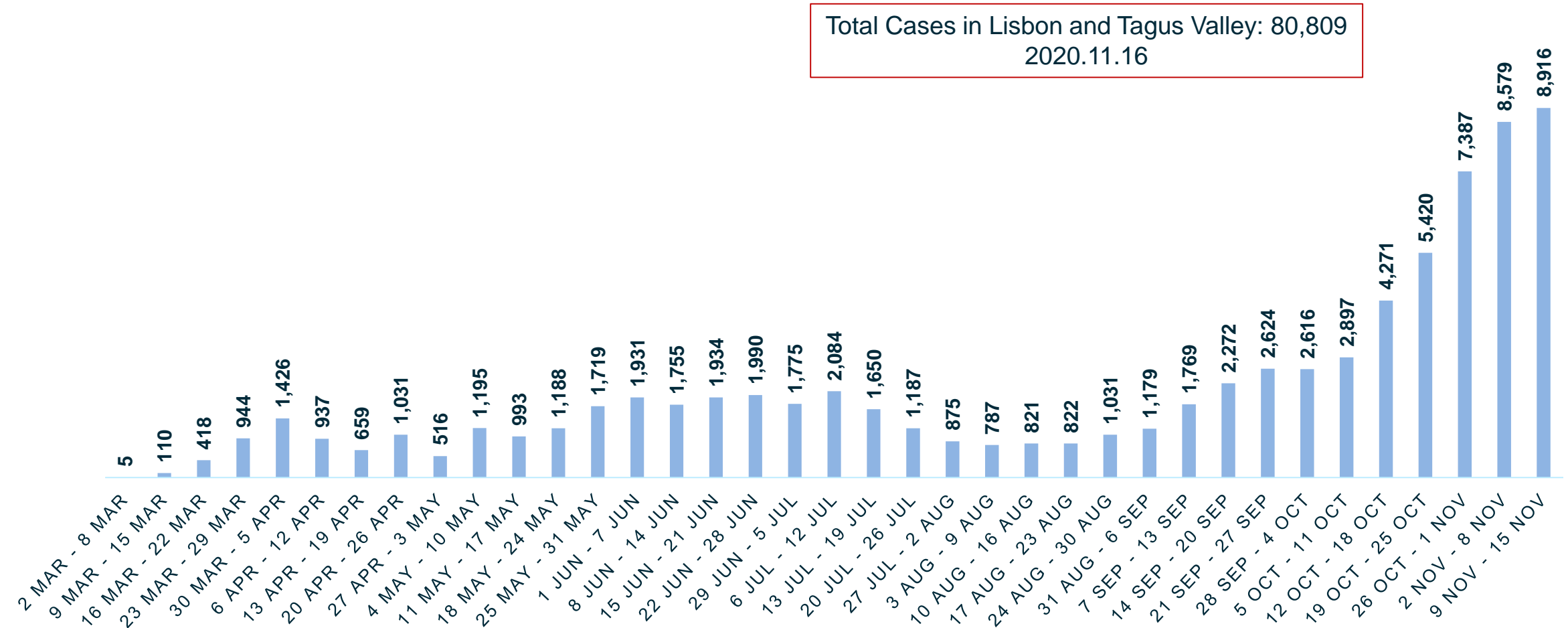
New Cases per 100,000 population

<20
20-59,9
60-119,9
120-239,9
≥240

576

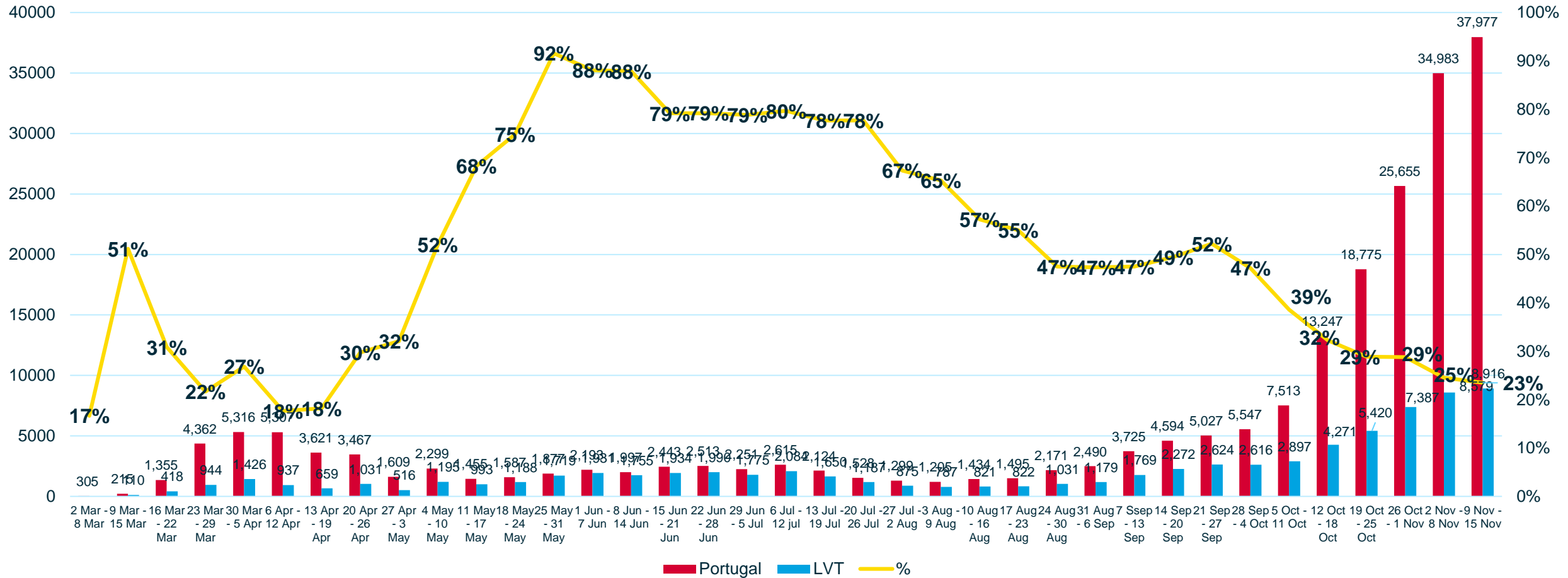
16.NOV

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

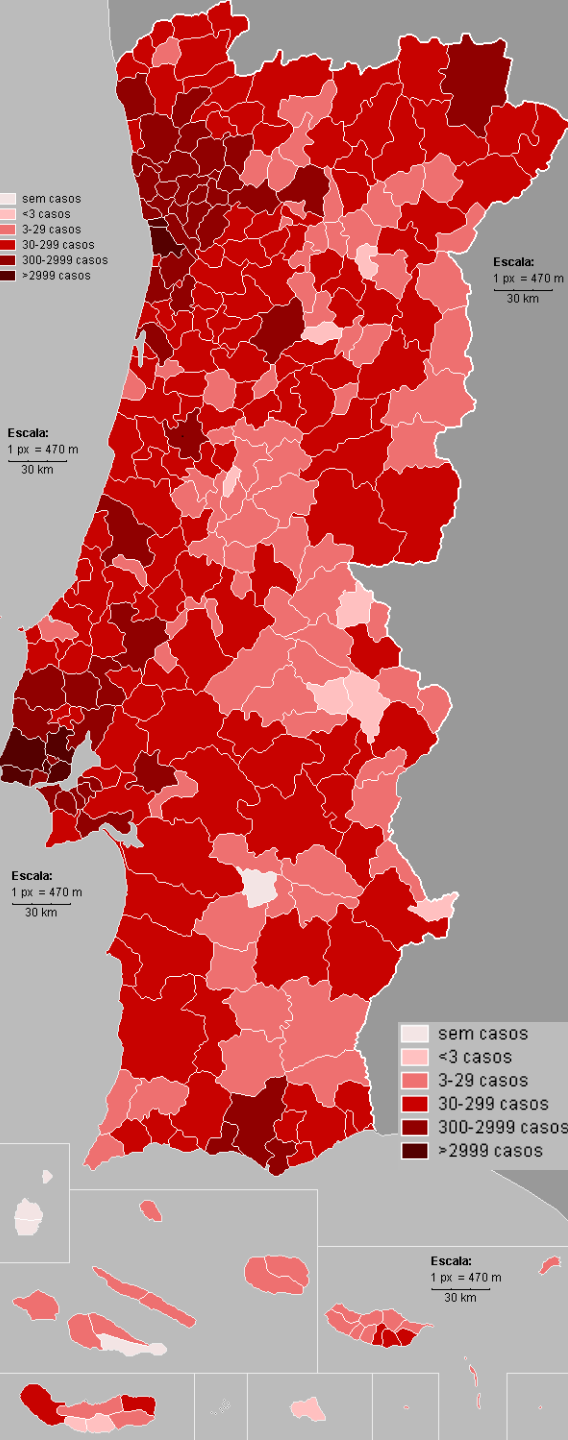


Source: <https://covid19.min-saude.pt/ponto-de-situacao-atual-em-portugal/>

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/>



Coronavirus (SARS-CoV-2 / COVID 19)

Portugal

16 November 2020

COVID-19 | RELATÓRIO DE SITUAÇÃO | 16 NOVEMBRO 2020

SITUAÇÃO EPIDEMIOLÓGICA EM PORTUGAL

TOTAL DE CASOS E VARIAÇÃO

80 045 | + 345

ATIVOS*

142 155 | +3 560

RECUPERADOS*

3 472 | + 91

ÓBITOS

95 354 | + 750

CONTACTOS EM VIGILÂNCIA

225 672 | +3 996

CONFIRMADOS*

*Nota

Os valores de hoje resultam de uma mudança no sistema de análise de dados. A diferença diária nestes campos é calculada em relação aos dados do dia anterior. No entanto, os dados cumulativos foram atualizados historicamente, resultando em +4 375 casos confirmados, +13 529 casos recuperados e -9 154 casos ativos. Esta atualização do número acumulado de casos confirmados traduz-se em +2 101 casos na região do Norte, +1 745 casos na região de LVT, +286 casos na região do Alentejo, +163 casos na região do Algarve, +52 casos na região da Madeira, + 29 casos na região do Centro e -1 caso na região dos Açores.

