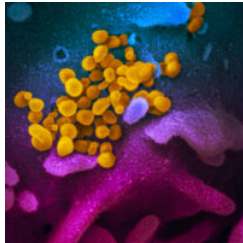


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COVID-19 AND HIV UPDATES

DECEMBER 15, 2021

SIGN UP FOR OUR NEWSLETTER HERE



The SARS-CoV-2 virus (NIAID)

Below are East Bay COVID-19 and HIV community updates. This page is updated on third Wednesdays and as needed by [Sophy S. Wong, MD](#), with community updates by [Yamini Oseguera-Bhatnagar, MPH](#) with content from many collaborators. [Please click here to share feedback.](#)

VACCINES

TESTING

MASKS

GUIDANCE

SCHOOLS

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ARCHIVES

PDF SUMMARY

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Dear readers,

Thank you for visiting and reading this update. This page will be in winter hibernation until mid-January. I will return around January 19 to update and restructure this page. I hope you and your loved ones have a safe, happy and healthy winter holiday season! With warmest wishes, Sophy

Many thanks to those of you who joined us on December 3 at our **East Bay World AIDS Day event** to honor and celebrate the amazing advocates, activists, artists and leaders we have in our community! [Click here to watch the video and see the art.](#)

Help us with the 2022 update of the East Bay HIV strategic plan! [Click here to vote](#) on the strategic activities you're most excited about.



In case you missed our recent workshops...

- The community workshop "Meet them where they're at: Best Practices for HIV Prevention Outreach through Dating/Hook-up Apps:" [watch the video and download handouts here.](#)
- The substance use workshop on October 19: download the [handouts here.](#)
- The housing and HIV linkages workshop on October 28: download the [handouts and watch the recording here.](#)
- [Check out our new Housing Opportunities bulletin board.](#)

The CDC released its updated [PrEP Clinical Practice Guideline](#) on December 10, 2021. [Read highlights here.](#)

KEY EAST BAY COVID-19 UPDATES

OMICRON IS HERE. GET BOOSTED, WEAR A MASK, TEST, VENTILATE AND AVOID CROWDS TO STAY HEALTHIER AND PROTECT LOVED ONES THIS WINTER.

1. New mask and vaccine requirements:

- **Masks are required in all indoor public settings in California** from December 15, 2021 through January 15, 2022 to reduce the impact of a winter surge from both the Delta and Omicron variants.
- Travel requirements are evolving in response to the Omicron variant. Please check the [CDC travel webpage](#) for updates.
- Please [click here](#) to see a summary of requirements and changes previously announced.
- [Click here](#) to get your CA digital vaccine record.



2. Bay Area pandemic trends:

- **Cases are rising. Delta is still dominant. Omicron is in the East Bay, and its rapid spread is serious threat.**
- **We need to prepare for a winter surge from both Delta and Omicron variants.**
- **Masking, rapid testing, ventilating and distancing will be required in addition to vaccinations and boosters.**
- **Is Omicron highly transmissible?** Yes. It is spreading 2-3x more rapidly than Delta in the [UK](#) and [South Africa](#), with cases doubling every 2-3 days, leading to explosive increases and outbreaks. This is likely due to immune evasion on top of high transmissibility.
- **Does Omicron evade immunity?** Yes. South African epidemiologists have reported [more reinfections](#) and [international lab scientists report](#) partial evasion to vaccine-induced antibodies compared to earlier variants. Scientists in the UK have [found](#) that while the Omicron variant is able to evade waning immunity from prior infection or 2-doses of the mRNA vaccines, boosters provide significant increases in protection. 2-doses of the mRNA vaccines are still expected to retain some efficacy against severe illness and death, but the data is not clear about disease severity from Omicron yet.
- **Does Omicron cause more severe disease?** We don't know yet. It may take weeks to months longer to see how disease severity plays out. The earliest cases were reported to be mostly mild, but hospitalizations are now rapidly increasing in areas with Omicron outbreaks.
- Health care staff are asked to report possible cases of the Omicron variant and submit specimens for genomic sequencing. Click for reporting info in: [Alameda County](#) and [Contra Costa County](#). Read more about [variants here](#).
- **The emergence of the Omicron variant reminds us of how crucial it is to get vaccines, boosters, testing, high-quality masks and good ventilation to everyone around the globe. Everyone in the US ages 5+ is recommended to get vaccinated and everyone ages 16+ is recommended to get boosters.**



PROTECT YOUR FAMILY FROM COVID-19.
Find a booster near you.
[MyTurn.ca.gov](#) | 833-422-4255



PROTEGE A TU FAMILIA DEL COVID-19.
Encuentra tu dosis de refuerzo.
[MyTurn.ca.gov](#) | 833-422-4255

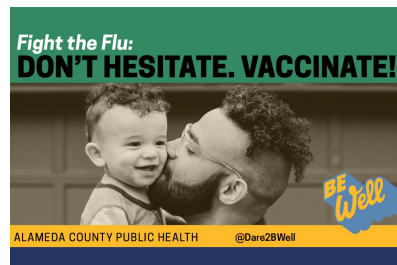
3. Vaccine efficacy, boosters and third doses:

- **Boosters for people ages 16 and 17** are now available following [FDA authorization](#) on December 9.
- **All people in the US ages 16+ are all recommended to get boosters, given concerns around rapid winter spread of the Delta and Omicron variants.** People eligible include those ages 16+ who got their second Pfizer or Moderna dose 6 or more months ago, or got their J&J dose 2 or more months ago. Boosters provide additional protection against waning immunity, particularly against the newer variants. People ages 18+ may choose which vaccine they receive as a booster dose using the "mix and match" approach. Get a free booster at [local pharmacies](#), [medical providers](#), [MyTurn.ca.gov](#), or [county sites](#).
- **The Pfizer vaccine for kids ages 5-11 is recommended and available.** 43% of kids ages 5-11 have received their first dose in Alameda County and 39% in Contra Costa County as of December 15. Please check [MyTurn.ca.gov](#), [pharmacies](#), [pediatrician offices](#) and [community health centers](#) for appointments, as well as community and school pop-ups. Not all locations offer the lower-dose Pfizer pediatric vaccinations.

- **Boosters for people with immunocompromising conditions** 6 months after their Moderna and Pfizer third doses are now recommended.
- **Vaccines remain highly effective against severe COVID-19 and death and are expected to retain some efficacy against Omicron. Our priorities remain vaccinating people not yet vaccinated while getting boosters out to more people.**
- **Alameda** and **Contra Costa** Counties have fully vaccinated 76% and 77% of all residents, respectively. Let's get to 90% or higher!

Get your flu vaccine this fall and help us avoid a twindemic! Health care workers in Alameda County are [required](#) to get their annual flu vaccination. Flu vaccine requirements for health care workers are also strongly [recommended](#) in Contra Costa County.

You can give/get the flu vaccine at the same time as the COVID-19 vaccine. Here's the [updated CDC guidance](#) on that.



Did you or a client test positive for COVID-19 within the last 7-10 days or had a recent high-risk exposure? Free monoclonal antibody treatment and post-exposure prophylaxis is available for people at risk for severe disease. Treatment can help reduce your symptoms and keep you out of the hospital. This treatment is available to all people at high risk regardless of health insurance or immigration status.

- [Click here to learn more for Alameda County residents](#), including flyers in multiple languages.
- [Click here for self-referrals or provider referrals for Alameda County residents.](#)
- [Click here for Contra Costa County residents.](#)
- Please note that some of the current monoclonal treatments may be less effective against the Omicron variant. Stay tuned as this gets studied.

MASK AND VACCINE REQUIREMENTS

Quick summary:

- **Masks:** [Masks are required in all indoor public settings in California](#) from December 15, 2021 through January 15, 2022 to reduce the impact of a winter surge from both the Delta and Omicron variants.
- **Travel:** Travel requirements are evolving in response to the Omicron variant. Please check the [CDC travel webpage](#) for updates.
- **Indoor public venues and vaccines:** Contra Costa and SF Counties and the City of Berkeley have [implemented](#) vaccine requirements for indoor restaurants, gyms and entertainment venues. Alameda County currently is not discussing this requirement.
- **Schools and vaccines:** California will [require](#) COVID-19 vaccinations for K-12 students following FDA-approval for their age group. [Oakland's Board of Education voted 4-3](#) on October 28 to adopt a policy requiring all students ages 12 and up to be fully vaccinated by January 1 to attend in-person school, similar to the policies in Los Angeles and Piedmont.
- **Employers and vaccines:** no new updates since October. Please scroll down to see a summary of the requirements previously announced.
- [Click here](#) to get your **CA digital vaccine record**.

Mask requirements:

[Masks are required in all indoor public settings in California](#) from December 15, 2021 through January 15, 2022 to reduce the impact of a winter surge from both the Delta and Omicron variants. [Click here](#) to read more about effective masking.

Indoor public venues and vaccine requirements:

- Los Angeles [approved](#) a vaccine requirement for indoor restaurants, gyms and entertainment venues, which will go into effect in November.
- Contra Costa County [implemented](#) a vaccine requirement for indoor restaurants, gyms and entertainment venues starting September 22.
- SF and Berkeley have similar requirements in place. Alameda County currently is not discussing this requirement.

