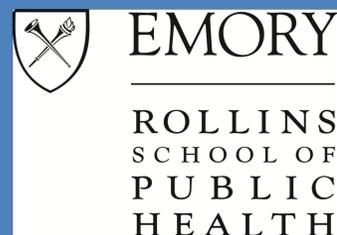


Informing United States Toxicology Guidelines and Policies to Improve Children's Environmental Health



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Background

Children are more vulnerable than adults to exposures because their bodies are still developing, they eat more, drink more, and breathe more in proportion to their body size. Their behavior can also expose them to more chemicals and organisms (US EPA, 2014). In the United States, children's health was not officially considered separately in the regulatory process until 1997, when President Clinton signed Executive Order 13045, "Protection of Children from Environmental Health and Safety Risks."

The EPA Office of Children's Health Protection (OCHP) was created after Executive Order 13045 was put in effect to create and enforce regulations to protect children's health in the United States, protecting approximately 74.5 million children living in the United States.



Outside of EPA Headquarters in Washington, D.C.

The goals of OCHP include: (1) reduce negative environmental impacts on children through involvement in EPA rulemaking, policy, enforcement actions, research and applications of science that focuses on prenatal and childhood vulnerabilities; (2) protecting children through safe chemicals management; and (3) coordinate national and internal community-based programs to eliminate threats to children's health.

OCHP addresses a range of public health problems by evaluating and communicating trends in environmental contaminants that may contribute to childhood disease and increasing environmental health literacy of health care providers in pediatric health. This EPA office provides leadership by serving on the interagency Healthy Homes Work Group, EPA's Health School Environments Initiative, supports the Pediatric Environmental Health Specialty Units (PEHSUs), and publishes America's Children and the Environment, an influential handbook on children's environmental health.

Two divisions comprise OCHP: Program Implementation and Coordination Division (PICD) and Regulatory Support and Science Policy Division (RSSPD). During my practicum, I worked in RSSPD, which focuses on translational science to inform future policies for EPA with a concentration on children's health outcomes.

Goals and Action Plan June 2014-August 2014

Goal 1

Develop dose-response assessment methodologies as a contributing member of the EPA Risk Assessment Forum's Technical Panel

Goal 2

Analyze chemicals for toxicity endpoints related to children's health in the 2012-2014 Chemical Work Plan as a part of the Toxic Substances Control Act (TSCA)

Goal 3

Update the EPA Children's Environmental Health Training used to inform employees at the Agency about environmental impacts on children's health



Action Plan 1

Bi-monthly meetings with panel of scientists across EPA to develop a strategy to create a systematic methodology to construct extensive literature review to capture various toxicological endpoints.

Action Plan 2

Extensive literature search developed to capture pertinent information related to children's health, followed by the prioritization of chemicals to aid future EPA efforts to regulate chemicals TSCA.

Action Plan 3

Deconstruct and reevaluate content for relevancy, consistency, and accuracy. Content then evaluated for future public release of training module.

Impact and Accomplishments

Development of systematic review and first level synthesis

Jumpstarted efforts by the EPA in support of the National Research Council's recommendations to implement a unified dose-response methodology

Analysis and prioritization of chemicals for the Toxic Substances Control Act

Informed OCHP about chemicals of priority concern in the 2012-2014 Chemical Work Plan to inform future policy regulations for TSCA

Updated EPA Children's Environmental Health Training

Informed approximately 16,000 employees about how children's health is impacted by the environment with future plans to externally publish training online

Professional Skills Learned

By working with a collaborative team of experts, I further developed interpersonal skills, which is essential in producing a well-rounded product. Having a firsthand exposure to how policies are constructed within the EPA gave me a better understanding on how different levels of the government affect health-related policies and programming. I also gained further insight in the kinetic chain of collaboration and communication that occurs amongst different federal agencies to improve health and well-being in the United States.

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