ID ECHO Update
April 20, 2023

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COVID-19 USA STATS

Daily Update for the United States

Cases

New Cases (Weekly Total)

101,437

Case Trends

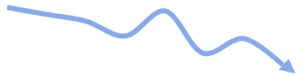
Feb 2023 Apr 2023

Deaths

New Deaths (Weekly Total)

1,327

Death Trends



Feb 2023 Apr 2023

Hospitalizations

New Admissions (Daily Avg)

1,850

Admission Trends

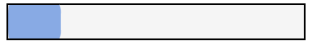
Mar 2023 Apr 2023

Vaccinations

% with Updated Booster Dose

16.7%

Total Population

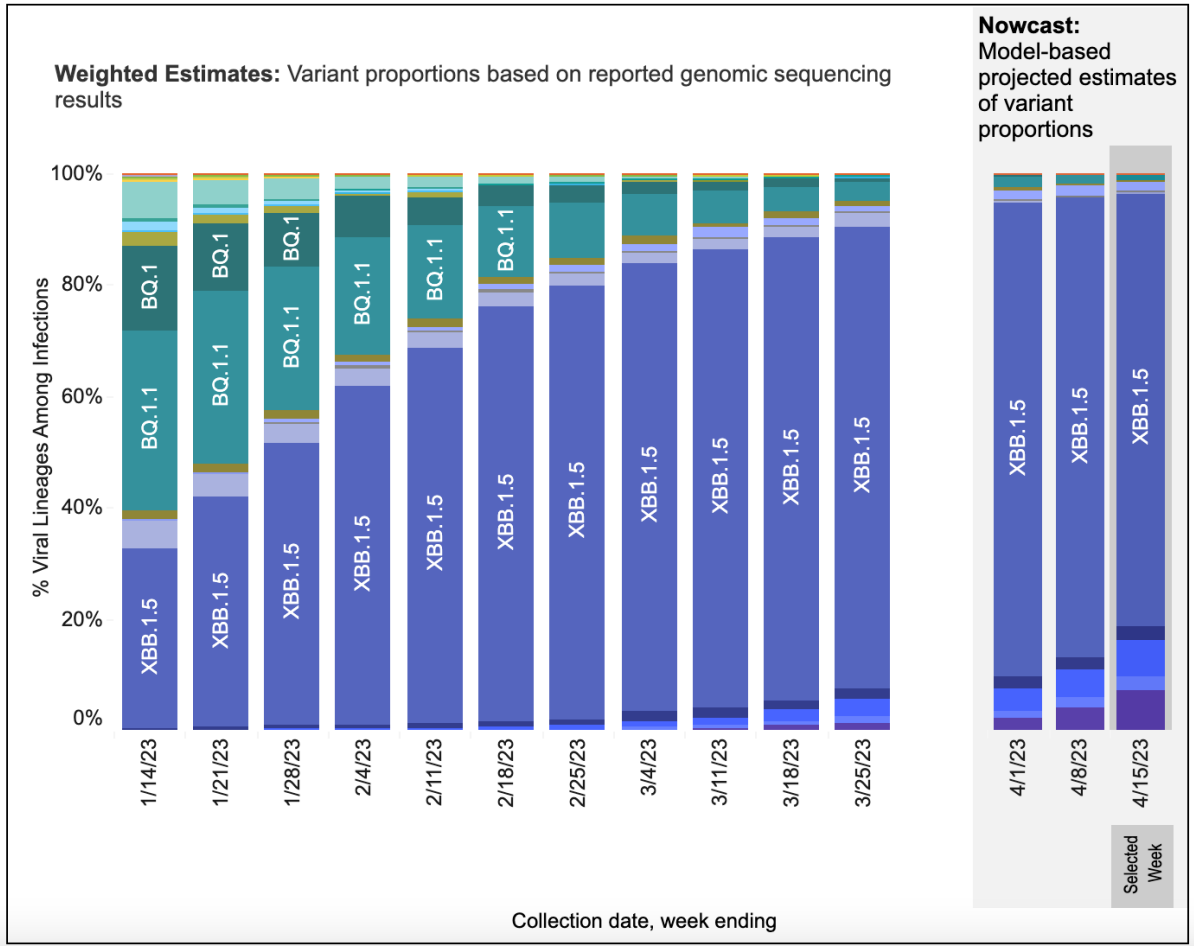


Total Cases	Total Deaths	Current Hospitalizations	Total Updated Booster Doses
104,348,746	1,128,404	11,279	55,577,285

CDC | Data as of: April 14, 2023 4:02 PM ET. Posted: April 14, 2023 5:00 PM ET

Weighted and Nowcast Estimates in United States for Weeks of 1/8/2023 – 4/15/2023

Hover over (or tap in mobile) any lineage of interest to see the amount of uncertainty in that lineage's estimate.



