



Justin Collins, MPH

Current Position

Associate Health Scientist II

Discipline Areas

- > Environmental Health
- > Risk Assessment
- > Toxicology
- > Industrial Hygiene

Years' Experience

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Joined Cardno

2019

Education

- > MPH, Environmental Health Sciences – Toxicology, Columbia University, 2019
- > BA, Molecular Biology and Biochemistry, Middlebury College, 2012

Summary of Experience

Mr. Justin Collins is an Associate Health Scientist II with Cardno ChemRisk. Mr. Collins' primary areas of training include toxicology, occupational health, industrial hygiene, epidemiology, and risk assessment. In his current position, he is involved in litigation support, environmental health and toxicology projects, and review of relevant epidemiology and toxicology literature.

Mr. Collins earned his MPH in Environmental Health Sciences with a Certificate in Toxicology from the Columbia University Mailman School of Public Health in 2019. He also earned a BA in Molecular Biology and Biochemistry from Middlebury College in 2012.

Significant Projects

Litigation Support

Provided support for expert witness testimony by reviewing and summarizing case materials regarding exposures to asbestos, talc, formaldehyde, lead, crude oil, benzene, PCBs, diacetyl, 2,3-pentanedione, 2,3-hexanedione, and 2,3-heptanedione.

Helped perform exposure assessments for scenarios involving occupational and non-occupational exposures to asbestos, diacetyl, 2,3-pentanedione, 2,3-hexanedione, and 2,3-heptanedione based on deposition testimony and relevant peer-reviewed literature.

Analyzed NIOSH Health Hazard Evaluations (HHE) literature related to occupational exposure to diacetyl, 2,3-pentanedione, 2,3-hexanedione, and 2,3-heptanedione in order to characterize potential exposures for workers in the food-production industry.

Reviewed and summarized literature related to the potential for lead exposure from soil in residential environments. Assisted with a human health risk assessment related to lead exposures from drinking water.

Epidemiology

Participated in a comprehensive literature review of the state-of-the-science of the epidemiology of e-cigarettes. Areas of review included e-cigarette perception, usage, abuse liability, initiation, topography, transition, pharmacokinetics, biomarkers of use, adverse events, explosions, and respiratory effects.

Evaluated the epidemiologic literature concerning dermal health effects as a result of exposure to oil spills and oil spill dispersants.

Toxicology

Performed toxicological review of the various reference values of exposure for a number of different Harmful and Potentially Harmful Constituents (HPHCs) found in e-cigarettes. Assisted in the selection of appropriate reference values for use in the FDA Premarket Tobacco Application process.

Provided support for a toxicological review of the human health effects historically associated with exposure to oil spills and oil spill dispersants.

Environmental Health

Assisted with preparation of human health risk assessment of children and their exposure to lead in soil, paint, house dust, and water.

Reviewed scientific publications of environmental health literature regarding estimates of dermal exposure to phthalates as well as to potential health effects from ingestion of caffeine.

Summarized relevant scientific literature for an evaluation of the potential for human exposure to PFAS compounds.

Previous Research Experience

Research Associate – Middlebury College

Conducted molecular biology research to investigate the role of regulator proteins in the oral pathogen *S. mutans*.

Research Technician – Boston University School of Medicine

Performed immunology research projects investigating the significance of regulatory t-cells in the etiology of Type 1 Diabetes.

Professional Associations

> Society of Toxicology (SOT), Associate Member, 2020-Present

Certifications

> 24-hour HAZWOPER Certified, OSHA, 2018

Professional Honors/Awards

> Delta Omega Public Health Honor Society, Inducted 2019

> Gold Star Award, Cardno, 2019

Publications

- > Vazquez-Mateo, C., J. Collins, S.J. Goldberg, M. Lawson, J. Hernandez-Escalante and H. Doms, 2019. Combining anti-IL-7R α antibodies with autoantigen-specific immunotherapy enhances non-specific cytokine production but fails to prevent Type 1 Diabetes. PloS one, 14(3), p.e0214379.
- > Vazquez-Mateo, C., J. Collins, M. Fleury and H. Doms, H. 2017. Broad induction of immunoregulatory mechanisms after a short course of anti-IL-7R α antibodies in NOD mice. BMC immunology, 18(1), p.18.
- > Spatafora, G., J. Corbett, L. Cornacchione, W. Daly, D. Galan, M. Wysota, P. Tivnan, J. Collins, D. Nye, T. Levitz and W.A. Breyer. 2015. Interactions of the metalloregulatory protein SloR from *Streptococcus mutans* with its metal ion effectors and DNA binding site. Journal of Bacteriology, 197(22), pp.3601-3615.