



SARS-CoV-2 Positive Specimens Requested from Long-Term Care Facilities when Vaccine Failure is Suspected

Date: July 12, 2021

Public Health Message Type: Alert Advisory Update Information

Intended Audience: All public health partners Healthcare providers Infection preventionists
 Long-Term Care Facilities Local health departments Schools/childcare
 ACOs Animal health professionals Other: Clinical Laboratories

Key Points or Updates:

- (1) NJDOH encourages healthcare providers to send SARS-CoV-2 positive respiratory specimens to the N.J. Public Health and Environmental Laboratories (PHEL) when vaccine failure is suspected so that genomic sequencing can be performed.
- (2) Because most commercial laboratories retain respiratory specimens only a couple days, once public health officials identify a possible vaccine breakthrough case (VBTC), the specimen may no longer be available.
- (3) It is important for VBTCs to be sequenced so that NJDOH can identify unusual patterns of breakthrough infection associated with one or more SARS-CoV-2 variant strains.
- (4) Sequencing is conducted for public health surveillance; results do not change infection control recommendations or public health actions.
- (5) All healthcare providers and laboratories performing sequencing should report all sequencing results to NJDOH via secure email to CDS.COVIDM@doh.nj.gov or fax to (609) 826-5972.

Action Items:

- (1) NJDOH requests that post-acute care/long-term care facilities (LTCFs) submit to PHEL (or ask commercial laboratory to submit) all SARS-CoV-2 positive (molecular or antigen) respiratory specimens in residents where vaccine failure and/or reinfection is suspected.
- (2) LTCFs should also send when possible all SARS-CoV-2 positive (molecular or antigen) staff specimens where vaccine failure and/or reinfection is suspected to PHEL for sequencing.
- (3) Notes:
 - a. A vaccine breakthrough case is defined as a U.S. resident who has SARS-CoV-2 RNA or antigen detected on a respiratory specimen collected ≥ 14 days after completing the primary series of an FDA-authorized COVID-19 vaccine.
 - b. Suspected reinfection is defined as a recurrence of symptoms and a positive viral test result (molecular or antigen) ≥ 90 days after an initial RT-PCR positive test result.
 - c. No public health approval is needed before specimen submission, but LTCFs are encouraged to report details on vaccine breakthrough or infection when reporting

COVID-19 cases to their local health department. A directory of local health departments is available at www.localhealth.nj.gov.

How to submit specimens to PHEL:

- (1) Refer to the [PHEL Technical Bulletin](#) for general guidance on specimen submission.
- (2) Store respiratory specimens at 2-8°C for up to 72 hours after collection. If a delay in shipping is expected, specimens must be stored at -70°C or below and shipped on dry ice. If samples have been refrigerated for greater than 72 hours after time of collection, consider collecting a new specimen for submission. Samples not on dry ice received more than 72 hours after collection will be rejected.
- (3) Fill out an [SRD-1 form](#) for each specimen submitted.
 - a. Ensure the patient name and DOB matches the specimen label exactly.
 - b. Include LTCF name and use LTCF address in Patient Address field.
 - c. Include symptoms, “vaccine breakthrough” or “reinfection,” date of prior positive viral test if known, and whether the individual is a resident or staff member in the Pertinent Clinical Information field.
 - d. Include date(s) of COVID-19 vaccination in Relevant Immunizations field.
 - e. Record date and time of positive specimen collection and specimen type.
 - f. Make sure all facility/laboratory and physician contact information are accurate.
 - g. To request genomic sequencing, check ‘other’ (bottom of middle column) and write/type-in “SARS-CoV-2 RNA Sequencing” for the test requested.
- (4) Email SARS.sequencing@doh.nj.gov upon shipping a specimen for sequencing with the number of samples being shipped, reason for shipping and estimated date/time of delivery.
- (5) *Note: Federal regulations do not authorize PHEL to report variant identification to submitting facilities. Sequencing results will be used for epidemiological and surveillance purposes. If a variant of concern is identified, additional guidance will be provided as appropriate.*

Contact Information:

- Local health departments: www.localhealth.nj.gov
- The Communicable Disease Service at (609) 826-5964 during business hours

References and Resources:

- NJDOH Weekly Variant Surveillance Reports <https://www.nj.gov/health/cd/statistics/covid/>
- PHEL Technical Bulletin <https://www.nj.gov/health/phel/documents/Bulletins/Supplemental%20Bulletin%202021.1.1%20SARS-CoV-2%20Testing%20at%20PHEL%20V3.pdf>
- PHEL SRD-1 Form <https://www.nj.gov/health/forms/srd-1.pdf>
- CDC information on variant strains <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant.html>
- U.S. Variant Cases <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html>