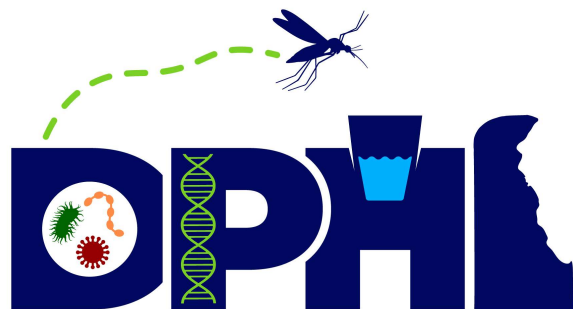


DELAWARE PUBLIC HEALTH LABORATORY



Division of Public Health Laboratory

30 Sunnyside Rd
Smyrna, DE 19977
8:00am – 4:30pm



CONTACT US



SCAN ME

WHO WE ARE



OUR MISSION

The Delaware Public Health Laboratory (DPHL) is a vital component of the state's public health system.

Our mission is to provide accurate and timely analytical data, information, and consultation to protect and enhance the health of the people of Delaware.



Clinical
Laboratory
Improvement
Amendments

CERTIFICATIONS

DPHL is certified by the EPA to test drinking water and CLIA to test clinical specimens for diagnostic results.

DPHL EPA Certification Officers inspect Certified Drinking Water Laboratories within the State of Delaware.

DPHL monitors and inspects CLIA certified laboratories throughout Delaware to ensure compliance with operational standards.

OUTREACH

DPHL currently participates in job fairs, school science days, and community events. Keep an eye out for DPHL at your next event!

PREPAREDNESS



DPHL is the reference laboratory for CDC's Laboratory Response Network (LRN) and a member of FDA's Food Emergency Response Network (FERN).

DPHL provides training and guidance to sentinel laboratories (hospital, agricultural, environmental, academic, and industry) for biothreat screening. Our team coordinates events, meetings, proficiency tests, and exercises with these organizations to ensure our partners are proficient in testing to rule out bacterial agents that may be suspected of being select agents. In the months following Sept. 11, 2001, DPHL tested 175 suspicious samples for Anthrax.

DPHL's Biosafety/Biosecurity Officer works closely with all laboratories, including hospitals, healthcare facilities and educational facilities in Delaware to enhance the levels of biosafety and biosecurity preparedness and laboratory practices.

ENVIRONMENTAL

The Environmental Laboratory (EL) is a certified drinking water laboratory for bacteriology, inorganic, and organic testing methods. The laboratory follows US EPA's Safe Drinking Water Act standards to ensure the safety of drinking water for all the citizens of Delaware. The EL is the Primacy State Laboratory with certification officers authorized by the EPA to audit and certify private laboratories in the state for water bacteriology, organics, and inorganics testing.



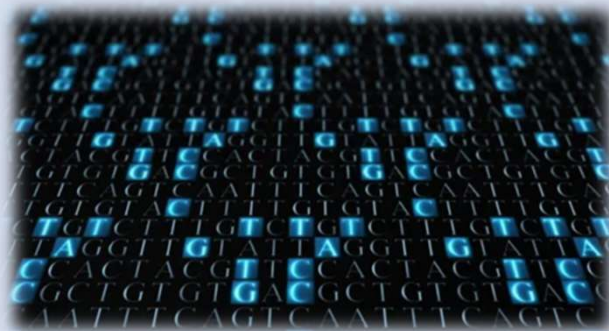
Wastewater Surveillance testing is a predictive method to monitor disease for more rapid public health response. Currently, DPHL tests wastewater using digital Polymerase Chain Reaction (dPCR) for detection of SARS-CoV-2 and Influenza Virus A and B with future testing of public health threats. Testing data represents a large portion of the state as most towns are part of municipal sewage collection systems. DPHL wastewater data is shared with public health epidemiologists, uploaded to the National Wastewater Surveillance System (NWSS), as well as other public health laboratory programs. The data is available on the CDC website through the COVID Data Tracker.

GENOMIC SEQUENCING

Genomic surveillance testing next generation and Whole Genome Sequencing (WGS) technologies to detect potential foodborne disease-related outbreaks, SARS-CoV-2 variants, serotypes for influenza, Tuberculosis, Hepatitis, genetic resistance markers in hospital acquired infections and more. Data generated from genome sequencing provides enhanced surveillance insight into disease transmission, cluster detection, genetic variation, and antimicrobial resistance identification.



Conversely, Bioinformatics plays a pivotal role in advancing public health through expertise in analysis of WGS data generated by the genomic sequencing group. Leveraging various cutting-edge workflows and sophisticated pipelines, these bioinformaticians examine the genomic data. Doing so they can trace the routes of transmission, assisting epidemiologists to identify the sources of outbreaks and understand how disease is spread within the community.



MOLECULAR VIROLOGY

This section performs various reverse transcription PCR (rt-PCR) and immunoassay methods, that range across public health diseases, including vaccine preventable diseases, COVID-19, arboviruses, respiratory viruses, and more. Additionally, DPHL participates in the CDC's influenza virus surveillance program providing testing data. This data contributes to determining future influenza vaccines. Additionally, this section contributes to bioterrorism, rabies, and arbovirus surveillance testing.



CLINICAL MICROBIOLOGY AND SEXUALLY TRANSMITTED INFECTIONS

This sections methods includes testing for antibiotic resistance markers from hospital acquired infections, outbreak screening for foodborne diseases (Salmonella, Campylobacter, Listeria, Shigella, and Shiga toxin E. coli) as well as identification of Tuberculosis, Syphilis, HIV, Hepatitis, Chlamydia, Gonorrhea, and Trichomonas to assist DPH Programs in public health action.