Employers and vaccine requirements:

Dr. Tomás J. Aragón, California State Health Officer, [issued a health order](#) on August 11 requiring all **CA school workers** to get fully vaccinated and provide proof of vaccination or undergo at least weekly COVID-19 testing. On August 10, Oakland Unified School District [announced](#) a



vaccination requirement for all school district staff, contractors and volunteers, with vaccination or weekly testing required by September 7.

Dr. Aragón [released a public health order mandating vaccinations](#) on July 26 for all **state employees and all workers in homeless shelters, retirement homes, jails and prisons**. Workers in these settings are required to show proof of vaccination or agree to mask and wear PPE and test at least weekly.

President Biden's COVID-19 pandemic plan includes requirements for 2/3 of US workers to get vaccinated, including employers with 100+ employees (~80 million workers), 17 million health care workers and federal workers and contractors.

Health care facilities and workers and vaccine requirements:

Hospitals, skilled nursing facilities, and intermediate care facilities [are required](#) to verify that visitors are fully vaccinated or have tested negative for COVID-19 in the prior 72 hours before indoor visits.

Adult and senior care facilities workers and workers who provide in-home care must be fully vaccinated by November 30 as part of a California [public health order](#) issued on September 28.

On August 5, Dr. Aragón issued a [public health order requiring vaccinations for all health care workers in California](#) without allowance for people to choose to wear PPE instead of getting vaccinated. Recent outbreaks in health care settings have come from unvaccinated workers.

Schools and vaccine requirements:

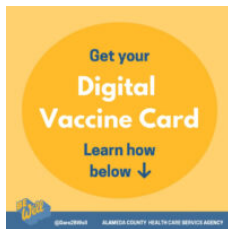
On October 1, Governor Newsom [announced](#) that **California will require COVID-19 vaccinations for K-12 students** following FDA-approval for their age group, adding COVID-19 to other vaccinations required for in-person school attendance.

On October 28, Oakland's Board of Education voted 4-3 to adopt a COVID-19 student vaccine policy which requires all students ages 12 and up to be fully vaccinated by January 1 to attend in-person school, similar to the policies in Los Angeles and Piedmont school districts.

However, exemptions for medical reasons, personal belief and partial vaccination are allowed in Oakland. Students not granted an exemption will be required to attend school online, transferring to Sojourner Truth Independent Study school. A similar policy including Oakland students ages 5-11 may also be considered in the future.

Hayward and Piedmont's school boards passed vaccine requirements on September 22. Berkeley and West Contra Costa County's boards have proposed similar requirements.

Los Angeles and Culver City school districts [passed](#) a student vaccine requirement earlier in September. Los Angeles Unified School District, the second largest in the US with 600,000 enrolled students, has [passed a requirement](#) for students 12+ to get vaccinated with 2 doses by December 19 or by October 31 to participate in extracurricular programs.



Need proof of vaccination? Visit the [Digital COVID-19 Vaccine Record](#) site to request your digital vaccination card and download the Alameda County [Frequently Asked Questions](#) for more information. If you need a replacement copy of your paper vaccine card and were vaccinated at an Alameda County supported site, you can visit any [currently open location](#) for assistance. If you were vaccinated elsewhere and need a paper vaccine card, contact that provider for a replacement.

Do you need to verify digital vaccine records at your workplace or venue? Download the [SMART Health Care Verifier](#) app to your Android phone or iPhone to scan the secure QR codes used in digital vaccine cards in California

and across the globe.

MORE DETAILS ON COVID VACCINES: EFFICACY, THIRD DOSES, BOOSTERS

The CDC issued an [urgent health advisory for pregnant people to get vaccinated](#) against COVID-19, given the 2x risk of ICU hospitalizations and 70% increase in death, as well as increased pre-term birth, ICU hospitalization and death in newborns.

A [study](#) from Kaiser Southern California found that the risk of post-vaccine myocarditis was not elevated after the first dose and was 5.8 cases per million among men (average age of 25 years) after the second dose of the Pfizer or Moderna vaccine. The risk of myocarditis from COVID-19 infection is still much higher, at about 110 cases per million. In the study, all 15 cases of post-vaccine myocarditis resolved on their own, and none required ICU care.

A new study including people experiencing homelessness in SF and Oakland "COVID-19 Testing and Vaccine Acceptability Among Homeless-Experienced Adults: Qualitative Data from Two Samples" found that mobile access is better (bring testing & vaccine to where people are) and incentives make a difference, so offer them if you can.



Vaccine efficacy:

The CDC has a new [COVID-19 vaccine effectiveness tracker](#), which appears to be updated monthly. The CDC also has a new [dashboard on US hospitalization by vaccination status](#).

A [CDC study](#) of hospitalized patients with COVID-19 symptoms found that people with prior infection who were unvaccinated were 5x more likely to have a positive COVID-19 test compared to those who did not have prior infection and were vaccinated.

A real-world [CDC study](#) on vaccine efficacy among teens showed that the Pfizer-BioNTech COVID-19 vaccine was 93% effective against hospitalization for 12-18-year-olds during the June-September 2021 delta surge. 97% of the teens hospitalized with COVID-19 were unvaccinated.

The [CDC recommended the Pfizer vaccine for kids ages 5-11 on November 2](#), following [FDA authorization](#) on October 29. The [FDA advisory panel voted 17-0](#) to recommend the Pfizer vaccine for kids ages 5-11 [on October 26](#) based on [Pfizer clinical trial data](#). These endorsements allow the pediatric Pfizer vaccine to be given for the 5-11 age group.

[Data from the Pfizer pediatric clinical trial](#) shows that the vaccine is safe and 90.7% effective in preventing COVID-19 delta variant infections for kids ages 5-11. The pediatric dose is one-third the adult dose (10 micrograms instead of 30 micrograms) and uses a different formulation, which is stable in a refrigerator for up to 10 weeks and does not need to be kept ultra-frozen like the vaccine formulation used for people ages 12 and older.

[New data presented](#) at the CDC ACIP meeting on November 2-3 showed that **vaccinating 5-11-year-olds could reduce national COVID case rates about 8%** from November 2021 to March 2022. Epidemiologists also expect widespread adoption of vaccines could lead to fewer school closures and more opportunities to resume pre-pandemic social activities for children. While 38% of children ages 5-11 are [estimated](#) to have had COVID-19 (a similar rate as adults), mild and asymptomatic cases in children in particular may not provide adequate immunity against the delta variant. For this reason, vaccinations for children and others with prior infection are still recommended.

How do I get a vaccine for kids ages 5-11? Please check [pharmacies](#), [pediatrician offices](#) and [community health centers](#) for appointments. Not all locations offer the lower-dose Pfizer pediatric vaccinations.

[Moderna announced on October 25 data from the clinical trial of its COVID-19 Vaccine in children ages 6 to 11](#) (using half the adult dose, 50 µg) showing robust antibody responses.

Both Pfizer and Moderna have expanded their ongoing pediatric clinical trials to collect additional safety and efficacy data. [Pfizer](#) plans to share data from the trial with children ages 2-4 by end of December 2021 and 6 months to 1 year by March 2022.

[CDC epidemiology report](#) on COVID-19 among children ages 5-11 shows that case rates per 100k among children ages 5-17 are now the highest of age groups nationwide. Children are at least as likely as adults to be infected. Black, Latinx and Indigenous children and those with underlying conditions have the highest hospitalization rates. While children are less likely than adults to have severe disease from the delta variant, COVID-19 in children can still result in long COVID (~7-8%), hospitalization and ICU stays, transmission to others who are more vulnerable, and school closures due to outbreaks.

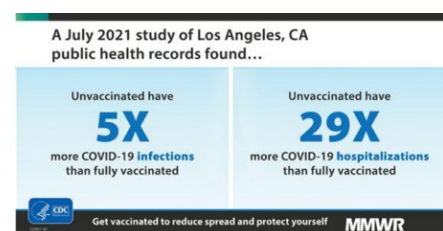
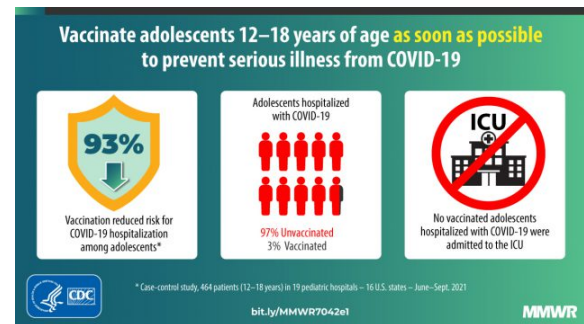
Data from the [LA Dept of Public Health](#), [HEROES-RECOVER Cohort study](#) of frontline workers, [IVY hospital network study](#), and [incidence rates in 13 US jurisdictions](#) show that high vaccine efficacy against hospitalization was maintained over time and during the delta surge. At the same time, there were more mild-moderate post-vaccine *infections* from delta compared to earlier variants. This may represent a combination of reduced vaccine efficacy against the delta variant as well as waning antibody/mucosal immunity over time. Additional findings were presented at the [August 18 White House COVID Briefing](#) with [excellent summary slides downloadable here](#).

A [large prospective study](#) of over a million UK COVID Symptom Study app users showed that compared to no vaccination, vaccination was associated with reduced odds of hospitalization, reduction in the number of symptoms during infection (and higher likelihood of being asymptomatic compared to no vaccination), and half the odds of [long COVID](#) (symptoms lasting 28 or more days).

