

Title: Occupational Exposure and Risk Science Is Advancing – Now Calling All OEL Ambassadors

Abstract: The importance of occupational exposure limits (OELs) is widely recognized in the practice of occupational health. The application of OELs is foundational for occupational hygiene decision making regarding the need for and design of exposure control strategies. Given this core role of OELs for worker health protection it is critical that the science behind OELs continues to develop. The good news is this is indeed occurring. Many examples can be proffered that reflect the continuing integration of risk assessment methods development into OEL derivation practice. Advances in systematic evidence integration, dose-response modeling, quantitative use of toxicokinetics principles, reliance on predictive toxicology methods, and increased sophistication of potency banding methods can all be seen in recent examples of published OELs. This presentation will highlight some of the latest developments and new challenges. But, deriving the best OEL the science can support is not good enough. Why? Because an OEL is a tool for occupational hygiene practitioners and the tool is only useful when there is access to it. Our OEL community of practice also needs to serve as a force for OEL education and outreach. The majority of workers are employed in small or medium sized businesses – strategies for reaching this target audience is a priority. A focus should be on ensuring awareness of and application of OELs at this level. Thus, while we need to continue to recruit new OEL scientists we also need to facilitate the work of our OEL ambassadors. Mechanisms for engagement among OEL developers, educators, and user communities is a critical and growing role for our OEL ambassadors.