Informe de resultados de COVID-19

México

21 de enero de 2022

Este documento contiene información resumida sobre las últimas proyecciones del modelo IHME sobre el COVID-19 en México. El modelo se ejecutó el 20 de enero de 2022, con datos hasta el 18 de enero de 2022.

La ola de infección por Omicron parece haber alcanzado su punto máximo en México y en otros países y está disminuyendo a partir de la última semana que alcanzó la cifra máxima de casos e infectados. La increíble ola rápida y la infección generalizada también significan que las políticas de salud que han sido altamente efectivo en oleadas anteriores de la pandemia puede tener un menor impacto con esta Variante. Las pruebas, el seguimiento de contactos y la cuarentena pueden tener pocos beneficios y utilizar recursos innecesariamente porque es muy grande la fracción de la población que está infectada. Es posible que los mandatos de distanciamiento social tampoco tengan mucho impacto durante el período muy corto que queda en la ola de Omicron. Los hospitales de muchos estados seguirán experimentando una gran presión de camas debido a tres factores: aumento de las infecciones por COVID-19, admisiones con infecciones incidentales por COVID-19 que requieren medidas de control de infecciones y escasez de personal debido a la cuarentena.

Después de que la ola de Omicron disminuya, los altos niveles de inmunidad adquirida por infección y derivada de la vacuna con una estacionalidad decreciente deberían conducir a niveles bajos de transmisión durante muchas semanas o meses. Las reducciones adicionales en el potencial de transmisión durante el verano pueden extender el período de bajas infecciones por COVID-19 hasta más adelante en el año.

Sin embargo, COVID-19 regresará por dos razones. En primer lugar, la inmunidad derivada de la vacuna y de la infección que previene la infección disminuirá constantemente. La disminución de la inmunidad y la estacionalidad invernal más adelante en 2022 deberían conducir a un aumento invernal. En segundo lugar, es muy probable que surjan nuevas variantes. De hecho, los miles de millones de infecciones globales que se produjeron en el mundo desde finales de noviembre hasta el 1 de marzo pueden haber creado la oportunidad para que surjan nuevas variantes. Para prepararse para futuras variantes de COVID-19, los gobiernos deben mantener la vigilancia y monitorear la aparición de nuevas variantes, continuar promoviendo la vacunación, incluidas las terceras dosis, ampliar el acceso a antivirales efectivos y brindar orientación para que los grupos de alto riesgo usen vacunas de alta calidad. máscaras y a la distancia social, siempre y cuando surja una nueva variante que sea más severa que Omicron. Con estas medidas implementadas, incluso la aparición de una nueva variante con mayor gravedad en comparación con Omicron no debería requerir el regreso a los mandatos de la era inicial de la pandemia.

Situación actual

• Los contagios diarios en la última semana disminuyeron a 2,442,500 por día en promedio frente a los 3,718,300 de la semana anterior (Figura 1.1). El censo diario de hospitales en la última semana (hasta el 18 de enero) aumentó a 30,900 por día en promedio en comparación con los 15,500 de la semana anterior.

• Los casos diarios notificados en la última semana aumentaron a 65,400 por día en promedio en comparación con los 43,600 de la semana anterior (Figura 2.1).

• Las muertes reportadas por COVID-19 en la última semana aumentaron a 200 por día en promedio en comparación con las 130 de la semana anterior (Figura 3.1).

• El total de muertes por COVID-19 en la última semana aumentó a 270 por día en promedio en comparación con 170 la semana anterior (Figura 3.1). Esto convierte al COVID-19 en la segunda causa de muerte en México esta semana (Cuadro 1). El total estimado de muertes diarias debido a COVID-19 en la última semana fue 1.3 veces mayor que el número de muertes informado.

• La tasa diaria de muertes reportadas por COVID-19 es mayor a 4 por millón en Baja California, Baja California Sur, Chihuahua y Zacatecas. (Figura 4.1).

• La tasa diaria de muertes totales por COVID-19 es superior a 4 por millón en 9 estados. (Figura 4.2).

• Estimamos que el 93% de las personas en México se han infectado al menos una vez por COVID-19 al 18 de enero (Figura 6.1). La tasa de R efectiva, calculado usando casos, hospitalizaciones y muertes, es mayor que 1 en 19 estados. La región en donde la tasa de propagación es menor a 1 se localizan en el sur del país. (Figura 7.1).

• La tasa de detección de infecciones en México fue cercana al 2% el 18 de enero (Figura 8.1).

• Con base en GISAID y varias bases de datos nacionales, combinados con nuestro modelo de dispersión de variantes, estimamos la prevalencia actual de las variantes de interés (Figura 9.1-Figura 9.5). Estimamos que las variantes Alfa, Beta y Gamma no circulan en el país; que las variantes Delta y Omicron circula en los 32 estados del país.

Tendencias en los impulsores de la transmisión

• La movilidad de la semana pasada fue un 30% más alta que la línea de base anterior a la COVID-19 (Figura 11.1).

• A partir del 18 de enero, en la Encuesta de Tendencias e Impacto de COVID-19, 76% de las personas informan que siempre usaban una máscara al salir de su hogar, sin cambios con respecto a la semana pasada (Figura 13.1).

• El 18 de enero se realizaron 11 pruebas diagnósticas por cada 100,000 habitantes (Figura 15.1).

• Al 18 de enero, 4 estados han alcanzado 70% o más de la población que ha recibido al menos una dosis de vacuna y ningún estado ha alcanzado el 70% o más de la población que

está completamente vacunada (Figura 17.1). 64% de las personas en México ha recibido al menos una dosis de vacuna y el 57% está completamente vacunado.

• En México, 92.4% de la población de 12 años y más dice que aceptaría o probablemente aceptaría una vacuna contra el COVID-19. Tenga en cuenta que la aceptación de la vacuna se calcula utilizando datos de encuestas de la población mayor de 18 años. Esto es un aumento de 0.2 puntos porcentuales desde la semana pasada. La proporción de la población que está abierta a recibir una vacuna contra el COVID-19 oscila entre 78% en Chiapas y 99% en la Ciudad de México (Gráfico 19.1).

• En nuestro escenario de referencia actual, esperamos que 84.8 millones de personas estén vacunadas con al menos una dosis para el 1 de mayo (Figura 20.1). Esperamos que 62% de la población esté completamente vacunada para el 1 de mayo.

Proyecciones

Infecciones

• Las infecciones diarias estimadas en el **escenario de referencia**, que representa lo que creemos que es más probable que suceda, disminuirán a 2,130 para el 28 de abril de 2022 (Figura 21.1).

• Las infecciones diarias estimadas en el **escenario de cobertura de mascarillas del 80** % disminuirán a 1,990 para el 30 de abril de 2022 (Figura 21.1).

• Las infecciones diarias estimadas en el **escenario de colocar la tercera dosis de vacuna** disminuirán a 1,180 el 1 de mayo de 2022 (Figura 21.1).

Casos

• Los casos diarios en el escenario de referencia disminuirán a 20 el 1 de mayo de 2022 (Figura 21.2).

• Los casos diarios en el escenario de cobertura de máscara del 80% se reducirán a 20 el 1 de mayo de 2022 (Figura 21.2).

• Los casos diarios en el **escenario de colocar la tercera dosis de vacuna** se reducirán a 10 el 1 de mayo de 2022 (Figura 21.2).

Hospitalizaciones

• El censo hospitalario diario en el **escenario de referencia** ascenderá a 39,700 al 22 de enero de 2022 (Gráfico 21.3).

• El censo hospitalario diario en el **escenario de cobertura de máscaras del 80**% aumentará a 39,690 para el 22 de enero de 2022 (Figura 21.3).

• El censo hospitalario diario en el **escenario de colocar la tercera dosis de vacuna** ascenderá a 37,660 para el 22 de enero de 2022 (Figura 21.3).

Fallecidos

• En nuestro **escenario de referencia**, nuestro modelo proyecta 429,000 muertes acumuladas notificadas debido a COVID-19 el 1 de mayo. Esto representa 9000 muertes adicionales del 18 de enero al 1 de mayo. Las muertes diarias reportadas de COVID-19 en el escenario de referencia aumentarán a 390 en enero 28, 2022 (Figura 21.4).

• Bajo nuestro **escenario de referencia**, nuestro modelo proyecta 577,000 muertes totales acumuladas por COVID-19 el 1 de mayo. Esto representa 13,000 muertes adicionales del 18 de enero al 1 de mayo (Figura 24.2).

• En nuestro **escenario de cobertura de mascarillas del 80%,** nuestro modelo proyecta 429,000 muertes acumuladas notificadas debido a la COVID-19 el 1 de mayo. Esto representa 9,000 muertes adicionales del 18 de enero al 1 de mayo. Muertes diarias de COVID-19 informadas en el **escenario de cobertura de mascarillas del 80%** aumentará a 390 el 28 de enero de 2022 (Figura 21.4).

• En nuestro **escenario de colocar la tercera dosis de vacuna**, nuestro modelo proyecta 429,000 muertes acumuladas notificadas debido a COVID-19 el 1 de mayo. Esto representa 9,000 muertes adicionales del 18 de enero al 1 de mayo. Las muertes diarias reportadas de COVID-19 en el **escenario de colocar la tercera dosis de vacuna** aumentarán a 360 para el 28 de enero de 2022 (Figura 21.4).

• La Figura 22.1 compara nuestros pronósticos de escenarios de referencia con otros modelos archivados públicamente. Las previsiones son muy divergentes.

• En algún momento entre enero y el 1 de mayo, 32 estados tendrán una presión alta o extrema en las camas de los hospitales (Figura 23.1). En algún momento entre enero y el 1 de mayo, 32 estados tendrán una presión alta o extrema en la capacidad de la unidad de cuidados intensivos (UCI) (Figura 24.1).

Actualizaciones del modelo

No hay actualizaciones de modelo.

COVID-19 Results Briefing

Mexico

January 21, 2022

This document contains summary information on the latest projections from the IHME model on COVID-19 in Mexico. The model was run on January 20, 2022, with data through January 18, 2022.

The wave of infection by Omicron seems to have reached its peak in Mexico and other countries and is declining from the last week that reached the maximum number of cases and infected people. The incredible rapid wave and widespread infection also means that health policies that have been highly effective in previous waves of the pandemic may have less of an impact under this variant. Testing, contact tracing, and quarantining may have little benefit and use resources unnecessarily because such a large fraction of the population is infected. Social distancing mandates may also not have much of an impact during the very short period left in the Omicron wave. Hospitals in many states will continue to experience significant bed pressure due to three factors: increased COVID-19 infections, admissions with incidental COVID-19 infections requiring infection control measures, and staffing shortages due to quarantine.

After the Omicron wave subsides, high levels of infection-acquired and vaccine-derived immunity with decreasing seasonality should lead to low levels of transmission for many weeks or months. Additional reductions in transmission potential during the summer may extend the period of low COVID-19 infections until later in the year.

