Informe de resultados de COVID-19

La Región de las Américas

17 de noviembre de 2021

Este documento contiene información resumida sobre las últimas proyecciones del modelo IHME sobre COVID-19 en la Región de las Américas. El modelo se ejecutó el 16 de noviembre de 2021, con datos hasta el 15 de noviembre de 2021.

COVID-19 sigue siendo la segunda causa de muerte en la Región de las Américas esta semana, a pesar de una ligera disminución en el número de muertes diarias reportadas, de 1,800 a 1,700. Sin embargo, a la inversa, ha habido aumentos tanto en las infecciones diarias como en las casos reportados, que se encuentran en 387,600 y 110,400 respectivamente. La tasa de detección de infección en la región era cercana al 32% el 15 de noviembre y estimamos que a esa fecha el 48% de las personas de la región han sido infectadas. Además, estimamos que la variante Delta está circulando en 31 países, mientras que la variante Gamma está circulando en 12.

Los factores clave de transmisión, movilidad, uso de mascarillas y tasas de vacunación siguen siendo motivo de gran preocupación. La movilidad es ahora, en promedio, 1% más alta que la línea de base anterior a COVID y estaba dentro del 10% de la línea de base en 23 países (cinco más que la semana pasada). El uso de mascarillas también sigue disminuyendo y, al 15 de noviembre, solo 59% de las personas informa que siempre lleva una mascarilla al salir de casa. Sin embargo, si 95% de las personas usaran máscaras al salir de casa, se podrían salvar 86,000 vidas antes del 1 de marzo.

La aceptación de la vacuna en la región también ha disminuido levemente y, si bien en general, 84.4% de las personas encuestadas dicen que aceptarían una vacuna para COVID-19, la proporción real varía ampliamente en la región, desde 49% en Haití hasta 94% en Chile. Al 15 de noviembre, solo 10 países habían administrado una dosis de vacuna al 70% de su población, mientras que incluso menos de la mitad de ese número (4) había llegado al 70% o más de la población que estaba completamente vacunada. Esperamos que al ritmo actual, 704.8 millones de personas se vacunen con al menos una dosis para el 1 de marzo, y que el 65% de la población esté completamente vacunada para ese momento. Además, estimamos que debido a la protección ofrecida por la infección natural, la vacunación o ambas, 60% de la región es actualmente inmune a la variante Delta. Si bien esperamos que la cifra alcance el 67% para el 1 de marzo, esas estimaciones aún no tienen en cuenta la disminución de la inmunidad y, por lo tanto, pueden, de hecho, ser optimistas.

Nuestro escenario de referencia, que representa lo que pensamos que es más probable que suceda, proyecta 2,625,000 muertes reportadas debido al COVID-19 el 1 de marzo, lo que representa 199,000 muertes adicionales del 15 de noviembre al 1 de marzo. Nuestro peor escenario proyecta 2,970,000 muertes reportadas acumuladas el 1 de marzo, y 345,000 muertes adicionales en comparación con nuestro escenario de referencia. También anticipamos que entre ahora y el 1 de marzo, 13 países tendrán una presión alta o extrema

en las camas de hospital, mientras que 24 lo tendrán en la capacidad de la unidad de cuidados intensivos (UCI).

La pérdida de inmunidad sigue siendo uno de los problemas más críticos para determinar la trayectoria de la pandemia. La evidencia actual sugiere que la inmunidad derivada de la vacuna contra la infección disminuye sustancialmente a las 30 semanas después de la segunda dosis, aunque afortunadamente disminuye mucho más lentamente para prevenir la hospitalización y la muerte. El ritmo al que disminuye la inmunidad derivada de una infección natural es un factor crítico aún desconocido. Queda claro que la forma más rápida de reducir la transmisión es promover el uso de mascarillas, especialmente mientras la región se prepara para entrar en la temporada navideña. También se debe prestar atención a las reuniones sociales y, por supuesto, la vacunación sigue siendo clave. La combinación de estas medidas, cuando se implementan de manera consistente, puede reducir la transmisión y, por lo tanto, la hospitalización y la muerte en la región a medida que terminamos el 2021 y nos preparamos para ingresar al 2022.

Situación actual

• Las infecciones diarias en la última semana aumentaron a 387,600 por día en promedio en comparación con 365,500 la semana anterior (Figura 1.1). El censo hospitalario diario en la última semana (hasta el 15 de noviembre) disminuyó a 77,300 por día en promedio en comparación con 77,600 la semana anterior.

• Los casos notificados diariamente en la última semana aumentaron a 110,400 por día en promedio en comparación con 100,600 la semana anterior (Figura 2.1).

• Las muertes reportadas por COVID-19 en la última semana disminuyeron a 1,700 por día en promedio en comparación con 1,800 la semana anterior (Figura 3.1).

• El total de muertes por COVID-19 en la última semana disminuyó a 2,200 por día en promedio en comparación con las 2,400 de la semana anterior (Figura 3.1). Esto convierte a COVID-19 en la segunda causa de muerte en la Región de las Américas esta semana (Tabla 1). El total estimado de muertes diarias por COVID-19 en la última semana fue 1.3 veces mayor que el número reportado de muertes.

• La tasa diaria de muertes notificadas por COVID-19 es superior a 4 por millón en Barbados, Belice, Dominica, Saint Kitts y Nevis, Santa Lucía, Surinam y Trinidad y Tobago (Figura 4.1).

• La tasa diaria de muertes totales por COVID-19 es superior a 4 por millón en 10 países (Figura 4.2).

• Estimamos que el 48% de las personas en la Región de las Américas han sido infectadas al 15 de noviembre (Figura 6.1).

• La R efectiva, calculada utilizando casos, hospitalizaciones y muertes, es mayor que 1 en 21 países. (Figura 7.1).

• La tasa de detección de infecciones en la Región de las Américas fue cercana al 32% el 15 de noviembre (Figura 8.1).

• Basándonos en el GISAID y varias bases de datos nacionales, combinado con nuestro modelo de dispersión de variantes, estimamos la prevalencia actual de variantes de interés (Figura 9.1). Estimamos que la variante Beta no está circulando en ningún país, que la variante Delta está circulando en 31 países y que la variante Gamma está circulando en 12 países de la región.

Tendencias en los impulsores de la transmisión

• La movilidad la semana pasada fue 1% más alta que la línea de base anterior a COVID-19 (Figura 11.1). La movilidad estuvo cerca de la línea de base (dentro del 10%) en 23 países. La movilidad fue inferior al 30% de la línea de base en ningún lugar.

• Al 15 de noviembre, en la Encuesta de Tendencias e Impacto de COVID-19, 59% de las personas informan que siempre usaban una máscara al salir de casa en comparación con el 59% de la semana pasada (Figura 13.1).

• Hubo 198 pruebas de diagnóstico por cada 100,000 personas el 15 de noviembre (Figura 15.1).

• Al 15 de noviembre, 10 países han alcanzado 70% o más de la población que ha recibido al menos una dosis de vacuna y 4 países han alcanzado el 70% o más de la población que está completamente vacunada (Figura 17.1).

• En la Región de las Américas, 83.4% de la población de 12 años o más dice que aceptaría o probablemente aceptaría una vacuna para COVID-19. Tenga en cuenta que la aceptación de la vacuna se calcula utilizando datos de encuestas de la población mayor de 18 años. Este porcentaje es casi igual al de la semana pasada. La proporción de la población que está dispuesta a recibir una vacuna COVID-19 oscila entre 49% en Haití y 94% en Chile (Figura 19.1).

• En nuestro escenario de referencia actual, esperamos que 704.8 millones de personas sean vacunadas con al menos una dosis para el 1 de marzo (Figura 20.1). Esperamos que 65% de la población esté completamente vacunada para el 1 de marzo.

• Con base en la estimación de la población que ha sido infectada con COVID-19 y vacunada hasta la fecha, combinada con supuestos sobre la protección contra la infección con la variante Delta proporcionada por infección natural, vacunación o ambas, estimamos que el 60% de la región es inmune a la variante Delta. En nuestro escenario de referencia actual, esperamos que para el 1 de marzo, el 67% de las personas sean inmunes a la variante Delta (Figura 21.1). Estos dos cálculos no tienen en cuenta la disminución de la inmunidad natural o derivada de la vacuna.

Proyecciones

• En nuestro escenario de referencia, que representa lo que creemos que es más probable que suceda, nuestro modelo proyecta 2,625,000 muertes reportadas acumuladas debido al

COVID-19 el 1 de marzo. Esto representa 199,000 muertes adicionales del 15 de noviembre al 1 de marzo. Las muertes reportadas diarias aumentarán. a 1,970 para el 19 de diciembre de 2021 (Figura 22.1).

• Bajo nuestro escenario de referencia, nuestro modelo proyecta 3,359,000 muertes totales acumuladas debido a COVID-19 el 1 de marzo. Esto representa 282,000 muertes adicionales del 15 de noviembre al 1 de marzo (Figura 22.1).

• Si se alcanzara la cobertura universal de la mascarilla (95%) en la próxima semana, nuestro modelo proyecta 86,000 muertes reportadas acumulativas menos en comparación con el escenario de referencia el 1 de marzo.

• En nuestro peor escenario, nuestro modelo proyecta 2,970,000 muertes acumuladas reportadas el 1 de marzo, 345,000 muertes adicionales en comparación con nuestro escenario de referencia. Las muertes reportadas diariamente en el peor escenario aumentarán a 8,820 para el 1 de febrero de 2022 (Figura 22.1).

• Las infecciones diarias en el escenario de referencia aumentarán a 502,770 para el 19 de enero de 2022 (Figura 22.3). Las infecciones diarias en el peor escenario aumentarán a 1,928,750 para el 7 de enero de 2022 (Figura 22.3).

• Los casos diarios en el escenario de referencia subirán a 144,790 para el 28 de enero de 2022 (Figura 22.4). Los casos diarios en el peor escenario aumentarán a 605,010 para el 17 de enero de 2022 (Figura 22.4).

• El censo hospitalario diario en el escenario de referencia aumentará a 118,380 al 4 de febrero de 2022 (Figura 22.5). El censo hospitalario diario en el peor escenario aumentará a 460,620 para el 23 de enero de 2022 (Figura 22.5).

• La Figura 23.1 compara nuestros pronósticos de escenarios de referencia con otros modelos archivados públicamente. Los pronósticos son muy divergentes.

• En algún momento, desde noviembre hasta el 1 de marzo, 13 países tendrán una presión alta o extrema de camas de hospital (Figura 24.1). En algún momento, desde noviembre hasta el 1 de marzo, 24 países tendrán una presión alta o extrema en la capacidad de la unidad de cuidados intensivos (UCI) (Figura 25.1).

Actualizaciones de modelos

No hay actualizaciones de modelos.

COVID-19 Results Briefing

The Region of the Americas

November 17, 2021

This document contains summary information on the latest projections from the IHME model on COVID-19 in the Region of the Americas. The model was run on November 16, 2021, with data through November 15, 2021.

COVID-19 remains the number 2 cause of death in the Region of the Americas this week, despite a slight decrease in the number of daily reported deaths, from 1,800 to 1,700. Conversely, however, there have been increases in both daily infections and daily reported cases, which are at 387,600 and 110,400 respectively. The infection-detection rate in the region was close to 32% on November 15 and we estimate that as of that date 48% of people in the region have been infected. We further estimate that the Delta variant is circulating in 31 countries, while the Gamma variant is circulating in 12.

The key drivers of transmission – mobility, mask use, and vaccination rates – remain matters of significant concern. Mobility is now, on average, 1% higher than the pre-COVID baseline and was within 10% of baseline in 23 countries, (five more than last week). Mask use also continues to decline, and as of November 15, only 59% of people self-report always wearing a mask when leaving home. However, if 95% of people wore masks when leaving home, 86,000 lives could be saved by March 1.

Vaccine acceptance across the region has also declined slightly, and while overall, 84.4% of people surveyed say they would accept a vaccine for COVID-19, the actual proportion varies widely across the region from 49% in Haiti to 94% in Chile. As of November 15, only 10 countries have administered one vaccine dose to 70% of their population while less than half that number (four countries) have reached 70% or more of the population who are fully vaccinated. We expect that at the current rate, 704.8 million people will be vaccinated with at least one dose by March 1, and that 65% of the population will be fully vaccinated by that time. Further, we estimate that due to protection offered by natural infection, vaccination, or both, 60% of the region is currently immune to the Delta variant. While we expect that figure to reach 67% by March 1, those estimates do not yet factor in waning immunity and so they may, in fact, be optimistic.

Our reference scenario, which represents what we think is most likely to happen, projects 2,625,000 cumulative reported deaths due to COVID-19 on March 1, representing 199,000 additional deaths from November 15 to March 1. Our worse scenario projects, 2,970,000 cumulative reported deaths on March 1, an additional 345,000 deaths compared to our reference scenario. We also anticipate that between now and March 1, 13 countries will have high or extreme stress on hospital beds while 24 will have high or extreme stress on intensive care unit (ICU) capacity.

Waning immunity remains one of the most critical issues in determining the pandemic's trajectory. Current evidence suggests that vaccine-derived immunity against infection wanes substantially by 30 weeks after the second dose, although fortunately it wanes much

more slowly for preventing hospitalization and death. The pace at which immunity derived from natural infection wanes is a critical yet unknown factor. It remains clear that the fastest way to reduce transmission is to promote mask use, particularly as the region prepares to enter the holiday season. Attention should also be paid to social gatherings and of course, vaccination remains key. The combination of these measures when implemented consistently may reduce transmission and therefore hospitalization and death in the region as we end 2021 and prepare to enter 2022.

