

A Bradford Hill's Analysis of Cosmetic Talc as a Cause of Mesothelioma

A. Michael Ierardi, MES, MS Cardno ChemRisk Brooklyn, NY **A. Michael Ierardi, MES, MS**, is a Senior Health Scientist with Cardno ChemRisk in the Brooklyn office. His principal areas of interest and training include industrial hygiene and safety, exposure science, toxicology, human health risk assessment, and environmental health. At Cardno ChemRisk, Mr. Ierardi provides on-site industrial hygiene support and sampling; conducts numerous exposure assessments and dose reconstructions for a variety of chemicals in a diverse array of occupational settings; and routinely assists clients with risk management and risk communication strategies.

In this session, a quantitative analysis of Sir Bradford Hill's guidelines for causal inference will be conducted to elucidate the potential causative relationship between cosmetic talc exposure and mesothelioma development. Specifically, multiple lines of scientific evidence related to cosmetic talc and mesothelioma will be discussed, evaluated, and ultimately synthesized using an empirical model to discern any potential causal relation between this exposure-response pair of interest.

I. <u>A Quantitative Weight of Evidence Assessment of Hill's Guidelines for Causal</u> Inference for Cosmetic Talc as a Cause of Mesothelioma