# Department of Laboratories and Research

2024 Executive Proposed Budget

Department of Laboratories and Research

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## **Core Programs & Functions**

#### **Medical Examiner**

- Investigates cause and manner of deaths in Westchester "due to unlawful acts, criminal neglect, violence, casualties, or by sudden or unexplained circumstances" and extends help to grieving families in time of intense grief.
- Partners with other divisions to provide accurate results and answers to public health or criminal justice questions.

#### Environmental

- Analyzes drinking water, waste water, soil and hazardous materials for harmful chemicals and microorganisms to maintain a healthy environment and to comply with regulatory authorities.
- Supports Health Department monitoring of public swimming pools and bathing beaches, in addition to the Environmental Lead Program for water, soil, paint, dust wipes, and food items.

#### Forensics

- Performs DNA, gunshot residue and fire debris analysis on crime scene evidence, analysis of drugs submitted by law enforcement agencies, analysis of audio video evidence such as surveillance videos of crime scenes and trace evidence analysis including paint samples from hit and run cases.
- Provides expert witness testimony upon request by prosecution or defense on processed cases.



## **Core Programs & Functions**

#### Microbiology

- Identifies bacteria, viruses and parasites of public health concern in clinical and environmental samples in support of the health department.
- Maintains the Laboratory Response Network Level B Biodefense Laboratory as a national security asset to identify agents of Bioterrorism.

#### Toxicology

- Provides analysis of biological samples from autopsies, DWI, DWAI, DFSA specimens for alcohol, drugs and medications.
- Support the breath alcohol instruments and testifies in court upon request.



## **Budget Summary**

ITEM	2023	2024
Operating Positions	105	105
Trust Positions	4	4
TOTAL POSITIONS	109	109
Personal Service	9,413,623	9,786,666
Equipment	96,555	195,868
Materials & Supplies	1,309,137	1,319,500
Contractual Expenses	1,268,386	1,264,142
Inter-Departmental Charges	4,608,344	4,840,736
TOTAL EXPENDITURES	16,696,045	17,406,912



## **Budget Summary**

ITEM	2023	2024
Inter-Departmental Revenue	5,000	5,000
Departmental Revenue	2,624,494	2,609,708
State & Federal Aid	1,423,530	2,467,697
TOTAL REVENUE	4,053,024	5,082,405
DEPARTMENT TAX LEVY	12,643,021	12,324,507



#### **Environmental Services**

- Preparations are under way for additional testing for lead in potable water systems at Westchester County Parks as part of the Lead Free Parks Act. This will include first draw testing at least once every 3 year.
- Using an enzyme-linked immunosorbent assay (ELISA) test method, the lab is setting up to monitor recreational waters for harmful algae and Cyanobacteria (Hazardous Algal Blooms).
- Finalizing the development of methodology to perform quantitative analysis of PFAS testing which is of public health concern. Estimated start date for potable water testing is early first 1<sup>st</sup> quarter of 2024.





#### **Microbiological Services**

- Validated and implemented Matrix assisted laser desorption-time of flight (MALDI-TOF) for use in identification of bacteria in cultures. This will initially be used in the TB lab to reduce time to identification.
- Validated and implemented Biofire PCR syndromic testing which provides rapid results for GI outbreaks and can detect 22 pathogens within a few hours.





#### **Forensic Sciences**

- Began working with the County DA's new Conviction Review unit to determine if adjudicated cases under review are suitable for testing with new technologies and also with the new Cold Case unit to assist with identifying unknown victims of crimes.
- Validating two new Scanning Electron Microscopes for gunshot residue testing, a LCMS for cannabis (marijuana) and psychedelic mushroom test, and a Microvisible Spectrometer to test trace evidence such as paints and fibers.





### Toxicology

 Validating the new LC-QTOF instrument for initial screening of drugs in all cases. This instrument is more sensitive than the current LC-TOF which will give greater confidence in screening results which reduces turn-around time.





#### **Medical Examiner's Office**

 Implement HealtheConnections which is an NYSDOH accredited database for medical information exchange. This website provides digital searches of a multitude of EMR (Electronic Medical Records) in an efficient, fast, comprehensive and secured way. It provides critical support of active medico-legal investigation to determine the cause and manner of death.