Current situation

- Daily infections in the last week increased to 387,600 per day on average compared to 365,500 the week before (Figure 1.1). Daily hospital census in the last week (through November 15) decreased to 77,300 per day on average compared to 77,600 the week before.

- Daily reported cases in the last week increased to 110,400 per day on average compared to 100,600 the week before (Figure 2.1).

- Reported deaths due to COVID-19 in the last week decreased to 1,700 per day on average compared to 1,800 the week before (Figure 3.1).

- Total deaths due to COVID-19 in the last week decreased to 2,200 per day on average compared to 2,400 the week before (Figure 3.1). This makes COVID-19 the number 2 cause of death in the Region of the Americas this week (Table 1). Estimated total daily deaths due to COVID-19 in the past week were 1.3 times larger than the reported number of deaths.

- The daily rate of reported deaths due to COVID-19 is greater than 4 per million in Barbados, Belize, Dominica, Saint Kitts and Nevis, Saint Lucia, Suriname, and Trinidad and Tobago (Figure 4.1).

- The daily rate of total deaths due to COVID-19 is greater than 4 per million in 10 countries (Figure 4.2).

- We estimate that 48% of people in the Region of the Americas have been infected as of November 15 (Figure 6.1).

- Effective R, computed using cases, hospitalizations, and deaths, is greater than 1 in 74 locations. (Figure 7.1).

- The infection-detection rate in the Region of the Americas was close to 32% on November 15 (Figure 8.1).

- Based on the GISAID and various national databases, combined with our variant spread model, we estimate the current prevalence of variants of concern (Figure 9.1). We estimate that the Beta variant is circulating in no countries, that the Delta variant is circulating in 31 countries, and that the Gamma variant is circulating in 12 countries in the region.

Trends in drivers of transmission

- Mobility last week was 1% higher than the pre-COVID-19 baseline (Figure 11.1). Mobility was near baseline (within 10%) in 23 countries. Mobility was lower than 30% of baseline in no locations.

- As of November 15, in the COVID-19 Trends and Impact Survey, 59% of people self-report that they always wore a mask when leaving their home, about the same as last week (Figure 13.1).

- There were 198 diagnostic tests per 100,000 people on November 15 (Figure 15.1).

- As of November 15, 10 countries have reached 70% or more of the population who have received at least one vaccine dose and four countries have reached 70% or more of the population who are fully vaccinated (Figure 17.1).

- In the Region of the Americas, 83.4% of the population that is 12 years and older say they would accept or would probably accept a vaccine for COVID-19. Note that vaccine acceptance is calculated using survey data from the 18+ population. This is about the same percentage as last week. The proportion of the population who are open to receiving a COVID-19 vaccine ranges from 49% in Haiti to 94% in Chile (Figure 19.1).

- In our current reference scenario, we expect that 704.8 million people will be vaccinated with at least one dose by March 1 (Figure 20.1). We expect that 65% of the population will be fully vaccinated by March 1.

- Based on the estimate of the population that have been infected with COVID-19 and vaccinated to date, combined with assumptions on protection against infection with the Delta variant provided by either natural infection, vaccination, or both, we estimate that 60% of the region is immune to the Delta variant. In our current reference scenario, we expect that by March 1, 67% of people will be immune to the Delta variant (Figure 21.1). These two calculations do not take into account waning of natural or vaccine-derived immunity.

Projections

- In our **reference scenario**, which represents what we think is most likely to happen, our model projects 2,625,000 cumulative reported deaths due to COVID-19 on March 1. This represents 199,000 additional deaths from November 15 to March 1. Daily reported deaths will rise to 1,970 by December 19, 2021 (Figure 22.1).

- Under our **reference scenario**, our model projects 3,359,000 cumulative total deaths due to COVID-19 on March 1. This represents 282,000 additional deaths from November 15 to March 1 (Figure 22.1).

- If **universal mask coverage (95%)** were attained in the next week, our model projects 86,000 fewer cumulative reported deaths compared to the reference scenario on March 1.

- Under our **worse scenario**, our model projects 2,970,000 cumulative reported deaths on March 1, an additional 345,000 deaths compared to our reference scenario. Daily reported deaths in the **worse scenario** will rise to 8,820 by February 1, 2022 (Figure 22.1).

- Daily infections in the **reference scenario** will rise to 502,770 by January 19, 2022 (Figure 22.3). Daily infections in the **worse scenario** will rise to 1,928,750 by January 7, 2022 (Figure 22.3).

- Daily cases in the **reference scenario** will rise to 144,790 by January 28, 2022 (Figure 22.4). Daily cases in the **worse scenario** will rise to 605,010 by January 17, 2022 (Figure 22.4).

- Daily hospital census in the **reference scenario** will rise to 118,380 by February 4, 2022 (Figure 22.5). Daily hospital census in the **worse scenario** will rise to 460,620 by January 23, 2022 (Figure 22.5).

- Figure 23.1 compares our reference scenario forecasts to other publicly archived models. Forecasts are widely divergent.

- At some point from November through March 1, 13 countries will have high or extreme stress on hospital beds (Figure 24.1). At some point from November through March 1, 24 countries will have high or extreme stress on intensive care unit (ICU) capacity (Figure 25.1).

Model updates

No model updates.

Figure 1.1. Daily COVID-19 hospital census and infections

Daily hospital census — Daily infections
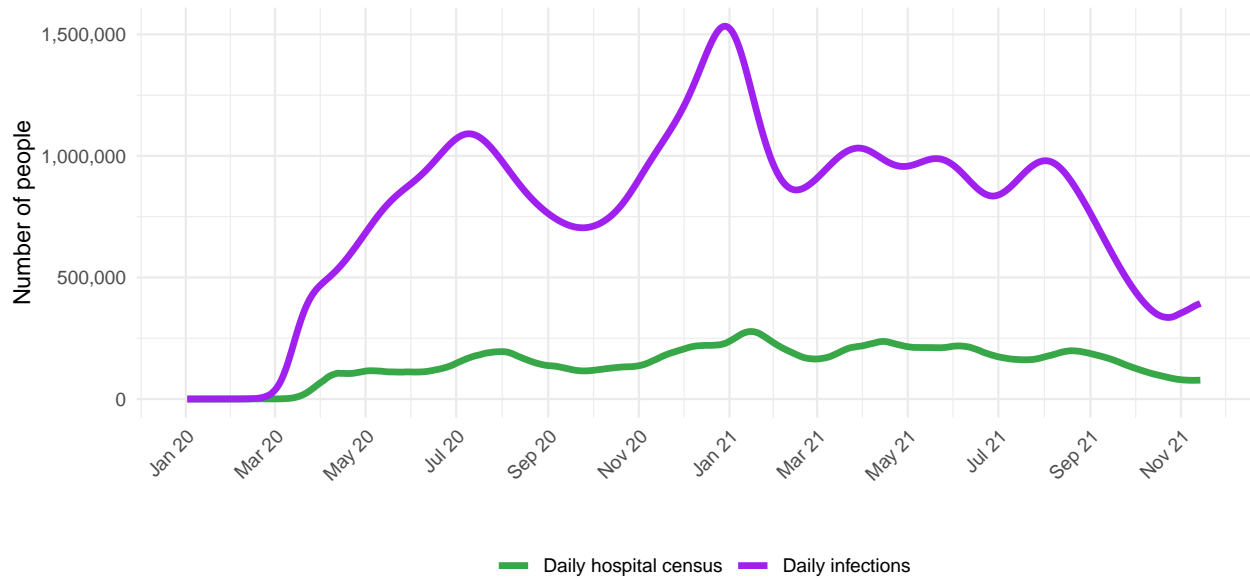
Figure 2.1. Reported daily COVID-19 cases, moving average

Daily cases
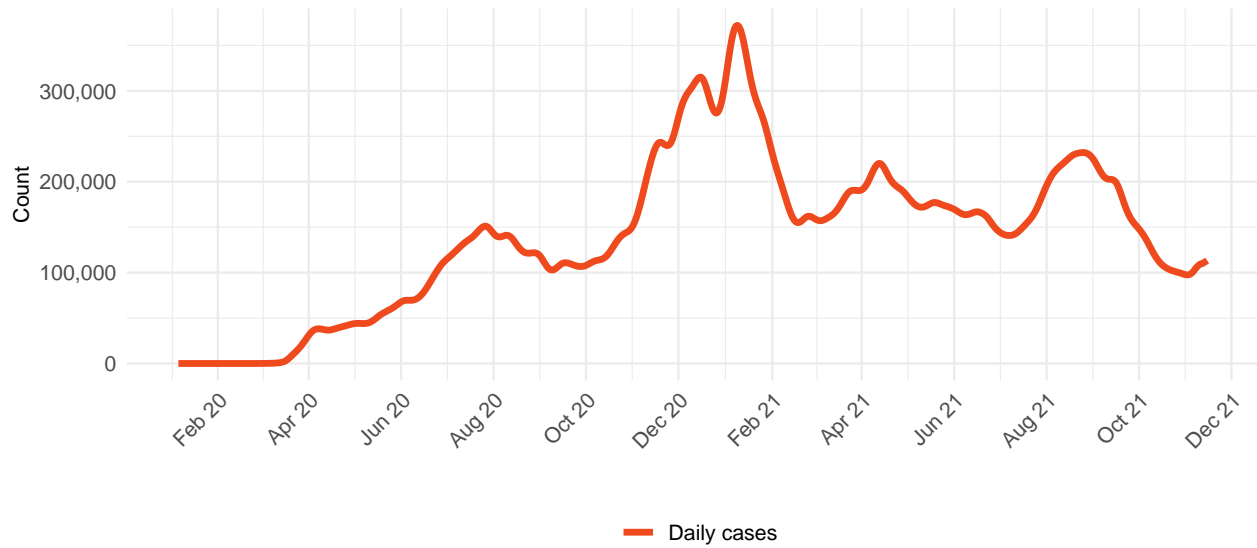
Table 1. Ranking of total deaths due to COVID-19 among the leading causes of mortality this week, assuming uniform deaths of non-COVID causes throughout the year

Cause name	Weekly deaths	Ranking
Ischemic heart disease	22,182	1
COVID-19	15,578	2
Stroke	10,124	3
Chronic obstructive pulmonary disease	7,401	4
Tracheal, bronchus, and lung cancer	6,369	5
Lower respiratory infections	6,211	6
Chronic kidney disease	6,184	7
Alzheimer's disease and other dementias	5,890	8
Diabetes mellitus	5,822	9
Cirrhosis and other chronic liver diseases	4,153	10

Figure 3.1. Smoothed trend estimate of reported daily COVID-19 deaths (blue) and total daily deaths due to COVID-19 (orange)

Daily COVID-19 death rate per 1 million on November 15, 2021

Figure 4.1 Daily reported COVID-19 death rate per 1 million
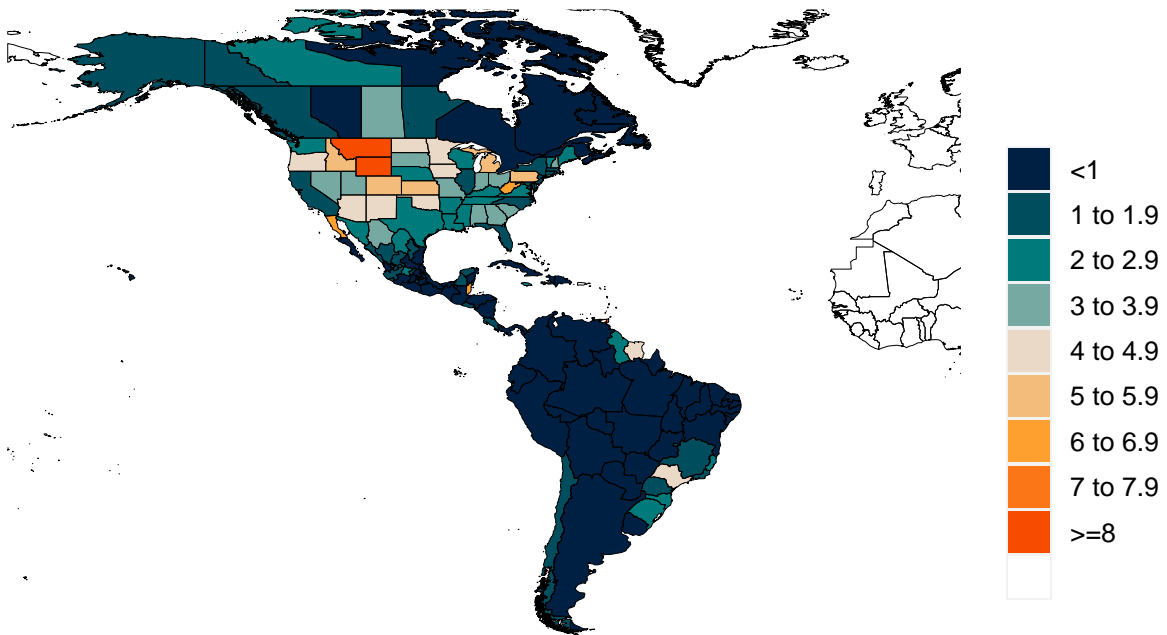
Figure 4.2 Daily total COVID-19 death rate per 1 million