With the delta and future variants, our goals are now to learn how to live with and reduce the destruction caused by the SARS-CoV-2 virus ("endemicity") by maximizing immunity, ideally through vaccines, in order to reduce the virus' ability to cause severe disease and death.

Third doses for people with immunocompromising conditions:

On August 12, the [FDA authorized a third mRNA vaccine dose for people "who have undergone solid organ transplantation, or who are](#)



diagnosed with conditions that are considered to have an equivalent level of immunocompromise.” About 3% of the US population falls into this category. [Studies](#) of people with solid organ transplants show a significant lack of immune response in this population with two doses, and a [randomized trial](#) showed benefit with a third mRNA vaccine dose. The CDC presented [additional data](#) for these recommendations on August 30.

[CDPH](#) and the [CDC recommend the third dose](#) at least 28 days after their second dose for the following people ([references in this PDF](#)):

- Been receiving active cancer treatment for tumors or cancers of the blood
- Received an organ transplant and are taking medicine to suppress the immune system
- Received a stem cell transplant within the last 2 years or are taking medicine to suppress the immune system
- Moderate or severe primary immunodeficiency (such as DiGeorge syndrome, Wiskott-Aldrich syndrome)
- [Advanced or untreated HIV infection \(click for more guidance\)](#)
- Active treatment with high-dose corticosteroids or other drugs that may suppress your immune response

Verification of immunocompromised status is not required, so people can self-attest and get their third dose anywhere mRNA vaccines are available. However, Alameda County recommends that residents discuss getting third doses with their providers first. Clinicians have leeway to assess immune status and help people think through getting a third dose.

Why should immunocompromised people get a third dose? Hospitalization data shows that people with moderate to severely immunocompromising conditions have more severe outcomes and higher risk for death from COVID-19, and also have inadequate immune response and protection to two doses of the mRNA vaccine or single doses of the J&J vaccine. A [CDC study](#) found that “Effectiveness of mRNA vaccination against laboratory-confirmed COVID-19-associated hospitalization was lower (77%) among immunocompromised adults than among immunocompetent adults (90%). Vaccine effectiveness varied considerably among immunocompromised patient subgroups.” Moderna provided slightly more protection than the Pfizer vaccine. The study did not include the J&J vaccine. The authors suggest that immunocompromised people will likely need a booster dose 6 month after an initial 3-dose series.

Booster doses:

All people in the US ages 18+ are recommended to get boosters. People eligible include those who received their second Pfizer or Moderna vaccine 6 or more months ago, or their first J&J dose 2 or more months ago. Boosters provide additional protection against waning immunity from vaccines or infection, especially against the delta variant. This simplifies the previous eligibility rules for boosters in September and October.

The “mix and match” approach giving people the choice of which vaccine they receive as a booster was authorized and approved by the [FDA, CDC](#) and the Western States Scientific Safety Review [Workgroup](#) on October 22, which makes boosters for all three authorized vaccines in the US available to California residents.

You are still considered fully vaccinated 2 or more weeks after two doses of Pfizer or Moderna vaccines or one dose of the J&J vaccine. These regimens still provide high levels of protection against severe disease for most people. People who are immunocompromised should get third doses of the Pfizer or Moderna vaccine. Boosters provide additional protection against mild-moderate infections from the delta variant, going from very good to excellent protection.

Evidence for mixing and matching: A [pre-print NIH study](#) suggests that J&J recipients might benefit more from an mRNA booster, and in particular a Moderna booster. The study found that J&J recipients who got a J&J booster increased neutralizing antibody levels 4x, J&J recipients who got a Pfizer booster has a 36x increase and J&J recipients who got a Moderna booster had a 76x rise in antibody levels.

Marin County Public Health [set a goal](#) for at least half of all residents over age 65 to receive their booster by the end of November. Currently, only 25% of residents in that age group have received a booster dose. Among those hospitalized with COVID-19 since June, nearly 80% were ages 65 or older. Public Health Officer Dr. Matt Willis stated, “The tragic death of Colin Powell highlights the vulnerability of vaccinated people with weakened immune systems. An additional booster shot can help keep you healthy.”

California state released a COVID-19 action plan on September 23 describing the state’s strategy for increasing vaccination rates overall, rolling out booster doses, and vaccines for children under age 12.

Why get boosted?

Immunity from natural infection and vaccination wanes over time, especially for older people and those at higher risk. Boosters increase immunity to highly protective levels. Boosting offers additional protection against infection and makes good vaccine protection into excellent vaccine protection.[]

Studies showing waning immunity:

[A CDC study of vaccine efficacy among US nursing home residents](#) during the delta surge shows waning efficacy over time. Nursing home residents are often elderly and frail and have a less robust response to vaccines. From March to May 2021, vaccine efficacy was 75%, then

dropped to 53% in June to July during the delta surge.

Studies from [UCSD](#) and [VA medical centers](#) show waning immunity among health care workers and people ages 65 and over. [A study](#) of 167 people who received the Moderna or Pfizer-BNT mRNA vaccine showed that antibody levels were before and higher after the 2nd dose for people who received the Moderna vaccine compared to the Pfizer-BNT vaccine and was also higher for people under the age of 50 compared to people ages 50 or over, which correlates with the higher preserved protection against hospitalization [seen](#) in Moderna vaccinations.

A [pre-print study](#) from the UK found that the Pfizer-BNT vaccine's efficacy in preventing forward transmission was 68% for the alpha variant and 50% for the delta variant after 2 doses. Efficacy against transmission of the delta variant waned over time, and at 3 months after the second dose decreased from 50% to ~22% for the Pfizer-BNT vaccine and from 24% to 0% compared to unvaccinated people for the Astra-Zeneca vaccine.

[Vaccine data from Israel](#) showed waning protection from severe disease in older populations who were vaccinated 6+ months ago. Israel has approved a third dose for everyone ages 12 and over.

Studies showing booster efficacy:

[J&J booster data](#) in a press release from Janssen's vaccine trial participants (ENSEMBLE) showed that a second dose 2 months after the first dose increased vaccine efficacy from 74% to 100% against severe/critical COVID-19 and increased antibody levels by 4-fold, though the outcomes were only followed for 14 days post-second dose thus far. When the second dose was given 6 months after the first dose, antibody levels increased by 12-fold.

[Data from Israel on boosters for people ages 60+](#) show an 11x decrease in the infection rate and 19.5x decrease in the hospitalization rate 12-25 days after a Pfizer booster dose, as compared to an age-matched group that did not get boosted and had 2 doses. The data does not describe outcomes after 25 days.

[Data from Israel](#) presented at the FDA COVID vaccine meeting on September 17 showed that after giving boosters to nearly 3 million people, there was a >10x reduction in COVID-19 infections and serious disease. As boosters rolled out, new infection rates fell.

Pfizer booster side effects are described as similar to 2nd doses as reported by [the CDC](#), the [Pfizer booster trial](#), [Maccabi Health Services in Israel](#), [Clalit Health Services in Israel](#).

Vaccine handling updates:

On August 22, the FDA updated the EUA for the **Pfizer-BioNTech vaccine to extend the shelf life from 6 months to 9 months** for products with an expiry date of August 2021 through February 2022 when stored between -90°C and -60°C (ultralow temperature freezer). The latest expiration dates can be accessed [here](#) (registration required).

WHAT'S UP WITH COVID VACCINES?

Updated December 15, 2021

Everyone ages 5 and over can get a free COVID-19 vaccine, even if you don't have insurance or immigration papers. All people ages 16+ are [recommended to get boosters](#) for additional protection against the Omicron variant.

Get a free vaccine today at [local pharmacies](#), your [medical provider](#), [MyTurn.ca.gov](#), or [county sites](#).

The best way to protect yourself and our community against serious illness from the highly contagious Delta and Omicron variants is to get vaccinated, boosted and wear a mask. Vaccines are expected to [remain](#) highly effective against severe disease and death. Boosters significantly increase protection against infection from the rapidly spreading Omicron variant.

Appointments and walk-ups are available for all three authorized vaccines and boosters (Pfizer, Moderna and Johnson & Johnson). The lower-dose Pfizer vaccine for children ages 5-11 is not available at all sites, so please check first for appointments and availability. Keep checking for appointments if you don't get what you want! New appointments and pop-ups become available as vaccine supply comes in.

More key vaccine updates:

- Vaccines are [recommended](#) for all people ages 5 and over, including people who are [pregnant](#), breastfeeding, wanting to get pregnant now or in the future.



- [Boosters for all people ages 16+](#): People eligible include those who received their second Pfizer or Moderna dose 6 or more months ago, or their first J&J dose 2 or more months ago. Boosters provide additional protection against waning immunity from vaccines or infection, especially against the Delta and Omicron variants.
- People 18+ may choose which vaccine they receive as a booster dose using the “mix and match” approach. People ages 16-17 can only get the Pfizer booster.
- Third Pfizer or Moderna vaccine doses are *recommended* for people with [immunocompromising conditions](#) as part of their primary series, followed by a booster 6 months later.
- You are considered fully vaccinated 2 or more weeks after two doses of Pfizer or Moderna vaccines or one dose of the J&J vaccine.
- Need proof of vaccination? Visit the [Digital COVID-19 Vaccine Record](#) site to request your digital vaccination card.