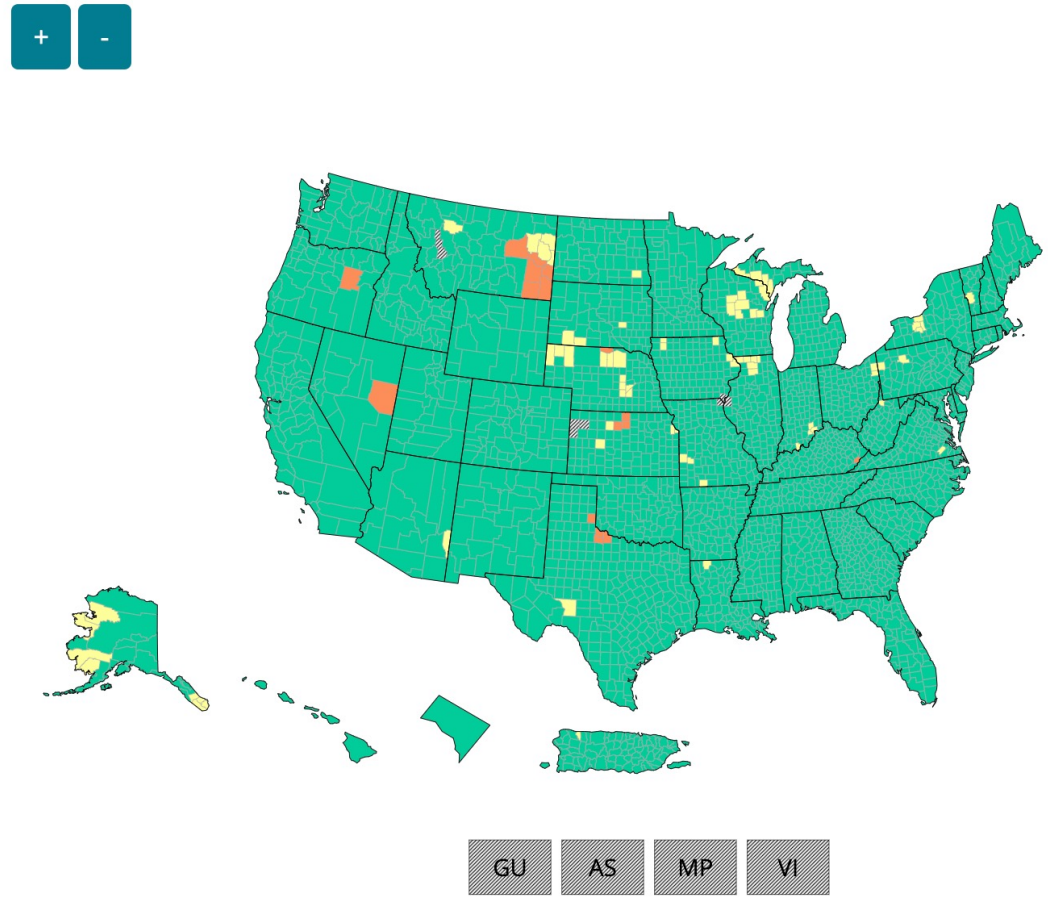
Nowcast Estimates in United States for 4/9/2023 – 4/15/2023