TOTAL DE CASOS, DE ÓBITOS E VARIAÇÃO POR REGIÃO

Açores

614 | + 10

15 | -

114 025 | +2 063

1 607 | + 44

Madeira

694 | +16

2 | -

21 053 | +462

433 | + 11

80 809 | +1 350

1 302 | + 33

4 304 | + 39

79 | + 3

4 173 | + 56

34 | -

Legenda

CASOS CONFIRMADOS
ÓBITOS

DISTRIBUIÇÃO DOS CASOS EM INTERNAMENTO

3 040 | +111

INTERNAMENTO

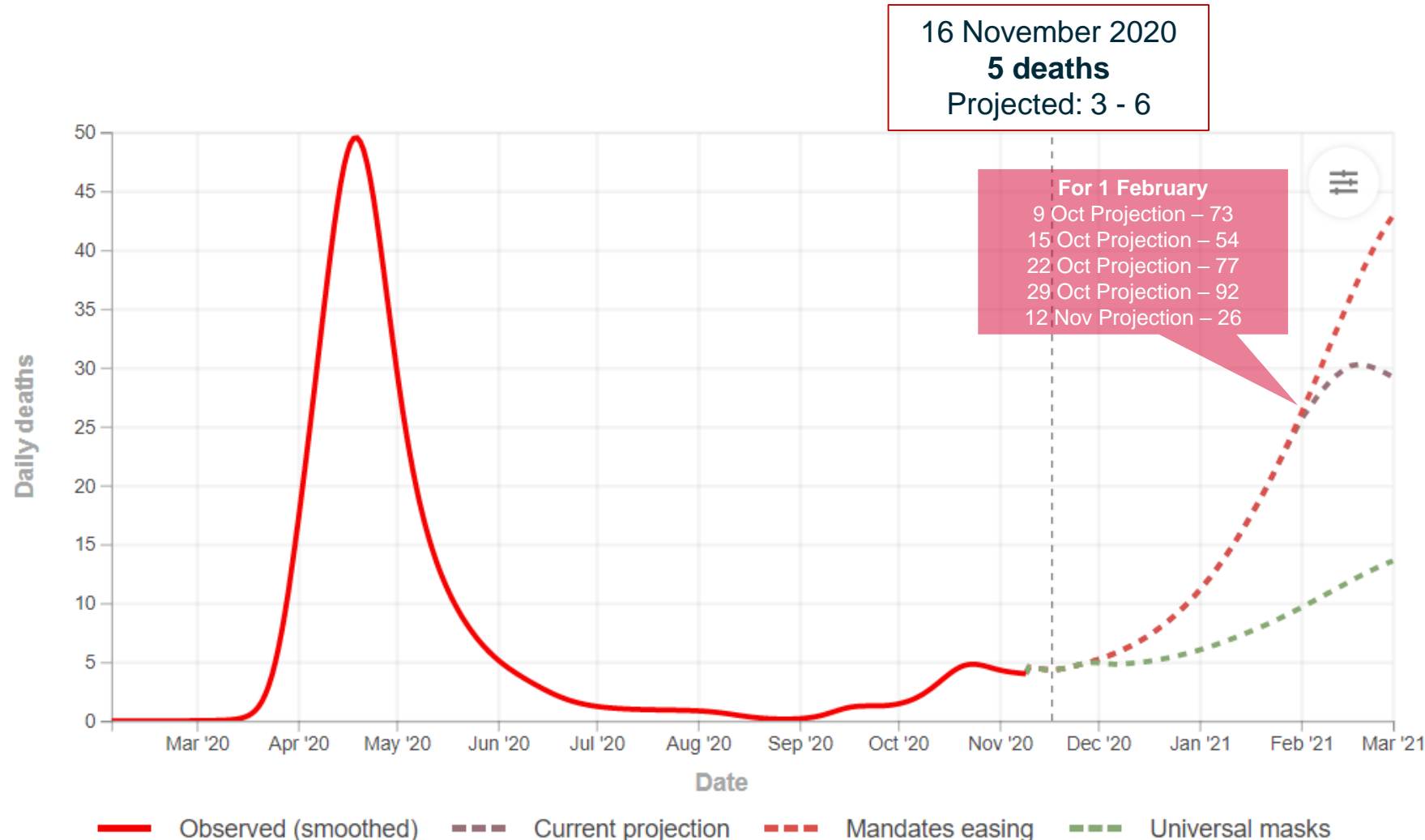
426 | +11

INTERNAMENTO
EM UCI

November 2020

Ireland