However, COVID-19 will return for two reasons. First, the immunity derived from the vaccine and from previous infection that prevents future infections will steadily decline. Waning immunity and winter seasonality later in 2022 should lead to a winter surge. Second, new variants are very likely to emerge. In fact, the billions of global infections that occurred in the world from the end of November to March 1 may have created the opportunity for new variants to emerge. To prepare for future variants of COVID-19, governments must maintain vigilance and monitor the emergence of new variants, continue to promote vaccination, including third doses, expand access to effective antivirals, and provide guidance so that high-risk groups get vaccines, use high-quality masks, and social distance, if and when a new variant emerges that is more severe than Omicron. With these measures in place, even the appearance of a new variant with higher severity compared to Omicron should not require a return to mandates from the initial pandemic era.

Current situation

- Daily infections in the last week decreased to 2,442,500 per day on average compared to 3,718,300 the week before (Figure 1.1). Daily hospital census in the last week (through January 18) increased to 30,900 per day on average compared to 15,500 the week before.
- Daily reported cases in the last week increased to 65,400 per day on average compared to 43,600 the week before (Figure 2.1).

- Reported deaths due to COVID-19 in the last week increased to 200 per day on average compared to 130 the week before (Figure 3.1).
- Total deaths due to COVID-19 in the last week increased to 270 per day on average compared to 170 the week before (Figure 3.1). This makes COVID-19 the number 2 cause of death in Mexico 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 four states. (Figure 4.1).
- The daily rate of total COVID-19 deaths is greater than 4 per million in nine states. (Figure 4.2).
- We estimate that 93% of people in Mexico have been infected at least once as of January 18 (Figure 6.1). Effective R, computed using cases, hospitalizations, and deaths, is greater than 1 in 19 states. (Figure 7.1).
- The infection-detection rate in Mexico was close to 2% on January 18 (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–Figure 9.5). We estimate that the Delta and Omicron variants are circulating in 32 states.

Trends in drivers of transmission

- Mobility last week was 30% higher than the pre-COVID-19 baseline (Figure 11.1). Mobility was lower than 30% of baseline in no locations.
- As of January 18, in the COVID-19 Trends and Impact Survey, 76% of people self-report that they always wore a mask when leaving their home, the same percentage as last week (Figure 13.1).
- There were 11 diagnostic tests per 100,000 people on January 18 (Figure 15.1).
- As of January 18, four states have reached 70% or more of the population who have received at least one vaccine dose and 0 states have reached 70% or more of the population who are fully vaccinated (Figure 17.1). 64% of people in Mexico have received at least one vaccine dose and 57% are fully vaccinated.
- In Mexico, 92.4% 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 up by 0.2 percentage points from last week. The proportion of the population who are open to receiving a COVID-19 vaccine ranges from 78% in Chiapas to 99% in Mexico City (Figure 19.1).
- In our current reference scenario, we expect that 84.8 million people will be vaccinated with at least one dose by May 1 (Figure 20.1). We expect that 62% of the population will be fully vaccinated by May 1.

Projections

Infections

- Daily estimated infections in the **reference scenario**, which represents what we think is most likely to happen, will decline to 2,130 by April 28, 2022 (Figure 21.1).
- Daily estimated infections in the **80% mask coverage scenario** will decline to 1,990 by April 30, 2022 (Figure 21.1).
- Daily estimated infections in the **third dose scenario** will decline to 1,180 on May 1, 2022 (Figure 21.1).

Cases

- Daily cases in the **reference scenario** will decline to 20 on May 1, 2022 (Figure 21.2).
- Daily cases in the **80% mask coverage scenario** will decline to 20 on May 1, 2022 (Figure 21.2).
- Daily cases in the **third dose scenario** will decline to 10 on May 1, 2022 (Figure 21.2).

Hospitalizations

- Daily hospital census in the **reference scenario** will rise to 39,700 by January 22, 2022 (Figure 21.3).
- Daily hospital census in the **80% mask coverage scenario** will rise to 39,690 by January 22, 2022 (Figure 21.3).
- Daily hospital census in the **third dose scenario** will rise to 37,660 by January 22, 2022 (Figure 21.3).

Deaths

- In our **reference scenario**, our model projects 429,000 cumulative reported deaths due to COVID-19 on May 1. This represents 9,000 additional deaths from January 18 to May 1. Daily reported COVID-19 deaths in the **reference scenario** will rise to 390 by January 28, 2022 (Figure 21.4).
- Under our **reference scenario**, our model projects 577,000 cumulative total deaths due to COVID-19 on May 1. This represents 13,000 additional deaths from January 18 to May 1 (Figure 24.2).
- In our **80% mask coverage scenario**, our model projects 429,000 cumulative reported deaths due to COVID-19 on May 1. This represents 9,000 additional deaths from January 18 to May 1. Daily reported COVID-19 deaths in the **80% mask coverage scenario** will rise to 390 by January 28, 2022 (Figure 21.4).
- In our **third dose scenario**, our model projects 429,000 cumulative reported deaths due to COVID-19 on May 1. This represents 9,000 additional deaths from January 18 to May 1. Daily reported COVID-19 deaths in the **third dose scenario** will rise to 360 by January 28, 2022 (Figure 21.4).

- Figure 22.1 compares our reference scenario forecasts to other publicly archived models. Forecasts are widely divergent.
- At some point from January through May 1, 32 states will have high or extreme stress on hospital beds (Figure 23.1). At some point from January through May 1, 32 states will have high or extreme stress on intensive care unit (ICU) capacity (Figure 24.1).

Model updates

No model updates.

Figure 1.1. Daily COVID-19 hospital census and estimated infections

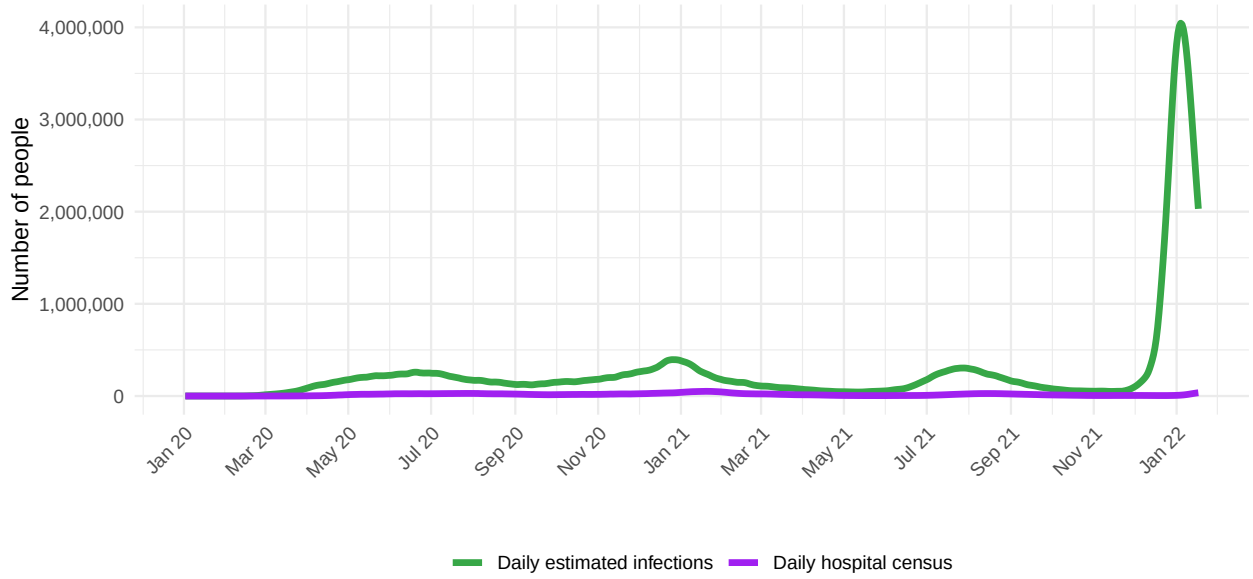


Figure 2.1. Reported daily COVID-19 cases, moving average

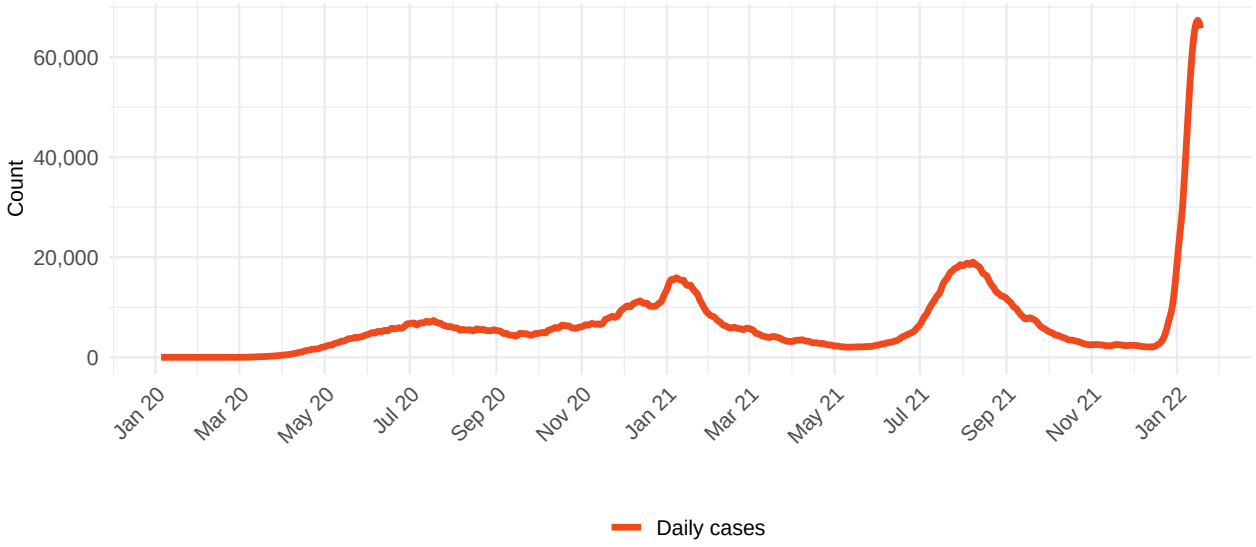
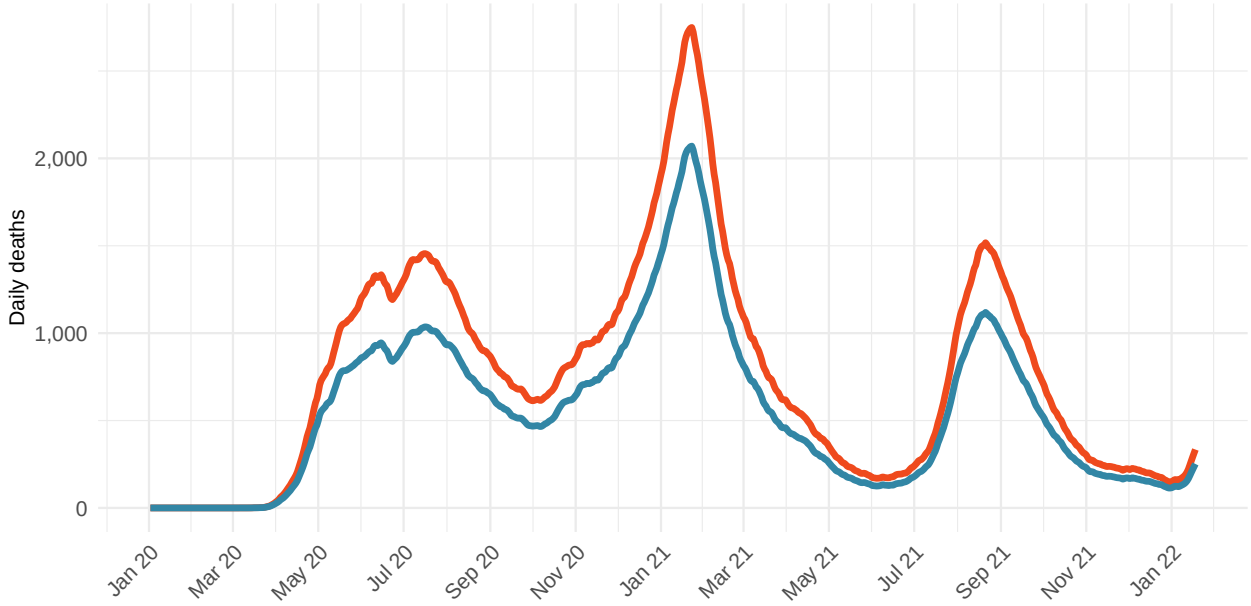


