

### Class Concept

Position oversees with full accountability the Department of Health and Human Services Postmortem Forensic Toxicology program. The position provides final authorization for all standard operating procedures, policies, and process changes. The position serves as the Toxicology Laboratory spokesperson for media outlets as needed. The position convenes with the Chief Medical Examiner and Assistant Director on laboratory operations, equipment purchases, and strategic planning. The position is responsible for cases with the highest complexity and visibility. It conducts all subject matter expert presentations relating to the field of toxicology on behalf of the Toxicology program. The position serves as the Forensics Laboratory Director assuming responsibility for laboratory activities including maintenance of the laboratory's accreditation (American Board of Forensic Toxicology – ABFT, College of American Pathologists Laboratory Accreditation Program CAP-LAP, or equivalent).

This is advanced professional and technical work involving the development and maintenance of a toxicological program designed to support the Chief Medical Examiner's Office through the discovery of primary and secondary causes of unattended, accidental, or homicidal death. The position functions as Toxicology Laboratory Director and Unit Manager and supervises a staff of toxicologists, analytical chemists and chemical technicians in performing an extensive range of chemical and physical analyses to discover, isolate, and identify the presence or extent of toxicity of drugs, environmental toxins, or synthetic toxic substances which may directly or indirectly cause death. The work results in confirming causes of death; detecting trends or recurring patterns of death among population groups; or in alerting public health officials of potential outbreaks of death from environmental toxins, unusual drug interactions, or by other toxic agents which may lead to death or illness.

Work assignments typically include the development and implementation of Branch and Unit policies, administrative procedures, and guidelines that must be integrated into the broad objectives of the Chief Medical Examiner's Office. The position determines appropriate and acceptable methodologies and techniques which support medicolegal investigations of death and oversees technical as well as administrative aspects of toxicological examinations. Administrative elements of the work are considered moderately stable with some recurring responsibilities, while the technical requirements in the analysis of postmortem biological specimens are highly dynamic based on frequent changes in available drugs, technology or shifts in methodology. Work requires extensive interpretive skill to correlate analytical findings with autopsy results in determining cause of death. Cases presented for chemical analyses often require significant research where findings and conclusions are not readily discerned or observed. The position may devise new procedures and techniques to identify unknown toxic agents, drugs, or poisons which may have contributed to the cause and manner of death.

In formulating results of chemical analyses and relating to cause and manner of death, this position must exhibit in-depth understanding of biological sciences to include biochemistry, toxicology, anatomy, and physiology as well as fundamental concepts of pharmacy, medicine, and law. The position must be able to integrate applications of theoretical chemistry into work decisions and must relate toxicological findings to broad field of public health. The position must understand drug interactions, disease etiology, characteristics and nature of extensive variety of synthetic and naturally occurring toxic substances, methods of medicolegal investigation, and concepts of forensic science.

The Chief Toxicologist trains and advises agents and other law enforcement officers in more complex cases as the department subject matter expert. Work includes testifying in court or at hearings as a technical expert, conducting consultations and participating in pretrial conferences with prosecutors and defense attorneys, and providing guidance to law enforcement officers in the collection and preservation of document evidence.

Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA.

## Recruitment Standards

### Knowledge, Skills, and Abilities

- Thorough knowledge of the principles, practice and current developments in the field of forensic toxicology
- Thorough knowledge of theoretical principles of analytical chemistry, physiology and pharmacology, biological science, drug interaction and toxicogenomics; laboratory protocol, procedure, and techniques associated with medicolegal investigative work; principles of operation of analytical instrumentation
- Ability to direct, organize, and coordinate all aspects of an analytical laboratory administratively and technically
- Ability to interpret and relate analytical results on causes and manner of death according to professional standards and ethical practices
- Ability to initiate and maintain professional working relationships with forensic staff, law enforcement authorities, physicians, attorneys, and toxicologists in other state medical examiner systems
- Ability to express technical information clearly both orally and in writing when reporting results, testifying, or explaining procedures to others

### Minimum Education and Experience

Doctorate degree in toxicology, biochemistry, or pharmacology with six years of experience in forensic toxicology, and certification by the American Board of Forensic Toxicology or equivalent; or

Master's degree in chemistry with at least eight years of experience in forensic toxicology, a medical examiner system, or in a clinical chemistry laboratory and certification by the American Board of Forensic Toxicology or equivalent; or an equivalent combination of education and experience.