

THE EXPERTS Robson Forensic

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

Experienced in the anticipation, recognition, evaluation, control, and management of occupational and environmental safety and health hazards involving chemical, physical, and biological agents, as well as machinery, equipment, products and manufacturing processes and systems.

Industries: Healthcare, aerospace, plastics, steel, foundry, metal working, beverage bottling and canning, military, food processing, sterile processing, electronic assembly, construction and demolition, cemetery, and aviation.

Processes: Cold and hot forming of metals, hazardous drug handling and compounding, animal and human surgery, animal research, laboratory research, tissue and specimen grossing, high-level disinfection, sterile processing, machining, grinding, welding/cutting/brazing/gouging, painting and coating, rubber compounding/mixing/extruding, furnaces and heat treating/quenching, abrasive blasting, solvent degreasing, high pressure spraying systems, woodworking, hand and automated assembly, laser machining, packaging, robotics.

Products: Commercial, consumer and industrial products and equipment, hazardous drugs, disinfectants/sterilizers, milling machines, lathes, mechanical power presses, conveyors, blenders/vibrators/mixers, acid vats, dip tanks, quench tanks, compressors, pneumatic tools, powered industrial trucks, aerial lifts, vehicle lifts, paints, primers and coatings, lubricants, gels and sealants, cleaners, adhesives, solvents, asbestos, lead and hazardous chemical products.

Buildings: Commercial, industrial and residential building envelope issues; origin and cause of water intrusion events, mold testing and evaluation, preparation of mold remediation plans; indoor air quality (Sick Building Syndrome, Building Related Illness, and exhaust re-entrainment issues).

Industrial Hygiene: Sampling and exposure monitoring for many toxic substances (including asbestos, cadmium, formaldehyde, methylene chloride, benzene, lead and hexavalent chromium); inhalation and dermal exposure modeling; exposure assessment strategies; exposure statistics; thermal stress, and ionizing/non-ionizing radiation; indoor air quality, and biological contamination exposure assessments; ergonomic evaluations; occupational sound level mapping and noise surveys; ventilation system evaluation; safety data sheet evaluation and interpretation.

Safety: Machine and equipment guarding; material handling methods and ergonomic task evaluations; hazardous material handling/labeling/use/storage/disposal; electrical hazards and energy control (lockout/tagout); permit required confined spaces; and evaluation of personal protective equipment to include limitations, proper selection, use, training and maintenance (e.g., head, eye, hearing, respirators, hands and feet, etc.).

Machine Guarding, Machine Operation & Safety: Machine safety; machine guarding, fabrication, installation, and maintenance; equipment relocation, rigging, and layouts; assessments and abatements; OSHA compliance; electrical and mechanical; guard devices.

THE EXPERTS Robson Forensic

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

Tools and Equipment: Fork trucks; hydraulic and pneumatic equipment; machine shop machinery and fabrication processes; maintenance equipment and hand tools; loaders; snowplows and snow removal equipment; excavation equipment; agricultural equipment; gas powered chainsaws; electric chainsaws; wood working equipment; hunting equipment; gunsmithing; crossbow guarding and safety.

Environmental Management: EPA, OSHA and DOT compliance; waste stream management, waste handling equipment and systems, hazard communication, SDS management, chemical exposure and contamination.

Tree Management: Property management and safety; contractor management; tree felling and cutting techniques; equipment, woodchippers, sawmills, chainsaw operation and safety.

Regulatory Compliance: Federal & State OSHA regulations, recordkeeping, and inspection/citation/variance processes, EPA regulations, ANSI and other industry standards.

Authoritative and Consensus Standards: Joint Commission, NFPA, OSHA, ACGIH, NIOSH, ANSI, ASTM, EPA, HUD

PROFESSIONAL EXPERIENCE

2025 to Present **Robson Forensic, Inc.**
Associate

Provide technical investigations, analysis, reports, and testimony toward the resolution of exposure-related illnesses, injuries, property damage, and environmental contamination.