USA

WHO label	Lineage #	US Class	%Total	95%PI
Omicron	XBB.1.5	VOC	78.0%	73.6-81.8%
	XBB.1.16	VOC	7.2%	4.5-11.3%
	XBB.1.9.1	VOC	6.5%	4.8-8.8%
	XBB.1.9.2	VOC	2.5%	1.5-4.1%
	XBB.1.5.1	VOC	2.4%	1.8-3.1%
	FD.2	VOC	1.7%	0.9-3.2%
	BQ.1.1	VOC	1.0%	0.6-1.5%
	CH.1.1	VOC	0.3%	0.2-0.5%
	XBB	VOC	0.3%	0.2-0.3%
	BQ.1	VOC	0.1%	0.1-0.2%
	BN.1	VOC	0.0%	0.0-0.0%
	BA.5	VOC	0.0%	0.0-0.0%
	BA.2.75	VOC	0.0%	0.0-0.0%
	BF.7	VOC	0.0%	0.0-0.0%
	BA.2	VOC	0.0%	0.0-0.0%
	BA.1.1	VOC	0.0%	0.0-0.0%
	BA.5.2.6	VOC	0.0%	0.0-0.0%
	BF.11	VOC	0.0%	0.0-0.0%
	B.1.1.529	VOC	0.0%	0.0-0.0%
	BA.4.6	VOC	0.0%	0.0-0.0%
Other	Other*		0.1%	0.0-0.1%

COVID Data Tracker: https://covid.cdc.gov/covid-data-tracker/#variant-proportions

COVID-19 Community Levels in US by County



COVID-19 Community Levels in US by County

	Total	Percent	% Change
High	17	0.53%	0.13%
Medium	79	2.46%	– 1.05%
Low	3117	97.01%	0.93%

How are COVID-19 Community Levels calculated?

As of April 13, 2023, there are 17 (0.5%) counties, districts, or territories with a high COVID-19 Community Level, 79 (2.5%) with a medium Community Level, and 3,117 (96.8%) with a low Community Level. Compared with last week, the number of counties, districts, or territories in the high level increased by 0.1%, in the medium level decreased by 0.9%, and in the low level increased by 0.7%. Overall, 25 out of 52 jurisdictions** had high- or medium-level counties this week.

https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html

End of COVID-19 Public Health Emergency: Related Changes 4/17/23

What is changing for Isolation and PPE for COVID-19 Infection	• **Nothing** Guidelines for isolation and PPE have not changed based on CDC recommendations.
When is masking still required?	• When patients are on specific types of isolation precautions • When you have respiratory symptoms and are working • When patients ask you to wear a mask
When is masking still strongly recommended?	• When caring for patients who are immunocompromised (examples: heme-oncology patients, renal transplant patients) • When influenza, RSV, and COVID-19 levels rise within the community again • When unit or area outbreaks occur.

COVID-19 Testing: What is changing

COVID-19 Testing will no longer be required for patients

- At the time of admission to the hospital
- Before surgical procedures

When is COVID-19 testing still required?