[CLICK FOR MORE DETAILS ON HOW TO GET VACCINES](#)

COVID-19 PREVENTION AND TESTING UPDATES

New studies on masking in schools during the delta outbreak show that mask mandates in Arizona schools [reduced outbreaks by 3.5 times](#) and nationwide [reduced pediatric cases](#) by about half.

The largest randomized trial on the effectiveness of face masks in real-world settings, including 340,000 adults living in 600 communities in Bangladesh, showed that wearing masks, particularly surgical masks, is effective in reducing the spread of COVID-19 in community settings. The researchers’ 4-part “NORM” intervention (including no-cost/free masks, info about masks, role modeling and mask reminders) increased community mask-wearing by 3x and prevented 1 in 3 infections among people ages 60+ who are at highest risk for severe disease. Villages that used surgical-type masks had a greater reduction in symptomatic infection.

“These results suggest that we could prevent unnecessary death and disease if we get people to wear high-performance masks, such as surgical masks, in schools, workplaces, shopping centers, places of worship and other indoor spaces,” said study co-author Laura Kwong, an assistant professor of environmental health sciences at Berkeley’s School of Public Health. “I would strongly recommend that people who spend time in indoor public spaces, including students, wear surgical masks or other high-performance masks such as N95s, KN95s or KF94s. Fit and comfort are especially important for children, so child-sized KF94s may be most appropriate for them.”

A prison delta variant outbreak in two housing units of a Texas prison showed very high transmission rates among unvaccinated people (93% secondary attack rate) and vaccinated people (70% secondary attack rate). 3 of the 4 hospitalized were unvaccinated, and one unvaccinated person died. This study demonstrates how even with high vaccination rates, masking, testing and isolation/quarantine remain critical in congregate and crowded settings.

A [study](#) of over 7,000 people in overnight youth camps during the delta outbreak showed that **multicomponent strategies** of high vaccination coverage (>93% among eligible people ages 12+), frequent screening and testing, masking, cohorts and other measures resulted in zero in-camp transmissions.

Get tested if you are exposed to COVID-19 or have symptoms! [Here](#) is California’s guidance on isolation for positive test results and quarantine for people who are exposed. A journalist has shared his [experience](#) with post-vaccination infection and what he wished he’d known.

[Reports](#) from the UK and this [US study](#) show these **top 5 symptoms** with delta infection:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Top 5 symptoms in unvaccinated people: • Headache • Sore throat • Runny nose • Fever • <i>Persistent cough</i> | <ul style="list-style-type: none"> • Top 5 symptoms in vaccinated people: “Feels like allergies or a bad cold.” • Headache • Runny nose • <i>Sneezing</i> • Sore throat • Loss of smell/taste |
|--|--|



[HOW TO GET A COVID TEST](#)

HARM REDUCTION RESOURCES

Our [COVID harm reduction infographics](#) include updated guidance! Find out more about [maximizing mask protection](#).

Click to download: [graphic in English](#) | [graphic in Spanish](#) | [PDF in English](#) | [PDF in Spanish](#).



COVID-19 harm reduction strategies: Use as many of these as you can!

Strategy	% reduction
1. Vaccination	75-95% vs. severe disease
2. Masking	50-96%
3. Max ventilation	80-90% outdoors/max vent.
4. Distancing	53-88% at least 3-6 feet
5. Eye protection	78%
6. Testing/isolation	33-53% with contact tracing
7. Hand hygiene	28-45%

Updated 8.2.21 * Data compiled by Sohyun S. Wong, MD
Icons by Good Ware, Freepik and Grip on Flaticon.com.
See [https://www.erozt.org](#) for updates and primary sources.

Our [summary of COVID prevention](#)

[research](#) is constantly updated with new studies.

COVID TREATMENT UPDATES

Pfizer submitted its application for FDA authorization on its COVID-19 antiviral medication Paxlovid on November 16. The antiviral is a combination of the HIV protease inhibitor ritonavir and the novel drug called PF-07321332. Pfizer's trials showed an 89% reduction in COVID-19 hospitalization or death compared to placebo when it was taken within 3 days of the onset of symptoms.

Both Pfizer and Merck have [announced](#) licensing deals with lower income countries to allow generic manufacturers to make inexpensive versions of their antiviral pills.

On October 1, Merck [announced](#) promising results from a randomized study of a **new antiviral medication** to treat mild-moderate COVID-19 in people at risk for severe outcomes. **Molnupiravir** reduced COVID hospitalizations or death by 50% in a trial involving 775 volunteers. Merck submitted its application for FDA authorization on October 11. The final data set include 1,433 people with milder infections randomized to molnupiravir or placebo showed a risk reduction of 30%. On November 30, the FDA's Antimicrobial Drugs Advisory Committee [voted 13 to 10](#) to recommend emergency authorization of molnupiravir.

On August 26, the CDC issued a warning around severe illness and toxic overdose from ivermectin, an anti-parasitic medication, including veterinary formulations not safe for human consumption, which is being mis-used for the prevention or treatment of COVID-19, for which there is insufficient evidence to support.

Monoclonal antibody treatment is available without cost for people with acute COVID-19 and risk factors for severe disease, including immunocompromising conditions such as advanced or untreated HIV. This treatment is given as an infusion and must be given as early as possible in the course of illness and within 7 days of symptom onset to be most effective. Post-exposure prophylaxis may also be available for some people at some locations. Currently Casirivimab + Imdevimab is recommended for efficacy against the delta variant.

In Alameda County, the treatment is available at [Total Infusion](#) in Eastmont Town Center in Oakland. Patients typically receive treatment within 3 days of the referral, and the appointment lasts 3 hours (1 hour for the infusion itself, 1 hour for post-infusion observation). The medication is paid for by DHHS. Total Infusion bills administration fees to insurers and not collecting fees from patients. Uninsured people can also get the treatment without cost. Referrals can be made by providers using [this online form](#).

[Click here to learn more on monoclonal antibody treatment for Alameda County residents](#), including flyers in multiple languages. [Click here for info for Contra Costa County residents](#).

Pills to treat COVID: Currently [three oral COVID-19 antiviral medications](#) are in late-stage clinical trials, which are intended to prevent or reduce the severity of disease. These oral medications include an antiviral from Merck & Co. and Ridgeback Biotherapeutics called molnupiravir, a candidate from Pfizer, known as PF-07321332, and AT-527, an antiviral produced by Roche and Atea Pharmaceuticals. COVID vaccinations remain the best way to prevent severe disease, and these oral medications are intended to be another tool in our toolbox to reduce the mortality and morbidity from COVID-19.

PANDEMIC TRENDS AND EPIDEMIOLOGICAL DATA

COVID-19 daily cases, hospitalizations and deaths in the Bay Area [increased by 64%](#) from early to mid-December. Deaths are still low

thanks to people [getting vaccinated](#) and [wearing masks](#).

California case rates [increased by 44%](#) from early to mid-December. The state is in the [CDC red "high" transmission category](#) as of December 15, like much of the rest of the US. [Nationwide](#), cases increased 40% from early to mid-December. 75% of people in the US ages 5+ have received at least one vaccine dose as of December 15. [Worldwide](#), cases are [increasing](#) in Southern Africa, Canada, South America, Japan, Korea, Laos, Australia and Western Europe.

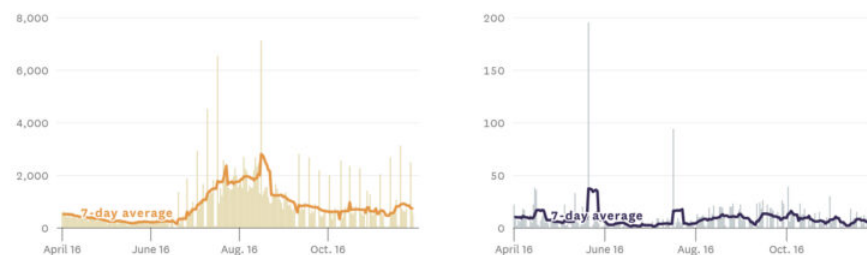
We are not safe until everyone is safe. The emergence and rapid spread of the Omicron variant demonstrates the importance of vaccine access worldwide and its impact on us.

The estimated transmission rates in California is [1.07 across California](#) as of December 13. We will need to step up with masking, vaccinating, boosting, testing, ventilating and distancing to get transmission rates lower and stem the winter surge.

As of December 15:

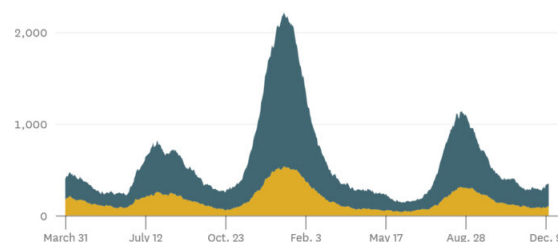
- **[Alameda County](#):**
 - [1.05](#) transmission rate
 - [8.5 cases](#) per 100,000 people
 - [82%](#) of all residents are partially vaccinated (have received at least one vaccine dose) and [76%](#) are fully vaccinated
- **[Contra Costa County](#):**
 - [0.79](#) transmission rate
 - [9.6 cases](#) per 100,000 people
 - [82%](#) of all residents are partially vaccinated and [77%](#) are fully vaccinated
- **[Solano County](#):**
 - [0.83](#) transmission rate
 - [10 cases](#) per 100,000 people
 - [70%](#) of all residents are partially vaccinated and [61%](#) are fully vaccinated

New reported **cases** and **deaths** in the Bay Area, by day



[SF Chronicle, 12/15/21](#): COVID-19 daily cases and deaths in the Bay Area.