Table 1. Ranking of total deaths due to COVID-19 among the leading causes of mortality this week, assuming uniform deaths of non-COVID causes throughout the year

Cause name	Weekly deaths	Ranking
Ischemic heart disease	2,044	1
COVID-19	1,875	2
Diabetes mellitus	1,420	3
Chronic kidney disease	1,395	4
Cirrhosis and other chronic liver diseases	891	5
Stroke	729	6
Chronic obstructive pulmonary disease	630	7
Interpersonal violence	590	8
Alzheimer's disease and other dementias	455	9
Lower respiratory infections	434	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 January 18, 2022

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

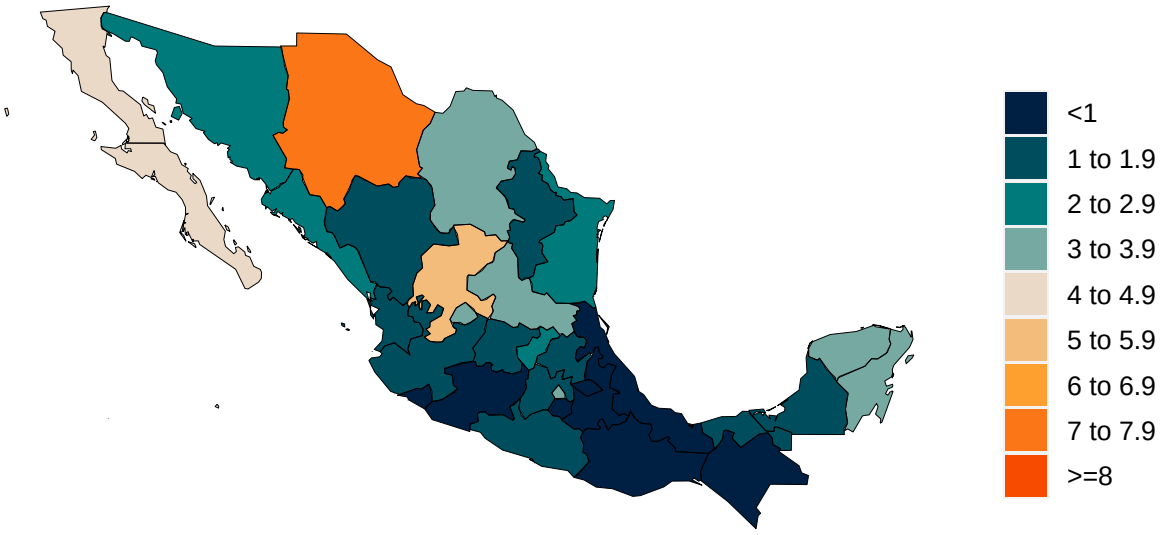
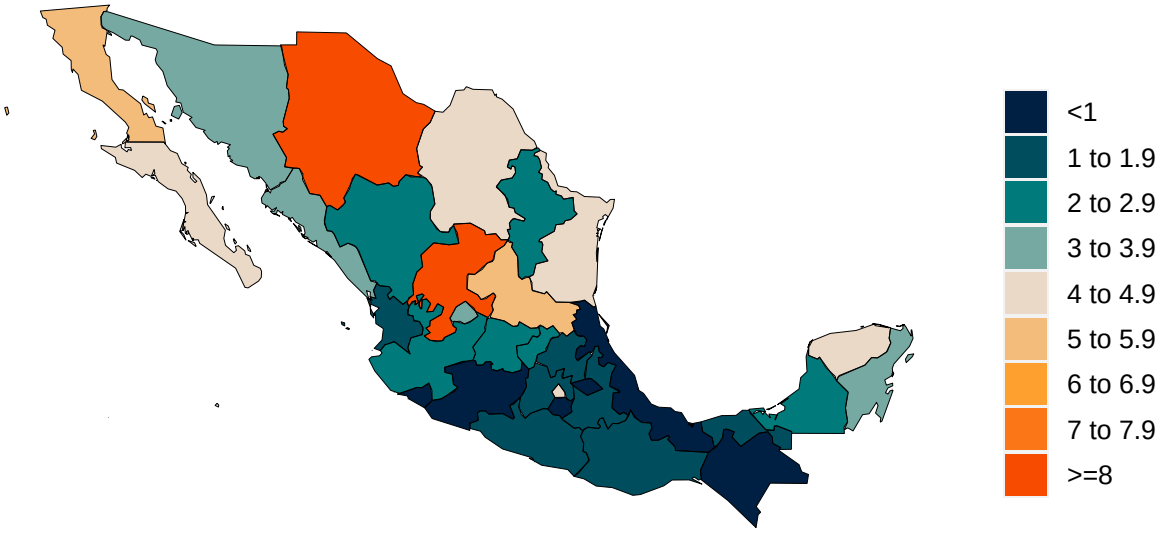


Figure 4.2 Daily total COVID-19 death rate per 1 million



Cumulative COVID-19 deaths per 100,000 on January 18, 2022

Figure 5.1 Reported cumulative COVID-19 deaths per 100,000

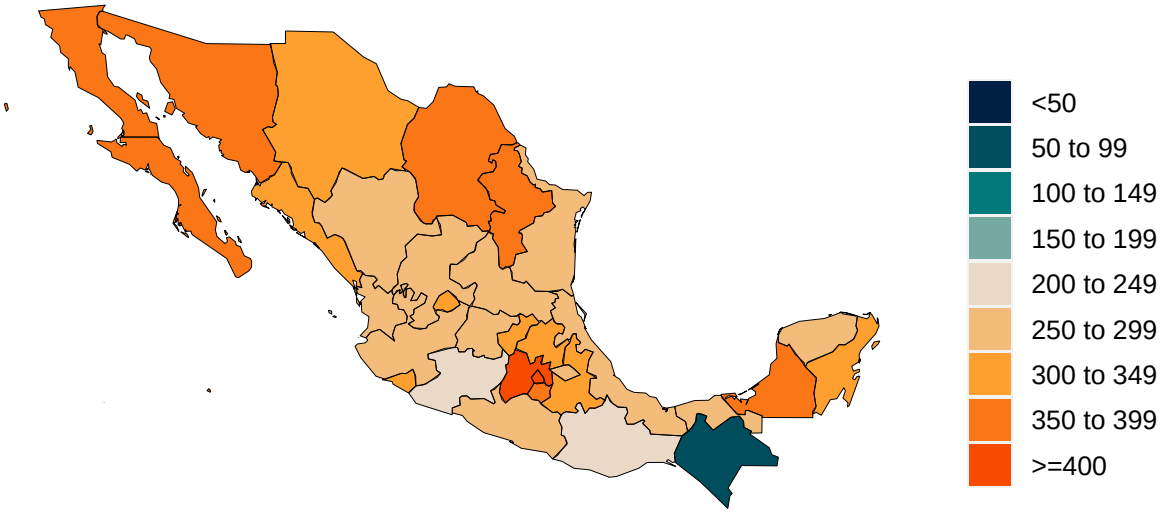


Figure 5.2 Total cumulative COVID-19 deaths per 100,000

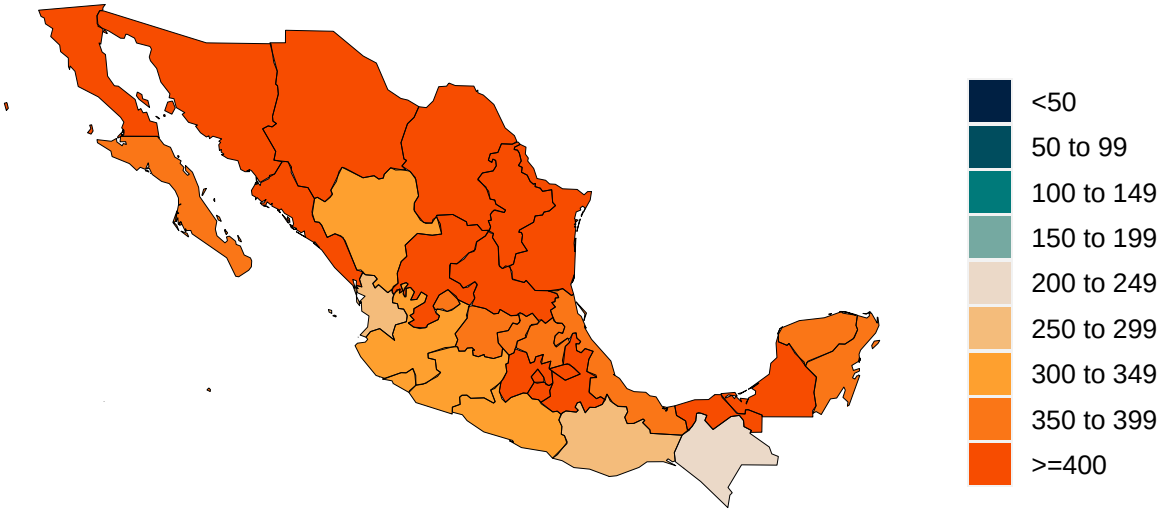


Figure 6.1. Estimated percent of the population infected with COVID-19 on January 18, 2022

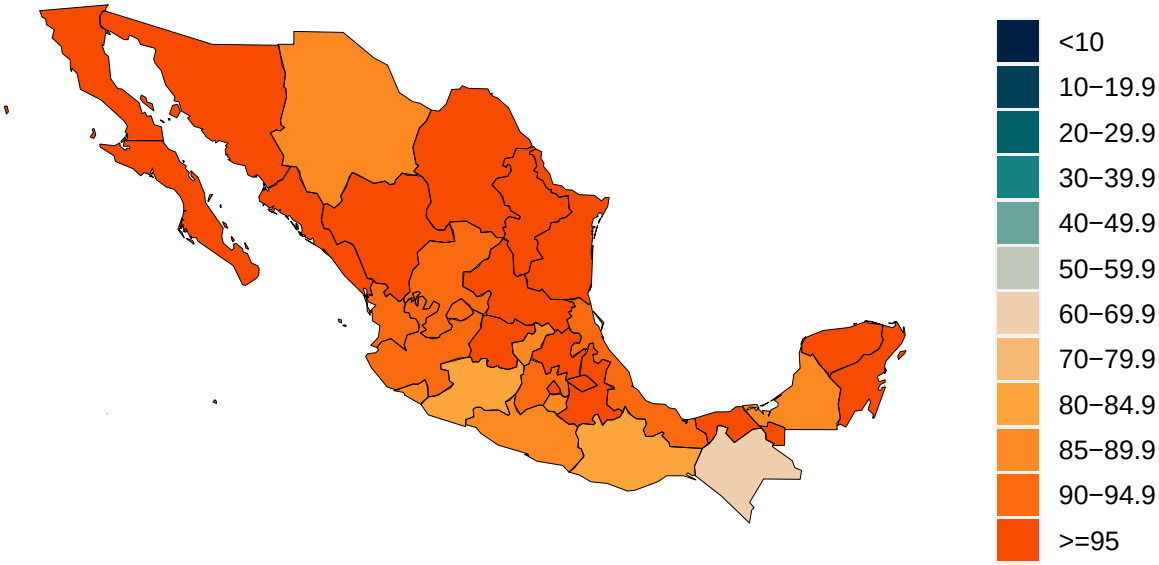


Figure 7.1. Mean effective R on January 7, 2022. Effective R less than 1 means that transmission should decline, all other things being held the same. The estimate of effective R is based on the combined analysis of deaths, case reporting, and hospitalizations where available. Current reported cases reflect infections 11-13 days prior, so estimates of effective R can only be made for the recent past.