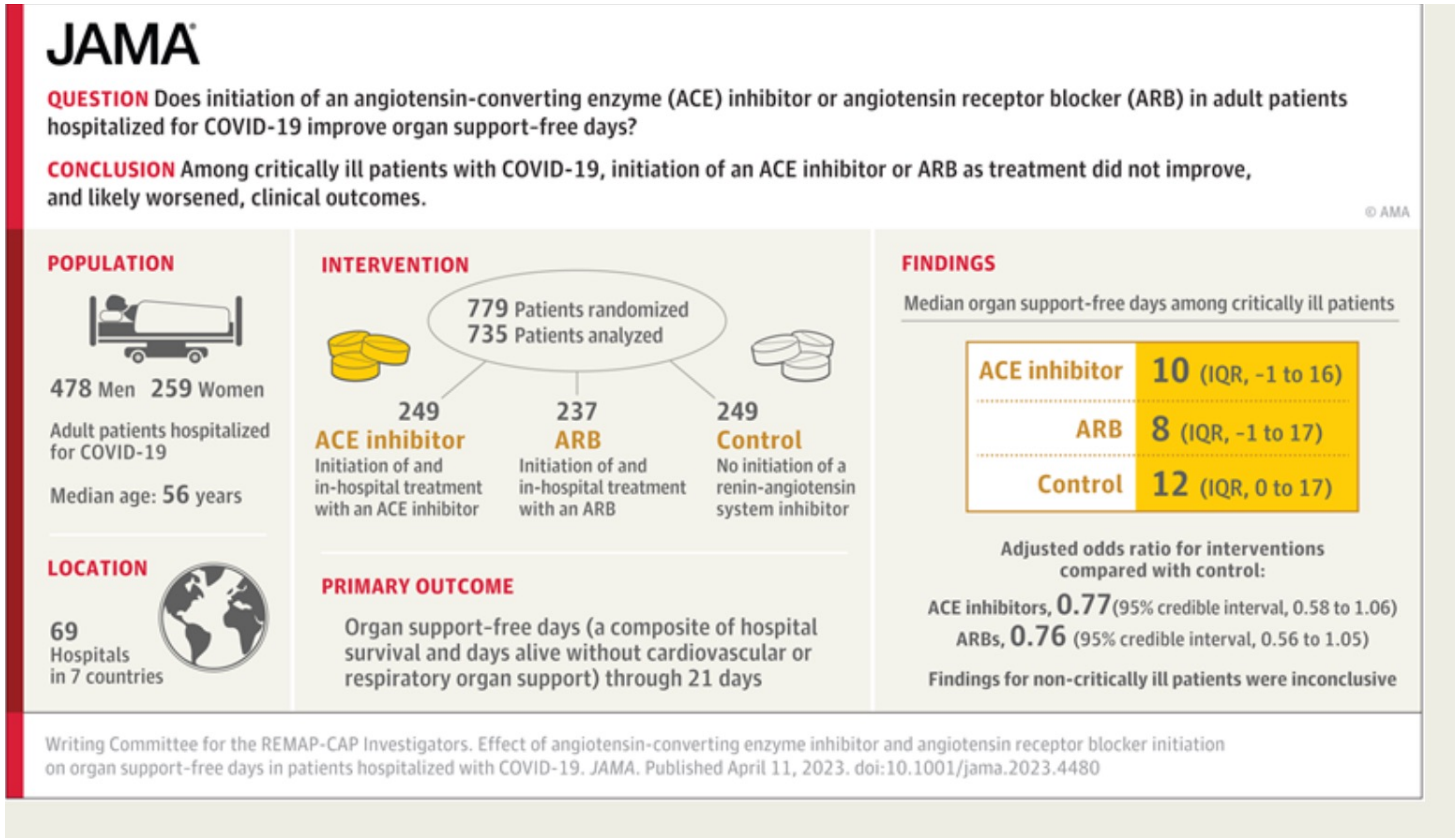
- For any patients who are admitted with any COVID-19 symptoms (including pneumonia)
- When required for placement after hospitalization
- Testing may be required again at the time of admission based on levels of community transmission and disease severity

When is COVID-19 testing recommended?

- For inpatients who develop COVID-19 symptoms
- Maybe considered for patients at high risk for complications with COVID-19 infection:
- Perioperatively (e.g., patients ≥ 70 years or with underlying comorbidities) **or**
- Prior to initiation of chemotherapy, transplant or immunosuppression

Effect of Angiotensin-Converting Enzyme Inhibitor and Angiotensin Receptor Blocker Initiation on Organ Support–Free Days in Patients Hospitalized With COVID-19A Randomized Clinical Trial

In this randomized clinical trial that included 779 patients, initiation of an ACE inhibitor or ARB did not improve organ support–free days. Among critically ill patients, there was a 95% probability that treatments worsened this outcome.



Writing Committee for the REMAP-CAP Investigators. *JAMA.* 2023;329(14):1183–1196. doi:10.1001/jama.2023.4480

FDA authorizes Gohibic (vilobelimab) injection under EUA for the treatment of COVID-19

Indications

- Adult patients with COVID-19 that are in hospitalized within 48 hours of receiving invasive mechanical ventilation or ECMO

Mechanism of action

- It is a complement inhibitor

Impact:

- Patients randomized to vilobelimab had a lower mortality rate by day 28 and 60 compared to the placebo arm

The recommended dosage of Gohibic is:

- 800 mg administered by intravenous infusion after dilution, given up to six times over the treatment period.

The most common adverse reactions were:

- Pneumonia, sepsis, delirium, pulmonary embolism, hypertension, pneumothorax, deep vein thrombosis, herpes simplex, enterococcal infection, bronchopulmonary aspergillosis, hepatic enzyme increased, urinary tract infection, hypoxia, thrombocytopenia, pneumomediastinum, respiratory tract infection, supraventricular tachycardia, constipation, and rash. Serious infections due to bacterial, fungal, or viral pathogens have been reported in patients with COVID-19 receiving Gohibic.

https://www.fda.gov/drugs/drug-safety-and-availability/fda-authorizes-gohibic-vilobelimab-injection-treatment-covid-19

Triple combination therapy with two antivirals and monoclonal antibodies for persistent or relapsed SARS-cov-2 infection in immunocompromised patients

Objectives: Evaluate the efficacy and safety of combination treatment in immunocompromised COVID-19 patients.