IHME
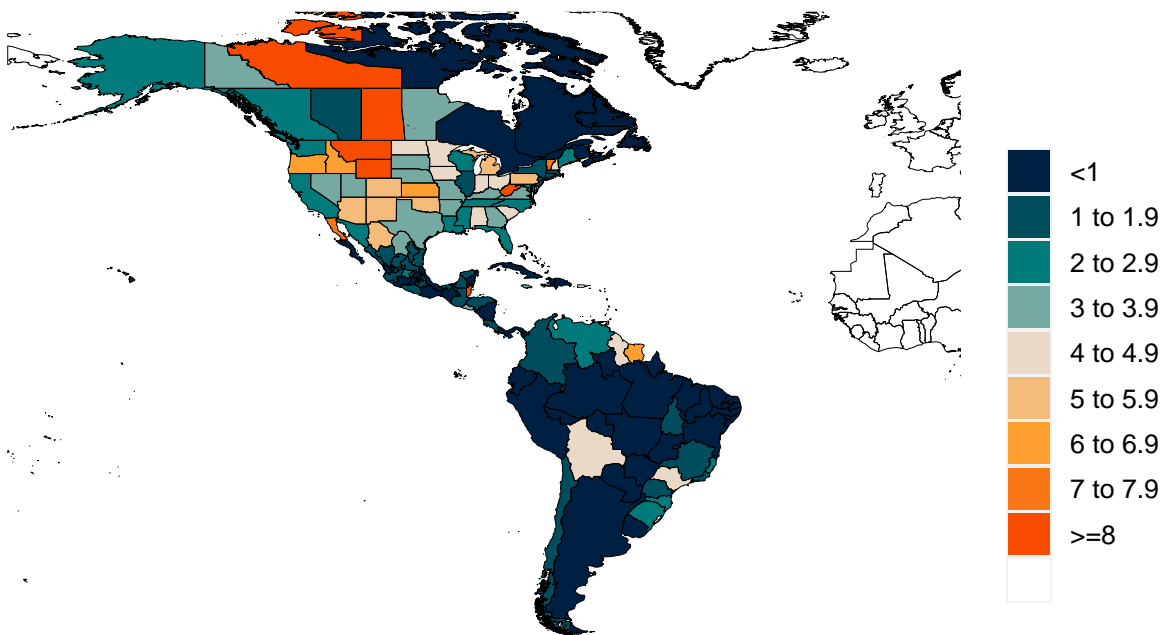
Cumulative COVID-19 deaths per 100,000 on November 15, 2021

Figure 5.1 Reported cumulative COVID-19 deaths per 100,000
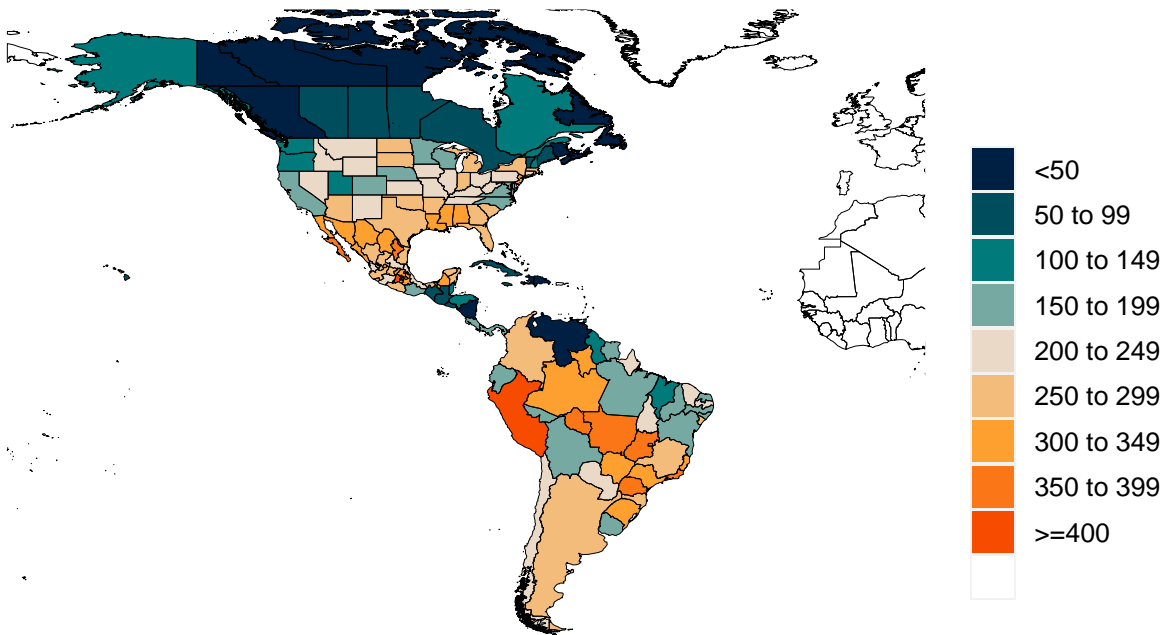
Figure 5.2 Total cumulative COVID-19 deaths per 100,000
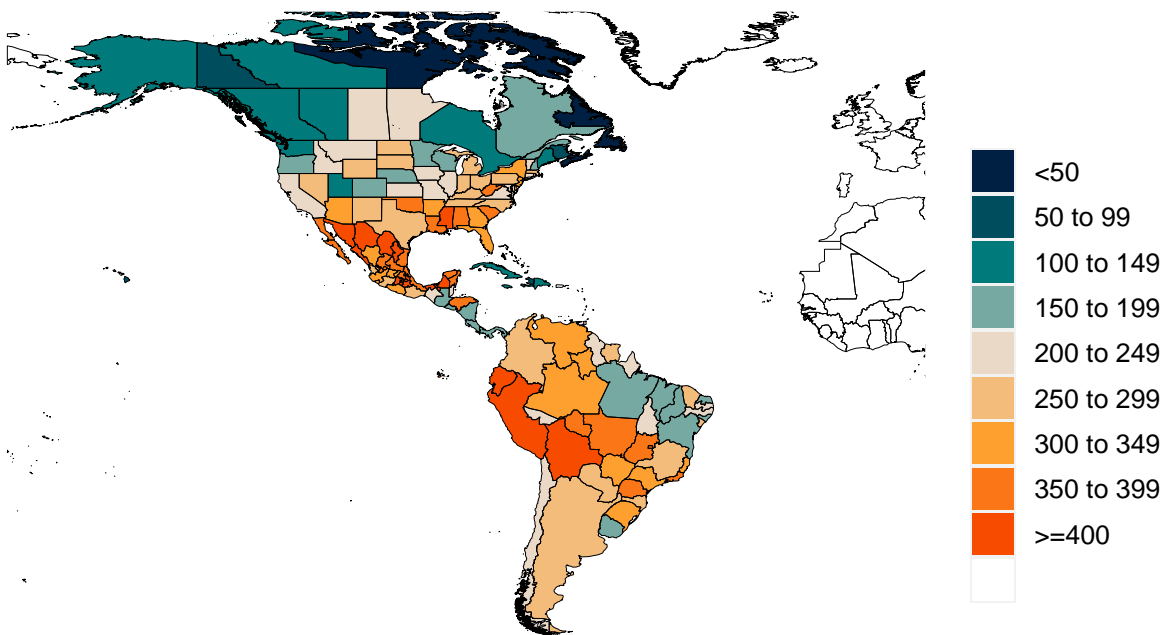
Figure 6.1. Estimated percent of the population infected with COVID-19 on November 15, 2021
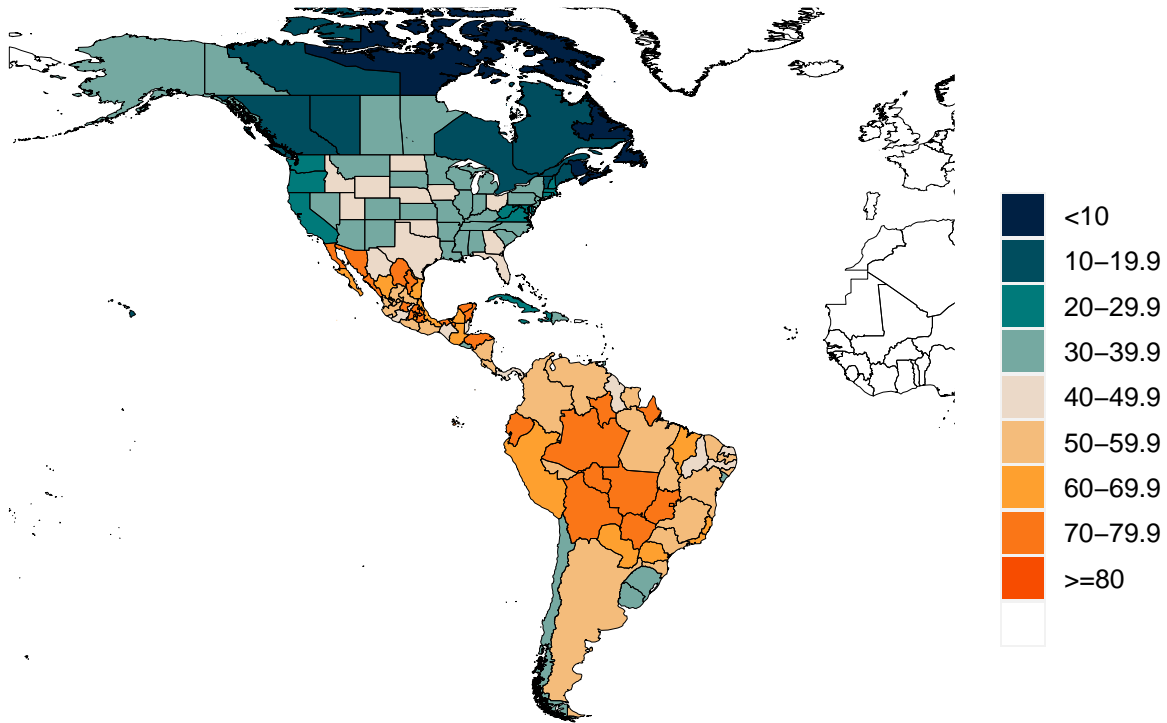
Figure 7.1. Mean effective R on November 4, 2021. Effective R less than 1 means that transmission should decline, all other things being held the same. The estimate of effective R is based on the combined analysis of deaths, case reporting, and hospitalizations where available. Current reported cases reflect infections 11-13 days prior, so estimates of effective R can only be made for the recent past.
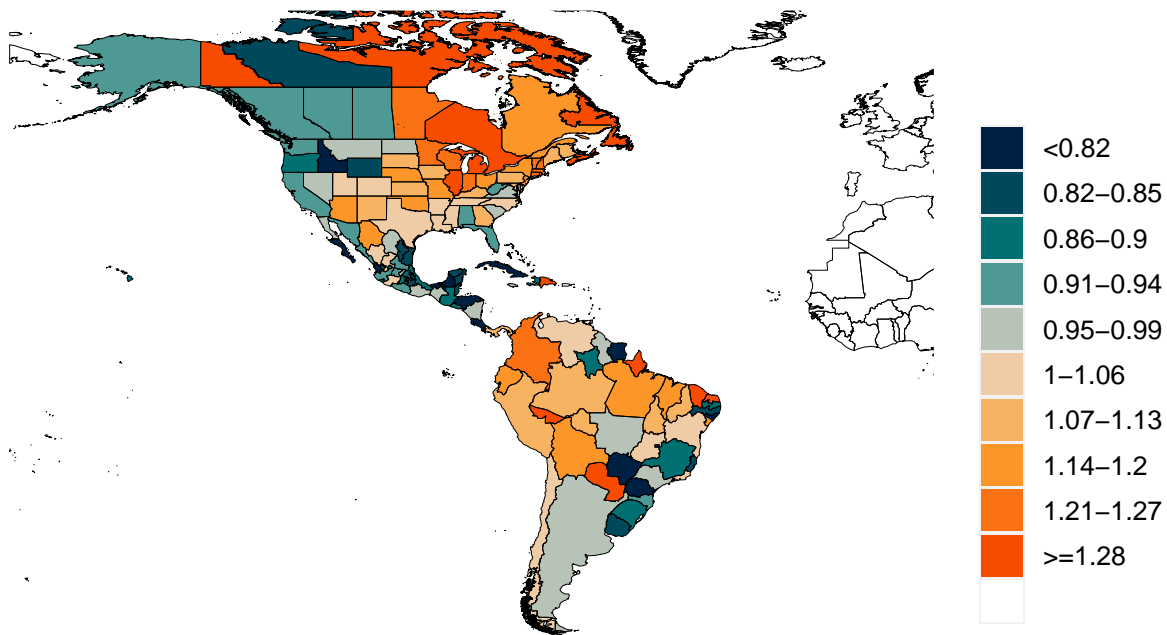
Figure 8.1. Percent of COVID-19 infections detected. This is estimated as the ratio of reported daily COVID-19 cases to estimated daily COVID-19 infections based on the SEIR disease transmission model. Due to measurement errors in cases and testing rates, the infection-detection rate can exceed 100% at particular points in time.
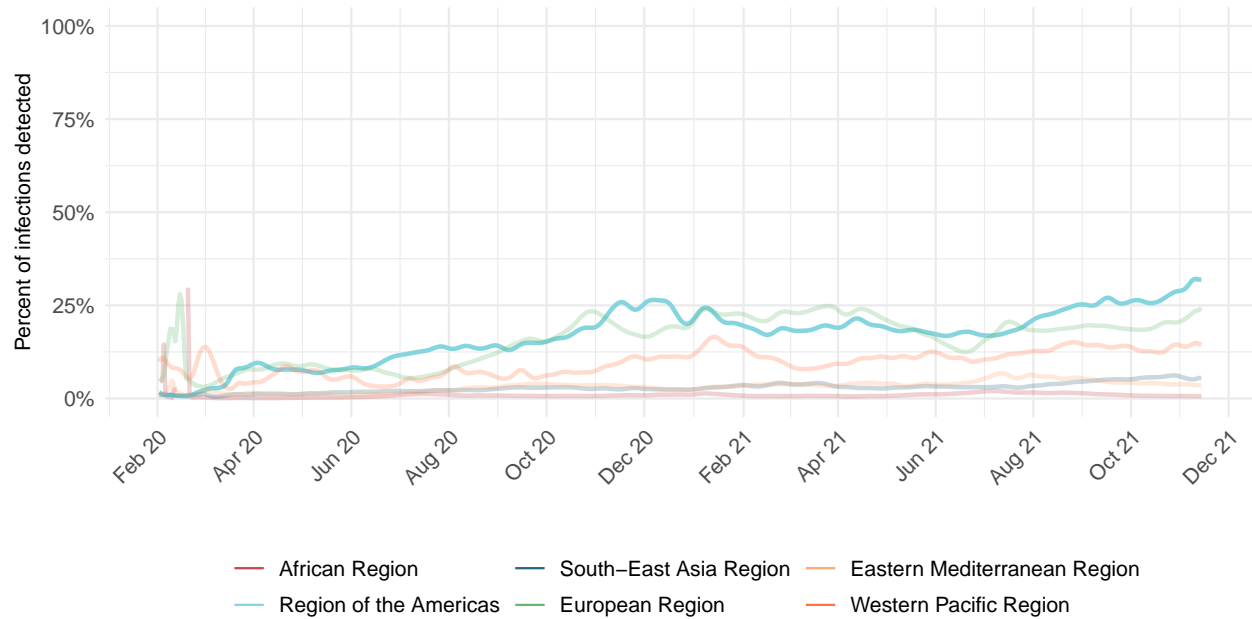
Estimated percent of circulating SARS-CoV-2 for primary variant families on November 15, 2021

