**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.

**Objectives** Exposure to allergens and microorganisms in the agricultural environment has been linked to altered immune response. Studies in the general population have reported reduced risks of non-Hodgkin lymphoma (NHL) among those with a history of atopic conditions, although results are inconsistent. To evaluate the allergy-NHL association in the context of farm exposures, we conducted an investigation in the Agricultural Health Study, a prospective cohort of farmers and spouses on farms growing grains or hay and 64% on farms raising livestock. Compared to individuals without allergy symptoms, those with symptoms had a reduced risk of NHL (HR=0.61, 95% CI=0.50–0.74). We observed a slightly greater reduction in NHL risk among participants whose allergy symptoms worsened after working with grains and hay (HR=0.53, 95% CI=0.41–0.69). The association between livestock and NHL was borderline significant overall (HR=0.82, 95% CI=0.66–1.01), and significant among those without allergy symptoms (HR=0.70, 95% CI=0.51–0.96).

**Conclusions** Our findings suggest that among individuals working and living on farms, allergy symptoms are associated with a reduced risk of developing NHL, and that risk may be influenced by particular farm characteristics.