Methods: All immunocompromised patients with prolonged/relapsed COVID-19 treated with combination therapy with two antivirals

- remdesivir plus nirmatrelvir/ritonavir, or molnupiravir in case of renal failure plus, if available, anti-spike monoclonal antibodies (Mabs), between February and October 2022.
- The main outcomes were virological response at day 14) and virological and clinical response (alive, asymptomatic, with negative SARS-CoV-2 swab) at day 30 and the last follow-up.

***Results*:** 22 patients (Omicron variant in 17/18) were included:

- The majority, 81.8% received two antivirals and Mabs and 4 received two antivirals only
- The majority, 91% received nirmatrelvir/ritonavir plus remdesivir
- Nineteen, 86% patients had hematological malignancy, 68% had received anti-CD20 therapy.
- All were symptomatic and 36% required oxygen

Response rate at day 14, 30 and last follow-up was, respectively, **75% , 73% and 82%.**

- Response rates were significantly higher when combination therapy included Mabs.
- Higher number of vaccine doses was associated with better final outcome.

***Conclusion*:**

- Combination therapy including two antivirals (mainly remdesivir and nirmatrelvir/ritonavir) and Mabs was associated with high rate of virological and clinical response in immunocompromised patients with prolonged/relapsed COVID-19.

DOI: 10.1093/cid/ciad181

Updated WHO Guidance for Prioritizing COVID-19 Vaccines

Strategic Advisory Group of Experts on Immunization (SAGE), part of the World Health Organization (WHO).

The recommendations reflect

- The impact of circulating Omicron variants as well as current population immunity due to previous infection and vaccination

SAGE recommends an additional booster 6 or 12 months after the last dose to those in a high priority group:

- Older adults
- People with underlying conditions or who are immunocompromised
- Frontline health care workers
- In addition, it suggests that pregnant people obtain another booster dose if they received their last 1 more than 6 months before.

SAGE does not recommend:

- Routine use of additional boosters for healthy adults younger than 50 to 60 years, although their use is safe.

Sage suggests that:

- Although primary and booster doses are safe and effective for healthy children between age 6 months and 17 years, countries should consider their disease burden, cost-effectiveness, as well as other health priorities when choosing whether to vaccinate this group.

JAMA. Published online April 12, 2023. doi:10.1001/jama.2023.6256

F.D.A. Authorizes Another Bivalent Covid Booster Shot for People Over 65

Why?

- COVID-19 still claims 1,300 per week
- C.D.C. data also show that only 43 percent of people over 65 have received an Omicron booster shot, and just 20 percent of those 18 and older

Who:

- Adults who are 65 and over
- People with compromised immune systems.

What variants does it target:

- Omicron variants of the coronavirus.
- It has the same formula that was released to protect people from the Omicron variant of the virus.
- An updated vaccine is expected later this year.
- The F.D.A. said it intended to make decisions about the recommended vaccine schedule for people younger than 65 after a June advisory meeting.

When:

- People who are 65 and older who have not had a bivalent booster shot in at least four months may get another one.
- For those who are immunocompromised, additional doses of the bivalent vaccine can be given two months after the last shot.
- Those who are unvaccinated can get a single dose of the bivalent booster

Risk of Death in Patients Hospitalized for COVID-19 vs Seasonal Influenza in Fall-Winter 2022-2023

In a VA population in fall-winter 2022-2023, being hospitalized for COVID-19 vs seasonal influenza was associated with an increased risk of death.

- This finding should be interpreted in the context of a 2 to 3 times greater number of people being hospitalized for COVID-19 vs influenza in the US in this period.

The difference in mortality rates between COVID-19 and influenza appears to have decreased since early in the pandemic;

- Death rates among people hospitalized for COVID-19 were 17% to 21% in 2020 vs 6% in this study
- Death rates for those hospitalized for influenza were 3.8% in 2020 vs 3.7% in this study.

