Alameda County Health Advisory
Additional Reporting Requirements for Suspect Variant SARS-CoV-2 Infections
April 27, 2021
(changes are in red)

Purpose: To inform clinicians and laboratorians in Alameda County of reporting requirements for patients with SARS-CoV-2 infections that may involve emerging variants.

Background: SARS-CoV-2, the virus that causes COVID-19, continues to evolve and produce variants. Some emerging variants, designated Variants of Concern (VOC), are thought to be more transmissible, to lead to more severe outcomes, and/or to evade host immune responses. Surveillance efforts for such variants have been limited but are increasing. Current VOCs include B.1.1.7, B.1.351, P.1, and B.1.429/427, and cases of B.1.1.7, B.1.351, and B.1.429/427 have already been reported to the Alameda County Public Health Department (ACPHD). CDC maintains an ongoing list of VOCs. Certain clinical scenarios merit further investigation as they might indicate infection by a VOC or other emerging SARS-CoV-2 variant evading immune responses. Enhanced surveillance for viral variant cases, including whole genome sequencing (WGS), will help characterize the impact of variants.

Actions Requested of Clinicians

- Report the following probable or confirmed COVID-19 cases to ACPHD by the next business day:
  - Cases caused by or with close contact to a confirmed VOC
  - Vaccine Breakthrough Cases of Interest (VBCIs) in fully vaccinated individuals
  - Repeat infections in persons who have cleared previous SARS-CoV-2 infection
  - Prolonged infections in persons hospitalized with severe immunocompromised status
  - Cases with S-gene target failure on SARS-COV-2 RT-PCR testing, a marker for B.1.1.7
  - Cases with international travel within the 2 weeks prior to onset of COVID-19

- Inform any persons with B.1.1.7, B.1.351 or P.1 infection that their close contacts should quarantine for 14 days and get an RT-PCR test, ideally at Day 5–7 after their last close contact.

- Include the following information when reporting, if available:
  - Demographics (name, DOB, address, contact information, sex, race/ethnicity)
  - Exposure information (contact to known cases, domestic/international travel history, congregate setting exposures, household contacts, other notable exposures)
  - Vaccination history (manufacturer, number of doses, and date(s) of vaccination)
  - Clinical history
    - Symptoms, hospitalization, ICU admission, MIS-C, immune status, death
    - Any history of prior SARS-CoV-2 infection

- Test respiratory specimens by SARS-CoV-2 RT-PCR and send for WGS by ACPHD, if not yet done. When cycle threshold (Ct), Relative Light Units (RLU) or other PCR-related values are known, please indicate the value on the submittal form.

- Laboratories may submit specimens to ACPHD for WGS by following the instructions below.
Reporting Instructions
Send the information requested by secure email to COVIDreport@acgov.org with subject line “Suspect Variant” or by fax to (510) 273-3944. Standard COVID-19 reporting requirements, including CMR submission, also apply for any newly-diagnosed case.

Laboratory Specimen Submission
Respiratory specimens may be submitted to the Alameda County Public Health Laboratory (ACPHL) for WGS during normal business hours. For specimen submission instructions, contact ACPHL by phone at 510-382-4300, email at acphl@acgov.org, or download the submittal form from the ACPHL website.

Notes and Definitions
- **Vaccine Breakthrough Cases of Interest (VBCIs)**
  - **Symptomatic** person is positive for SARS-CoV-2 by molecular test (e.g. PCR) on a respiratory specimen obtained ≥14 days after completing any primary FDA-authorized vaccine series;
  - Cycle threshold (Ct) value of ≤30 (where Ct value is available); AND
  - Person did not test positive for SARS-CoV-2 RNA or antigen within the previous 90 days
- **Repeat infection with SARS-CoV-2**
  - Defined as recurrence of symptoms with positive molecular testing at least 90 days after initial infection
- **Prolonged infection in severely immunocompromised hospitalized patients**
  - Ongoing COVID-19-compatible clinical disease with at least 2 positive tests for SARS-CoV-2, including at original diagnosis, occurring ≥20 days apart
- **S-gene target failure**
  - Failure of RT-PCR assay to detect viral S-gene target may indicate B.1.1.7 infection
  - Requires marked differences in real-time RT-PCR viral target(s) cycle threshold (Ct) values (e.g., ORF1ab target detected, N target detected, and S target NOT DETECTED)

Local Health Department Contact Information
Alameda County Acute Communicable Disease Control:
- Weekdays 8:30AM – 5PM Phone: (510) 267–3250
- After-Hours Phone: (925) 422–7595 and ask for the public health duty officer on call

Berkeley Public Health Division:
- Weekdays 8AM – 5PM Phone: (510) 981–5292
- After-Hours Phone: (510) 981–5911 and ask for the Health Officer on call

Resources
- [CDC- US COVID-19 Cases Caused by Variants](https://emergency.cdc.gov/han/nip/covid-19-variants.asp)
- [CDPH-Tracking Variants](https://www.acgov.org/health/state/variants)