Figure 9.1 Estimated percent Alpha variant

⬜	0%
⬛	1–9%
🟦	10–24%
🟩	25–49%
🟧	50–74%
🟧	75–89%
🟥	90–100%
⬜	
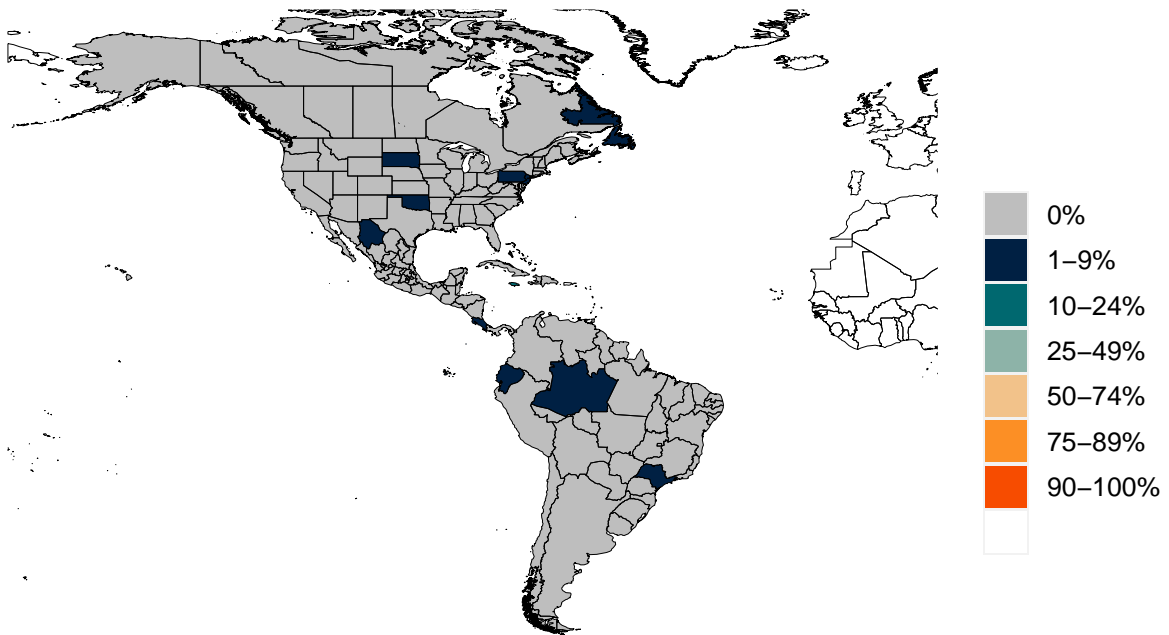
Figure 9.2 Estimated percent Beta variant

⬜	0%
⬛	1–9%
🟦	10–24%
🟩	25–49%
🟧	50–74%
🟧	75–89%
🟥	90–100%
⬜	

Figure 9.3 Estimated percent Delta variant
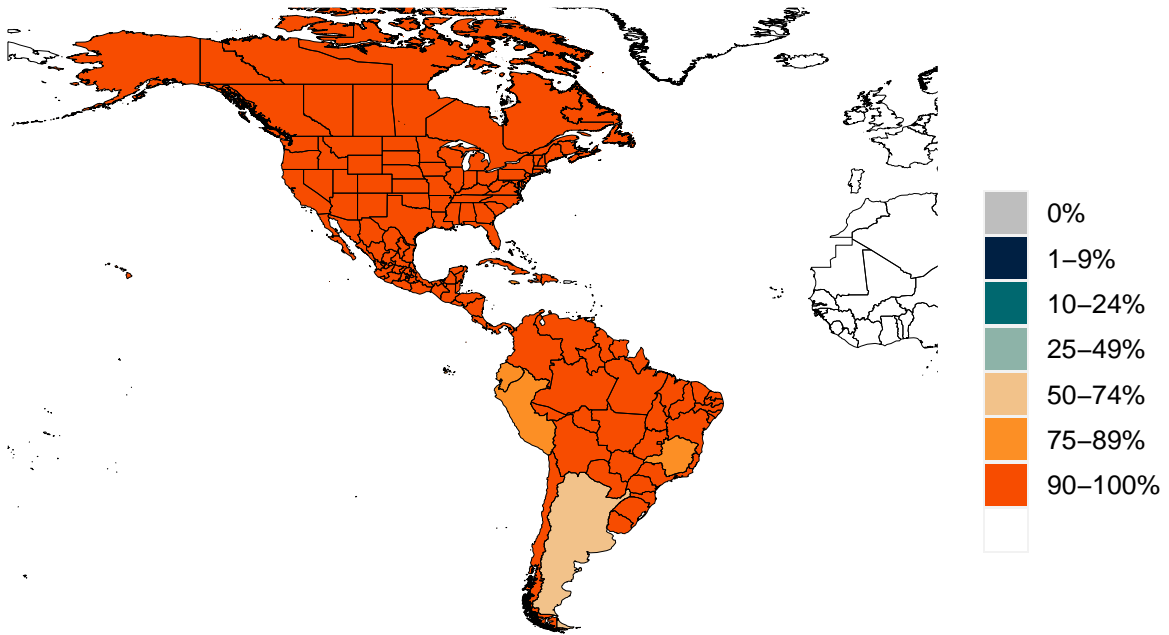
Figure 9.4 Estimated percent Gamma variant
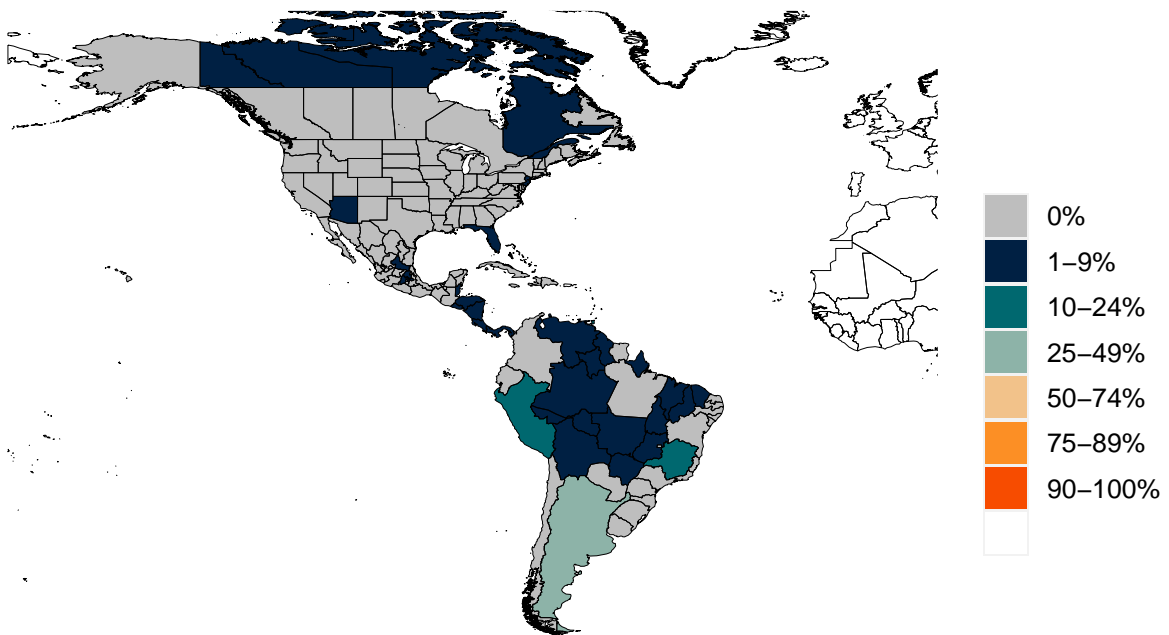
Figure 10.1. Infection-fatality rate on November 15, 2021. This is estimated as the ratio of COVID-19 deaths to estimated daily COVID-19 infections.
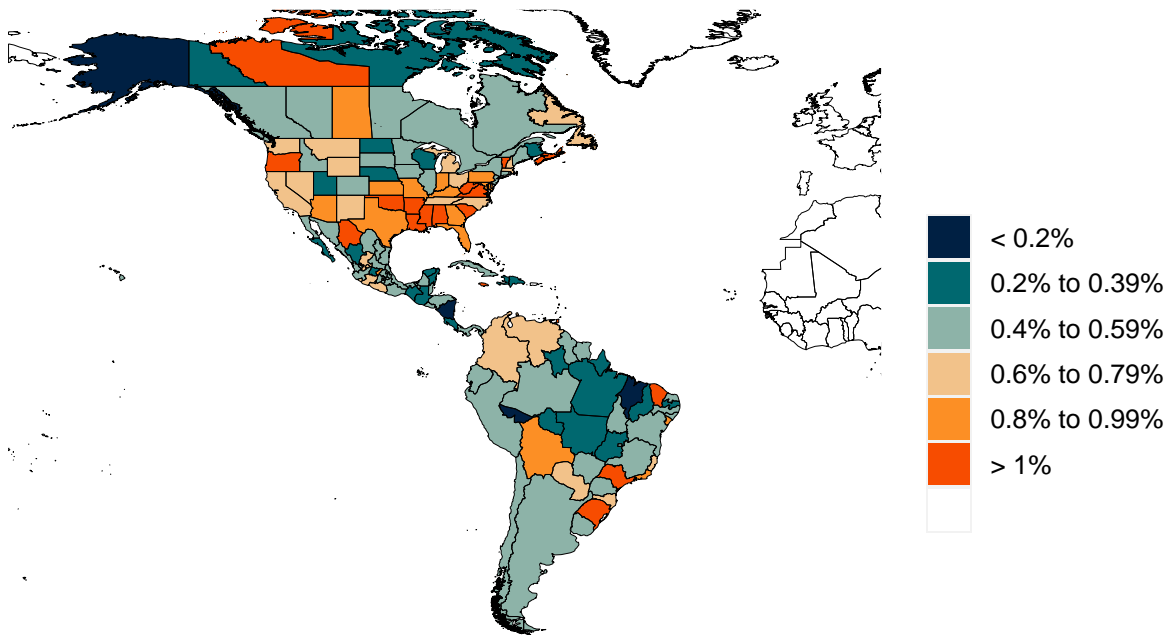
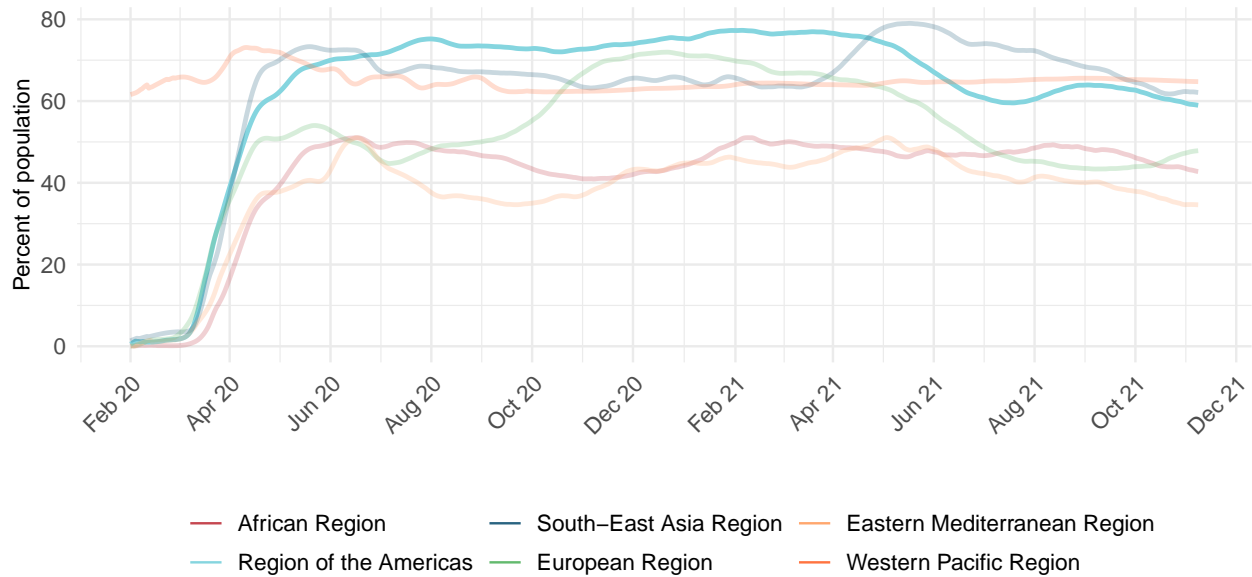# Critical drivers

