**Objectives** To examine gender and racial disparities in heart disease mortality related to metalworking fluid exposures and in the healthy worker survivor effect.

**Method** We examined ischaemic heart disease (IHD) mortality from 1941 to 1995 in a cohort of autoworkers with quantitative exposure to cumulative respirable particulate matter from water-based metalworking fluids. Cox models were used to estimate the exposure-response to soluble and synthetic fluids separately in white men, black men, and white women. In separate analyses, we used g-estimation to adjust for the healthy worker survivor effect.

**Results** The risk of IHD was increased among black men (295 deaths) exposed to synthetic fluid with a hazard ratio (HR) of 3.47 (95% CI: 1.52, 7.92) in the highest cumulative exposure category. White women (119 deaths) had increased risk of IHD with increased soluble fluid (HR: 2.44 (0.93, 6.38)) in the second to highest category. However, Cox models show no increased risk in white men (2246 deaths). In contrast, g-estimation results indicate that if white men had been always unexposed to soluble and synthetic fluid, then on average for each case, 2.99 and 2.77 years of life would have been saved, respectively.

**Conclusions** We found increased risk of IHD for black men and white women exposed to metalworking fluids using Cox regression. After adjusting for the healthy worker survivor effect, increased risk was observed for white men. The ability to leave work for health related reasons may be an option more available to white male workers.

**0106 REDUCTION OF OCCUPATIONAL ACCIDENTS: EVIDENCE BASED PREVENTION AND THE PREVENTION INDEX (PI-TOP)**

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**Objectives** Prevention Index (PI-TOP) is a practical measurement tool which is currently used to monitor injury prevention activities at workplaces. This 12-item scoring system has 3 subscales rating technical, organisational and personnel-related internal safety conditions of a company. The reliability and validity of this instrument were evaluated in a cross-sectional survey in the German metal industry during the time between December 2011 and May 2012.

**Method** The inter-rater-reliability of this instrument was examined by 2 trained supervisors of the German Social Accident Insurance Institution for the Woodworking and Metalworking Industries in 128 companies. The agreement of the double ratings was quantified by interclass correlation coefficient (ICC) and absolute agreement of the rating values.

**Results** Our analysis indicate that PITOP is a valid and reliable instrument, it will be used to monitor safety conditions at workplaces in a longitudinal practical approach.