Confirmed **ICU** and **non-ICU** COVID-19 patients in Bay Area hospitals



Source: California Department of Public Health

[SF Chronicle, 12/15/21](#): COVID-19 daily ICU and non-ICU hospitalizations in the Bay Area.

VARIANTS

The WHO uses a [naming system](#) for coronavirus variants using the Greek alphabet. [Variants of concern or interest](#) include:

- Alpha (B.1.1.7): ~50% more infectious than original strain, might cause more severe disease.
- Beta (B.1.351): ~50% more infectious, vaccines/monoclonal antibodies less effective against it.
- Gamma (P.1): vaccines/monoclonal antibodies less effective against it.
- Delta (B.1.617): 200-400% more infectious, might cause more severe disease, see below for more.
- Lambda (C.37): [data](#) suggest it's more infectious and vaccines/monoclonal antibodies less effective against it.
- Mu (B.1.621): [data](#) suggest vaccines/monoclonal antibodies less effective against it.
- Omicron (B.1.1.529): [very early data](#) suggest it's more infectious than delta and may cause more reinfections; studies are evaluating possible immune evasion.

The Omicron variant

The [Omicron variant](#), which has a large number of concerning mutations, was designated as a variant of concern by the WHO on November 26. Scientists in Botswana and South Africa have identified over 30 mutations in the spike protein, compared to 9 mutations in the Delta variant, raising concerns about transmissibility, immune evasion and disease severity. Thanks to our colleagues in South Africa and Botswana, we have very helpful early data about Omicron. South Africa's world-class genomic surveillance system as well as their timely and transparent communication is helping us understand Omicron's dynamics. Scientists around the world are rapidly studying whether Omicron is more transmissible, evades immunity, and/or causes more severe illness.

[The first US case of the Omicron variant](#) was identified in San Francisco on December 1. Since then, more Omicron cases were found across the US, including in people [without travel history](#). The Omicron variant, with its high number of concerning mutations, was detected in a San Francisco resident who traveled from South Africa on Wednesday, November 22, developed symptoms on Thursday, November 25, and tested positive for COVID-19 on Monday, November 27. They were vaccinated with 2 doses of the Moderna vaccine and were not eligible for a booster yet. They have mild symptoms that are improving. Genomic sequencing was conducted at UCSF and confirmed by the CDC. SFPDPH reports that close contacts have been reached and have tested negative so far.

At least [5 cases of the Omicron variant](#) were detected in Alameda County on Friday, December 3, in an outbreak including 12 East Bay residents linked to a wedding in Wisconsin the weekend of November 27. The 5 people with the Omicron variant are vaccinated and so far are reported to have only mild symptoms. One of the 5 people had traveled from Nigeria a few days prior to the wedding.

The [CDC identified](#) and is following 43 cases of people with the Omicron variant during the first week of December; 13 cases of these cases were in [California](#). As of December 10, one person has been hospitalized for 2 days and there are no deaths. 33% had a history of international travel, 79% were vaccinated, 33% were boosted (but 35% of people boosted had gotten their booster dose <14 days prior to exposure), and 14% had evidence of prior infection. The most commonly reported symptoms were cough, fatigue, and congestion or runny nose. Most exposures were associated with international and domestic travel, large public events, and household transmission.

Extremely rapid spread

As of December 15, data from South Africa and the [UK](#) show that Omicron spreads about 3 times faster than Delta in populations with high levels of immunity (either from vaccines or prior infection), with the number of cases doubling every 2-3 days. Based on the high number of mutations on the Omicron variant, this is likely a combination of immune evasion and high transmissibility.

[Early data from Southern Africa](#) suggests that Omicron is more transmissible than Delta, given that Omicron has quickly replaced Delta and is now 75% of cases sequenced in South Africa.

On Friday, December 3, the South African COVID-19 Modeling Consortium released non-peer-reviewed [data](#) showing that Omicron is spreading about twice as fast as Delta, with an [Rt \(transmission rate\) 2.4x higher than that of Delta](#) in a community with high levels of prior infection.

Immune evasion

Scientists in the UK have [found](#) that while the Omicron variant is able to evade waning immunity from prior infection or 2-doses of the mRNA vaccines (35% protection against symptomatic infection 4 months out from the second dose), boosters provide significant increases in protection (to 80% against symptomatic infection). 2-doses of the mRNA vaccines are still expected to retain some efficacy against severe illness and death, but the data is not clear about disease severity from Omicron yet.

South African officials report [more reinfections](#) with Omicron in people previously infected, suggesting some evasion to infection-induced immunity. [International lab scientists also report](#) partial evasion to vaccine-induced antibodies compared to earlier variants. Thus far, vaccines are still expected to retain some efficacy against severe illness and death. As of December 1, no deaths have been reported yet from the Omicron variant.

Disease severity

Does Omicron cause more severe disease? We don't know yet; it can take weeks to months longer to see how disease severity plays out. The earliest cases were reported to be mostly mild, but as of mid-December, hospitalizations are rapidly increasing in areas with Omicron outbreaks.

The Delta variant

The Delta variant is >99% of infections in the US and rapidly out-competed all other variants around the world by mid-2020. The Omicron variant appears to be out-competing Delta in South Africa so far. Vaccines remain highly effective against severe disease caused by the delta variant, though less effective against milder infections.

The delta variant is 2-4 times as infectious as the original strain, has a shorter incubation period of 3 days, and may cause more severe illness and death. It is the fastest spreading respiratory virus in recorded history. People with delta infections have much higher viral loads compared to infections with previous strains. Being vaccinated reduces the risk of infection by ~3-5x, reduces the risk of serious illness and death from delta infection by ~10-29x and reduces the time of viral shedding by ~2x. Universal vaccination combined with masking and distancing is necessary to reduce spread.



The delta variant very rapidly became the [dominant strain in the US](#) in the summer of 2021, quickly overtaking other variants. With its high transmissibility, the delta variant is still outrunning all the other variants, even the ones that may be more vaccine/immune evasive such as beta, gamma or mu. The delta variant was [99.9%](#) of the COVID cases sequenced in the US as of November 13, up from around 50% at the beginning of July. In California, the delta variant was [98.1%](#) of variants sequenced as of October 21, up from 53% on June 21 and from 6% on May 21.

Delta variant [data](#) show that:

- The delta variant is far more transmissible than the original strain, the common cold, the seasonal and 1918 flu, Ebola and smallpox. A person infected with the original strain would on average infect 2-3 other people, but a person infected with the delta variant will on average infect 5-8 other people. ([CDC](#))
- Delta infections have shorter incubation periods (~3 days), higher viral loads and longer duration of shedding. ([Mlcochova](#), [Ong](#))
- CDC data from a large July 2021 outbreak in a highly vaccinated county in Massachusetts as well as data from the delta outbreak in Los Angeles County shows that viral loads of delta infections in vaccinated people were similar to viral loads among unvaccinated people, which suggests that transmission risk during early infection is similar from vaccinated people and unvaccinated people infected with the delta variant. ([Brown](#), [CDC](#), [Griffin](#))
- Delta infections have been found in Canada, Singapore and Scotland to have higher odds of hospitalizations, ICU admission and death, especially for unvaccinated people. ([Fisman](#), [Ong](#), [Sheikh](#))
- Vaccines still provide 10-29x reduction in hospitalization and death from delta infection (93-100% efficacy with 2-doses of the Pfizer vaccine) and 3-5x reduction in mild or asymptomatic delta infection (64-79% against any delta infection with 2-doses of Pfizer). ([Nasreen](#), [Israel's Ministry of Health](#), [Lopez Bernal](#), [Stowe](#), [Public Health England](#), [Griffin](#))

Data suggests that vaccinated people with delta infections can likely transmit the virus to others, though for shorter periods of time. It's still unclear how much and how well vaccinated people transmit in real-life settings. A pre-print [study](#) posted on July 31 from Singapore also found that vaccinated people who get delta infection have similar initial viral loads as unvaccinated people, but importantly also showed that viral loads decreased much more rapidly (PCR cycle times >30 in 9 days in vaccinated people rather than 18 days in unvaccinated people). This study also found that being vaccinated reduced the odds of requiring supplemental oxygen by 93%. ([Chia](#))

In summary, this data shows that the delta variant is more highly contagious, may cause more severe disease, and suggests that vaccinated people who get infected can transmit the virus, though likely for shorter periods of time. Vaccines remain highly effective at preventing severe disease, but a bit less effective at preventing mild or asymptomatic infection with the delta variant.

Universal masking and distancing are crucial for slowing the spread and rise of worse variants, given current inadequate vaccine coverage. We need to continue to outreach to people to increase vaccination rates and distribute more vaccines to developing countries to reduce serious illness and death. We will also likely need to learn to live with the virus over the long run and aim to reduce serious illness and death through vaccinations.

NEW HIV/STD STUDIES

Current lists of open HIV and hepatitis studies at UCSF are posted [here](#).

The CDC released its updated [PrEP Clinical Practice Guideline](#) on December 10, 2021. The update includes guidance for recommended initial and follow-up STD screening, revised HIV testing strategies, and recommended primary care practices for patients being prescribed oral or injectable PrEP. The Clinical Providers Supplement includes revised checklists, patient information sheets, and billing codes for both oral and injectable PrEP and includes guidance for counseling patients about adherent PrEP use.

