



# EPI Update for Friday, January 28, 2022

**Office of the Public Health Medical Director  
Center for Acute Disease Epidemiology (CADE)  
Bureau of HIV, STD, and Hepatitis**

**Iowa Department of Public Health (IDPH)**

**Items for this week's EPI Update include:**

- **Omicron variant update**
- **Overview: SHL sequencing process to identify variants**
- **In the news: Past Covid infection protected against delta, but vaccines safest to prevent dire illness, CDC says**

## **Omicron variant update**

As of the morning of January 26, a total of 865 Omicron variants have been identified in Iowa. Overall, 93.5% of specimens sequenced with collection dates in a two week period ending January 22 were Omicron variants.

## **Overview: SHL sequencing process to identify variants**

Sequencing is a lengthy process that requires two scientific methods to check for SARS-CoV-2 variants. First, genetic material is extracted out of the viral particle. Second, a library of the genetic material is prepared by fragmenting the genome into small pieces and attaching adapters at each end of the fragments that will subsequently allow clonal amplification of the fragments by PCR. Third, the amplified fragments are sequenced one base at a time to reconstruct the chain of bases within that fragment. All these processes occur at a submicroscopic level, invisible to the human eye.

SHL typically sequences about 300 samples per week. Clinical laboratories are submitting the first five positive samples by PCR testing each week to SHL. Sequence information is reported to IDPH and posted to an international database called GISAID where CDC retrieves the data.

A few reminders regarding sequencing of SARS-CoV-2:

- Do not request sequencing unless PCR has already been completed. Please ensure that the information regarding PCR platforms and Ct values are listed on the test request form.
- Due to the increase in testing volume and the high positivity rate, please limit the number of specimens for sequencing to 5 per week.
- If sending a combination of specimens (sequencing and PCR), please ensure that like specimens are grouped together for easier and more efficient processing by SHL accessioning staff

**In the news: Past Covid infection protected against delta, but vaccines safest to prevent dire illness, CDC says**

[www.nbcnews.com/health/health-news/covid-infection-protected-delta-vaccines-safest-prevent-dire-illness-c-rcna12712](http://www.nbcnews.com/health/health-news/covid-infection-protected-delta-vaccines-safest-prevent-dire-illness-c-rcna12712)

**Have a healthy and happy week!**

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