2017 to present **U.S. Air National Guard, 179th Cyberspace Wing, Mansfield, OH**
Major, Bioenvironmental Engineering Officer in Charge

- Manages multiple compliance driven programs for specific shops, including respiratory protection, hearing conservation, pest management, hazard communication, radiation safety, laser safety, specific OSHA Expanded Standards, and personal protective equipment.
- Serves as Installation Laser Safety Officer and Installation Radiation Safety Officer.
- Performs laser and ionizing radiation inventories, EMF calculations, laser calculations, and uses a variety of ionizing and non-ionizing radiation equipment to perform quantitative assessments.
- Performs inhalation exposure assessments, inhalation exposure modeling, and qualitative exposure assessments of inhalation, skin absorption, skin contact, eye contact, and ingestion pathways of exposure.
- Manages successful completion of Toxic Industrial Chemical/ Toxic Industrial Material (TIC/TIM) and Water Vulnerability Assessments (WVA).
- Manages successful completion of Occupational and Environmental Health Site Assessment (OEHSA) surveys.

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

- Manages and mentors two full-time enlisted personnel, ensuring success in all tasks performed, with specific emphasis on building exposure assessment competencies.
- Performed a base-wide review of asbestos containing materials, collected air and grab samples to determine exposure potential, and reviewed/approved an asbestos mitigation plan.

2017 to
2025

Booz Allen Hamilton

Senior Occupational Safety and Health Professional

- Served as technical lead for a Department of Veterans' Affairs (VA) medical center task responsible for conducting qualitative inhalation, ingestion, dermal absorption, noise, heat stress, ergonomic, and radiation exposure assessments across a variety of workplaces within the VA Healthcare system. Built a system of accountability for each shop assessed, assigning each exposure hazard an exposure judgment based upon observed controls and exposure determinants, provided recommendations for each uncertain or unacceptable judgment to make the risk acceptable.
- Served as technical lead for a VA task performing quantitative exposure assessments. Identified potential exposures with the highest degree of uncertainty and/or unacceptability and developed sampling strategies to better characterize the exposures. Based upon sampling results, made recommendations to drive compliance and reduce exposure risk to an acceptable level. Hazards assessed included, but were not limited to: respirable crystalline silica, peracetic acid, hydrogen peroxide, waste anesthetic gases, welding fumes, hazardous noise, cotton dust, respirable and total dust, benzene, toluene, ethylbenzene, and xylenes.
- Served as a lead assessor on Risk identification, Triage, Mitigation, and Sustainment (RiTMS) task for VA – performed week-long assessments of VAMCs evaluating 52 safety and industrial hygiene key performance indicators (KPIs) to determine an overall facility safety risk score. Briefed findings to medical center senior leadership and developed timeline for risk reduction.
- Served as a safety professional within the AJW-23 office of the Federal Aviation Administration (FAA). Provides review of construction drawings and process changes to ensure compliance.
- Served as hazardous material identification subject matter expert (SME) in a large artificial intelligence (AI) effort for the United States Air Force (USAF) and United States Army (USARMY) to identify parts within weapon systems to determine if they contain hazardous material such as cadmium or hexavalent chromium. Additionally, provided input to determine which hazardous characteristics should be tracked and informed the programming code.

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

- Served as lead assessor and program manager for National Cemetery Administration (NCA) annual safety workplace evaluations (AWEs). Performed on-site walkthroughs and document reviews at individual national cemeteries to determine overall site risk. Identified programmatic and on-the-spot risks related to fall protection, electrical safety, fire and life safety, machine guarding, flammable storage, and industrial hygiene (among others). Assigned a Risk Assessment Code (RAC) to each finding and discussed a plan of action with the facility to address each finding. Responsible for assigning task authorizations to employees ensuring project remains on time and on budget. Provided client with monthly status reports to document progress and budget.
- Served as project lead for a US Navy, Naval Air Systems Command (NAVAIR) project authoring hazard warning labels for hazardous materials that personnel may encounter. Safety Data Sheets (SDS) were pulled from the Defense Logistic Agency's (DLA) Hazardous Materials Information Resource System (HMIRS) and data was extracted into a cohesive warning.
- Served as Data Modernization and Enhancements (DME) lead for the FDA's Office of Laboratory Safety (OLS) Inventory Control Information Management System (ICIMS) portfolio. Provided subject matter expertise regarding identification of key performance indicators (leading/lagging) for specific safety programs to identify their current state health and future state innovations for improvement. Additionally, developed business process maps to drive future states through Cority software ensuring compliance and best practices are achieved. Project adhered to Agile methodology to improve efficiency and production.
- Developed methodology to quantitatively assess inhalation and contact risk to hazardous drugs at VAMCs and determine if existing controls and cleaning procedures were adequate.
- Developed a near field/ far field inhalation exposure model to determine spill risk for a variety of liquid hazardous drugs and made emergency response recommendations based upon identified inhalation risk.
- Served as task and technical lead for a USAF funded Air National Guard project performing human health and facility risk assessments at ANG bases nationwide. Identified exposure risks within the aircraft structural maintenance shop and made recommendations based upon findings. Determined exposure pathways and provided client with a set of detailed maps identifying potential contamination risks from both a facility standpoint and personnel standpoint – provided client with optimal configuration to reduce risk to the lowest possible level.
- Developed and delivered classroom training for the Air National Guard Bioenvironmental Engineering career field at their annual training event. Content of training was heavily focused on industrial hygiene methodology – Anticipation, Recognition, Evaluation, Control, and Management (ARECM) of hazards, with special emphasis on mathematical modeling of inhalation exposures and management of exposure assessment in the Defense Occupational and Environmental Health Readiness System – Industrial Hygiene (DOEHS-IH).