Table 2. Current mandate implementation
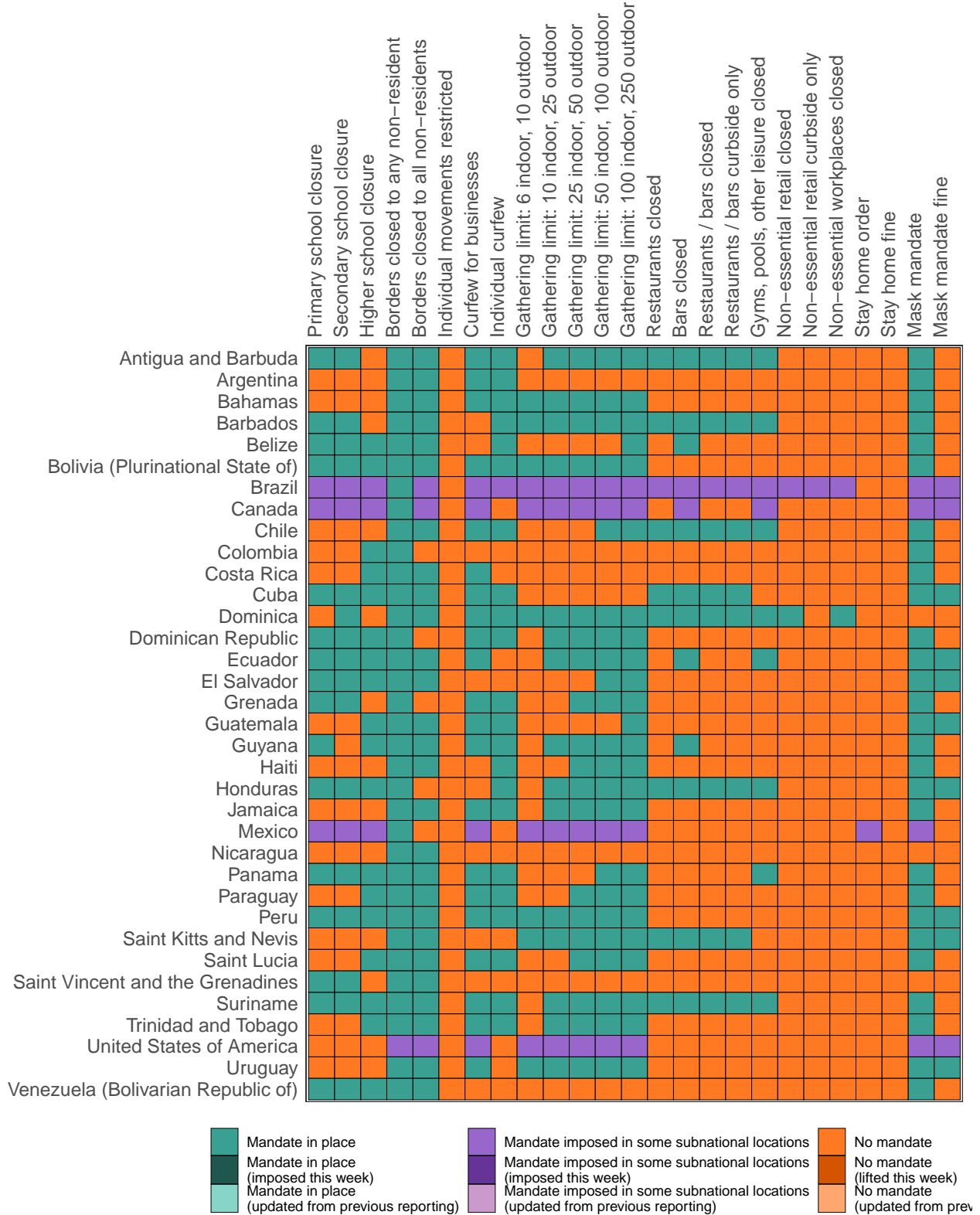
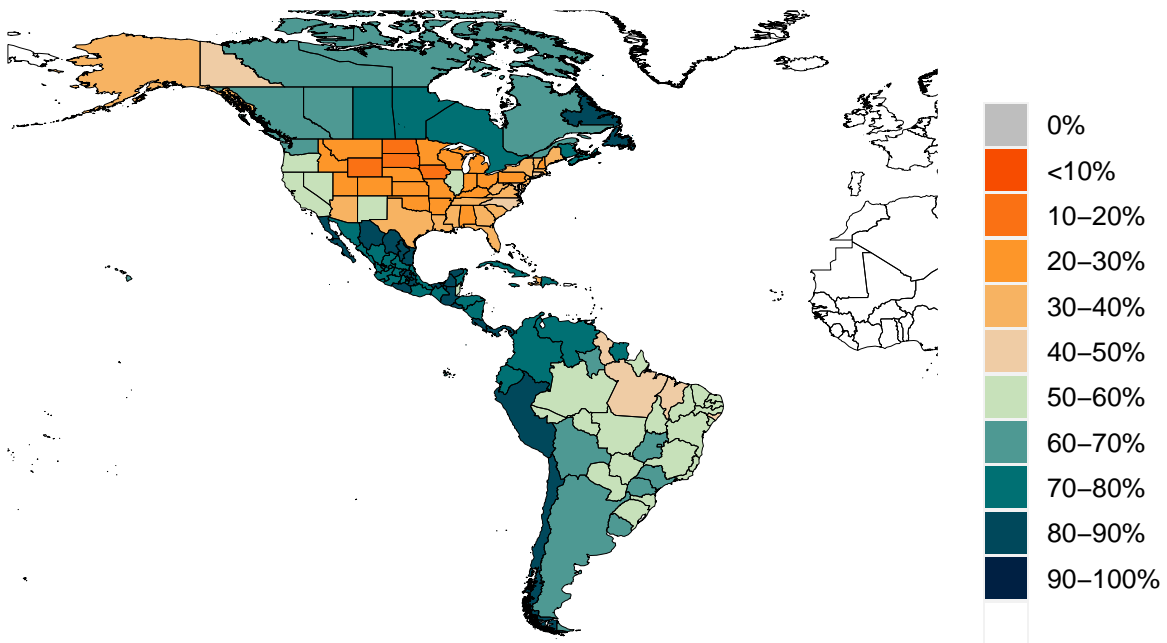**Figure 11.1.** Trend in mobility as measured through smartphone app use, compared to January 2020 baseline
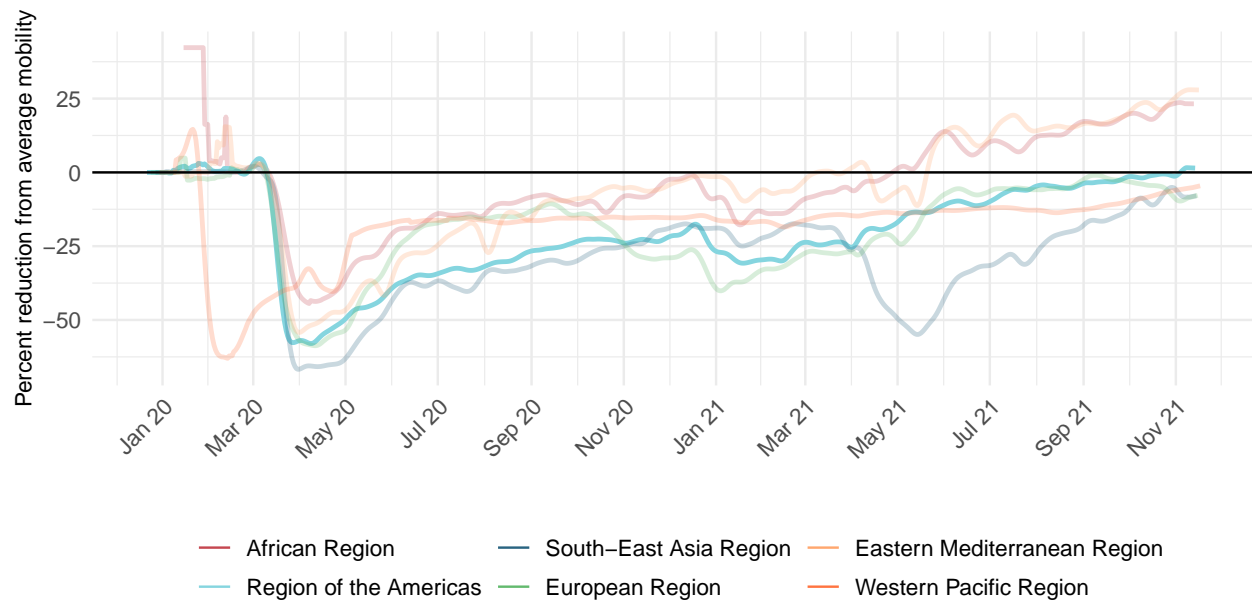
Figure 12.1. Mobility level as measured through smartphone app use, compared to January 2020 baseline (percent) on November 15, 2021
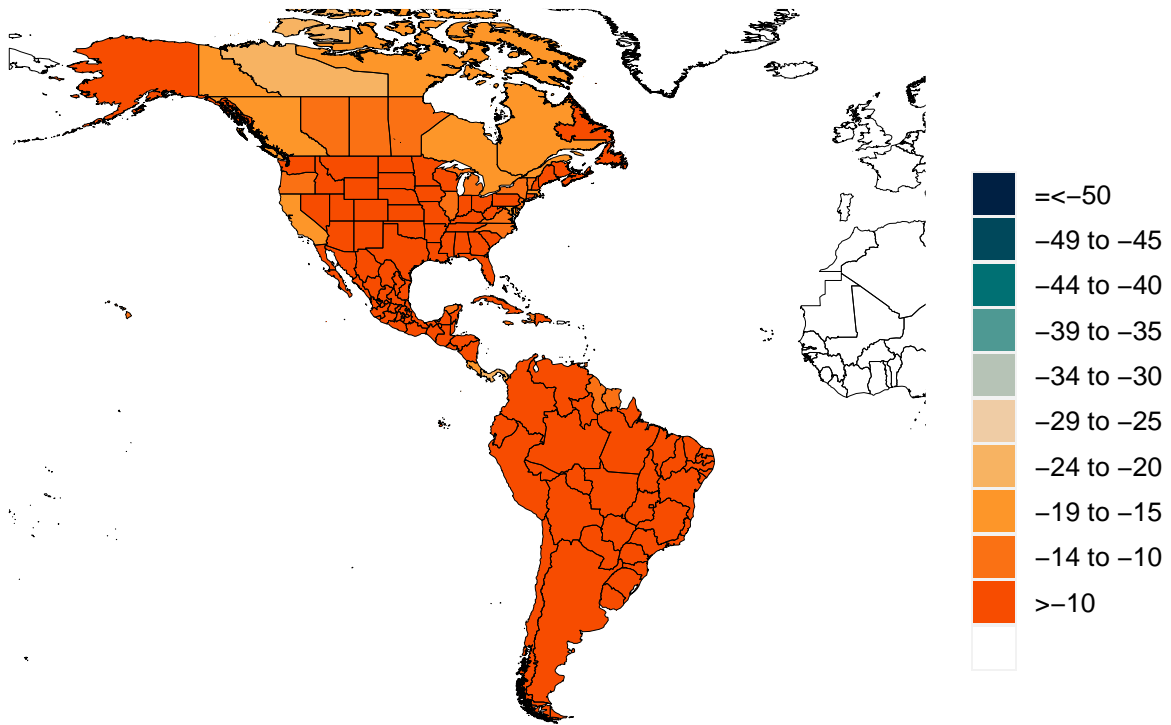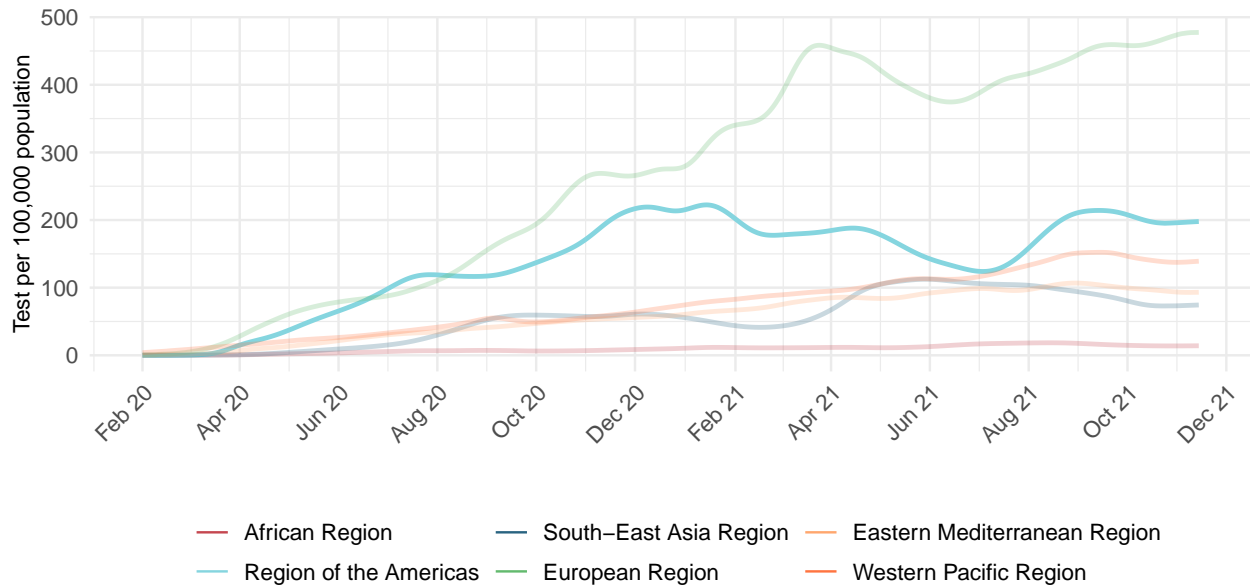
Figure 13.1. Trend in the proportion of the population reporting always wearing a mask when leaving home
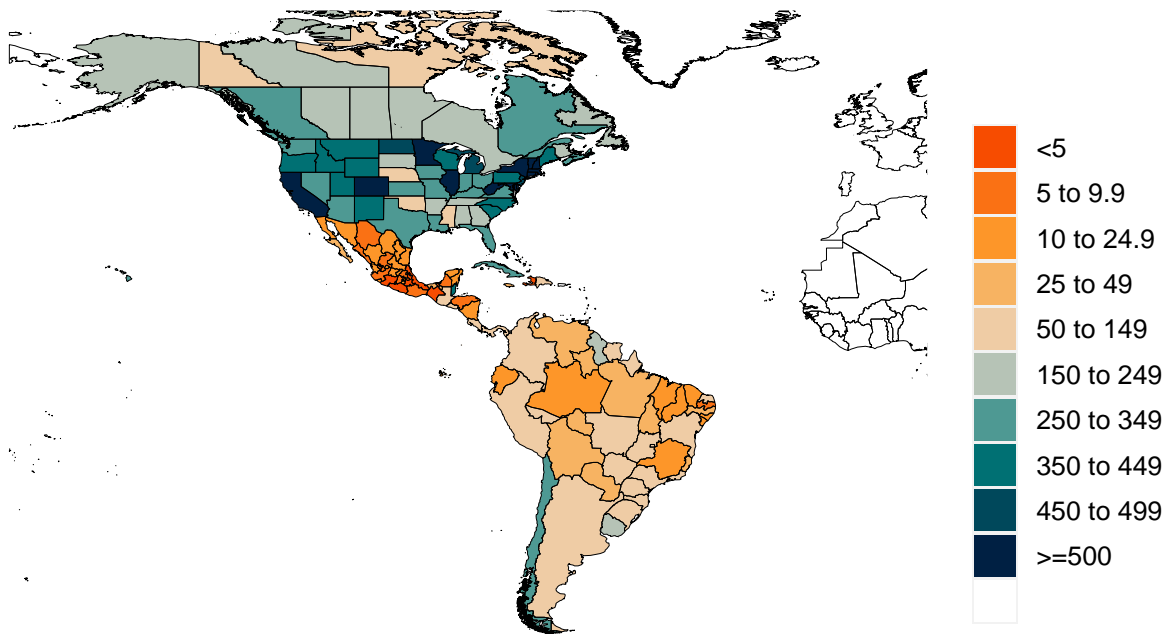