Covid-19 Daily Deaths Projections in Ireland



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

Projection Daily Deaths

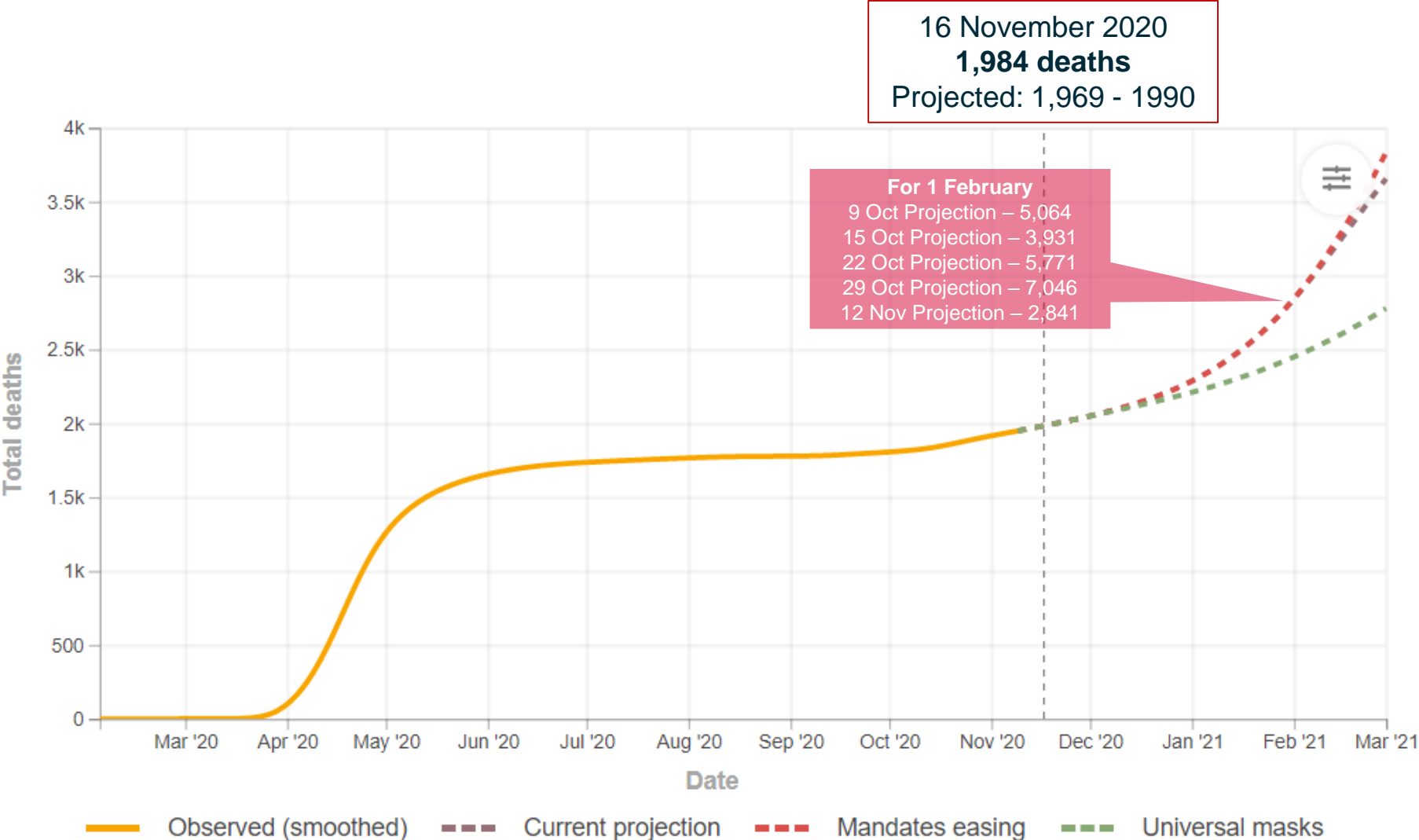
1 March 2021
Projected: 29

Projections in:

- 12 November - 29

Mar 2021

Covid-19 Total Deaths Projections in Ireland



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

Projection Total Deaths

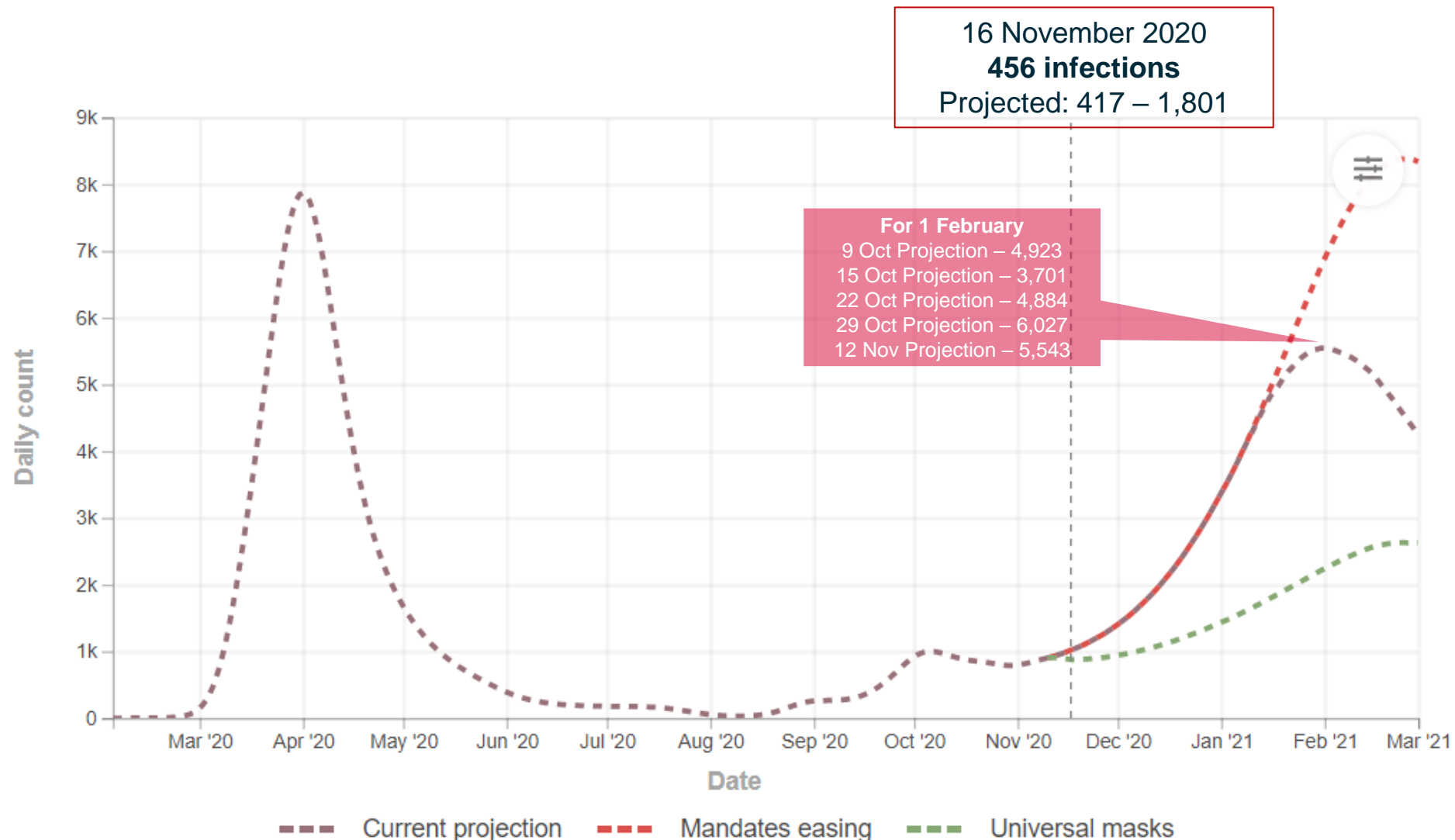
1 March 2021
Projected: 3,655

Projections in:

- 12 November – 3,655

Mar 2021

Covid-19 Daily Infection Projections in Ireland



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

Projection Daily Infections

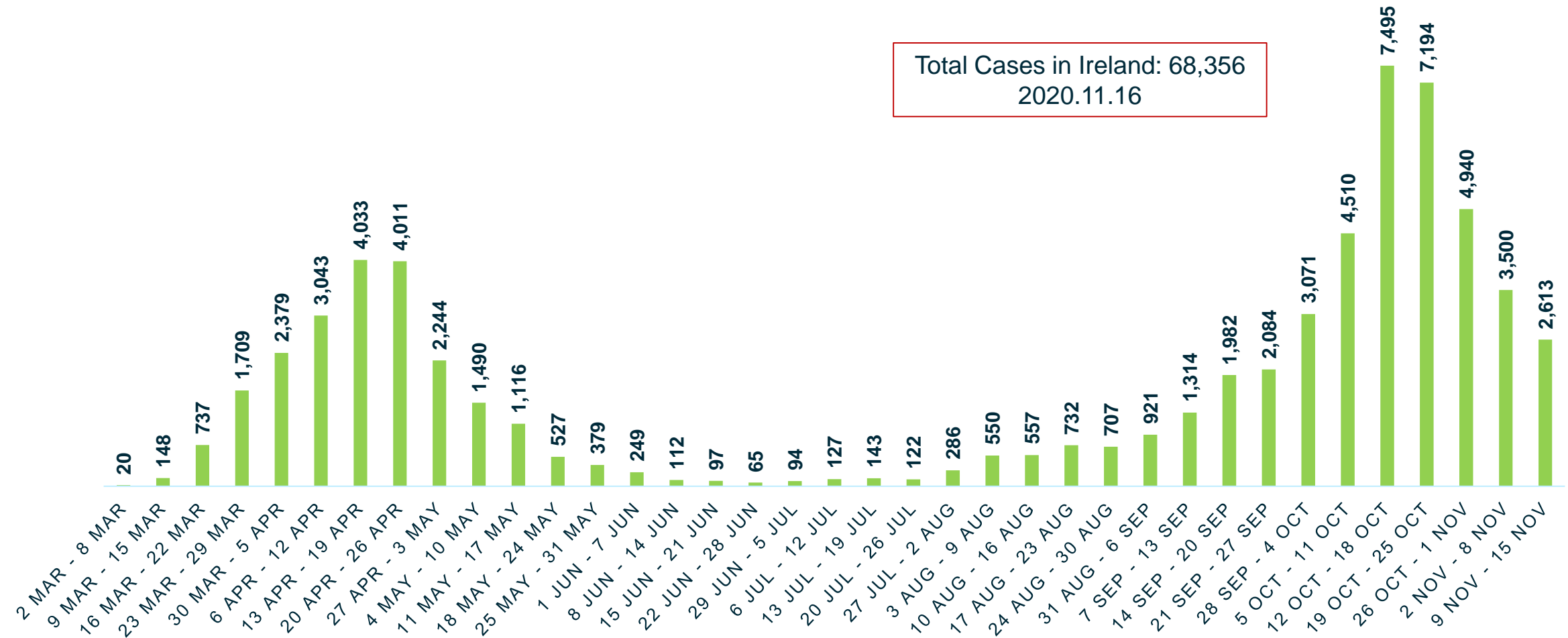
1 March 2021
Projected: 4,245

Projections in:

- 12 November – 4,245

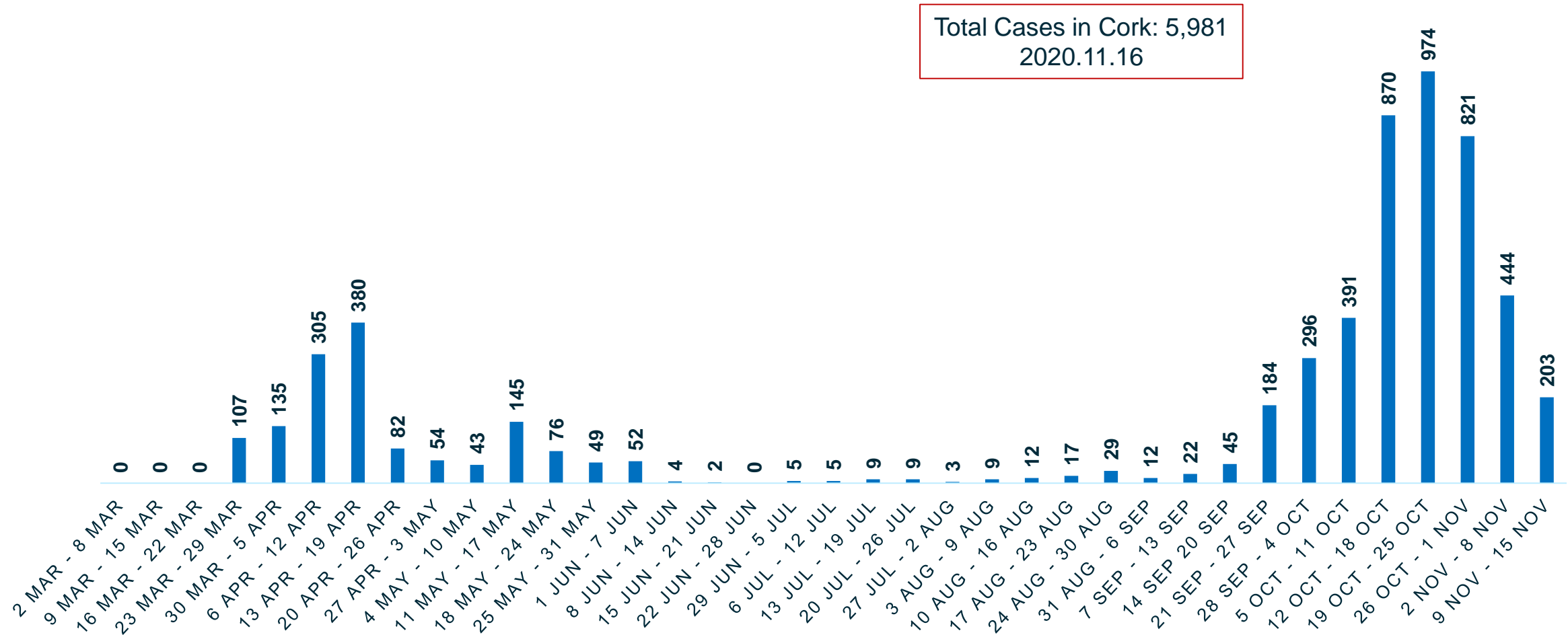
Mar 2021

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



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

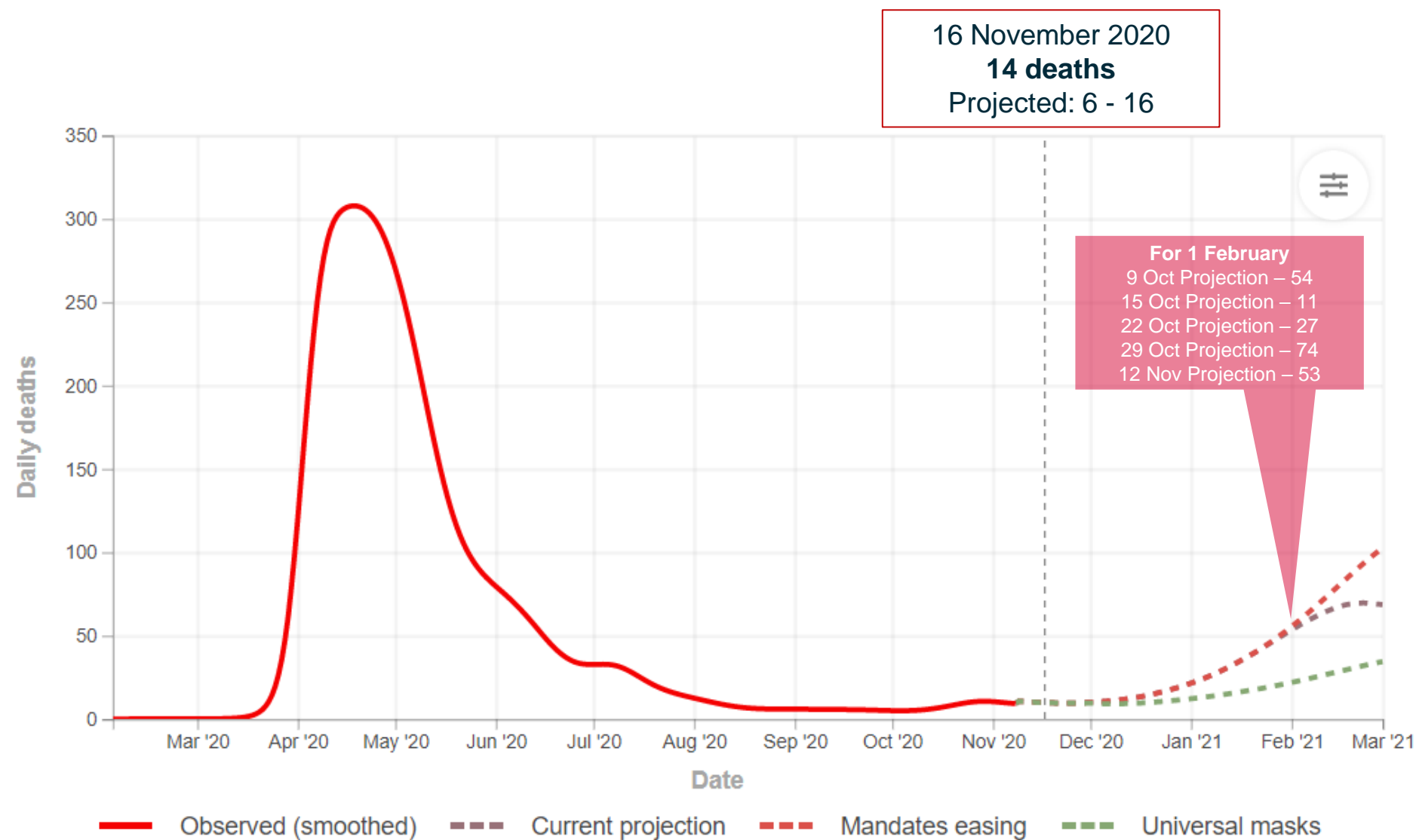
Coronavirus (SARS-CoV-2 / COVID 19) – **Cork** - New cases per week



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

New Jersey

Covid-19 Daily Deaths Projections in New Jersey



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

Projection Daily Deaths

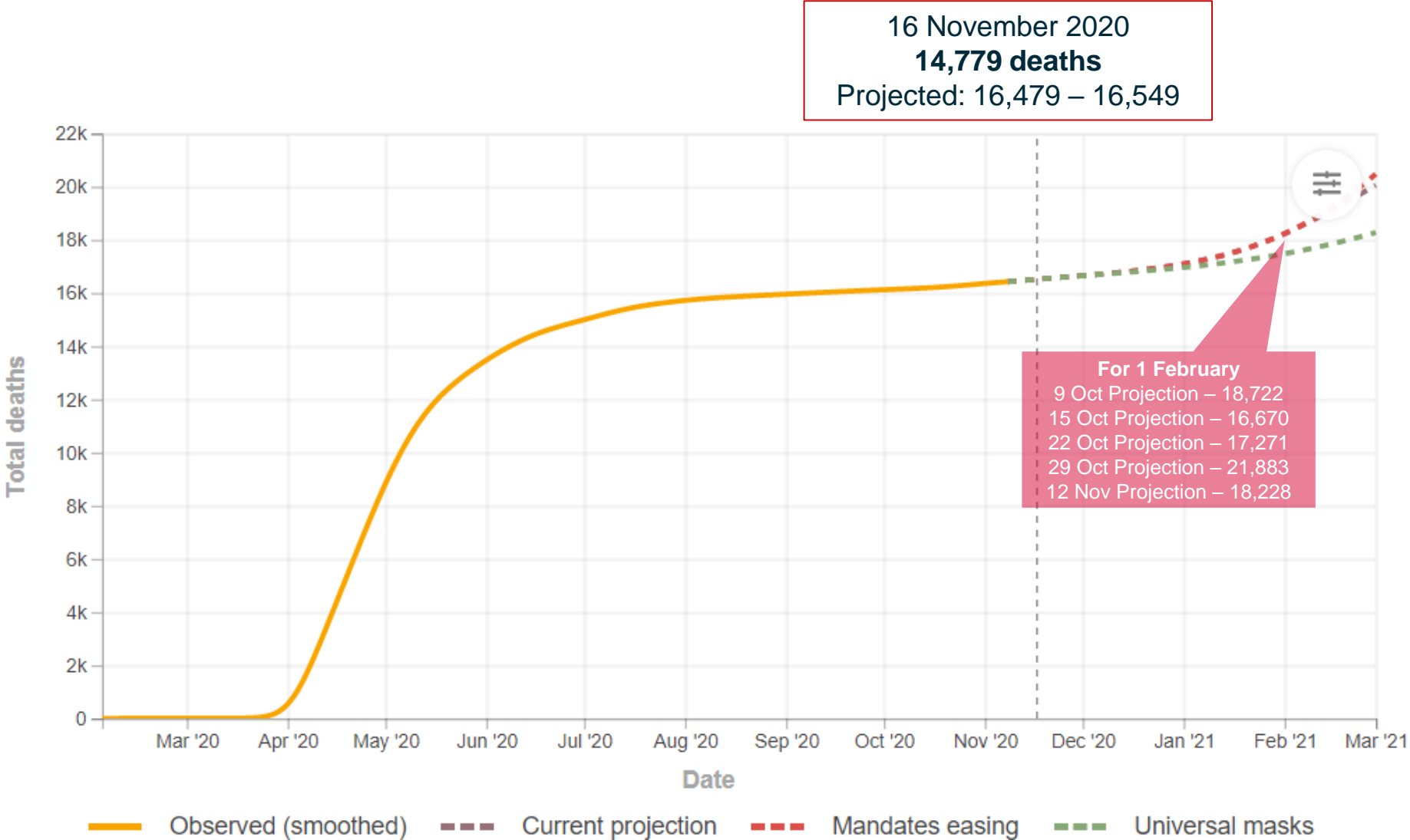
1 March 2021
Projected: 69

Projections in:

- 12 November - 69

Mar 2021

Covid-19 Total Deaths Projections in New Jersey



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

Projection Total Deaths

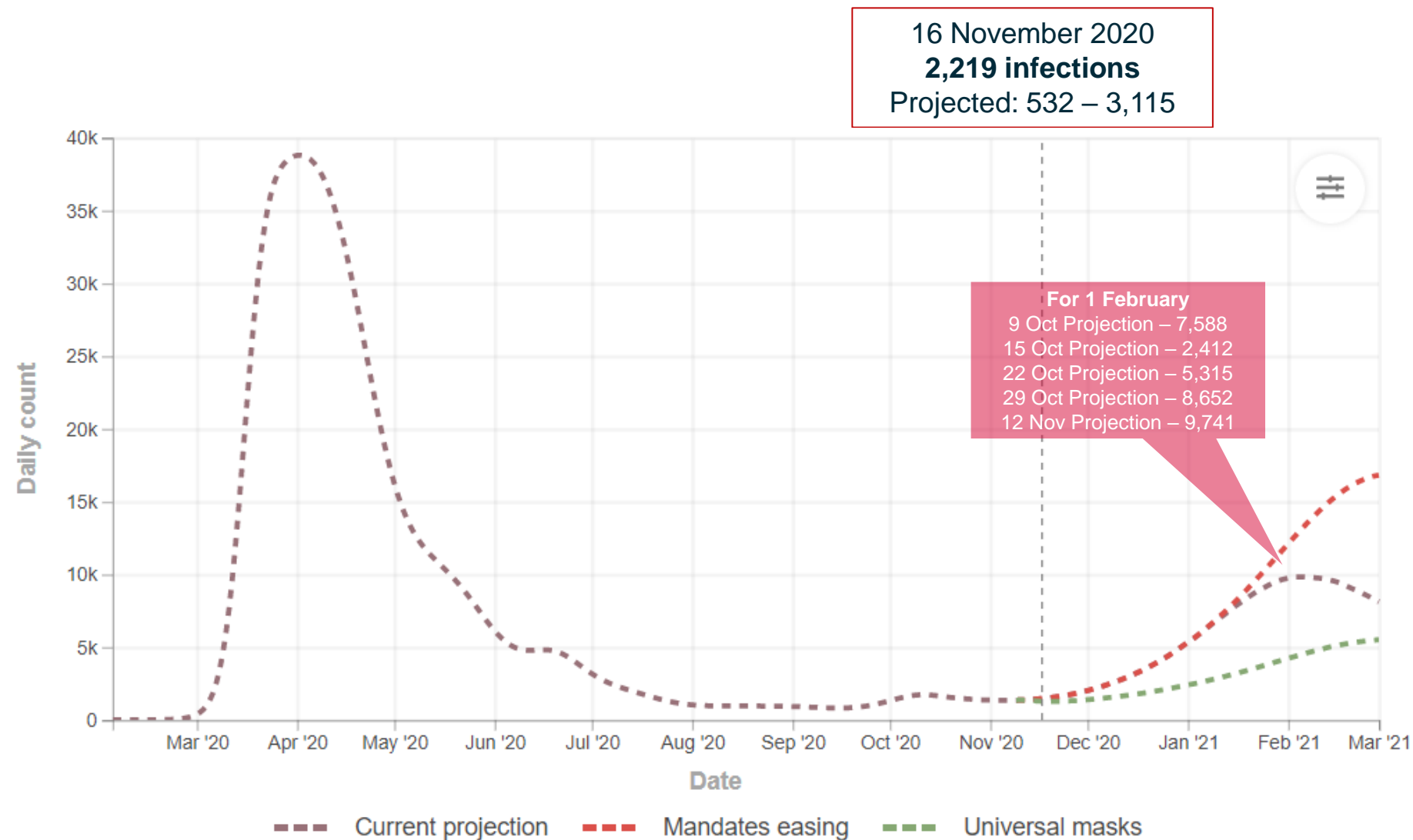
1 March 2021
Projected: 20,051

Projections in:

- 12 November – 20,051

Mar 2021

Covid-19 Daily Infection Projections in New Jersey



Current projection : Mandates are re-imposed for 6 weeks whenever daily deaths reach 8 per million (0.8 per 100k).

Mandates easing : Continued easing of social distancing mandates, and mandates are not re-imposed.

Universal masks : 95% mask usage in public in every location, reaching levels seen in Singapore. Mandates are re-imposed for 6 weeks if daily deaths reach 8 per million (0.8 per 100k).