Key revisions to the guideline include (from Demetre C. Daskalakis, MD, MPH, Director of the CDC Division of HIV Prevention):

- A new recommendation for providers to inform all sexually active adults and adolescents about PrEP. This is intended to increase awareness of PrEP more broadly.
- A recommendation that, in addition to taking a very brief history to identify persons with indications for PrEP, providers prescribe PrEP to anyone who requests it, even if they do not report specific HIV risk behaviors. This recommendation is intended to make PrEP available to people who may be apprehensive about sharing potentially stigmatized HIV risk behaviors with their provider.
- A recommendation for F/TAF (Descovy) as an FDA-approved PrEP option for sexually active men and transgender women at risk of getting HIV, based on recent data showing its effectiveness for these populations.
- A new section on prescribing bimonthly intramuscular injections of cabotegravir (CAB) for sexually active men and women who could benefit from PrEP, pending FDA data review and potential regulatory action.

An international collaborative group has released the first [Global Cure Strategy](#), which summarizes the priorities and recommendations for the next 5 years. The collaborative group included community members, scientific and industry experts. Key goals include understanding and measuring HIV reservoirs, identifying mechanisms of virus control, targeting the HIV provirus, developing ways to support immune control, cell and gene therapy, pediatric remission and cure, and the social, behavioral and ethical aspects of cure.

A [case report](#) has been published of a woman in Argentina who has undetectable HIV viral load after more than 8 years off ART, even with ultra-sensitive testing of multiple organs and reservoirs. It appears that **her immune system may have cleared the HIV-1 virus**, an extremely rare phenomenon.

The **2021 virtual Ryan White HIV Clinical Conference** was held October 3-6, 2021. [Please click here](#) to see our resource page for key takeaways and links to slides from the conference.



Another [study](#) shows worse COVID-19 outcomes for people living with HIV. People living with HIV in Spain with detectable HIV viral loads, chronic comorbidities, age over 75, and people of non-Spanish origin (e.g. migrants) had increased rates of severe outcomes from COVID-19. Earlier studies showed similar patterns and are summarized [here](#).

A resurgence in STD cases: New [CDC data](#) show that during March-April 2020, reported STD cases dramatically decreased compared to the same time in 2019. However, a resurgence in gonorrhea and syphilis cases later in the year suggest overall STDs may have increased during 2020.

The CDC just released their updated **2021 Sexually Transmitted Infections Treatment Guidelines**. Click on this [link](#) to access the full guidelines and visit their [provider resource page](#) for copies of a summary wall chart and pocket guide.

A [study of PrEP services at Kaiser Northern California](#) from 2012 to 2019 showed that among those linked to PrEP care, people less likely to receive PrEP prescriptions included young adults ages 18-25, people with substance use disorders, people living in lower income neighborhoods, women, and among African American and Latinx people.

Cabotegravir for HIV Prevention in Cisgender Men and Transgender Women: [A study](#) of 4,566 people including 570 (12%) transgender women, participants were randomized to receive TDF-FTC vs. CAB LA for PrEP. The results showed that CAB-LA was superior to daily oral TDF-FTC in preventing HIV infection. The study authors write that “strategies are needed to prevent INSTI resistance in cases of CAB-LA PrEP failure.”

The **San Francisco 2017-2018 HIV Medical Monitoring Project (MMP) Report** was released in July. Interview and medical record data from 361 participants were collected between June 2017 and May 2019 and features new data on long-term survivors and resiliency.

The CDC [published data](#) on August 5, 2021 from the 2019-2020 cycle of the **HIV National Medical Monitoring Project** (MMP). The MMP is an annual, cross-sectional survey that reports nationally representative estimates of behavioral and clinical characteristics of adults with diagnosed HIV infection (PLWH) in the United States.

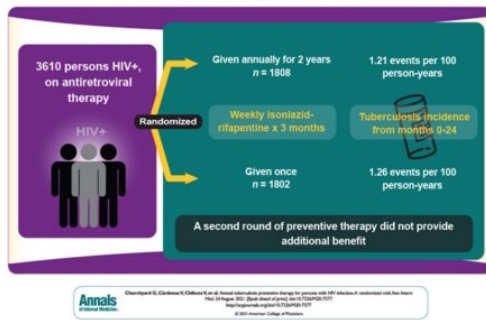
[Findings in this latest national MMP report](#) include:

- 79% of PLWH surveyed were retained in care
- 61% were virally suppressed
- 16% had symptoms of depression
- 21% had recent symptoms of anxiety
- 9% experienced homelessness
- The median HIV-related stigma score was 30.7 (0= lowest stigma and 100= highest stigma)

A separate MMP report on PLWH in the US showed that 25% had experienced discrimination in health care settings. People ages 18-29, transgender people, LGBTQ+ people and those who were experiencing homelessness or incarceration were significantly more likely to experience discrimination, and were more likely to have missed visits, not take ART or miss ART doses.

The authors conclude, “Interventions that address the sociocultural and structural factors associated with discrimination in all health care settings are needed to improve health outcomes among PWH and end the HIV epidemic in the United States.”

Is an annual or single round of weekly isoniazid and rifapentine for 3 months more effective in preventing tuberculosis?



A randomized trial in South Africa, Ethiopia and Mozambique found that **for PLWH and latent TB treatment, “treatment completion was higher with rifapentine-isoniazid for 3 months** compared with isoniazid for 6 months. In settings with high tuberculosis transmission, a second round of preventive therapy did not provide additional benefit to persons receiving antiretroviral therapy.”

A systematic review of **Motherhood and decision-making among women living with HIV** in developed countries found that women living with HIV “encounter reproductive decision-making with knowledge deficits and limited social support... Evidence-based clinical practice guidelines need to be tailored for the family planning and sexual health needs of women living with HIV.”

PEOPLE LIVING WITH HIV AND COVID-19 VACCINES

All people living with HIV (PLWH) are highly recommended to get the COVID-19 vaccine, all PLWH ages 16+ are recommended to get boosters, and people with advanced or untreated HIV are recommended to get third full doses of mRNA vaccines. The authorized vaccines are safe for people living with HIV regardless of CD4 count.

New data has found that PLWH are more likely to get post-vaccine infections, even at higher CD4 counts and undetectable viral loads, so consider third doses, boosters and mRNA vaccines for all PLWH.

A WHO study of over 15,000 global cases of COVID-19 in people living with HIV (PLWH) presented at IAS in July 2021 found that **unvaccinated PLWH were 13% more likely to be hospitalized and 30% more likely to die** after being hospitalized, independent of age, gender, comorbidities. Among PLWH, having diabetes, high blood pressure, being male or over 75 years old was each associated with an increased risk of death. CD4, viral load and ART status was not available in this cohort. Most people in this cohort were from the African region, and of those, most were from South Africa.

A US study of 8,270 PLWH with COVID-19 found that **unvaccinated PLWH in the US who went to the ED with COVID symptoms had an increased risk of hospitalization requiring ventilation by 43% and increased risk of death by 20%**, independent of sociodemographic factors and comorbidities. Outcomes were 4-7x worse for people with CD4 <350 and with higher viral loads. Another study (under review) of the ~13,000 PLWH in the CNICs cohort showed that COVID-19 severity was worse with CD4 <350 and history of CD4 <200.

Earlier data also showed that people living with HIV and CD4 counts less than 200 have greater risk for hospitalizations and death from COVID-19.

UK data shows that getting 2 doses of **COVID-19 vaccines are highly effective for people with health conditions, including HIV**. Protection after one dose in a 2-dose regimen was not as protective compared to people without health conditions. The July 2021 outbreak in Provincetown, Massachusetts included 30 PLWH who were fully vaccinated, all virally suppressed, none were hospitalized. Two small lab-based studies showed that antibody, T- and B-cell responses were similar between PLWH and people without HIV, but most study participants had CD4>500 and suppressed viral loads.

The COVID pandemic has also disrupted care, attention and funding for HIV and share common disparities among communities of color, requiring underlying structural change.

These studies underscore the importance of prioritizing PLWH for outreach and to complete all vaccination doses.

The **CDC recommends a third mRNA vaccine dose for people with “Advanced or untreated HIV infection,”** which was authorized by the FDA on August 12, 2021. This is because people with advanced immunocompromise from HIV don’t respond as well to the first 2 doses as other people.

- Published guidance: the [CDC](#), [CDPH](#) and [HIVMA \(for PLWH\)](#).
- It’s best to stay with the same mRNA vaccine (Pfizer or Moderna) for the third dose simply because we have more data on that, but if the same one is not readily available, it’s OK to give a third dose with the other mRNA vaccine.
- The CDC has clarified that “advanced HIV” means:
 - CD4 cell counts less than 200/mm³
 - A history of an AIDS-defining illness without immune reconstitution
 - Clinical manifestations of symptomatic HIV infection
- People who got the J&J vaccine have not gotten authorization for additional doses yet, but hopefully will on Oct 15.

What about booster doses for people living with HIV?

All people living with HIV ages 16+ are [recommended](#) to get a booster with a Pfizer, Moderna or J&J dose, including if they received a third mRNA dose.

Based on our [best available data](#), we know that people living with HIV with CD4 <350 and higher viral loads are at higher risk for hospitalization and death, so we may want to prioritize outreach and third doses or boosters for this group, though please keep outreaching to people living HIV and others not yet vaccinated!