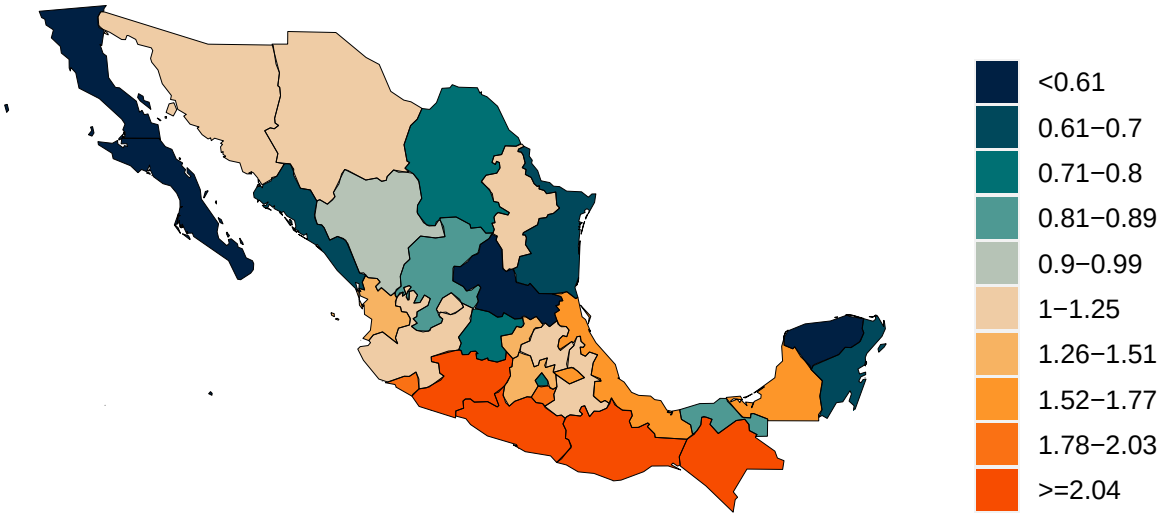
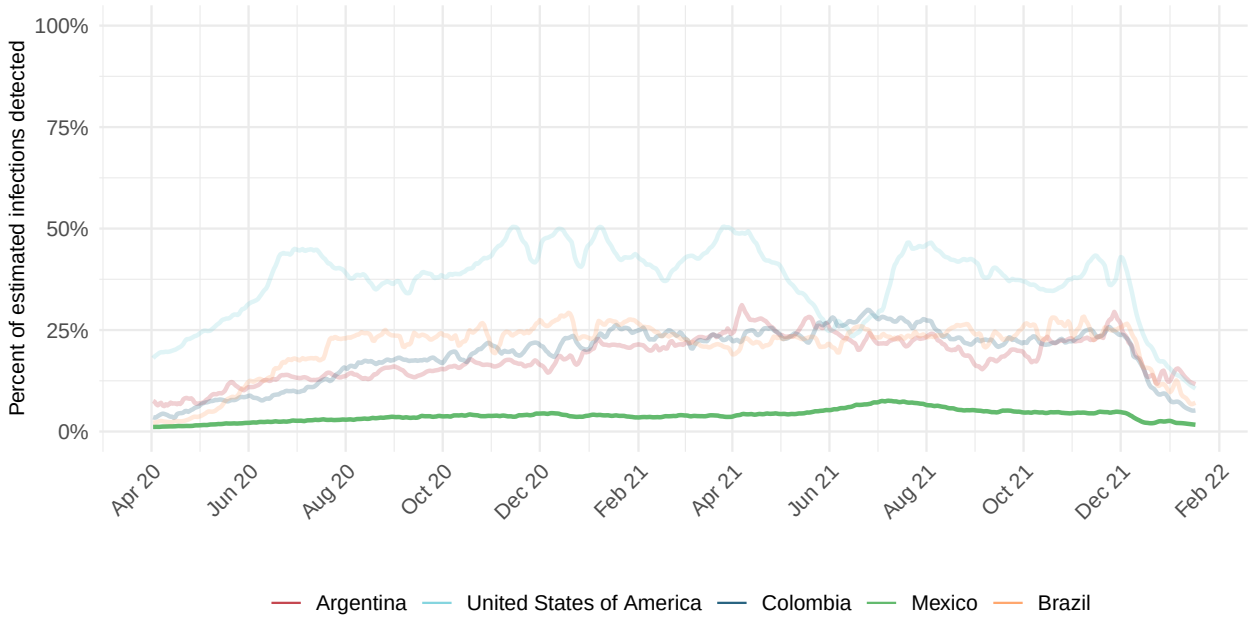


Figure 8.1. Percent of estimated COVID-19 infections detected. This is estimated as the ratio of reported daily COVID-19 cases to estimated daily COVID-19 infections based on the SEIR disease transmission model. Due to measurement errors in cases and testing rates, the infection-detection rate can exceed 100% at particular points in time.



Estimated percent of circulating SARS-CoV-2 for primary variant families on January 18, 2022

Figure 9.1 Estimated percent of new infections that are Alpha variant

Figure 9.2 Estimated percent of new infections that are Beta variant

Figure 9.3 Estimated percent of new infections that are Delta variant

Figure 9.4 Estimated percent of new infections that are Gamma variant

Figure 9.5 Estimated percent of new infections that are Omicron variant

Figure 10.1. Infection-fatality rate on January 18, 2022. 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

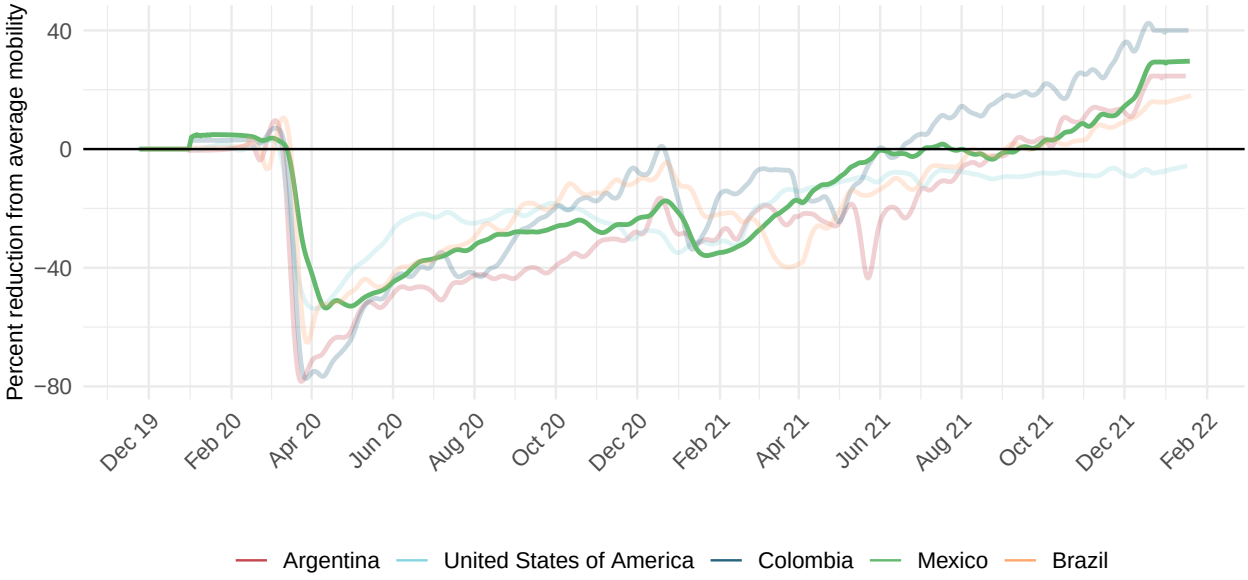


Figure 12.1. Mobility level as measured through smartphone app use, compared to January 2020 baseline (percent) on January 18, 2022

Figure 13.1. Trend in the proportion of the population reporting always wearing a mask when leaving home

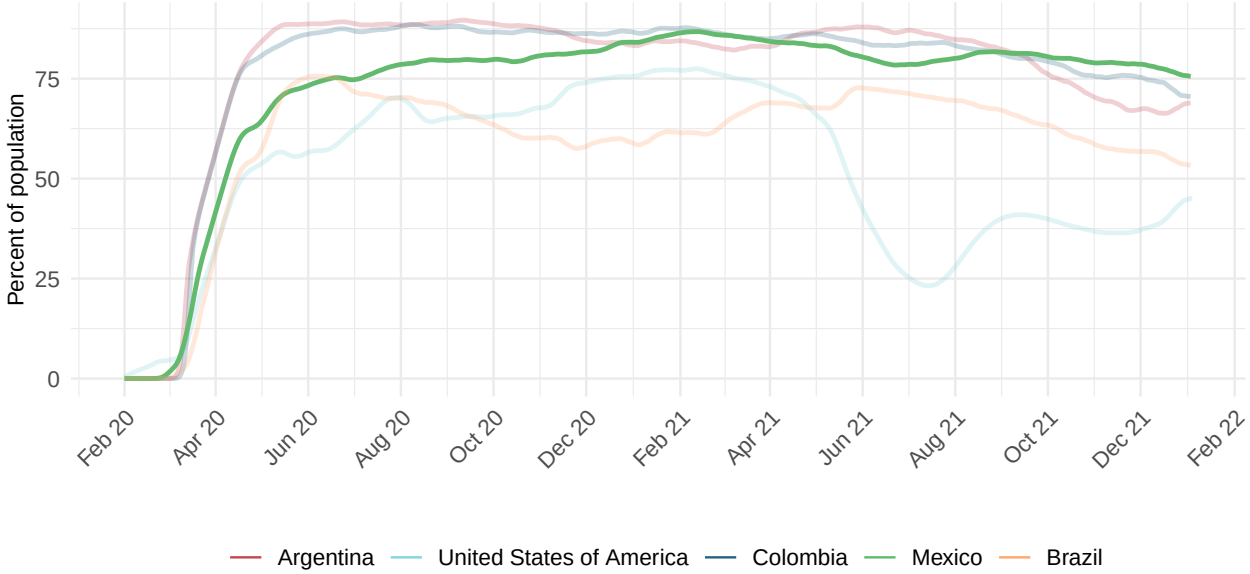


Figure 14.1. Proportion of the population reporting always wearing a mask when leaving home on January 18, 2022

