

## Neonates and infants in outdoor play areas: Public health consequences of cultural attitudes about lead (Pb) dust in New Orleans, USA and Oslo, Norway



Howard W Mielke

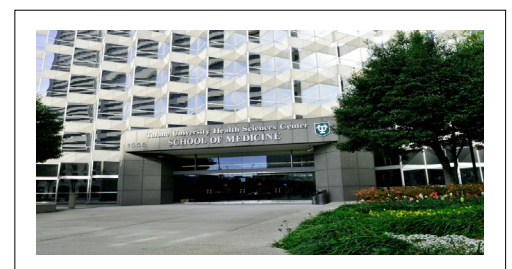
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### Abstract

New Orleans, USA and Oslo, Norway are similarly sized cities that provide outdoor play areas for children. This comparison evaluates lead (Pb) content of soils at children's play areas in parks and childcare areas near city centers. The median soil Pb in New Orleans and Oslo play areas are 418 mg/kg vs. 25 mg/kg, respectively. Why are the play area soils in New Orleans 17 times higher than play area soils in Oslo? The cultural attitudes toward two commercial products, lead-based paints and Pb additives in gasoline, suggest reasons for the unusual differences in soil Pb at children's play areas of these two cities. In the US, lead-based paint containing 1%-50% Pb was widely used until regulated downward in 1978; in Norway lead-based paint was banned during the 1920's. In the US, instead of public transportation, automobile use was enthusiastically encouraged, along with subsidized leaded gasoline; in Norway inexpensive public transportation was subsidized, and automobile use along with fuel, was taxed, and discouraged. The outcome of the cultural differences in attitudes about household and transportation uses of Pb resulted in environmental and exposure disparities. The consequences to life expectancy, learning, behavior, and immune system problems are known when children are unduly exposed to Pb. Children living in the two cities demonstrate differences that align with what is known about Pb exposure. From the nursing, whole-of-society perspective, the fundamental lesson is: if Pb exposure is prevented in the first place, then outcomes are life-long health benefits for individuals and society

### Biography

Howard W Mielke is a Professor in the Department of Pharmacology and researches environmental signaling. Graduate degrees are MS in biology and PhD in geography. He taught in Peace Corps, Malawi, Africa; Shaanxi Normal University; Xi'an, China; RUDN University Moscow, Russia; Xavier University of Louisiana; Research on Baltimore garden soils; soil and blood lead studies in Minnesota, Louisiana and Michigan; Testified to ban lead additives in gasoline; assisted Norway with their National Clean Soil Program; demonstrated the effectiveness of low-lead soil on contaminated inner-cities. His goal is primary prevention by improving urban environments for infants and children.



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