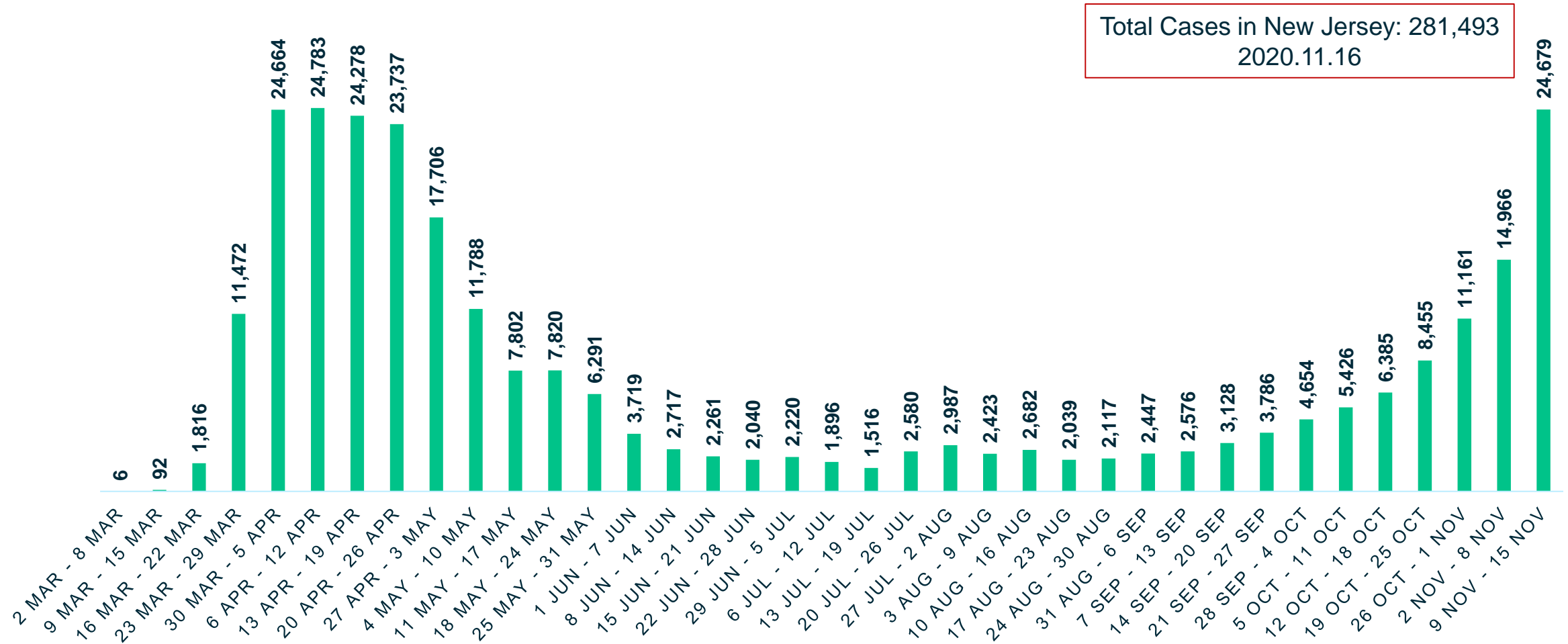
Projection Daily Infections

1 March 2021
Projected: 8,114

Projections in:
• 12 November – 8,114

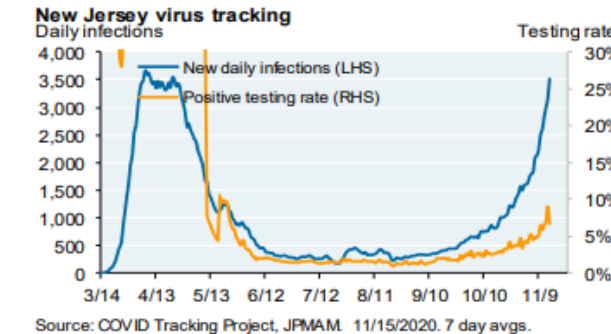
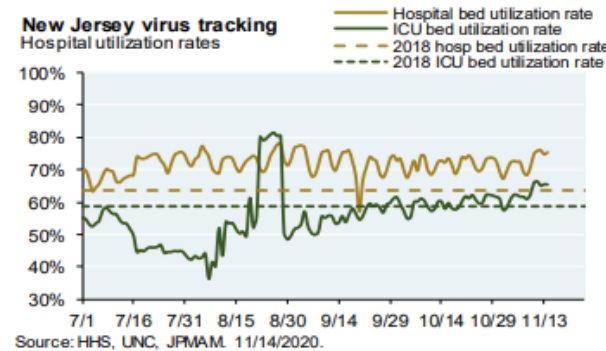
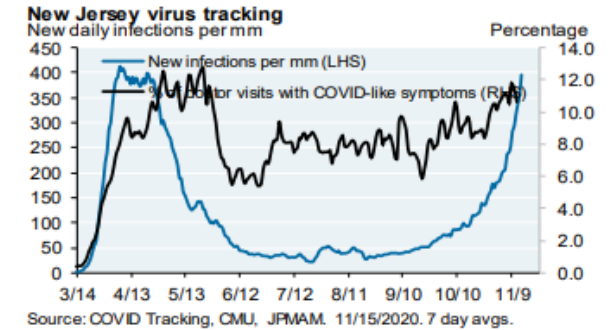
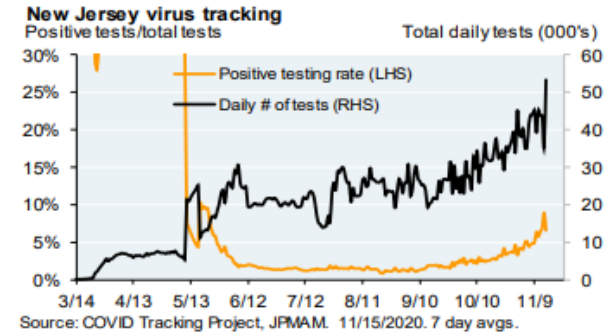
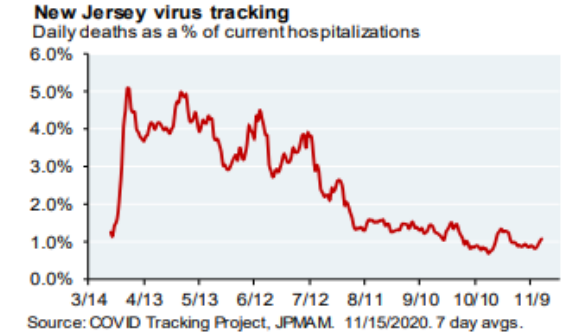
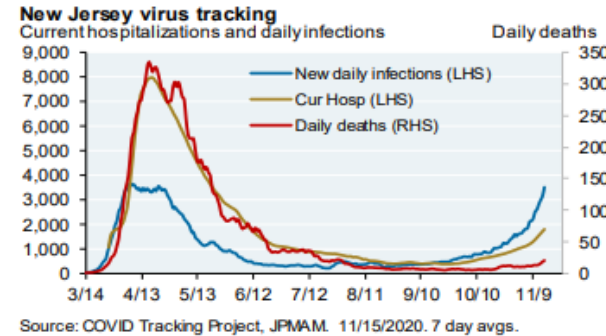
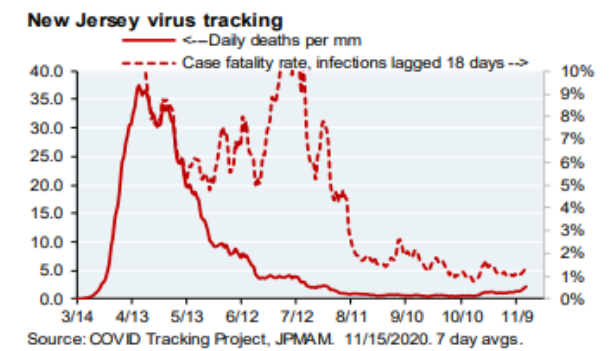
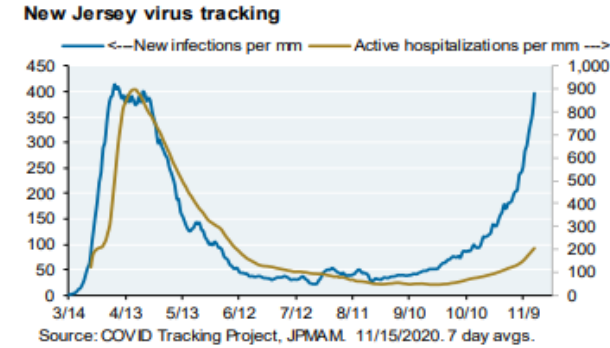
Mar 2021

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



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

New Jersey Coronavirus tracking



Recent News

Latest News

- **Moderna announced that its mRNA-1273 Covid-19 vaccine candidate met its primary efficacy endpoint** according to the first interim data from a Phase III study. The interim data showed that mRNA-1273 had an **efficacy rate of 94.5%** based on 95 cases of Covid-19. More than 30,000 participants in the US are enrolled in the study, which is being conducted with the National Institute of Allergy and Infectious Diseases and the Biomedical Advanced Research and Development Authority.
The company claims that its vaccine has a longer shelf life when refrigerated at 'normal' fridge temperatures and at room temperature, making it easier to store and use, unlike the Pfizer candidate that requires refrigeration at -70 degrees Celsius for storage. Both Moderna and the front runner Pfizer have sought the US Food and Drug Administration (FDA) emergency use authorisation to start vaccinating the populations.
- **Pfizer and BioNTech signed an agreement to supply 200 million doses of its BNT162b2 mRNA-based vaccine against Covid-19 to European Union (EU) member states.** The agreement also allows the European Commission to request an additional 100 million doses of the vaccine. The vaccines are expected to be delivered by the end of 2020, after thorough clinical success and regulatory authorisation.
- **Samsung Biologics announced that it has struck a long-term deal with Eli Lilly to produce the antibody-drug neutralising Covid-19.** The Korean-based biotech signed a contract manufacturing organisation agreement with the US pharmaceutical company in May to supply the drug for Covid-19.
- **Bharat Biotech has begun Phase III trials of Covaxin, its Covid-19 vaccine candidate in India.** The trial involves 26,000 participants across 22 locations and will be conducted in collaboration with the Indian Council of Medical Research. The trial has been approved by the Drugs Controller General of India and registered with the clinical trials registry of India.