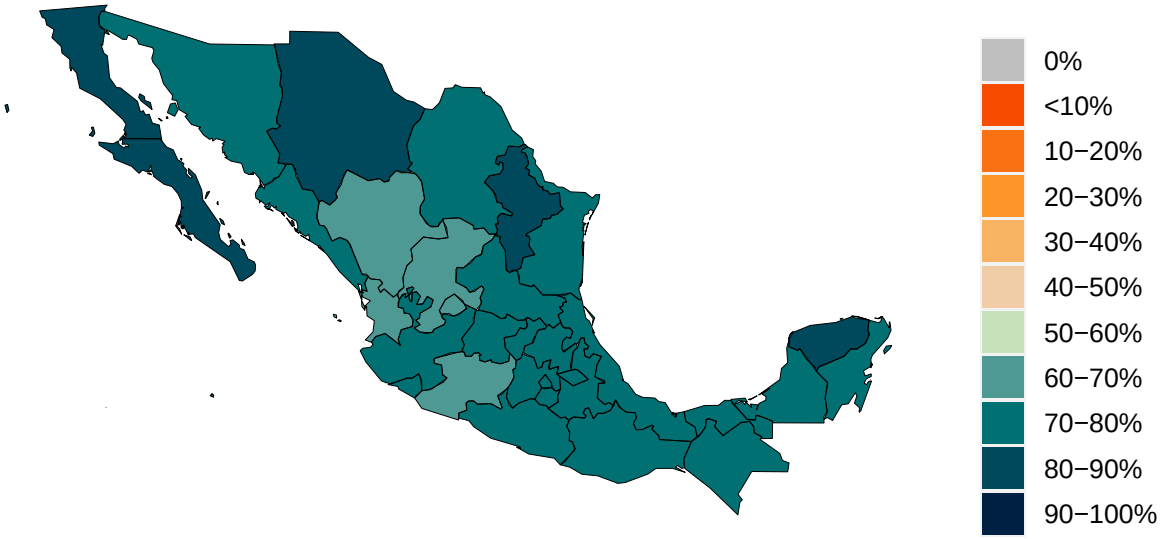


Figure 15.1. Trend in COVID-19 diagnostic tests per 100,000 people

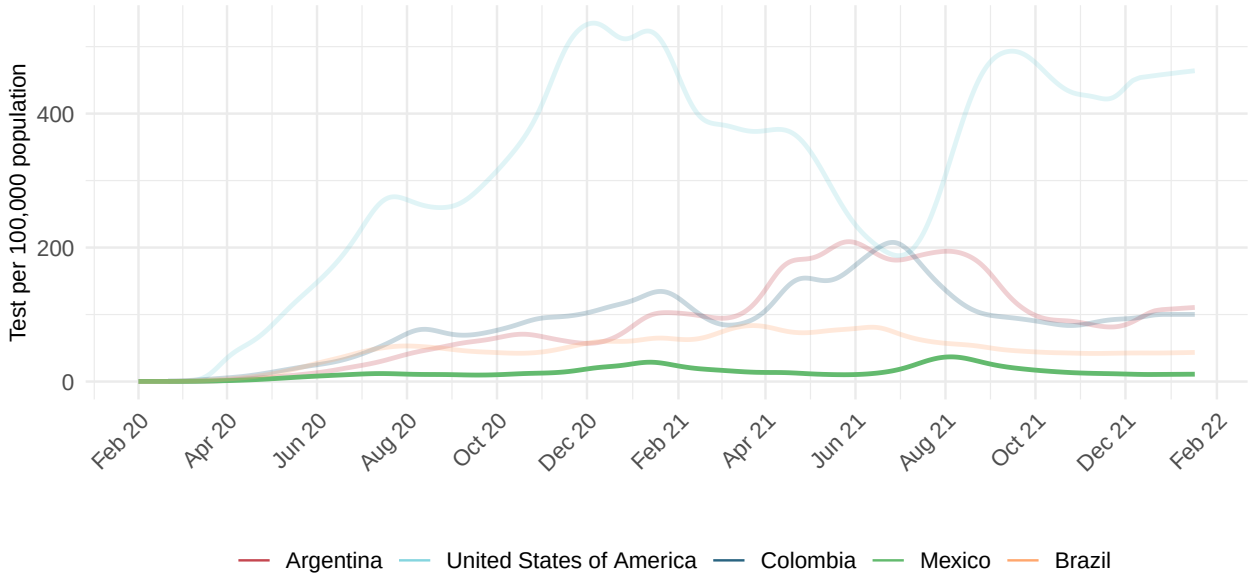


Figure 16.1. COVID-19 diagnostic tests per 100,000 people on January 18, 2022

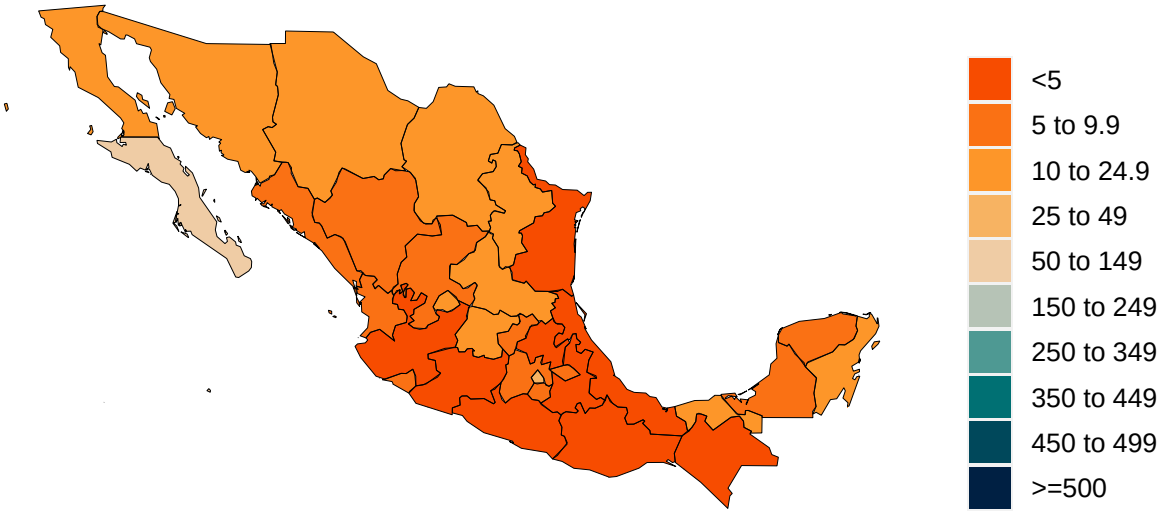


Table 3. Estimates of vaccine effectiveness for specific vaccines used in the model at preventing severe disease and infection. We use data from clinical trials directly, where available, and make estimates otherwise. More information can be found on our website.

	Effectiveness at preventing											
	Ancestral		Alpha		Beta		Gamma		Delta		Omicron	
Vaccine	Severe disease	Infection	Severe disease	Infection	Severe disease	Infection	Severe disease	Infection	Severe disease	Infection	Severe disease	Infection
AstraZeneca	94%	63%	94%	63%	94%	69%	94%	69%	94%	69%	71%	36%
CanSino	66%	62%	66%	62%	64%	61%	64%	61%	64%	61%	48%	32%
CoronaVac	50%	47%	50%	47%	49%	46%	49%	46%	49%	46%	37%	24%
Covaxin	78%	73%	78%	73%	76%	72%	76%	72%	76%	72%	57%	38%
Johnson & Johnson	86%	72%	86%	72%	76%	64%	76%	64%	76%	64%	57%	33%
Moderna	97%	92%	97%	92%	97%	91%	97%	91%	97%	91%	73%	48%
Novavax	89%	83%	89%	83%	86%	82%	86%	82%	86%	82%	65%	43%
Pfizer/BioNTech	95%	86%	95%	86%	95%	84%	95%	84%	95%	84%	72%	44%
Sinopharm	73%	68%	73%	68%	71%	67%	71%	67%	71%	67%	53%	35%
Sputnik-V	92%	86%	92%	86%	89%	85%	89%	85%	89%	85%	67%	44%
Other vaccines	75%	70%	75%	70%	73%	69%	73%	69%	73%	69%	55%	36%
Other vaccines (mRNA)	91%	86%	91%	86%	88%	85%	88%	85%	88%	85%	67%	45%

Percent of the population having received at least one dose (17.1) and fully vaccinated against SARS-CoV-2 (17.2) by January 18, 2022