- African Region
- Region of the Americas
- South–East Asia Region
- European Region
- Eastern Mediterranean Region
- Western Pacific Region

Figure 14.1. Proportion of the population reporting always wearing a mask when leaving home on November 15, 2021

	0%
	<10%
	10–20%
	20–30%
	30–40%
	40–50%
	50–60%
	60–70%
	70–80%
	80–90%
	90–100%

Figure 15.1. Trend in COVID-19 diagnostic tests per 100,000 people

— African Region	— South–East Asia Region	— Eastern Mediterranean Region
— Region of the Americas	— European Region	— Western Pacific Region

Figure 16.1. COVID-19 diagnostic tests per 100,000 people on November 15, 2021

Table 3. Estimates of vaccine efficacy for specific vaccines used in the model at preventing disease and infection. The SEIR model uses variant-specific estimates of vaccine efficacy at preventing symptomatic disease and at preventing infection. We use data from clinical trials directly, where available, and make estimates otherwise. More information can be found on our website.

Vaccine	Efficacy at preventing disease: ancestral and Alpha	Efficacy at preventing infection: ancestral and Alpha	Efficacy at preventing disease: Beta, Delta, & Gamma	Efficacy at preventing infection: Beta, Delta, & Gamma
AstraZeneca	90%	52%	85%	49%
CoronaVac	50%	44%	43%	38%
Covaxin	78%	69%	68%	60%
Johnson & Johnson	86%	72%	60%	56%
Moderna	94%	89%	94%	80%
Novavax	89%	79%	79%	69%
Pfizer/BioNTech	94%	86%	85%	78%
Sinopharm	73%	65%	63%	56%
Sputnik-V	92%	81%	80%	70%
Tianjin CanSino	66%	58%	57%	50%
Other vaccines	75%	66%	65%	57%
Other vaccines (mRNA)	91%	86%	85%	78%

Percent of the population having received at least one dose (17.1) and fully vaccinated against SARS-CoV-2 (17.2) by November 15, 2021

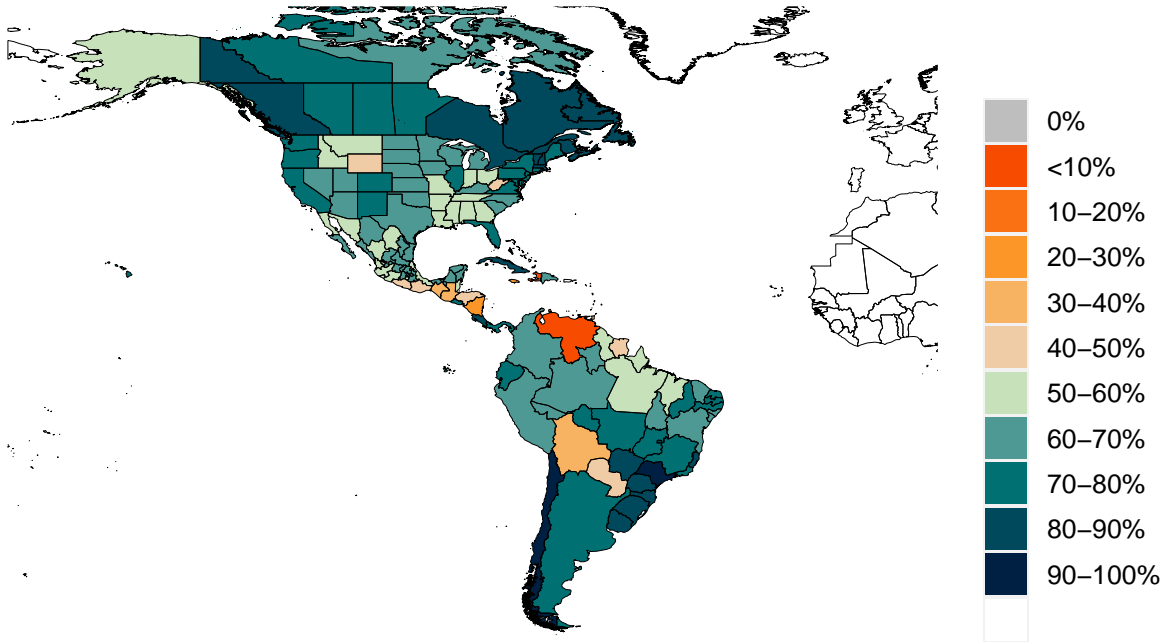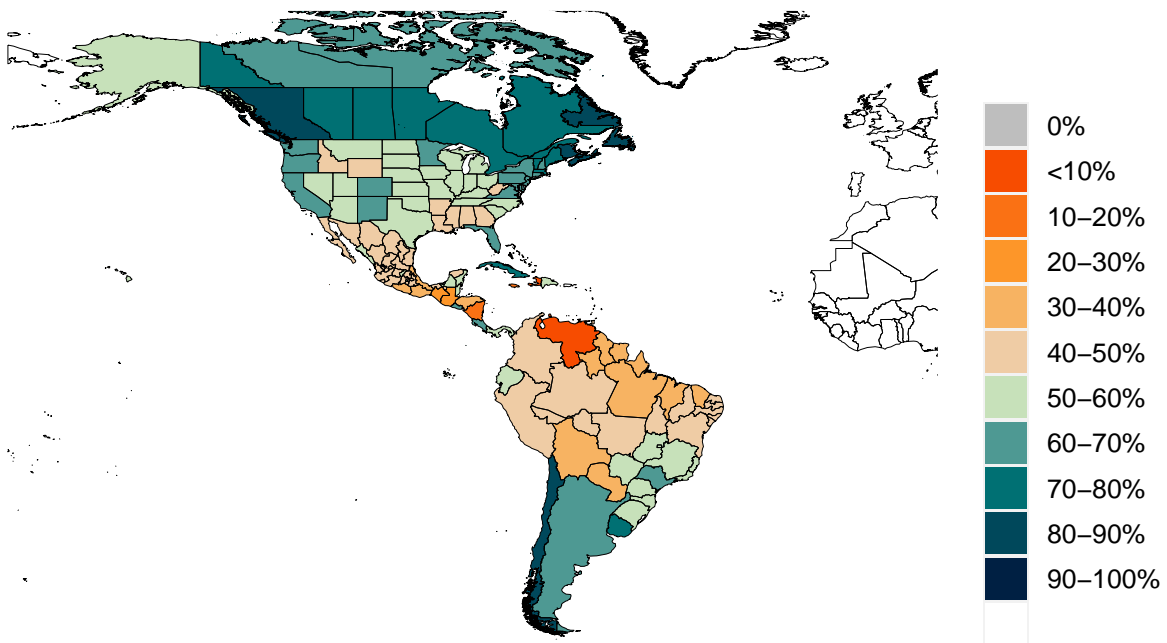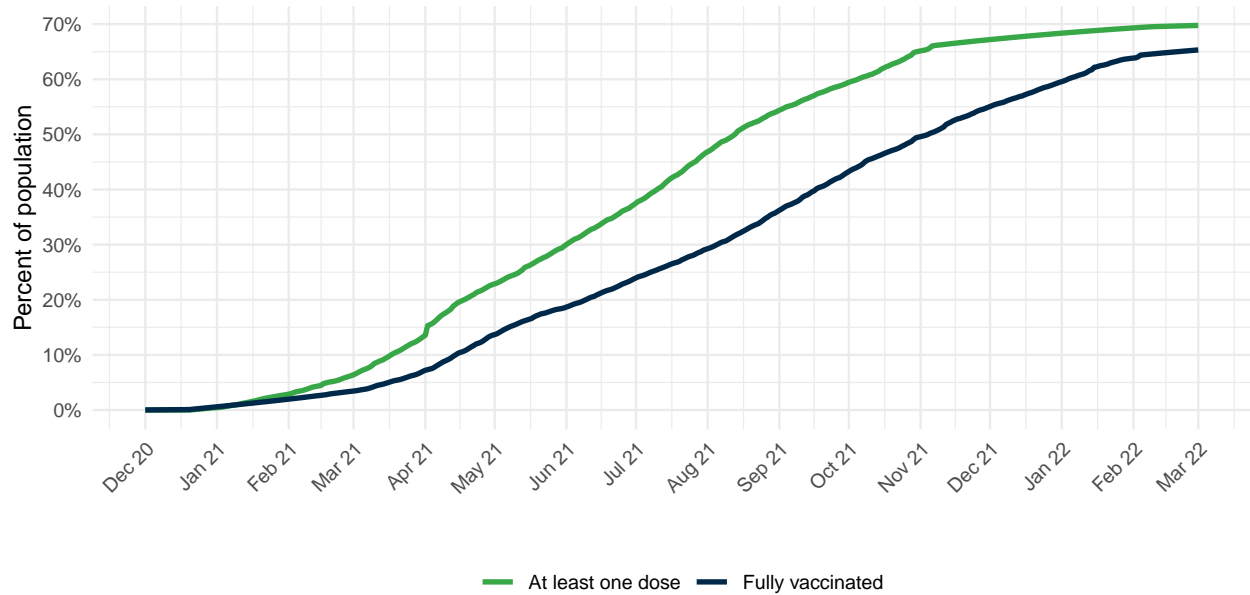**Figure 17.1 Percent of the population having received one dose of a COVID-19 vaccine**

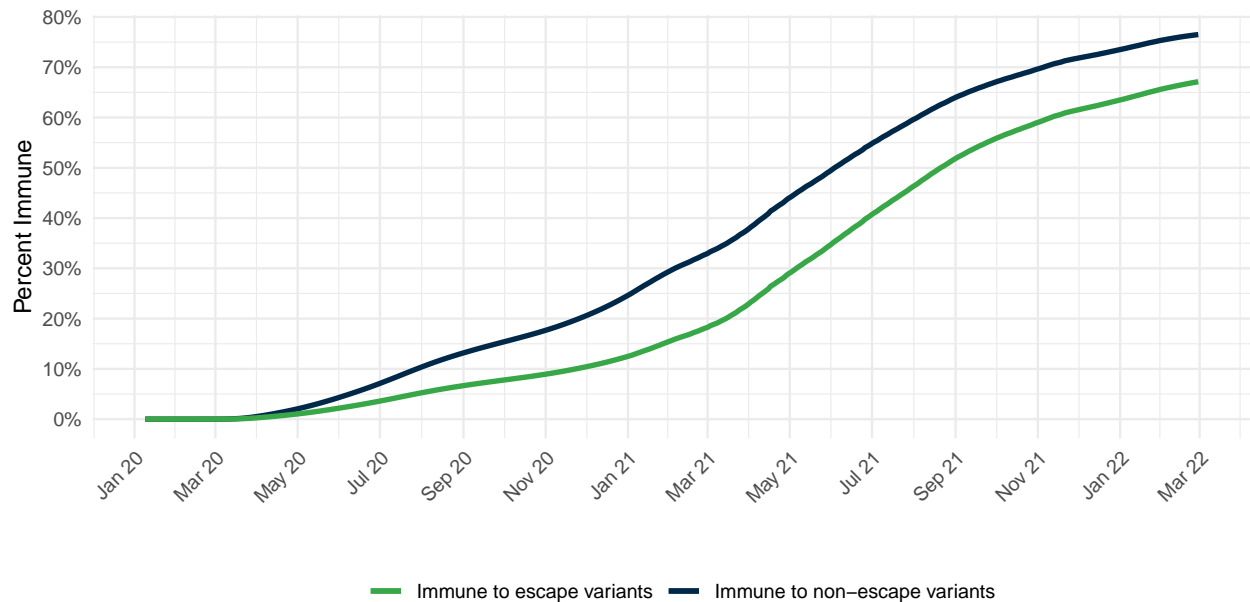**Figure 17.2 Percent of the population fully vaccinated against SARS-CoV-2**

Figure 20.1. Percent of people who receive at least one dose of a COVID-19 vaccine and those who are fully vaccinated

Figure 21.1. Percentage of people who are immune to non-escape variants and the percentage of people who are immune to escape variants

Projections and scenarios

We produce three scenarios when projecting COVID-19. The **reference scenario** is our forecast of what we think is most likely to happen:

- Vaccines are distributed at the expected pace. Brand- and variant-specific vaccine efficacy is updated using the latest available information from peer-reviewed publications and other reports.
- Future mask use is the mean of mask use over the last 7 days.
- Mobility increases as vaccine coverage increases.
- Governments adapt their response by re-imposing social distancing mandates for 6 weeks whenever daily deaths reach 8 per million, unless a location has already spent at least 7 of the last 14 days with daily deaths above this rate, and not yet re-imposed social distancing mandates. In this case, the reference scenario assumes that mandates are re-imposed when daily deaths reach 15 per million.
- Variants Alpha, Beta, Gamma, and Delta continue to spread regionally and globally from locations with sufficient transmission.

