

AFRL

EPI LAB

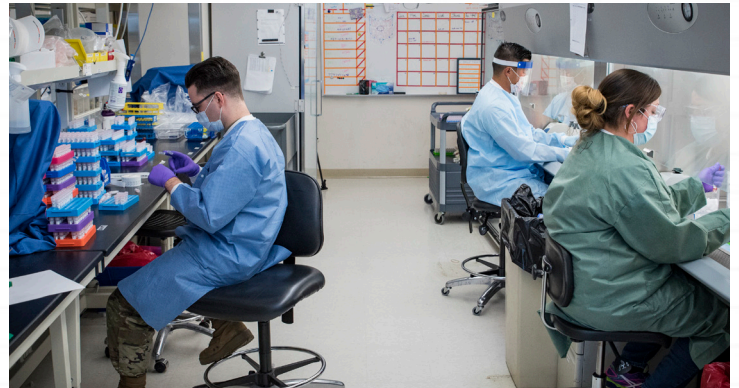
EPIDEMIOLOGY REFERENCE LABORATORY

What is the Epidemiology Reference Laboratory?

The Air Force Research Laboratory's Epidemiology Reference Laboratory, which is housed in our 711th Human Performance Wing's USAF School of Aerospace Medicine, focuses on clinical diagnostic, public health testing and force health screening, routinely performing tests six days a week (or about 2.1 million tests a year) for clinics and hospitals treating active duty service members, reservists and National Guard members, and their beneficiaries. The Epi Lab, as it's commonly referred to, is the Air Force's sole clinical reference laboratory, and because of this, has proven experience testing respiratory infection samples and working with the Centers for Disease Control and Prevention processes. This lab has been operating since 1990.

For what does the Epi Lab routinely test, and how is the data used?

The lab routinely performs testing for immune status, screening for STIs, and infections such as Human Immunodeficiency Virus (HIV), gonorrhea, syphilis and hepatitis. The lab was also involved in past global outbreaks such as SARs and Ebola. The collected data from these tests enables the analysis of disease within the joint force. It is also shared with civilian public health agencies, contributing to the tracking of diseases such as influenza and sexually transmitted diseases, as well as supporting disease prevention efforts such as the formulation of vaccines.



Medical laboratory technicians from the United States Air Force School of Aerospace Medicine's Epidemiology Laboratory separate a larger sample into smaller parts for COVID-19 testing. (U.S. Air Force photo by Richard Eldridge)

How has this laboratory been involved in the Air Force's COVID-19 response?

As the Air Force's sole clinical reference laboratory, the Epi Lab was authorized by the Defense Health Agency to test samples from Department of Defense beneficiaries for COVID-19 in early March. The lab received test kits from the Centers of Disease Control and Prevention shortly after.

At the height of the initial outbreak in 2020, the lab was averaging 1,200 tests per day, with less than a 24-hour turnaround time from receipt of sample. To date the lab has tested over 287,000 samples, which equates to approximately 11 percent of the total DoD samples tested. Epi Lab personnel also teamed with AFRL's applied genomics and technology experts for genetic sequencing, and were the first in the DoD to detect the Gamma (Brazil) variant.