



Alexandra M. Hazell, M.S.

Current Position

Associate Health Scientist II

Discipline Areas

Toxicology
Risk Assessment
Exposure Assessment

Years' Experience

1.5

Joined Cardno

2019

Education

- > M.S., Toxicology, Colorado State University, 2017
- > B.S., Health and Exercise Science, Colorado State University, 2015

Summary of Experience

Alex Hazell is an Associate Health Scientist II with Cardno ChemRisk in the Boulder office. She received her M.S. in Toxicology from the Colorado State University College of Veterinary Medicine and Biomedical Sciences in 2017 and her B.S. in Health and Exercise Science from Colorado State University in 2015. Alex's primary academic training includes toxicological pathology, toxicological mechanisms and metabolism, and cellular signaling mechanisms in apoptosis. Her experience and areas of expertise include toxicology, pharmaceutical science, consumer product safety, and human health risk assessment.

Alex worked in the pharmaceutical industry for 2 years prior to joining Cardno ChemRisk and was mainly involved in preclinical research. Since joining ChemRisk in 2019, Alex has mainly been involved in the electronic cigarette initiative. She has also recently joined the TV, Film, and Media Initiative.

Toxicology Research

Incorporated dose response and molecular biology assays to elucidate qualitative and quantitative information on the cytotoxicity of curcumin in a C6 rat glioma cell line.

Designed and conducted nonclinical toxicology studies for a pharmaceutical company specializing in dermal and specialty injectable products in various areas. Used absorption, distribution, metabolism, and elimination (ADME) principles to guide future drug development and efficacy and safety studies. Looked at various toxicological endpoints following dose administration including body and organ weights, clinical observations, injection site reactions, and histopathology. Experience with pharmacokinetic and pharmacodynamic modeling and simulations used to predict future outcomes.

Risk Assessment Experience

Benzoates

Performed a toxicological review of the health effects associated with the consumption of benzoates used as preservatives in beverage products in order to suggest updates to the current safety database.

Pharmaceutical Safety

Conducted a risk assessment and established permitted daily exposures (PDEs) for various compounds found as impurities in a dermal drug product. Used findings to determine safety and set specification criteria for these compounds consistent with regulatory requirements and below levels of toxicological concern.

Significant Projects at Cardno ChemRisk

Consumer Product Safety and Regulatory Compliance

Assisted with evaluating and characterizing risk associated with various electronic cigarette liquids and devices for submission of FDA Premarket Tobacco Applications

(PMTAs). Involved in the assessment of harmful and potentially harmful constituents (HPHCs) and various flavoring compounds.

Provided toxicology support for a project evaluating potential human health risks from trace contaminants in food, and the potential for residual chemical carryover from prior cargoes, when food is transported via bulk shipping containers.

Human Health Exposure and Risk Assessment

Performed systematic review of available electronic cigarette literature specific to *in vitro* toxicology.

Evaluated the potential human health and environmental impact of electronic cigarette devices, and modeled potential disposal scenarios of products and packaging in municipal waste landfill facilities.

Evaluated risk and formulated opinions related to electronic cigarette exposures and oral cancer risk.

Performed systematic review of available literature specific to the major constituents of wildfire smoke and potential health outcomes following exposure to wildfire smoke.

Litigation Support

Reviewed and summarized literature and case materials related to occupational and non-occupational exposures to asbestos and talc-containing products, glycol ether, and lead for use in the preparation of expert testimony and reports.

Society of Toxicology (SOT)

- > Gem Award, Cardno. 2020
- > Gold Star Award, Cardno. 2019

- > Safe Management of Productions Health & Safety Training, 2020
- > TSCA Webinar Series on EPA's proposed Environment and Product Regulation, 2019
- > NIH Clinical Pharmacology Course, 2018, 2019
- > IVIVC for Extremely Long Acting Drugs, 2018
- > Quantitative and Systems Pharmacology Approaches for the Development of Oncology Drugs, 2018
- > PBPK Modeling: An Approach for Designing Better Clinical Trials, 2019
- > Pharmacodynamic Modeling and Theory Course, 2019
- > The FDA and Prescription Drugs: Current Controversies in Context, 2019

Membership to
Professional
Societies

Professional
Honors/Awards

Additional Courses
and Trainings