The **worse scenario** modifies the reference scenario assumption in four ways:

- 100% of vaccinated individuals stop using masks.
- Mobility increases in all locations to 25% above the pre-pandemic winter baseline, irrespective of vaccine coverage.
- Governments are more reluctant to re-impose social distancing mandates, waiting until the daily death rate reaches 15 per million, unless a location has already spent at least 7 of the last 14 days with daily deaths above this rate, and not yet re-imposed social distancing mandates. In this case, the reference scenario assumes that mandates are re-imposed when daily deaths reach 38 per million. In either case, we assume social distancing mandates remain in effect for 6 weeks.
- Variants Alpha, Beta, Gamma, and Delta spread between locations twice as fast when compared with our reference scenario.

The **universal masks scenario** makes all the same assumptions as the reference scenario but assumes all locations reach 95% mask use within 7 days.
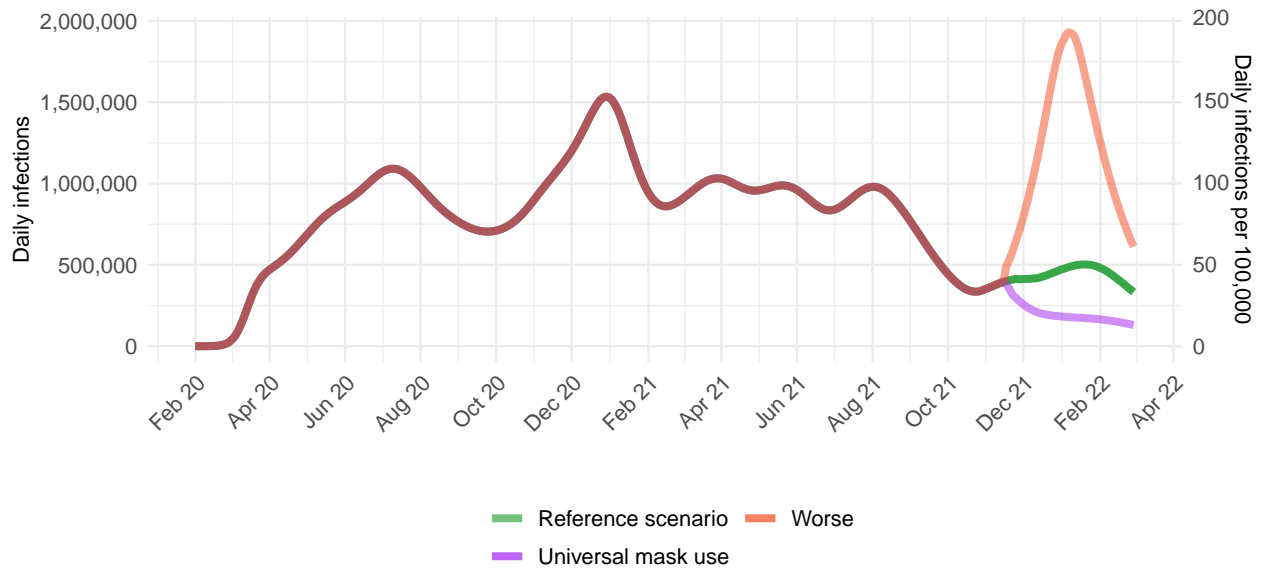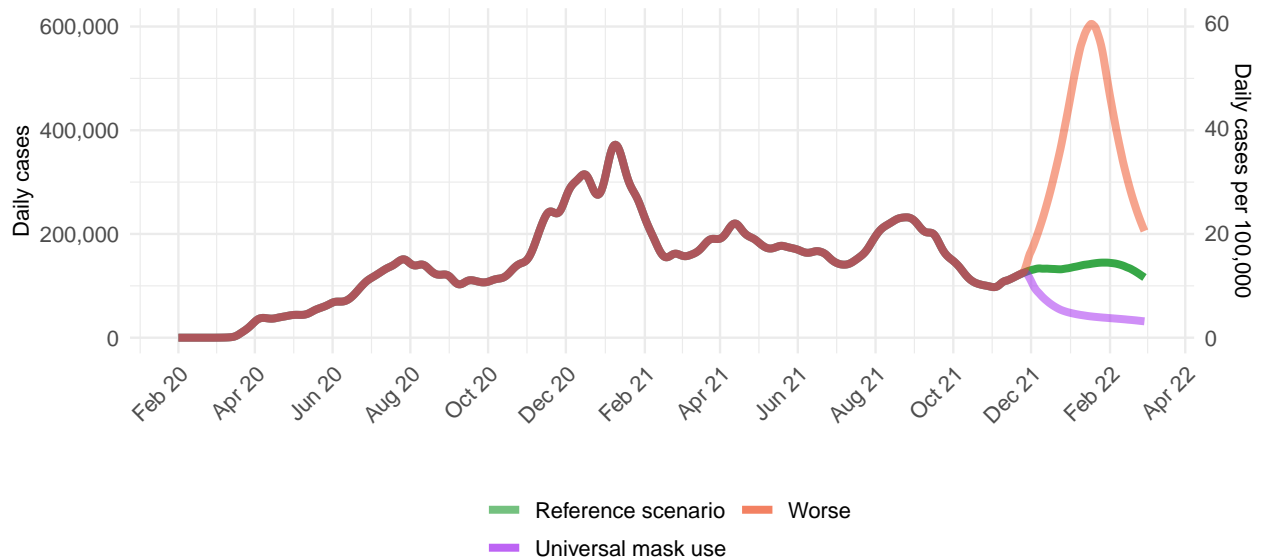
Daily COVID-19 deaths until March 01, 2022 for three scenarios

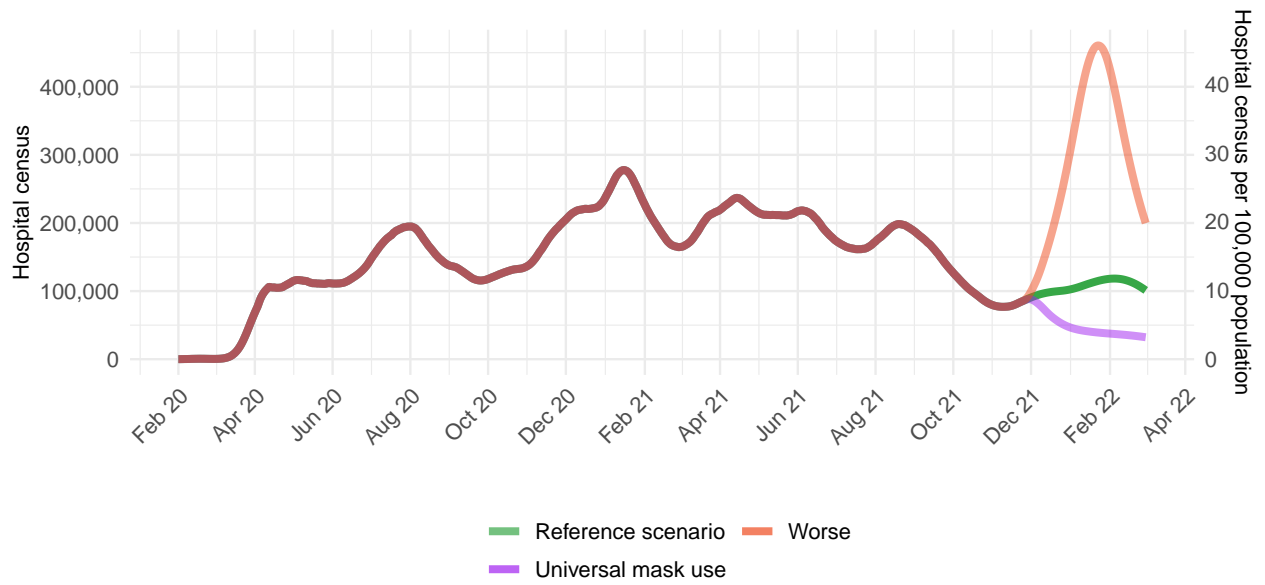**Figure 22.1 Reported daily COVID-19 deaths per 100,000**

Reference scenario — Worse
Universal mask use
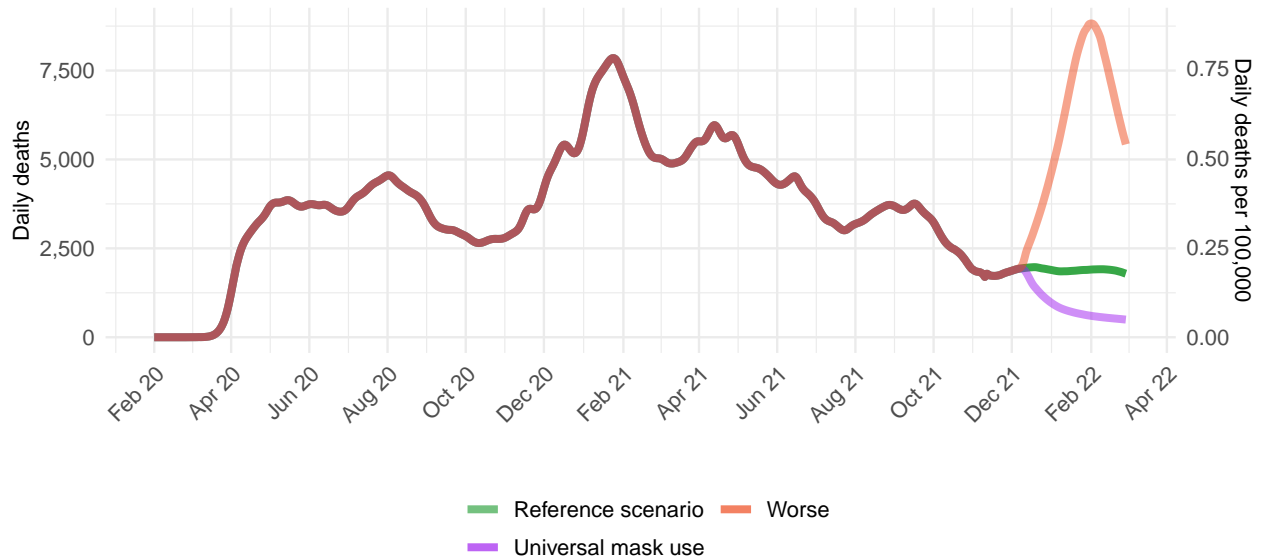
Figure 22.2 Total daily COVID-19 deaths per 100,000

Reference scenario — Worse
Universal mask use
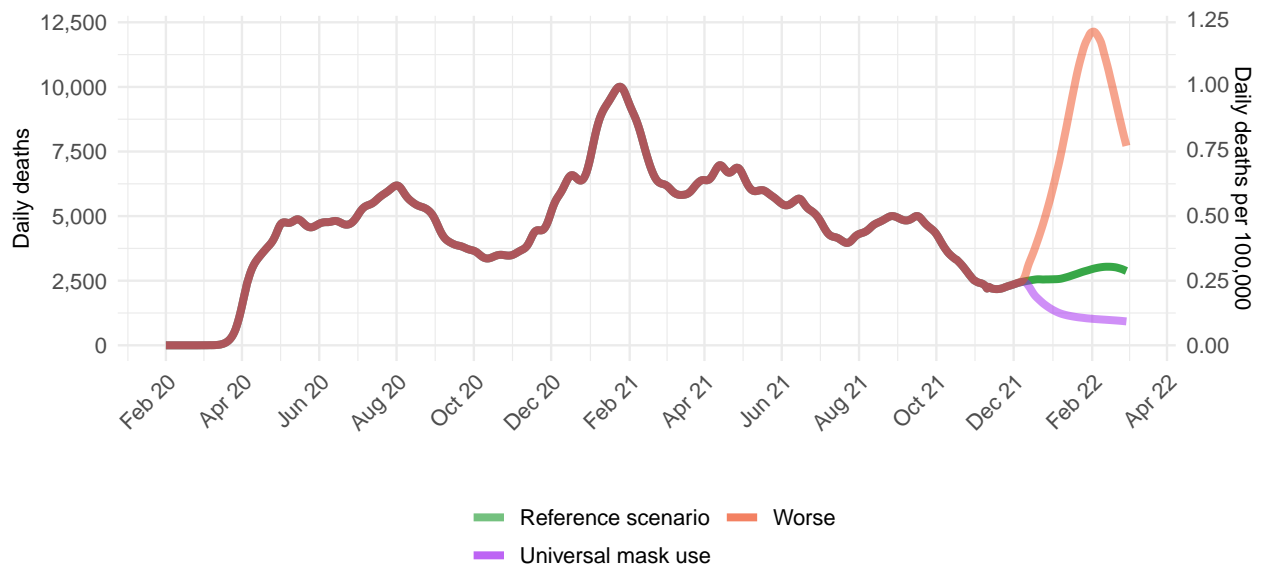
Figure 22.3. Daily COVID-19 infections until March 01, 2022 for three scenarios