Latest News (cont.)

- **The FDA granted emergency use authorisation** for Eli Lilly's neutralising antibody bamlanivimab (LY-CoV555). Bamlanivimab is authorised for the treatment of Covid-19 patients suffering from mild to moderate symptoms.
- **Pfizer and BioNTech** announced that BNT162b2, **their mRNA-based vaccine** candidate, has shown efficacy in the treatment of the Covid-19 among individuals without prior evidence of infection by the SARS-CoV-2 virus. The interim analysis showed that the vaccine candidate was **more than a 90% effective** after two doses.
- **Novavax announced that it has been granted fast track designation by the FDA for NVX-CoV2373**, its Covid-19 vaccine candidate. The vaccine, which is currently in its late-stage development, is a stable, prefusion protein developed using Novavax' nanoparticle technology including its Matrix adjuvant.
- **Russia's Covid-19 vaccine, Sputnik V, is more than 90% effective**, according to preliminary observations, the Health Ministry said in text message. The ministry cited observations of patients outside phase 3 of trial, according to Oksana Drapkina, Director of National Research Center for Preventive Medicine of the Ministry of Health.
- **Brazil's health regulator said Monday it had suspended clinical trials** of a Chinese-developed Covid-19 vaccine after an "adverse incident" involving a volunteer recipient, a blow for one of the most advanced vaccine candidates, AFP reports.
- **Aspirin is being investigated as a possible treatment for Covid-19** in the UK-based randomised evaluation RECOVERY trial. The RECOVERY trial is investigating multiple promising drugs for Covid-19 and being overseen by researchers from the University of Oxford. Around 16,000 patients across 176 hospitals in the UK have been recruited in the trial to date. The researchers believe aspirin may be effective against Covid-19 it may prevent the risk of blood clots as a result of the viral disease.

The latest coronavirus updates and developments impacting the global pharmaceutical supply chain... (cont.)

• 2 November

- Regeneron Pharmaceuticals has stopped further enrolment of critically ill hospitalised Covid-19 patients into its antibody drug trial, pending further analysis of the data from already enrolled patients. The independent data monitoring committee, however recommended, enrolment to continue for hospitalised patients requiring no or less oxygen, as well as for outpatient trials of REGN-COV2 without any modification.
- Lonza has entered into an agreement with AstraZeneca to develop AZD7442, two long-acting antibodies to treat Covid-19. AZD7442 is currently being studied in Phase I clinical trials, while AstraZeneca plans to advance the two long-acting antibodies into Phase III trials in the coming weeks.
- Appili Therapeutics has collaborated with Dr Reddy's Laboratories and the Global Response Aid to develop and supply Avigan tablets for the treatment of Covid-19. This agreement follows the global licensing transaction between Dr Reddy's, GRA and FUJIFILM, the inventor of Avigan tablets.
- The University of Stanford School of Medicine is set to enrol approximately 1,000 people in a large Phase III trial of a potential vaccine candidate for treating Covid-19. The vaccine is produced by Janssen, a subsidiary of Johnson & Johnson, and this Stanford study will be among a larger trial of 60,000 people across 180 sites globally.

• 30 October

- Takeda has partnered with Moderna and the government of Japan to import and market 50 million doses of Moderna's mRNA-1273 Covid-19 vaccine from 2021. Moderna earlier announced the full enrolment of the 30,000-participant phase 3 clinical trial of the mRNA-1273 vaccine in the US. Takeda is also looking to manufacture and distribute Novavax's Covid-19 vaccine in the country.
- Equillium has received US Food and Drug Administration (FDA) clearance to initiate a Phase III clinical trial of its drug Equinox during the fourth quarter of 2020. The drug will be evaluated for safety and efficacy in hospitalised Covid-19 patients suffering from acute respiratory distress syndrome. The initial clinical data will be available in mid-2021.
- An international team of scientists tracking the virus's genetic mutations says a variant that originated in Spanish farm workers has spread through much of Europe since the summer, accounting for a majority of new Covid-19 cases in several countries - including more than 80 % in the UK, the Financial Times reported.
- Sanofi and GlaxoSmithKline (GSK) have signed a Statement of Intent with Gavi, the vaccine alliance, which runs the COVAX Facility that aims to provide equitable access to Covid-19 vaccines globally. The pharmaceutical companies have agreed to produce available approximately 200 million doses of their protein-based COVID-19 vaccine, once approved and according to the terms of the contract with the COVAX Facility.

• 28 October

- The FDA is not planning to inspect COVID-19 vaccine manufacturing plants prior to potential Emergency Use Authorizations (EUA), Bloomberg reports. The updated FDA guidelines for COVID-19 vaccine approval require two months of safety data, several cases of COVID-19 in the placebo group, and manufacturing capacity, and detailed information about manufacturing processes.
- A new study from the UK in 365,000 people found a drop in SARS-CoV-2 antibody prevalence from 6% to 4.4% from the end of June to September, raising questions about long-lasting immunity of people previously infected with the virus. However, B-cell and T-cell immunity play an important role in long-lasting immune memory, and it's too early to tell how susceptible people who already had COVID-19 will be to future SARS-CoV-2 infections. A small number of cases of re-infections have been reported globally; however, it is unclear if a greater number of re-infections have occurred with symptoms that did not necessitate diagnosis or treatment.

The latest coronavirus updates and developments impacting the global pharmaceutical supply chain... (cont.)

- **26 October**

- AstraZeneca has reported its Covid-19 vaccine, which is being developed in partnership with the University of Oxford, has generated a similar immunogenicity response in older and younger adults. The vaccine also generated lower adverse reactions in older adults reported CNBC.
- Johnson & Johnson has announced plans to resume enrolment for its ENSEMBLE Phase III clinical trial on its subsidiary Janssen's Covid-19 vaccine in the US. The trial was paused over an adverse event reported in one of the participants. J&J is resuming the trial after recommendation from the trial's independent Data Safety and Monitoring Board and after consultation with the U.S. Food and Drug Administration (FDA).

- **25 October**

- The US FDA has approved the restart of Phase III clinical trials on AstraZeneca/University of Oxford AZD1222 Covid-19 vaccine after reviewing safety data related to the trial globally. This trial was paused due to an illness reported in one of the volunteers. Clinical trials on the vaccine will resume across the US, UK, Brazil, South Africa and Japan.

- **23 October**

- The US Food and Drug Administration has approved Gilead Sciences' antiviral drug Veklury (remdesivir) to treat hospitalised Covid-19 patients. Veklury stops the replication of the SARS-CoV-2 virus that caused Covid-19. It is the first and the only approved drug for Covid-19 in the US and is abundantly available due to early investment efforts by the country to maximise its supply.

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>