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*Nanoparticle Toxicity in Human Alveolar Cells: Implications for Health Impacts in an Occupational Setting*

The behavior of nanoparticles is an important public health topic because of their growing production and their toxic effects on human health and the environment. The same unique physicochemical properties that enable the beneficial use of nanoparticles in nanomedicine and other novel applications also make their unintentional interactions with biological systems difficult to anticipate. The interplay between nanoparticles, epithelial lining fluid, pulmonary surfactant and the cell membrane to be explored in this research is critical to understanding the potential adverse effects of nanoparticle exposure on human health, specifically in occupational settings.