What the data shows us when we determine whom to prioritize outreach for third doses and boosters:

- **Untreated HIV**
 - Highest priority: Any person living with HIV not on ART. (Please offer ART again too!)
 - People with viral loads >1,000. Detectable viral loads >50 who were also associated with higher hospitalization rates even when CD4 was >500 (VL of 50-1,000 had 1.8x increased odds and VL >1,000 had 3.5x increased odds).
- **People on treatment with greater risk for severe COVID-19**
 - Highest priority: CD4 counts of <200
 - People with CD4 <350 were associated with 7.6x increased odds of death, 5.4x increased odds of requiring ventilation and 4.4x increased odds of hospitalization.
 - CD4 of 350-500 had 2.9x increased odds of hospitalization compared to CD4 >500.
 - Highest priority: People living with HIV *and* other immunocompromising conditions, especially people with transplants, getting cancer treatment or on high dose steroids or other immunosuppressive drugs.
 - People with a history of AIDS (CD4<200 or opportunistic illness) and long-term survivors (especially those over 75, have diabetes, hypertension or other cardiovascular disease).

Should we check for immunity after vaccination? The FDA does not currently recommend checking for SARS-Cov2 antibodies after COVID-19 vaccination since current antibody tests have not been evaluated to assess level of protection from vaccination. If antibodies are checked anyway, be sure the proper type is ordered:

- The [anti-spike IgG antibody](#) checks for circulating antibodies generated by vaccination *or* past infection.
- The [anti-nucleocapsid IgG antibody](#) checks for past infection only.

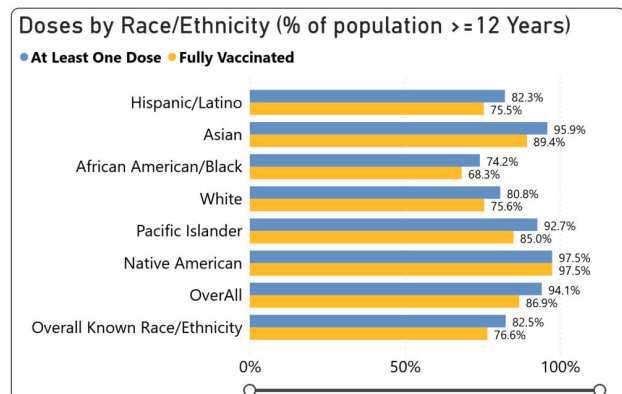
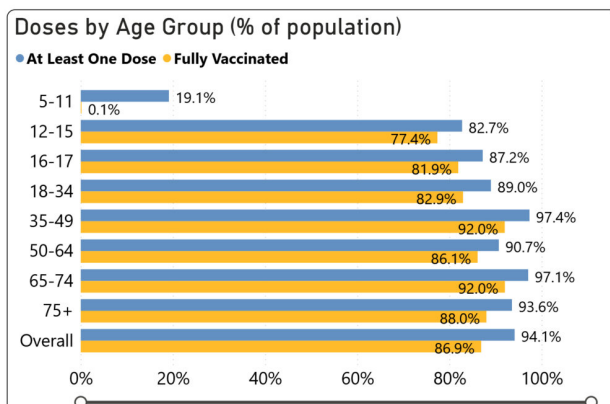
[Click here](#) to download recommendations for PLWH during the summer 2021 delta surge from Getting to Zero San Francisco.

Resources for PLWH and COVID-19 vaccines: [UNAIDS infosheet on COVID-19 vaccines and HIV](#), [Clinical FAQs with Dr. Paul Sax at Harvard and The New England Journal of Medicine](#), [Clinical FAQs for people living with HIV from HIVMA \(PDF\)](#), [Guidance for talking with patients and FAQs for PLWH from Alameda Health Systems \(PDF\)](#).

MORE VACCINE RESOURCES

COVID DISPARITIES STUDIES AND DATA

Alameda County vaccination rates by age and race/ethnicity as of 11/17/21 show that Alameda County resident under age 35 are less likely to be vaccinated compared to older residents. Black/African American are less likely than White and Latinx residents to have been vaccinated. Asian, Pacific Islander and Native American residents have the highest vaccination rates among the race/ethnicity groups.



The [November KFF COVID-19 Vaccine Monitor](#) report found that while COVID-19 vaccination rates have increased over time, Republicans make up an increasingly disproportionate share of those who remain unvaccinated. Political partisanship was found to be a stronger predictor of whether someone is vaccinated than demographic factors such as age, race, level of education, or insurance status.

The [September 2021 KFF Vaccine Monitor](#) report found that most people in the US who got their first doses over the summer were motivated by the delta variant surge in cases, hospitalizations and deaths... followed by full FDA approval of the Pfizer vaccine and vaccine mandates. The largest increases were among younger Latinx adults, and now similar vaccination rates are seen across racial and ethnic groups (71% of White adults, 70% of Black adults, and 73% of Latinx adults). Disparities in vaccine uptake are mostly by partisanship, education level, age, and health insurance status. Among people who are unvaccinated, boosters are seen as a sign that the vaccines are not working, so we will need to explain the nuances of boosters and reassure people that the primary series still is highly effective against serious disease.

New vaccine equity guidance shared by the CDC HIV prevention division: [Click to download](#)

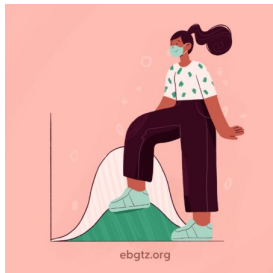
- [COVID-19 Vaccine Equity: Best Practices for Community and Faith-based Organizations](#)
- [A Guide for Community Partners](#) includes strategies, interventions, and ready-made messages and materials.
- [Toolkit for Correctional and Detention Facilities](#)

The SF Community Clinic Consortium developed [this HIV clinic reopening guidance document](#) which clinic teams might find helpful around specific considerations for PLWH.

Free COVID testing sites: [Click here for Alameda County](#), [Contra Costa County](#) and [Solano County testing sites](#).

HIV services during COVID-19: [Click here for Contra Costa HIV services](#) and [see our online directory for Alameda County HIV services](#).

If your organization is in Alameda County and needs COVID-related supplies or staffing, please go to the [Emergency Medical Services website](#) to [request PPE and testing supplies](#) and [request staffing](#).



Please follow and share our [Instagram](#), [Facebook](#) and [Twitter](#) accounts.

A note about this webpage: COVID and HIV practice-changing updates will be posted on this page, with comprehensive updates posted monthly, usually on third Wednesdays. New studies will be continuously added to our summary of [COVID-19 harm reduction strategies](#). The emailed [HIV+COVID-19 update newsletters](#) are sent monthly on third Wednesdays.

Official Alameda County COVID-19 updates are accessible on the [county website](#). You can sign up to receive the Alameda County weekly COVID-19 newsletter by emailing Jamie.Yee@acgov.org.

[CLICK HERE FOR ALAMEDA COUNTY WEEKLY NEWSLETTERS](#)

TOP LINKS:

- **COVID Vaccines:** [Alameda County](#), [Contra Costa County](#), [Solano County](#), [California State](#), [CA vaccine progress tracker](#)
- **COVID Vaccine Myths and Facts and FAQs** in English, Español, 中文, and Arabic and [Questions & Answers](#)
- **COVID vaccine safety updates** (CDC)
- **COVID testing:** locations in the [Bay Area](#); [Alameda County](#), [Contra Costa County](#), [Solano County](#); [CDC guidance on home testing](#).
- **Phone numbers/Centro de llamadas:** [Contra Costa County](#)- (844) 729-8410, [Solano County](#)- 707-784-8988, [Alameda County vaccine line](#) in English, Spanish, Mandarin for those who cannot navigate the internet: 510-208-4VAX or 510-208-4829
- **COVID supports** (food, housing, stipends, etc.): [Alameda County resources and ARCH isolation stipends](#), [Contra Costa County](#), [Solano County](#)
- **Public Health Department updates:** [Alameda County](#), [Contra Costa County](#), [Solano County](#), [California State](#)
- **COVID data:** [Alameda County](#), [Contra Costa County](#), [Solano County](#), [California State](#), [California \(SF Chronicle\)](#), [US \(CDC\)](#), [US by race \(CDC\)](#), [National/Global \(JHU\)](#). **Variants:** [in the US \(CDC\)](#) and [in California](#).
- **COVID risk calculator**
- **Maximizing mask protection:** [CDC guidance](#), [EBGTZ mask videos](#), [guidance and resources](#)
- **COVID PPE, staffing or testing supplies:** [Alameda County EMS- request PPE testing kits and supplies](#).
- **HIV:** [FAQs for people living with HIV \(PLWH\)](#) and [Preguntas Frecuentes in Spanish](#), [Guidance for PLWH \(CDC\)](#), [Guidance for HIV providers \(HIVMA\)](#), [Vaccines for PLWH \(HIVMA\)](#), [UNAIDS infosheet on COVID-19 vaccines and HIV](#)
- **HIV services during COVID-19:** [Click here for Contra Costa HIV services](#), [Alameda County HIV services](#), [SF Community Clinic HIV clinic reopening guidance](#)
- **Key Communities:** [Harm Reduction Coalition](#), [Immigrants Rising](#), [Protecting Immigrant Families: Public Charge](#), [Healthcare for the](#)

COVID-19 TESTING

WHICH TEST? (BRIEF OVERVIEW)

- **If you have symptoms, it's best to get a PCR test to diagnose or rule-out COVID-19**, including if you are vaccinated and/or if you have a negative rapid antigen test. A PCR test will pick up low levels of virus. Rapid antigen tests can also be done to pick up high levels of virus. A positive rapid antigen test accurately diagnoses COVID-19 infection but a negative rapid antigen result does not rule it out, so it's important to wear masks and take precautions while waiting for the PCR test result.
- **If you are screening for infectiousness, a rapid antigen test can quickly identify infectiousness with high viral loads**, regardless of vaccination status, including in people who haven't developed symptoms yet or who don't develop symptoms. Rapid antigen tests are useful for screening for infectiousness 3-5 days after an exposure and for screening every 3-7 days.