The decline in death rates among people hospitalized for COVID-19 may be due to:

- Changes in SARS-CoV-2 variant
- Increased immunity levels (from vaccination and prior infection)
- Improved clinical care

The increased risk of death was greater among unvaccinated individuals compared with those vaccinated or boosted

- Findings that highlight the importance of vaccination in reducing risk of COVID-19 death.

Study limitations include:

- The older and predominantly male VA population may limit generalizability to broader populations.
- The results may not reflect risk in nonhospitalized individuals.
- The analyses did not examine causes of death, and residual confounding cannot be ruled out.

JAMA. Published online April 06, 2023. doi:10.1001/jama.2023.5348

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From: **Risk of Death in Patients Hospitalized for COVID-19 vs Seasonal Influenza in Fall-Winter 2022-2023**

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	Death rate at 30 d, % (95% CI)		Excess deaths at 30 d, % (95% CI)	Hazard ratio (95% CI)	*P* value for interaction
	COVID-19	Influenza			
Age, y					
≤65	1.29 (0.77-1.82)	1.33 (0.46-2.20)	-0.04 (-1.06 to 0.98)	0.97 (0.45-2.11)	Reference
>65	6.42 (5.85-6.98)	3.66 (2.77-4.54)	2.76 (1.71 to 3.81)	1.78 (1.37-2.31)	.10
COVID-19 vaccination status					
Unvaccinated	8.75 (7.46-10.01)	3.86 (3.09-4.63)	4.88 (3.39 to 6.37)	2.32 (1.80-3.00)	Reference
1 or 2 doses of vaccine	6.23 (5.22-7.23)	3.79 (3.03-4.56)	2.44 (1.17 to 3.70)	1.66 (1.28-2.17)	.009
Boosted	5.18 (4.55-5.79)	3.77 (3.00-4.53)	1.41 (0.43 to 2.39)	1.38 (1.09-1.76)	<.001
SARS-CoV-2 infection					
Primary infection	6.14 (5.58-6.69)	3.76 (2.99-4.51)	2.38 (1.44 to 3.32)	1.65 (1.32-2.08)	Reference
Reinfection	5.11 (4.11-6.09)	3.85 (3.08-4.62)	1.26 (0.00 to 2.52)	1.34 (1.01-1.78)	.15
Outpatient COVID-19 antiviral treatment					
No	6.03 (5.53-6.53)	3.75 (2.99-4.51)	2.28 (1.37 to 3.19)	1.63 (1.30-2.04)	Reference
Yes	4.81 (2.49-7.07)	3.81 (3.04-4.57)	1.01 (-1.41 to 3.42)	1.27 (0.75-2.16)	.42
Overall	5.97 (5.48-6.46)	3.75 (2.98-4.50)	2.23 (1.32 to 3.13)	1.61 (1.29-2.02)	

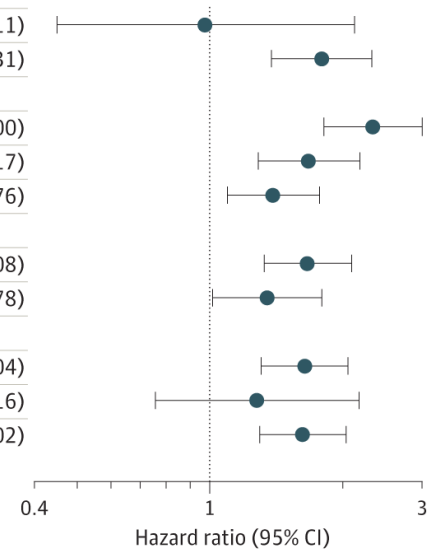

Figure Legend:

Hazard Ratio, Death Rates, and Percentage of Excess Deaths in COVID-19 Compared With Seasonal Influenza. Comparison conducted in overall cohort by age (≤65, >65 years) and by COVID-19 vaccination status (unvaccinated, 1-2 doses of vaccine, and boosted), SARS-CoV-2 infection status (with primary SARS-CoV-2 infection and reinfection), and outpatient COVID-19 antiviral treatment (yes or no), compared with overall seasonal influenza. Outpatient COVID-19 antiviral treatment included nirmatrelvir-ritonavir, molnupiravir, or remdesivir.

questions