



Inhalation Toxicology



Lovelace Biomedical conducts a full range of **Good Laboratory Practice (GLP)** and **Non-GLP** inhalation bioassays and we are known worldwide for our storied and long history in the field of inhalation toxicology. We integrate quality, leading-edge expertise in generation and characterization of exposure atmospheres, exposure technology, dosimetry, and evaluation of health outcomes, as needed to quickly meet study goals. Lovelace's large Inhalation Toxicology facility has capabilities and capacity to conduct single or repeated, nose-only or whole-body inhalation exposures of all laboratory species. Exposures range from individual animals for preliminary investigations to large-scale carcinogenicity bioassays.

Inhalation Toxicology Key Capabilities:

- Thirty year history of compliance with national and international GLP regulations for pharmaceutical and chemistry industry partners
- IND-, NDA-, BLA-enabling safety programs
- Novel techniques for conserving test articles during aerosolization and delivery
- Supporting nebulizers, metered dose inhalers, dry powder inhalers and unique aerosol generation systems
- Novel exposure techniques for developmental work and pilot studies, including measurement and control of respiration in all species, simulation of human oral dosing using dogs and primates, and exposure by intratracheal instillation or via bronchoscopy
- Wide range of dosimetric (including tissue-specific compound analysis), toxicokinetic, clinical, physiological, and genetic assays
- Exposures to gases, vapors, fibrous and nonfibrous particles, and to engine exhaust, cigarette smoke, and other actual or synthesized complex mixtures
- Generation and exposure to radiolabeled and radioactive materials
- Full histopathology, immunohistochemistry, and morphometric capability
- AAALAC-accredited animal facilities
- Approved waste streams for hazardous materials
- Confidential, proprietary, and intellectual property agreements
- Collaboration with customer's in-house investigations