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

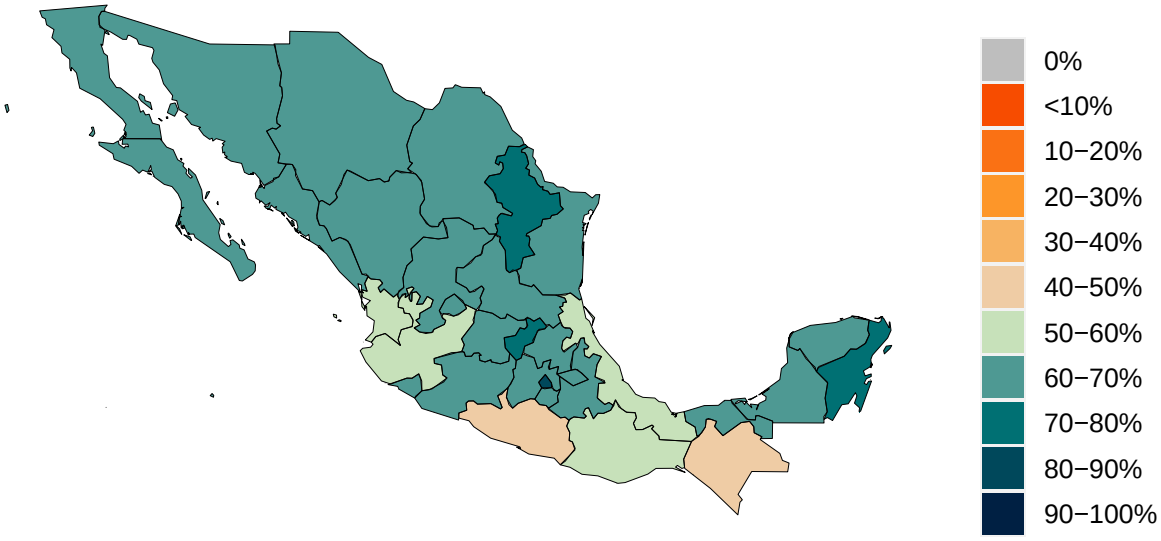


Figure 17.2 Percent of the population fully vaccinated against SARS-CoV-2

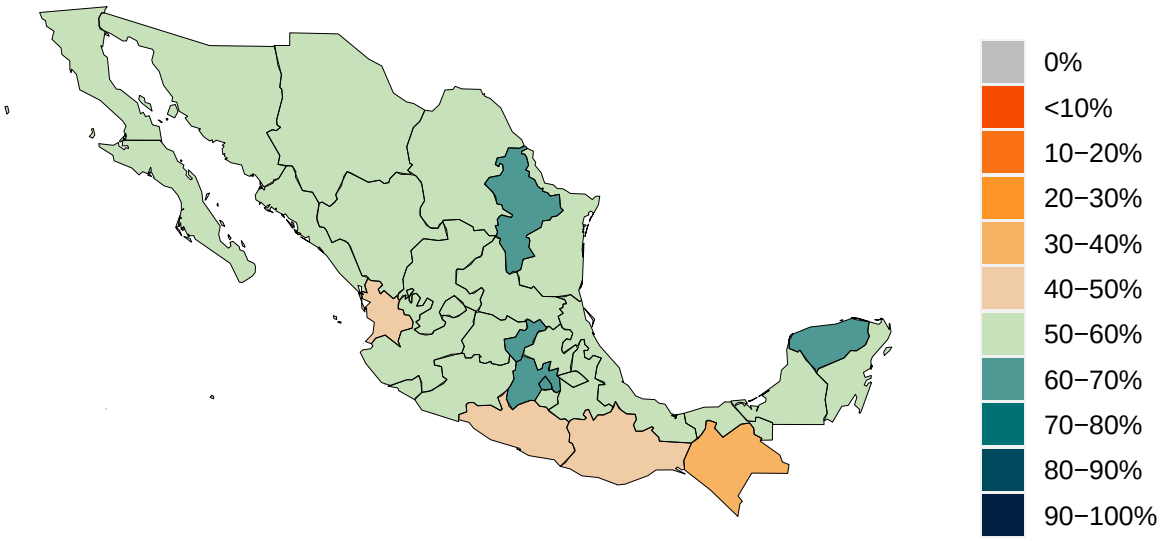


Figure 18.1. Trend in the estimated proportion of the population that is 12 years and older that has been vaccinated or would probably or definitely receive the COVID-19 vaccine if available. Note that vaccine acceptance is calculated using survey data from the 18+ population.

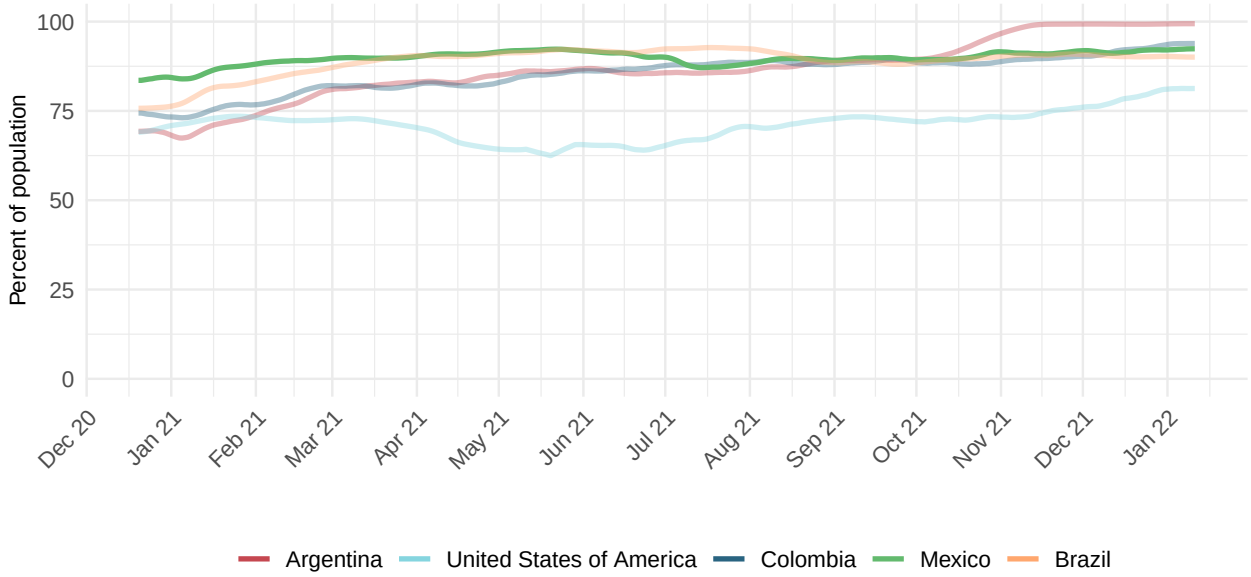


Figure 19.1. Estimated proportion of the population that is 12 years and older that has been vaccinated or would probably or definitely receive the COVID-19 vaccine if available. Note that vaccine acceptance is calculated using survey data from the 18+ population.

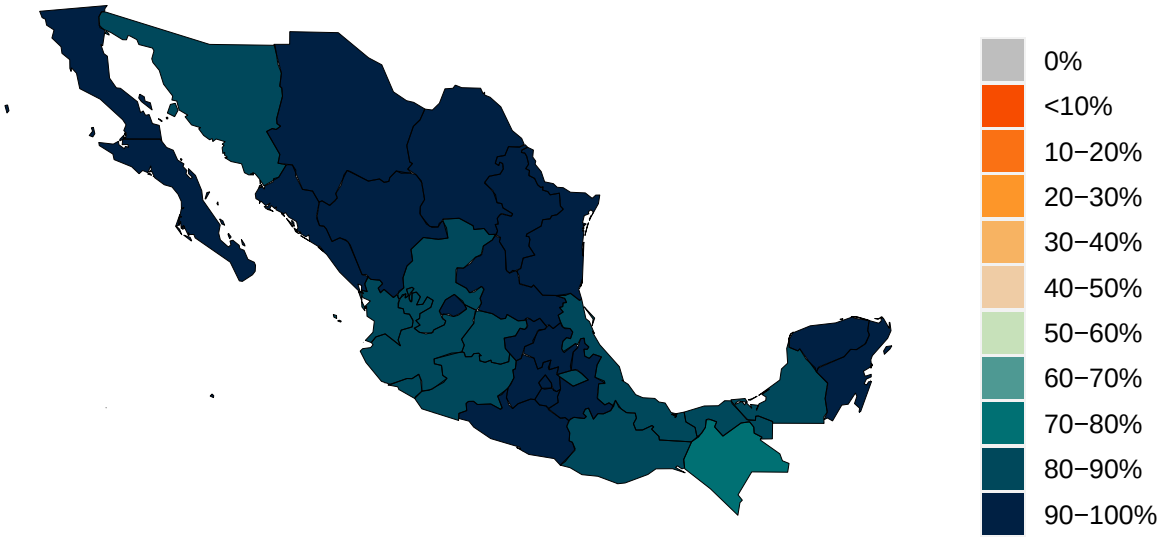
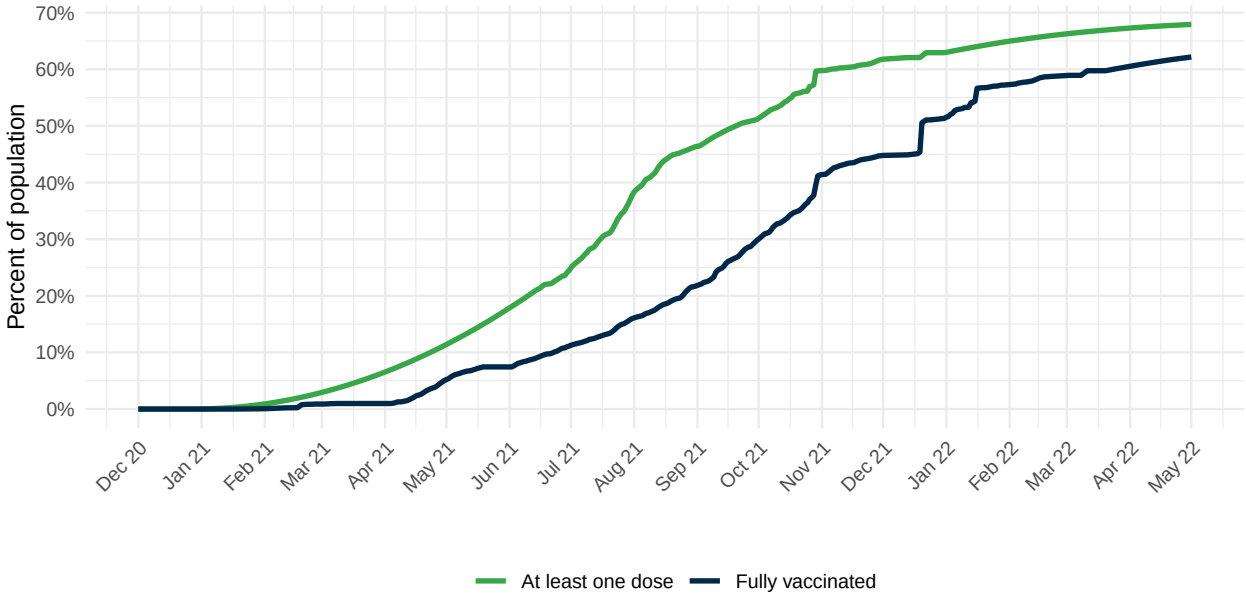


Figure 20.1. Percent of people who receive at least one dose of a COVID-19 vaccine and those who are fully vaccinated



Projections and scenarios

We produce 3 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.
- Omicron variant spreads according to our flight and local spread model.

- 80% of those who have had two doses of vaccine (or one dose for Johnson & Johnson) receive a third dose at 6 months after their second dose.

The **80% mask use scenario** makes all the same assumptions as the reference scenario but assumes all locations reach 80% mask use within 7 days. If a location currently has higher than 80% use, mask use remains at the current level.

The **third dose scenario** is the same as the reference scenario but assumes that 100% of those who have received two doses of vaccine will get a third dose at 6 months.

