

Occupational Health Speaker Series

EHS 668/IOE 837

Noah Seixas, PhD

Approaches to Exposure Assessment for Manganese Among Welders

Assessing exposure to manganese as a component of welding fume presents a number of challenges, and although accurate and valid exposure biomarkers are needed, they have thus far proved elusive. We examine the literature relating air exposure to manganese (aMn) and its appearance in blood (bMn) for evidence of a quantitative relationship, and to identify limitations in these data. Despite some evidence for a relationship, the evidence is extremely limited, especially by temporal factors. We describe our current study of exposure and biomarkers among welding school students, which is designed to overcome many of these limitations. The observed relationships between aMn and bMn is again examined within differing time scales. Finally, we explore the potential for expression of manganese exposure in hair (hMn), and a time-windowing approach is described. The promise, and continuing limitations of manganese exposure biomarkers are discussed.

All interested persons are welcome to attend.

Friday, April 19; 1-2pm ; 2610 SPH I



CENTER FOR OCCUPATIONAL HEALTH AND SAFETY ENGINEERING