



# COUNTY OF YOLO

Health and Human Services Agency

*Karen Larsen, LMFT*  
Director

Aimee Sisson, MD, MPH  
Public Health Officer

MAILING ADDRESS  
137 N. Cottonwood Street • Woodland, CA 95695  
www.yolocounty.org

## Health Advisory

Date: May 4, 2021

To: Yolo County Healthcare Providers

From: Dr. Aimee Sisson, Health Officer

Subject: Fully Vaccinated Persons Who Test Positive for COVID-19

**SUMMARY:** Cases of COVID-19 have been identified in individuals fully vaccinated for COVID-19. Clinicians are advised to collect two specimens when conducting COVID testing in symptomatic persons fully vaccinated for COVID-19 to ensure a specimen will be available for whole genome sequencing.

**BACKGROUND:** Authorized vaccines against COVID-19 are highly effective against symptomatic illness, severe disease, and death. However, even with high effectiveness, we would expect to see cases of COVID-19 occurring in fully vaccinated persons. Indeed, such “vaccine breakthrough” cases have occurred, although they remain uncommon. To date, out of more than 95 million people fully vaccinated in the United States, there have been 9,245 vaccine breakthrough infections reported to CDC. A vaccine breakthrough case is defined as a person who has SARS-CoV-2 RNA or antigen detected on a respiratory specimen collected 14 or more days after completing the primary series of an FDA-authorized COVID-19 vaccine.

Any COVID strain can cause disease in fully vaccinated persons, but providers should have a high index of suspicion for a COVID variant in vaccine breakthrough cases. Variant cases cannot be identified based on clinical features, such as symptomatology—they can only be identified through whole genome sequencing or other genomic analysis, such as genotyping with SNP assays.

Yolo County Public Health has been notified by several clinicians about cases of COVID-19 in fully vaccinated persons. In nearly every case, the original specimen collected from the patient had already been destroyed by the testing laboratory by the time Public Health requested the specimen. As a result, no specimen was available for sequencing.

To facilitate sequencing of specimens collected from fully vaccinated persons, Yolo County Public Health requests that health care providers who are performing COVID testing in fully vaccinated persons with COVID-like symptoms collect two specimens. One specimen should be used for the purpose of COVID diagnosis. The second specimen should be placed in viral transport medium and stored according to the test kit requirements. If the first specimen is reported as positive for the SARS-CoV-2 virus that causes COVID-19, the health care provider should then contact Yolo County Public Health to arrange for shipment of the reserved specimen to the regional public health laboratory for whole genome sequencing.

### Davis

600 A Street  
Davis, CA 95616  
Mental Health (530) 757-5530

### West Sacramento

500 Jefferson Boulevard  
West Sacramento, CA 95605  
Service Center (916) 375-6200  
Mental Health (916) 375-6350  
Public Health (916) 375-6380

### Winters

111 East Grant Avenue  
Winters, CA 95694  
Service Center (530) 406-4444

### Woodland

25 & 137 N. Cottonwood Street  
Woodland, CA 95695  
Service Center (530) 661-2750  
Mental Health (530) 666-8630  
Public Health (530) 666-8645

Health care providers can contact Yolo County Public Health at the COVID Provider Line (530) 666-8614 to receive approval for sequencing of the reserved specimen, along with instructions for specimen submission. Yolo County Public Health is particularly interested in sequencing specimens collected from symptomatic vaccine breakthrough cases, especially those resulting in hospitalization.

**RESOURCES:**

CDPH COVID-19 [Vaccine Breakthrough Testing Guidance](#)

CDPH [Tracking Variants](#)

CDC COVID-19 [Breakthrough Case Investigations and Reporting](#)