

Professional Development Course:

Crash Course on Asbestos Risk Assessment: Workers, Community, Consumers

Crowne Plaza Nottingham. Monday 18 November 2019



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Dr. Bruce Case (Canada)

Course Tutors

Dr. Andrey Korchevskiy is a certified toxicologist (DABT), certified industrial hygienist (CIH), and is the Director of Research and Development at C&IH (Wheat Ridge, Colorado).

Andrew Darnton, MSc, is one of the leading internationally renowned epidemiologists, famous for his landmark publications on asbestos health risk assessment. He is a statistician at the HSE, UK.

Bruce Case, MD, is a pathologist and epidemiologist at McGill University, Canada, one of the most advanced experts in the area of asbestos pathology. He has been a member of BOHS since 1985.

Course Information

Asbestos and other fibrous minerals remain one of the significant occupational and environmental concerns worldwide. In spite of being effectively banned from commercial utilization, asbestos still reveals itself as a hazard in various settings. For example, asbestos fibers can be found in ambient air as a background contaminant, at workplaces when employees are involved in abatement operations, in automotive brakes, in industrial filters, in soils and rocks... Potential concerns regarding fibrous component of commercial products (like cosmetic talc and other) require special attention. To handle all those issues, it is necessary to apply a systematic and scientifically-based approach. It is not enough just to compare exposure levels with existing regulatory standards, because applicability of the asbestos exposure limits can be questionable for various practical settings and for various fiber types, being under-protective even more often than overprotective. This is why asbestos risk assessment becoming the method of choice in many situations when occupational hygienists, environmental experts, public health professionals and toxicologists face, analyze, manage, and regulate fibrous contaminants in air, soil, or commercial products.

This 8 hour PDC will introduce the audience into the cutting edge topics and agenda of asbestos risk assessment. The participants will study the four step paradigm of risk assessment (including hazard identification, exposure assessment, dose-response assessment and risk characterization) that represents an effective framework for dealing with asbestos contamination. The audience will learn how to use probabilistic techniques for exposure estimation, and how to evaluate various exposure scenarios utilizing Monte Carlo and Markov's chains framework. The class will include exciting hands on exercises to understand better the work of pathologists exploring various asbestos-related health conditions. The audience will also learn how to apply dose-response relationships for different fiber types and sizes and to probabilistically predict various health outcomes of exposure. Examples of risk assessment related to exposures from occupational procedures, residential soil contamination and talcum powder will be demonstrated and discussed.