Figure 21.1. Daily COVID-19 infections until May 01, 2022 for 3 scenarios

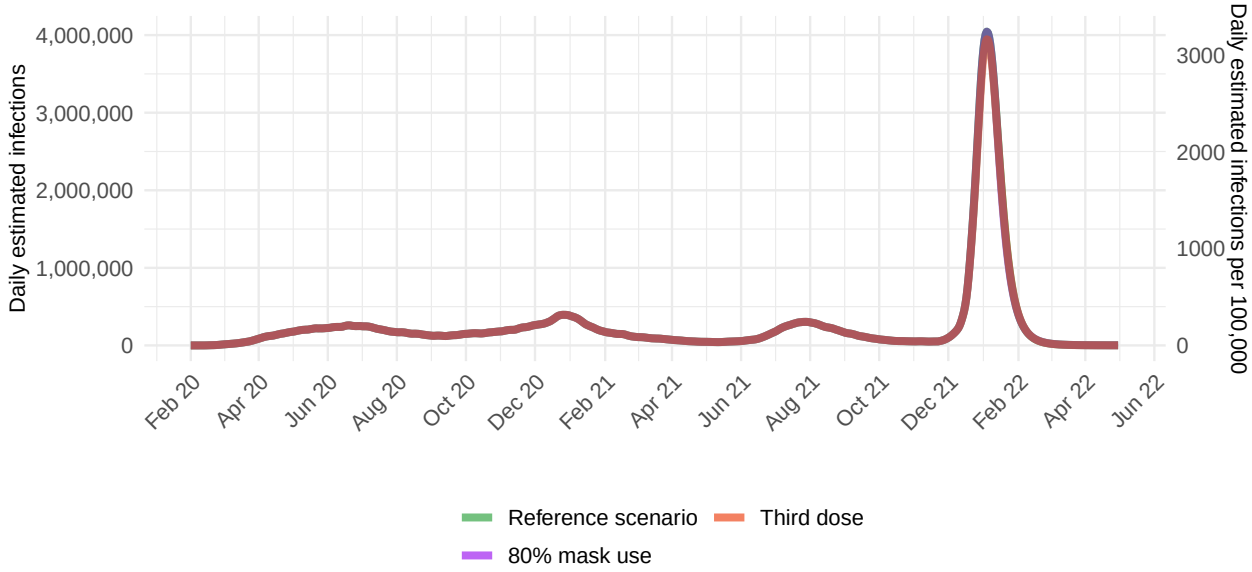


Figure 21.2. Daily COVID-19 reported cases until May 01, 2022 for 3 scenarios

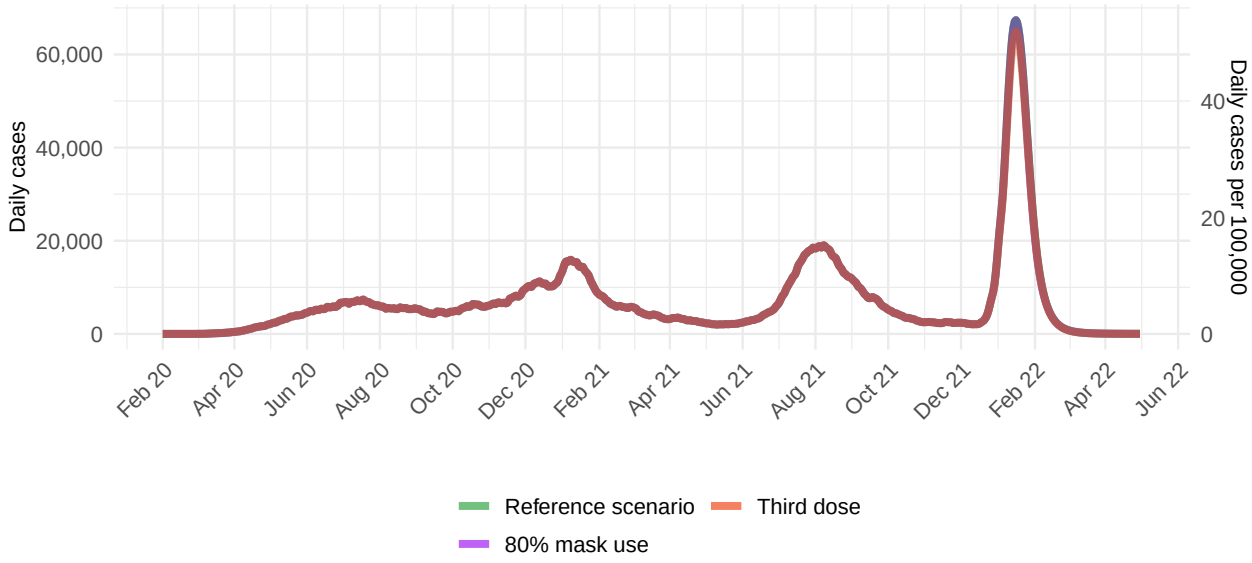


Figure 21.3. Daily COVID-19 hospital census until May 01, 2022 for 3 scenarios

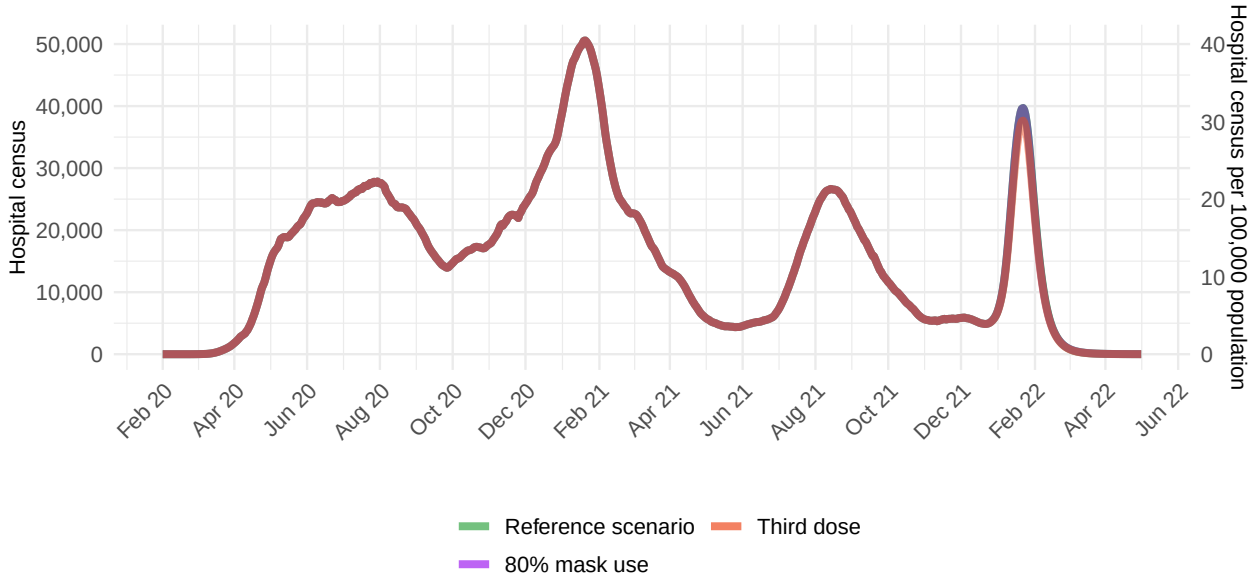


Figure 21.4 Reported daily COVID-19 deaths per 100,000

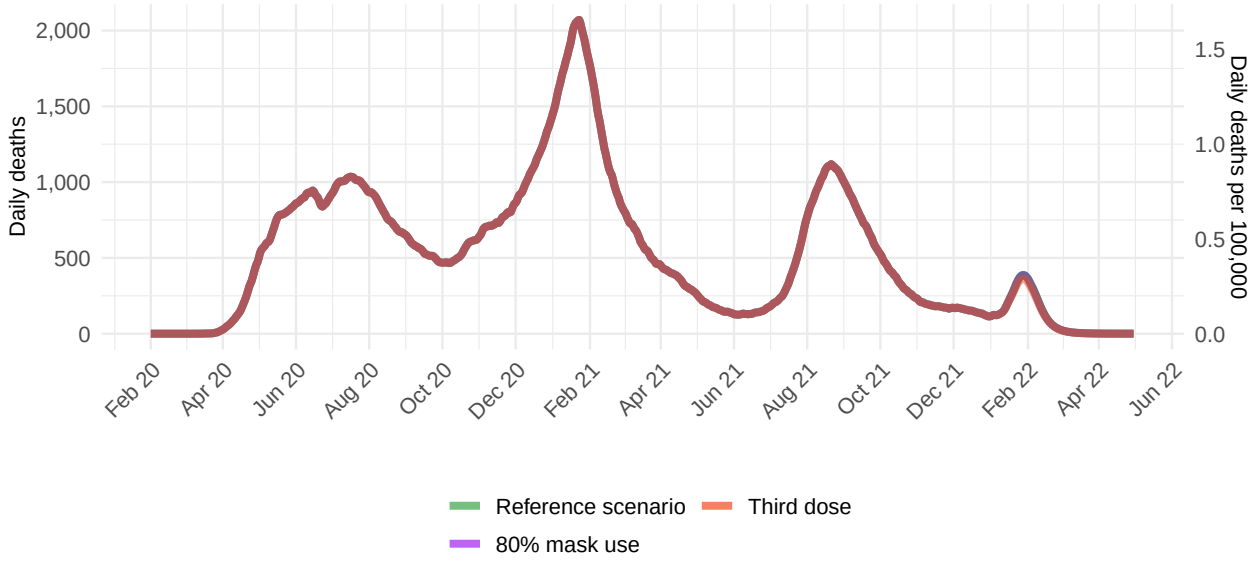


Figure 21.5 Total daily COVID-19 deaths per 100,000

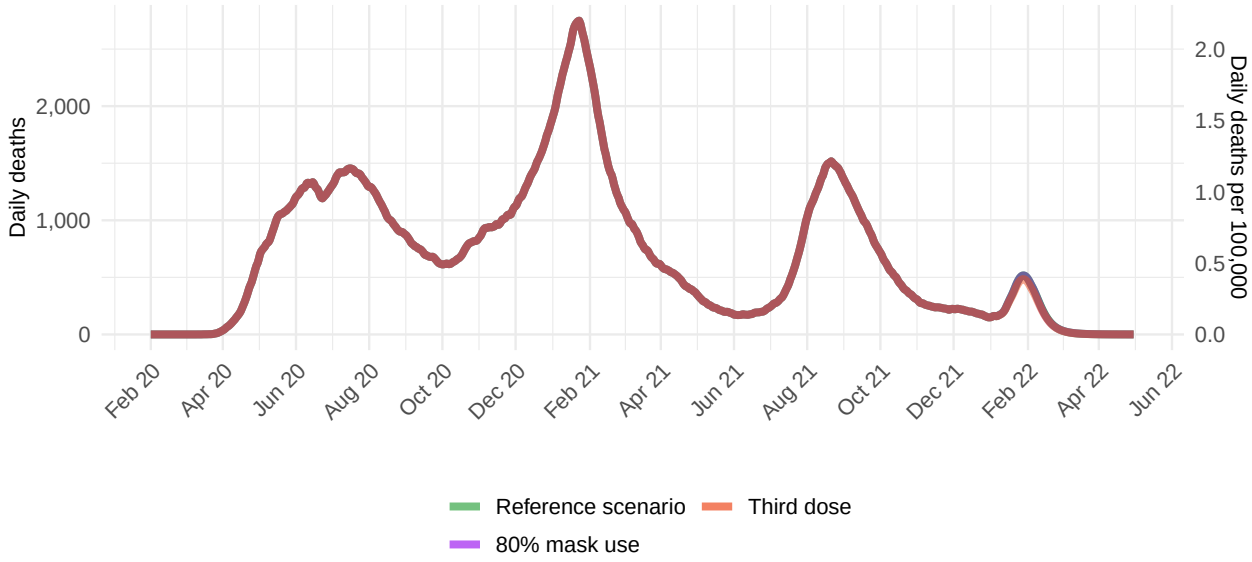


Figure 22.1. Comparison of reference model projections with other COVID modeling groups. For this comparison, we are including projections of daily COVID-19 deaths from other modeling groups when available, last model update in brackets: Delphi from the Massachusetts Institute of Technology (Delphi) [January 21, 2022], Imperial College London (Imperial) [January 2, 2022], the SI-KJalpha model from the University of Southern California (SIKJalpha) [January 20, 2022]. Daily deaths from other modeling groups are smoothed to remove inconsistencies with rounding. Regional values are aggregates from available locations in that region.