WHERE TO GET FREE COVID-19 TESTS IN THE EAST BAY

COVID testing is supposed to be available without cost to you. You don't need to have insurance or immigration papers. If you're worried about getting billed or don't have insurance or papers, we recommend getting tested at one of the county sites below. PCR tests using nose swab or using saliva (no swabs!) and rapid antigen tests are available.

- [SF Chronicle's map of Bay Area COVID testing sites](#) that don't require a doctor's referral.
- [Alameda County](#) free COVID testing sites: This [webpage](#) includes community-based sites offering free testing for anyone with symptoms, including people without health insurance.
- [Contra Costa County](#) free drive-through or walk-in COVID testing
- [Solano County](#) free testing sites
- **Home rapid antigen home testing is also available:** [click to read more](#)
- Please check the listing for updates and call the testing site before you leave to make sure they are open for testing, you are eligible, and register if needed.
- If you don't have a provider and have COVID symptoms: In Alameda County, call Alameda Health System 510-437-8500 for a phone screen and guidance. In Contra Costa County, call 844-729-8410. In Solano County, the county COVID warmline is 707-784-8988.
- If you're having difficulty breathing and unstable, please go to your nearest emergency room.



COVID-19 testing at the *Unidos en Salud* site in the Mission, SF.
(Creative Commons, Konstantin 'KVentz' Ventslavovich, 2020)



Community pop-up testing and vaccination at Serenity House in Oakland, July 2021.

[CLICK HERE FOR MORE DETAILS ABOUT HOME TESTING AND TESTING SCIENCE](#)

COMMUNITY OPPORTUNITIES: JOBS, INTERNSHIPS, TRAININGS, EVENTS, RESOURCES

Updated December 1st, 2021

Job Opportunities:

- **Refugee & Immigrant Transitions** assists refugee and immigrant individuals and families through education, family engagement and community leadership programs. They are hiring for a Wellness & Social Services Manager. Learn more about the position [here](#).
- **The Ecology Center** works to inspire and build a sustainable, healthy, and just future for the East Bay, California, and beyond. They are hiring for a Farmers' Market Access and Equity Coordinator. Learn more about the position [here](#).

- **Contra Costa Health Services** is hiring for a Public Health Program Specialist for CommunityConnect – a holistic case management program. Learn more about the position [here](#).
- **Prevention Institute** is a national nonprofit that works to build prevention and health equity into key policies and actions at the federal, state, local, and organizational level. They are hiring for a Communications Director and a Finance Director. Learn more about the opportunities [here](#).
- **Black Cultural Zone** is looking for a Community Builder- Business & Resident Services and a Business Development Counselor. Learn more about the positions [here](#).

Fellowships/Internships:

SHARP (Summer HIV/AIDS Research Program) is an innovative 12-week paid summer mentored internship and learning experience designed to inspire students from underrepresented communities to pursue further studies and careers in public health-oriented clinical, socio-behavioral, and community-focused research. The application for Summer 2022 is now open. Learn more about the program [here](#).

Creating Responsible Intelligent Black Brothers (C.R.I.B.B.) Fellowship is a yearlong leadership development course for Black gay men who are ages 19 to 30 and who are actively involved in HIV/AIDS, or other health disparities or social justice issues that affect black gay men. The application deadline is Friday, December 10th. Learn more about the program [here](#).



Join Our 2022 summer cohort!
APPLICATION DEADLINE: January 17, 2022

SHARP is an innovative summer mentored research internship and learning experience designed to inspire students from underrepresented communities to pursue further studies and careers in public health-oriented clinical and socio-behavioral HIV research that advance racial equity. [Apply here](#)

Program Highlights

- Hands-on experience conducting a research project matched to student interests
- One-on-one mentoring from experienced researchers
- Exposure to community engaged research and public health career options
- Networking & social events
- Pragging workshops and key experts in HIV/AIDS, substance use, mental health and racial equity

Eligibility

- Enrolled in an undergraduate program or community college OR be a recent graduate (less than two years since graduation)
- Legally eligible to work in the U.S.

Program Details

- Paid internship from June 6th-August 31st, 2022
- Based at the San Francisco Department of Public Health and University of California, San Francisco (UCSF)
- Training and travel stipends for eligible scholars

UCSF Center for AIDS Prevention Studies
 Center for Community & Prevention Science
 Center for HIV Research & Education

Find out more & apply at
<https://sharpiinternship.org/>

SHARP is funded by the National Institute on Drug Abuse



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Oakland East Bay Alumnae Chapter of Delta Sigma Theta Sorority, Inc.
 Presents

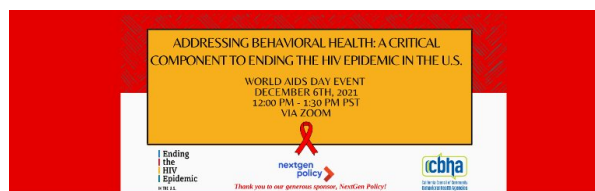
**BUILDING OUR HEALTH EQUITY:
 ENDING HIV IN THE BLACK
 COMMUNITY**

SUNDAY, DECEMBER 12, 2021 1:00 PM - 5:30 PM

Register Now!

QR Code

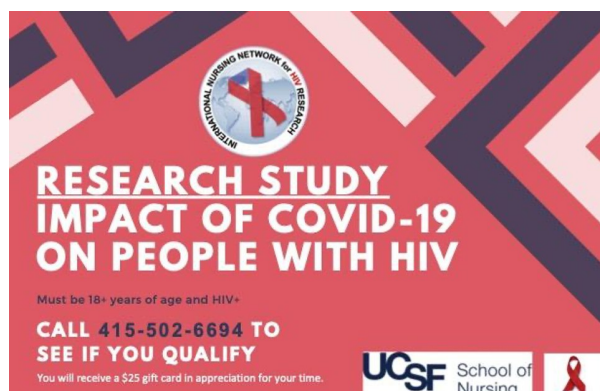
Logos: AIDS RAV, Delta Sigma Theta, CUEAD, RSSC



ADDRESSING BEHAVIORAL HEALTH: A CRITICAL COMPONENT TO ENDING THE HIV EPIDEMIC IN THE U.S.

**WORLD AIDS DAY EVENT
 DECEMBER 6TH, 2021
 12:00 PM - 1:30 PM PST
 VIA ZOOM**

Logos: Ending the HIV Epidemic, NextGen Policy, CBHA



**RESEARCH STUDY
 IMPACT OF COVID-19
 ON PEOPLE WITH HIV**

Must be 18+ years of age and HIV+

**CALL 415-502-6694 TO
 SEE IF YOU QUALIFY**

UCSF School of Nursing

Funding Opportunities:

Equality California is offering [Nosotros VIHviendo](#), a program that will be providing annual mini-grants to Latinx gay, bisexual and transgender men in California and Nevada to develop (or continue) their own, self-directed community program, art project or HIV-support group. More details about the program can be found [here](#).

Events:

Toward a History of Black AIDS Activism: Join historians Dan Royles and Antoine Johnson for a conversation about the long—and

little told—history of responses to HIV/AIDS in African American communities. **Monday, December 6th, 3-4pm.** Learn more and register [here](#).

Celebrate the 2021 World AIDS Day theme, “**Ending the HIV Epidemic: Equitable Access, Everyone’s Voice**”, by joining a virtual discussion on “Addressing Behavioral Health: A Critical Component to Ending the HIV Epidemic”. **Monday, December 6, 12-1:30PM.** Learn more and register [here](#).

Join **Alameda CareConnect** for a workshop on **The Empathy Effect**. The workshop is designed to improve personal self-awareness, communication skills, and interpersonal relationships with clients and team members. Part 1: **Wednesday, Dec 8th, 10am-12:30pm & part 2: Wednesday, December 15th, 10am-12:30pm.** Learn more and register [here](#).

Resources for your clients

The Oakland Restorative Loan Fund is a special program of Pacific Community Ventures that is aimed at helping combat gentrification and displacement, and support business owners as state and federal grant programs begin to end. Loans and microloans from \$10,000 to \$100,000 are available. Learn more about the program [here](#).

The **East Bay Relief Fund for Individuals in the Arts** is a pooled fund led by Kenneth Rainin Foundation with support from the Walter & Elise Haas Fund. The Fund makes available \$337,500 to help the region’s artists, teaching artists, culture bearers, and nonprofit arts workers who comprise the various and diverse cultural communities of Alameda and Contra Costa Counties. Applicants can apply for up to \$2,000. Application closes on Wednesday, December 8th. Learn more and apply [here](#)

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