Reference scenario — Worse
Universal mask use

Figure 22.4. Daily COVID-19 reported cases until March 01, 2022 for three scenarios

Reference scenario — Worse
Universal mask use

Region of the Americas

IHME

Figure 22.5. Daily COVID-19 hospital census until March 01, 2022 for three scenarios

— Reference scenario — Worse
— Universal mask use

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Figure 23.1. Comparison of reference model projections with other COVID modeling groups. For this comparison, we are including projections of daily COVID-19 deaths from other modeling groups when available, last model update in brackets: Delphi from the Massachusetts Institute of Technology (Delphi) [November 17, 2021], Imperial College London (Imperial) [November 3, 2021], the SI-KJalpha model from the University of Southern California (SIKJalpha) [November 17, 2021]. Daily deaths from other modeling groups are smoothed to remove inconsistencies with rounding. Regional values are aggregates from available locations in that region.
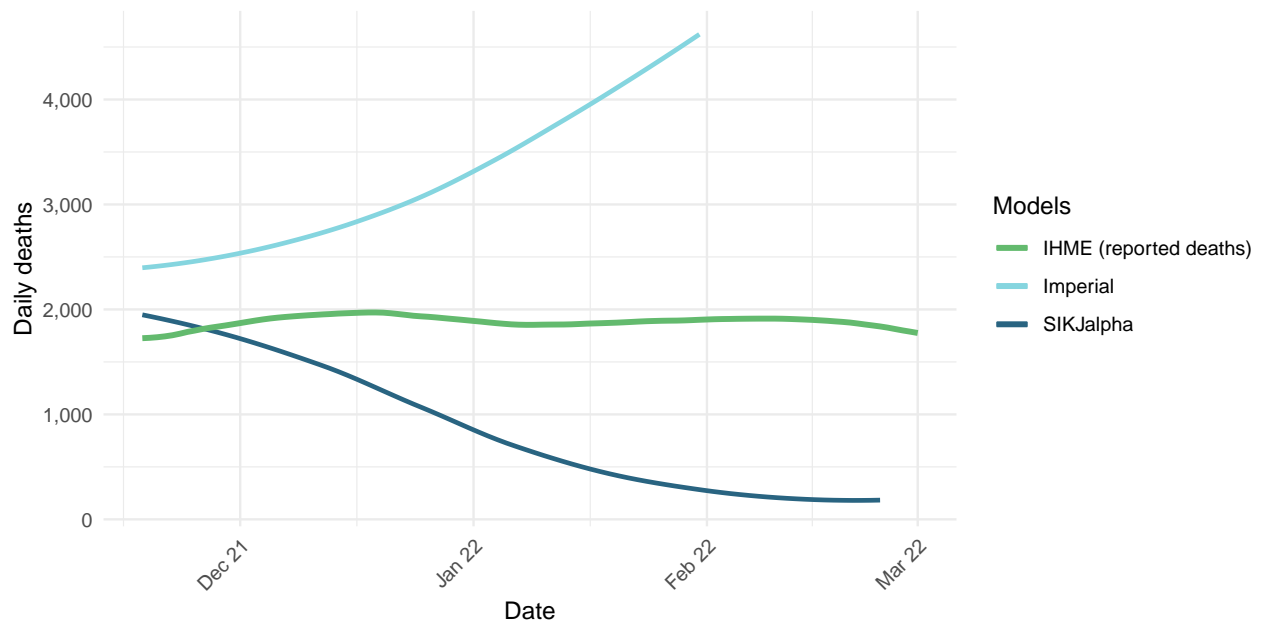
Figure 24.1. The estimated inpatient hospital usage is shown over time. The percent of hospital beds occupied by COVID-19 patients is color-coded based on observed quantiles of the maximum proportion of beds occupied by COVID-19 patients. Less than 5% is considered *low stress*, 5-9% is considered *moderate stress*, 10-19% is considered *high stress*, and 20% or greater is considered *extreme stress*.
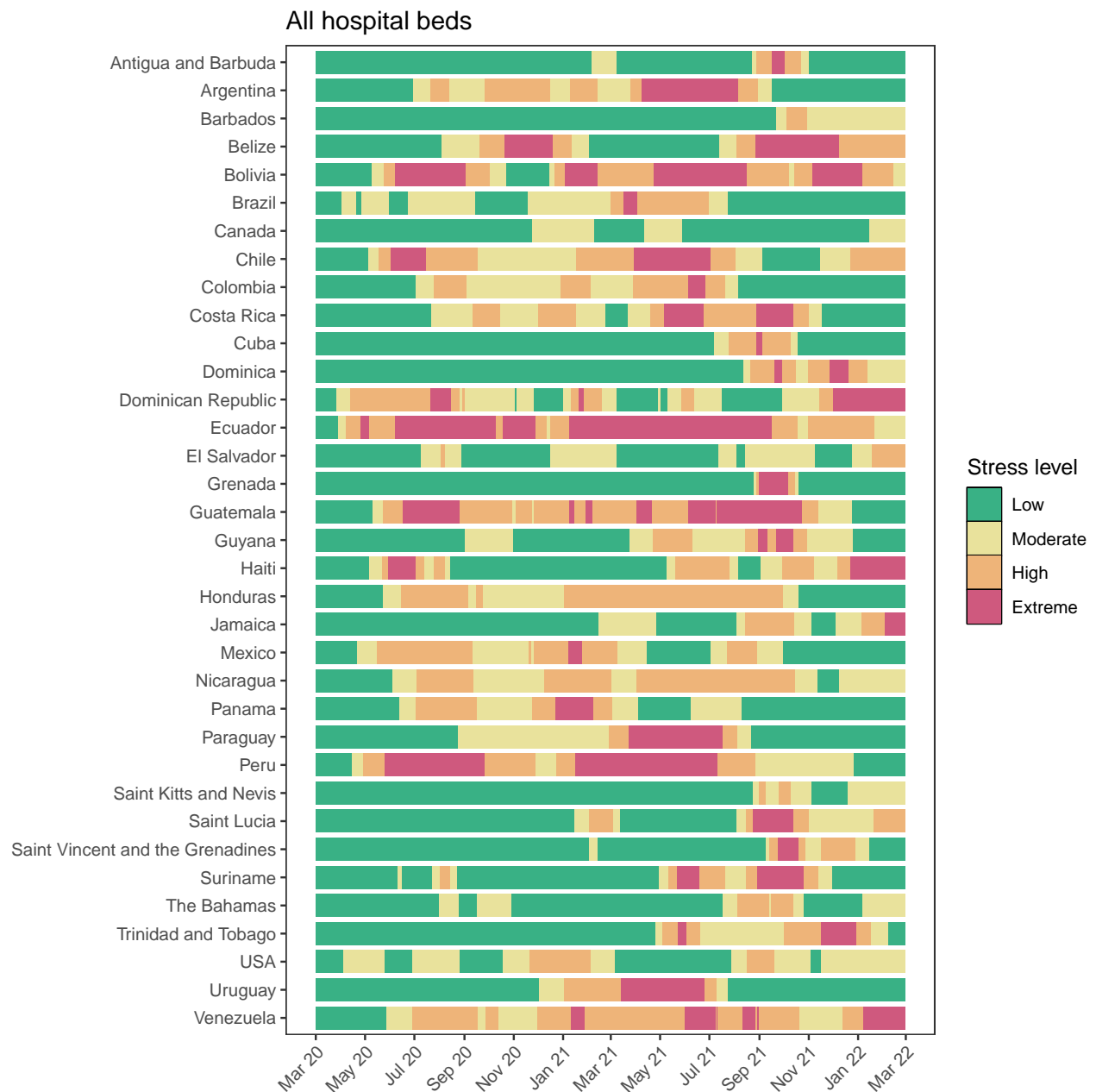
Figure 25.1. The estimated intensive care unit (ICU) usage is shown over time. The percent of ICU beds occupied by COVID-19 patients is color-coded based on observed quantiles of the maximum proportion of ICU beds occupied by COVID-19 patients. Less than 10% is considered *low stress*, 10-29% is considered *moderate stress*, 30-59% is considered *high stress*, and 60% or greater is considered *extreme stress*.
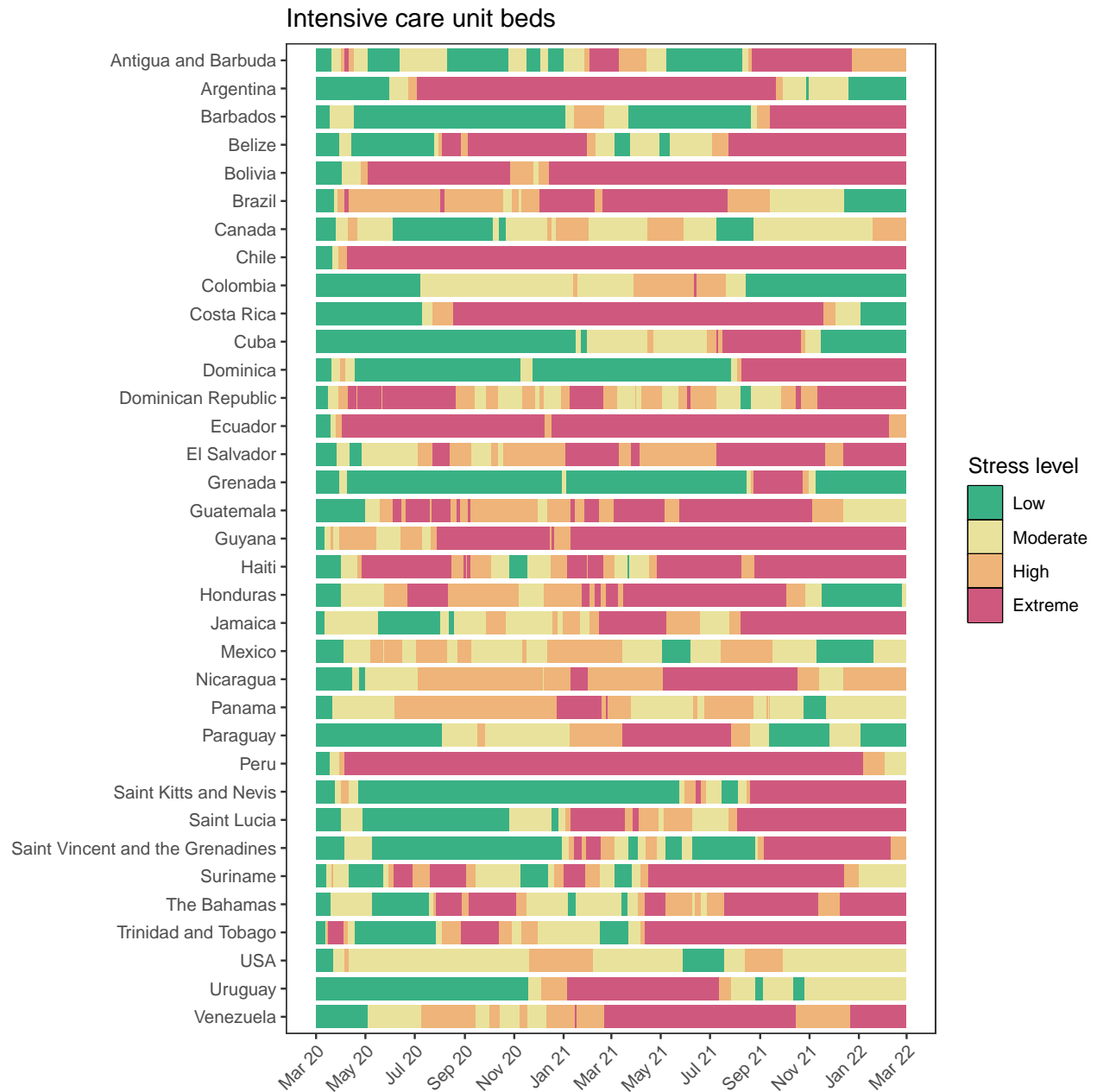
More information

Data sources:

Mask use and vaccine confidence data are from the The Delphi Group at Carnegie Mellon University and University of Maryland COVID-19 Trends and Impact Surveys, in partnership with Facebook. Mask use data are also from Premise, the Kaiser Family Foundation, and the YouGov COVID-19 Behaviour Tracker survey.

Genetic sequence and metadata are primarily from the GISAID Initiative. Further details available on the COVID-19 model FAQ page.

A note of thanks:

We wish to warmly acknowledge the support of these and others who have made our COVID-19 estimation efforts possible.

More information:

For all COVID-19 resources at IHME, visit http://www.healthdata.org/covid.

To download our most recent results, visit our Data downloads page.

Questions? Requests? Feedback? Please contact us at https://www.healthdata.org/covid/contact-us.