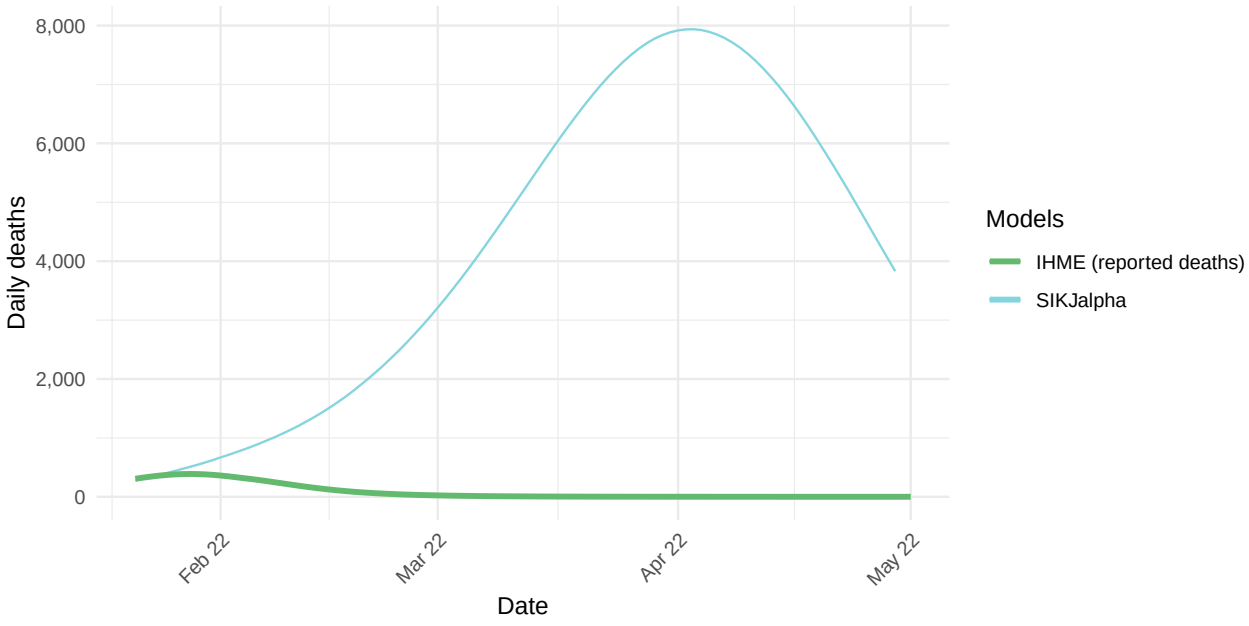


Figure 23.1. The estimated inpatient hospital usage is shown over time. The percent of hospital beds occupied by COVID-19 patients is color-coded based on observed quantiles of the maximum proportion of beds occupied by COVID-19 patients. Less than 5% is considered *low stress*, 5-9% is considered *moderate stress*, 10-19% is considered *high stress*, and 20% or greater is considered *extreme stress*.

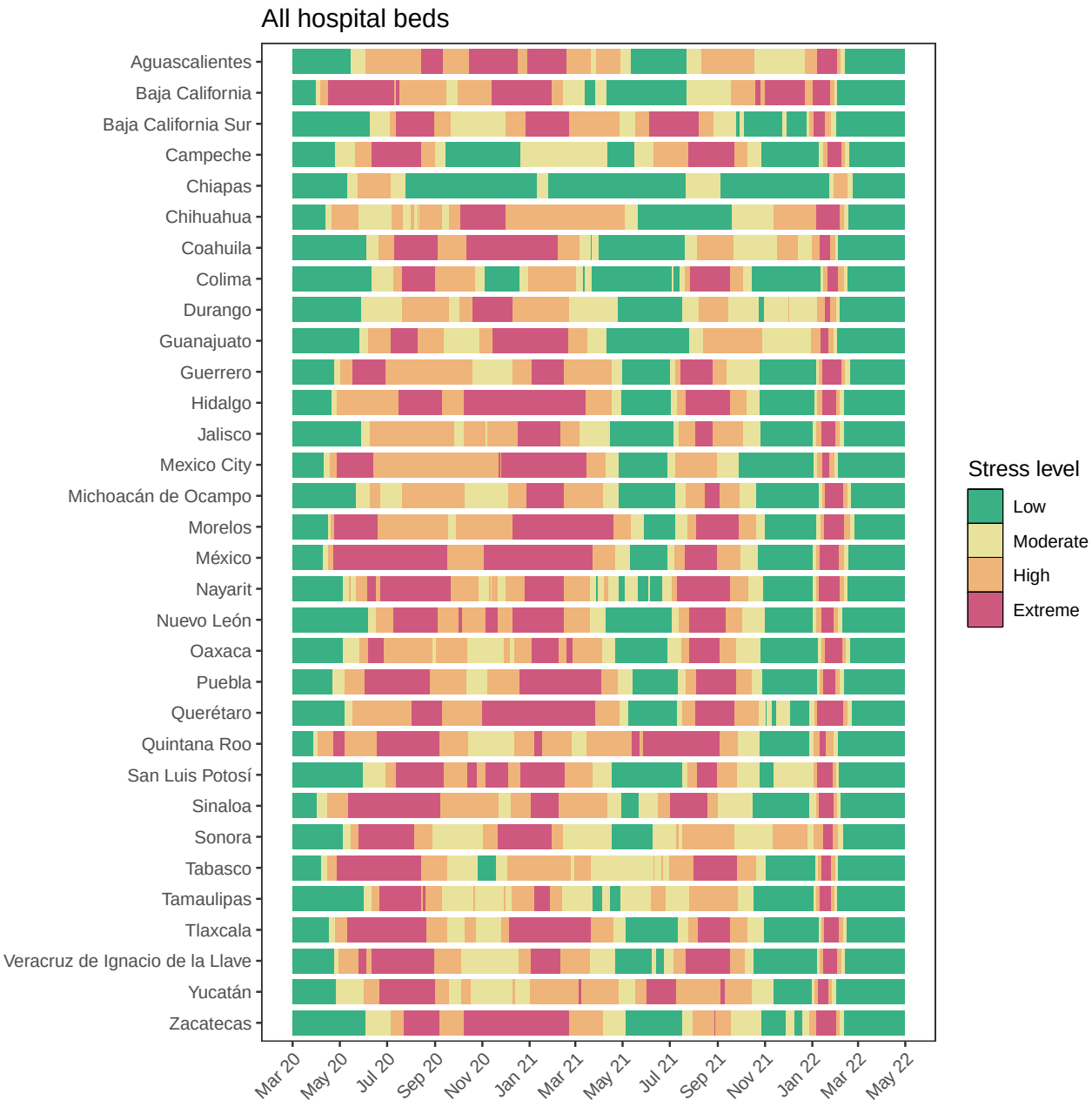
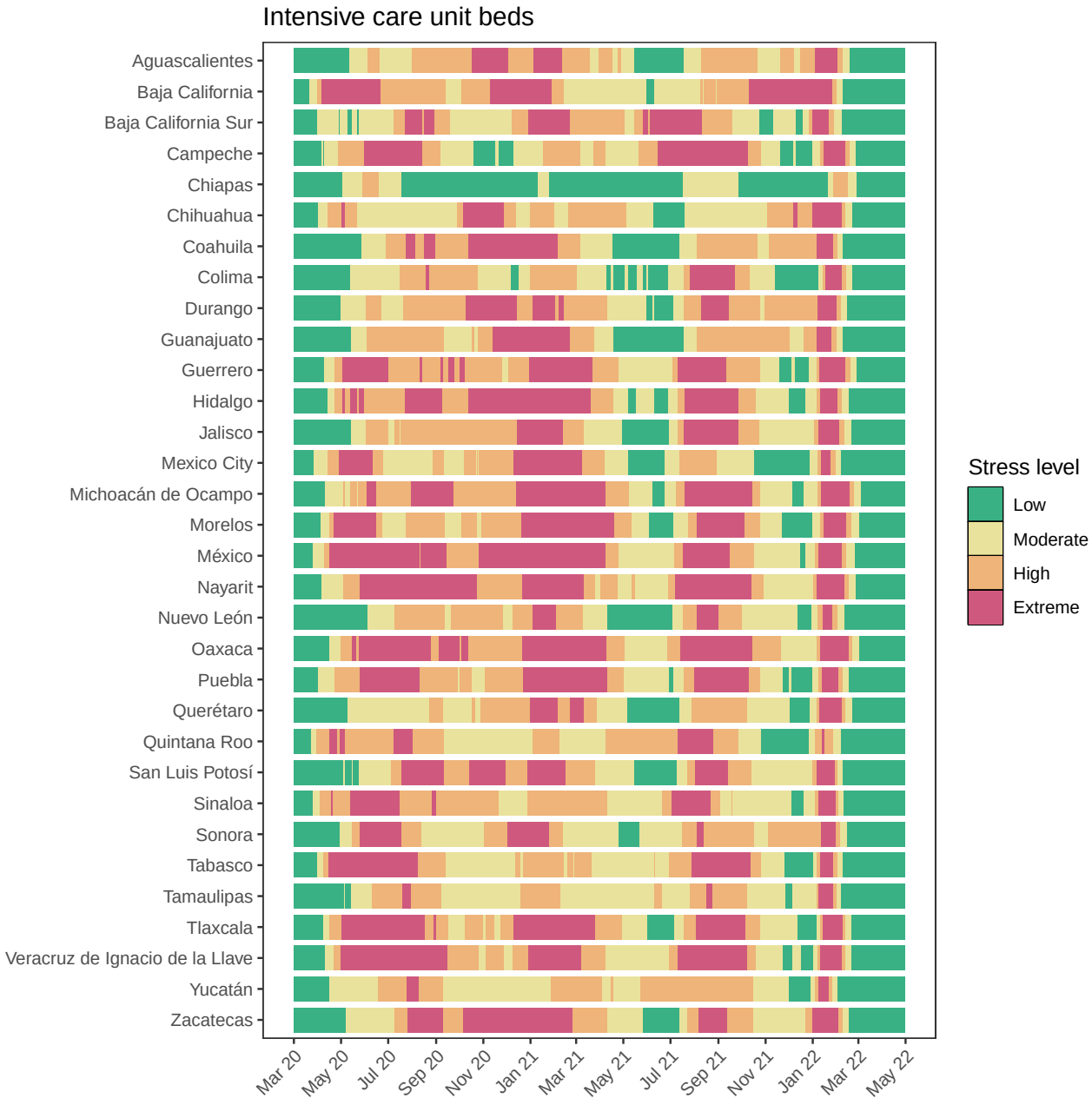


Figure 24.1. The estimated intensive care unit (ICU) usage is shown over time. The percent of ICU beds occupied by COVID-19 patients is color-coded based on observed quantiles of the maximum proportion of ICU beds occupied by COVID-19 patients. Less than 10% is considered *low stress*, 10-29% is considered *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.