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

- Provided support to the Department of Justice, Federal Bureau of Investigation performing job hazard analyses for a multitude of groups – identifying both safety and exposure concerns and providing appropriate control guidance.
- Performed indoor air quality (IAQ) plan reviews for commissioning of new buildings for the United States Environmental Protection Agency (USEPA) Region 3.
- Assisted the USEPA Region 3 with ventilation calculations and feasibility assessments for commissioning a newly occupied space.
- Served on the COVID Mitigation Team (CMT) for the US Army Guardian Response '21 exercise.
- Served as technical lead for Asbestos, Formaldehyde, Lead, and Mercury policy updates for the Architect of the Capitol.
- Developed methodology to assess combat effectiveness of futuristic combat Army ensembles with emphasis on material's effect on heat stress and ergonomic strain. Offered recommendations to reduce heat stress and ergonomic burden to optimize combat effectiveness.
- Served as technical lead for National Park Service (NPS) industrial hygiene services: performed asbestos and lead sampling at Everglades National Park and developed a housekeeping plan to assure volunteers and visitors were protected while leading and taking part in tours. Performed noise, heat stress, respirable crystalline silica, hydrochloric acid, and welding fume exposure monitoring to determine employee exposure risk while performing a variety of tasks at the San Juan National Historic Site – made programmatic recommendations based upon exposure determinations, including hearing conservation program and respiratory protection program considerations.

2014 to
2017

Battelle Memorial Institute
Research Scientist – Industrial Hygiene

- Served as technical lead on the development of a toxicological primer for the NIOSH Occupational Exposure Banding process. Identified and provided key information regarding nine health endpoints and described in a way designed for comprehension by practicing industrial hygienists.
- Served as project leader for two Air National Guard trainings developed to teach Bioenvironmental Engineers appropriate methods of developing air sampling strategies, conducting air sampling, analyzing air sampling data, conducting ventilation surveys, and managing ventilation surveillance programs.
- Provided technical support to the development of common operating practices for the USAF.
- Provided support to the United States Marine Corps (USMC), Corrosion Prevention and Control (CPAC), Corrosion Service Team (CST) and Corrosion Repair Facilities (CRF).
- Performed inhalation exposure assessments of hexavalent chromium and isocyanates used by the CST and safety audits of CRF processes.

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

- 2013 to 2014 **Safex, Inc.**
Industrial Hygienist
- Performed chemical, physical, and biological exposure assessments for various industries including steel, refractory, automotive, and healthcare.
 - Performed exposure assessments to include industry research, development of sampling strategies (identification of similar exposure groups and methodology selection).
 - Interpretation of data collected during exposure monitoring (including a large-scale historical data analysis project for each of a client's North American manufacturing facilities).
 - Inhalation exposure modeling (including a tiered approach to quantify risk for a spill at a municipality's water treatment plant utilizing several models varying in complexity from zero ventilation to turbulent eddy diffusion and near field/far field).
 - Recommendations of engineering controls to mitigate inhalation exposure (including an evaluation of local exhaust ventilation utilized in multiple welding booths and recommendations for hood orientation and resulting airflow dynamics).
 - Developed and delivered training including improving exposure judgment with Bayesian decision analysis, exposure assessment strategies and statistics, use and selection of direct-read instrumentation, noise evaluation and equipment selection, and integrated contingency planning.
- 2011 to 2013 **University of Illinois at Chicago**
Research Assistant – Industrial Hygiene
- Assisted a United States Department of Housing and Urban Development (HUD) funded study through the National Center for Healthy Housing (NCHH) by collecting lead samples and conducting health surveys in low-income housing on the south side of Chicago before and after window replacement.
 - Assisted an OSHA funded study by utilizing mathematical models to describe transmission dynamics of infectious microorganisms in health care settings and determined infection risk. Maintained an active bibliography and assisted with literature review.
- 2008 to 2011 **Bowling Green State University**
Research Assistant – Industrial Hygiene
- Performed indoor combustion research.
 - Maintained laboratory organization.
 - Prepared laboratory experiments.
 - Utilized direct-read instrumentation and NIOSH analytical methodology to determine airborne carbon monoxide and fine particulate matter concentrations.
 - Utilized velocity measurement equipment (hot wire anemometer) to determine conditional airflow.

