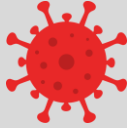


SARS-CoV-2 SEQUENCING



Guidance for the submission of positive SARS-CoV-2 viral specimens to the Alaska State Virology Laboratory for Next Generation Sequencing (NGS)

Why Sequence SARS-CoV-2?



NGS provides a comprehensive profile of viruses circulating within a population and helps the response to the COVID-19 pandemic in a number of ways, including:

Understanding viral transmission.

SARS-CoV-2 sequencing allows for monitoring viral spread both within and between populations over time, aiding targeted public health interventions aimed at reducing disease transmission.

Treatment and vaccine development.

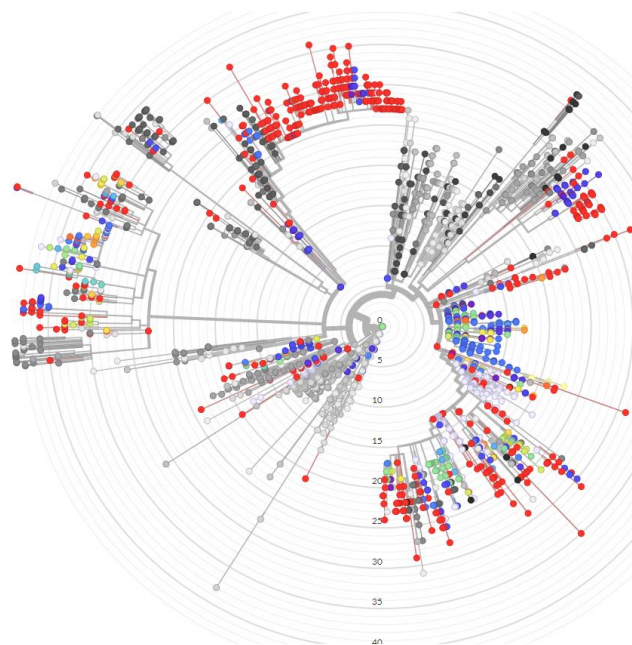
Knowledge of the viral RNA sequence assists in the design of therapies and vaccines that target specific features of the virus. This information provides an idea of how these therapies may change with an evolving virus.

Monitoring viral evolution.

Continually evaluating circulating strains of SARS-CoV-2 allows for the detection of genetic changes in the virus that may give rise of viral variants.

Genomic epidemiology of novel coronavirus - Alaska-focused subsampling

Built with CDCgov/spheres-augur-build/. Maintained by CDC/AMD.
Showing 2100 of 2100 genomes sampled between Dec 2019 and May 2021.



The genomic epidemiology of SARS-CoV-2 with Alaskan genomes indicated in red and each concentric ring representing 1 nucleotide divergence between the viral genome and the original SARS-CoV-2 strain.
CDC/Spheres: <https://nextstrain.org/groups/spheres/hcov/alaska>

Submitting Positive Specimens to ASVL

1 What to Submit

Original VTM (Viral transport medium) or UTM (Universal transport medium) for confirmed POSITIVE specimens. Please include CT values if known.

2 How to Submit

Complete a SARS-CoV2 requisition form (found at: <https://dhss.alaska.gov/health/dph/Labs/Documents/RespPathRequestForm.pdf>) and select "SARS-CoV-2(COVID-19) Sequencing". This is for submitting confirmed positive samples for SARS-CoV-2 sequencing. It is not necessary to request PCR testing unless seeking confirmation of a positive result.

Package and ship specimens frozen or cold (on dry ice or with frozen ice packs) as Category B to:

Shipments via UPS or Fed Ex
Alaska State Virology Laboratory
1051 Sheenjek Dr.
Fairbanks, AK 99775

Shipments via USPS
Alaska State Virology Laboratory
P.O. Box 60230
Fairbanks, AK 99706

Questions? Contact Dr. Lisa Smith at: lisa.smith@alaska.gov or 907.371.1000

Alaska State Public Health Laboratories		Respiratory Pathogen Request Form v4/20/2021	
Anchorage Public Health Laboratory 1030A 200250 Anchorage, AK 99515 Phone: 907-586-2255 24-hour: 1-800-522-9918 Alaska Compliance Fax: 907-334-3153		Alaska State Virology Laboratory P.O. Box 60230 Fairbanks, AK 99706 Phone: 907-371-3000 24-hour: 1-800-371-1003 Alaska Compliance Fax: 907-474-4038	
Patient Information: Preprinted Labels are recommended. Two unique patient identifiers are required on the specimen and the requisition. Please print clearly. Failure to fill out our contact info will result in specimen processing delay.		Submitter Information - Report Results to:	
Patient ID (Client, Assay) Collection Date Time am pm		Facility Name (Hospital/Clinic/Out.) Phone Number	
Last Name First Name MI		Provider Name Fax Number	
Date of Birth Gender Other Patient/Sampled ID		Mailing Address City State Zip Code	
Race/Ethnicity Date of Birth Home City or Village		Preferred specimen types include nasopharyngeal swabs, nasal swabs (anterior nares), oropharyngeal swabs (throat), nasal milt (for marine vessels (long nasal swab), nasopharyngeal wash (separate), or nasal wash (separate). All upper respiratory specimens must be in approved viral transport media. Dry swabs will be rejected.	
Patient Contact Information: Phone Number:		Storage and Transport: • Store all specimens in a refrigerator (2-8C) up to 72 hours or freeze for longer storage. • Pack with dry ice (specimens on ice packs to preserve viral integrity). Pack frozen specimens with dry ice in a leak-proof container. • Ship as a Biological Substance Category B (UN3373). If using dry ice, indicate UN1845.	
For all testing requested, please choose all that apply:		Specimen Type:	
<input type="checkbox"/> Symptomatic <input type="checkbox"/> Required for work clearance <input type="checkbox"/> Asymptomatic <input type="checkbox"/> Medical procedure clearance <input type="checkbox"/> Healthcare worker <input type="checkbox"/> New/return of 60 within last 14 days <input type="checkbox"/> Long term care resident <input type="checkbox"/> Vaccinated for SARS-CoV-2 <input type="checkbox"/> Inpatient <input type="checkbox"/> Associated with outbreak <input type="checkbox"/> Outpatient		<input type="checkbox"/> Influenza, RSV, and SARS-CoV-2 PCR	
SARS-CoV-2 Virus Diagnostic Testing <input type="checkbox"/> SARS-CoV-2 PCR Specimens will be screened using a PCR assay with a 2-3 day turnaround from specimen receipt. All positive specimens will be refiled to sequencing.		Respiratory Virus Surveillance Testing Specimens submitted by respiratory services providers for surveillance purposes. If pre-tested, please indicate the platform and result.	
SARS-CoV-2 Virus Confirmation Testing <input type="checkbox"/> SARS-CoV-2 NAAT Confirmation of previously tested patient. Specimens must be submitted in VTM/UTM. Please indicate assay and result below.		Influenza Report to: _____ Influenza Report Result: _____ Influenza Isolated: _____ RSV Report to: _____ RSV Report Result: _____	
SARS-CoV-2 Sequencing This option is only available for pre-tested positive specimens. Please list cycle threshold (CT) values below, if available.		SARS-CoV-2 _____ SARS-CoV-2 Result _____ SARS-CoV-2 Result _____	
Other Respiratory Pathogen Diagnostic Testing Specimens submitted for respiratory pathogen diagnosis.		SARS-CoV-2 _____ SARS-CoV-2 Result _____ SARS-CoV-2 Result _____	