Abstract

Asbestos-related diseases continue to result in approximately 120,000 deaths every year in the United States and worldwide. Although extensive **research** has been conducted on health effects of occupational exposures to asbestos, many issues related to environmental asbestos exposures remain unresolved. For example, environmental asbestos exposures associated with a former mine in Libby, Montana, have resulted in high rates of nonoccupational asbestos-related disease. Additionally, other areas with naturally occurring asbestos deposits near communities in the United States and overseas are undergoing investigations to assess exposures and potential health risks. Some of the latest public health, epidemiological, and basic **research** findings were presented at a workshop on asbestos at the 2014 annual meeting of the Society of Toxicology in Phoenix, Arizona. The following focus areas were discussed: a) mechanisms resulting in fibrosis and/or tumor development; b) relative toxicity of different forms of asbestos and other hazardous elongated mineral particles (EMPs); c) proper dose metrics (e.g., mass, fiber number, or surface area of fibers) when interpreting asbestos toxicity; d) asbestos exposure to susceptible populations; and e) using toxicological findings for risk assessment and remediation efforts. The workshop also featured asbestos **research** supported by the National Institute of Environmental Health Sciences, the Agency for Toxic Substances and Disease Registry, and the U.S. Environmental Protection Agency. Better protection of individuals from asbestos-related health effects will require stimulation of new multidisciplinary **research** to further our understanding of what constitutes hazardous exposures and risk factors associated with toxicity of asbestos and other hazardous EMPs (e.g., nanomaterials).