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

PROFESSIONAL CREDENTIALS

Certified Industrial Hygienist (CIH), American Board of Industrial Hygiene/ Board for Global EHS Credentialing, (CP: 11115)
Certified Safety Professional (CSP), Board of Certified Safety Professionals, (CSP: 38833)

EDUCATION

M.S., Public Health, University of Illinois, Chicago, Illinois
B.S., Environmental Health, Bowling Green State University, Bowling Green, Ohio

Continuing Education:

AIHA Connect 2024, Columbus, OH

AIHceEXP 2022, Nashville, TN

- PDC 704: Communicating Risk Pathways from EHS Hazards Identification to Enterprise Risk Management, 2022

AIHceEXP 2019, Minneapolis, MN

- PDC 410: Forecasting Exposures Using Well Mixed Room Models, 2019

AIHceEXP 2018, Philadelphia, PA

- PDC 408: A Case-Based Introduction to Chemical Exposure Modeling, 2018

AIHce 2017, Seattle, WA

- PDC 604: Occupational Exposure Assessment in the World of Toxic Substances Control Act (TSCA), 2017

AIHce 2016, Baltimore, MD

AIHce 2015, Salt Lake City, UT

AIHce 2014, San Antonio, TX

- PDC 704: Use of Mathematical Models to Estimate Exposure, 2014

AIHce 2013, Montreal, QB

- PDC 701: Exposure Assessment Strategies and Statistics, 2013
- PDC 801: Train-the-Trainer Workshop: Improving IH Exposure Judgments, 2013

PROFESSIONAL MEMBERSHIPS

American Industrial Hygiene Association	2011 to Present
American Conference of Governmental Industrial Hygienists	2011 to Present
American Society of Safety Professionals	2025 to Present

QUINCY A. COLEMAN, MSPH, CIH, CSP
Industrial Hygiene and Workplace Safety Expert

SPEAKING ENGAGEMENTS AND PRESENTATIONS

How to Develop an IH Sampling Strategy: A walk-through of an exposure scenario to develop a robust sampling strategy, AIHA Deep South Summer Seminar, 2022

Introduction to Chemical Exposure Modeling (1-day PDC w/ Chris Keil as Co-Presenter), AIHce 2019

Introduction to Inhalation Exposure Modeling with Emphasis on Input Development and Model Selection, COAIHA PDC, 2019

A Visual Approach to Facility and Health Risk Assessment – Aircraft Corrosion Control Facilities, Naval Safety and Environmental Training Center, Joint Safety and Environmental Professional Development Symposium, 2019

Exposure Assessment Strategies and Techniques, Air National Guard Volk Field Bioenvironmental Engineering Summit, 2018

Determining Acceptability of a Hexavalent Chromium Exposure during Anti-Corrosion Treatments: An exploration of available statistical tools, COAIHA Local Section Quarterly Meeting, 2016

Mathematical Modeling to Estimate Chemical Exposures with DOEHRs Application, United States Air Force, Air National Guard Volk Field Symposium, 2015

A Compartmental Model of MRSA Transmission among Healthcare Workers in a Nursing Home, AIHCE 2013

Development of an Inhalation Fingerprint for Carbon Monoxide and Respirable Particulate Matter from Incense Burning and Incomplete Charcoal Combustion during Ethiopian Coffee Ceremonies. National Environmental Health Association Annual Educational Conference and Exhibition. June 2011

PUBLICATIONS

Keil, C.; Coleman, Q.; Brown, A.; and Kassa, H., January 2014, Mass Balance Source Apportionment Modeling of Indoor Air Pollution Exposures During the Ethiopian Coffee Ceremony. Journal of Occupational and Environmental Hygiene, Volume 11, pages 40-46.

Coleman, Q., December 2013, A Compartmental Model for the Assessment of Exposure to Methicillin-Resistant Staphylococcus Aureus. University of Illinois at Chicago, Master's Thesis.