Results For the highest compared with the lowest quartile of intake, total omega 3 dietary intake (OR=0.68, 95% CI 0.40 to 1.15, p=0.14), DHA (OR=0.71, 95% CI 0.48 to 1.05, p=0.09) and EPA (OR=0.72, 95% CI 0.46 to 1.14, p=0.16), all showed non-significant trends with decreased FrCa risk. However, increased supplement dosage of DHA and EPA both showed significant, protective dose-response relationships (p for trend=0.04).

Conclusion This study of early onset prostate cancer has shown protective trends for supplement intakes of DHA and EPA which if confirmed in other studies could have implications for prevention.

Method New South Wales hospital data (July 2000–December 2008) were linked to mortality data (July 2000–December 2009). The first IHD admission per person was selected from January 2002. We ran multilevel logistic regression models for 30-day and 365-day mortality with 131,357 patients clustered within 193 public hospitals.

Results After adjusting for age, sex and a random hospital intercept, Aboriginal IHD patients had similar odds of dying within 30 days as non-Aboriginal patients (AOR: 1.1, 0.9–1.4). Using the same adjustments, odds of dying within 365 days were significantly higher for Aboriginal than non-Aboriginal patients (AOR: 1.4, 1.2–1.7). Adding the Charlson co-morbidity index and specific IHD diagnosis reduced this 365-day AOR to 1.2 (1.0–1.4). After adding the above variables, 2.4% of the unexplained variation in 365-day mortality was attributable to hospitals.

Conclusion Aboriginal IHD patients in NSW had similar odds of dying within 30 days of admission as non-Aboriginal patients, but were more likely to die within 1 year of admission. Increased long-term mortality was partly explained by individual risk factors. Tackling the mortality gap will require major efforts to boost primary and secondary prevention, as well as improving hospital care for IHD.

Introduction Our objective is to study the relation between industrial pollution and cancer in Spain by defining a simple industrialisation index (town level), using the information from the European Pollutant Release and Transfer Register (E-PRTR).

Materials and Methods We used data on industries from the PRTR-Spain for year 2007. We selected the 3458 facilities with positively validated co-ordinates. For the 8098 Spanish towns we defined the index as a factor with four levels based on the number of factories in a radius of 2.5 km from the centroid of each town: Value 0 for towns with no factory within the radius; 1 for those with 1 factory; 2 for those with 2, 3 or 4; and 3 for those with more than four factories.

The index, along with socio-demographic indicators (potential confounders), was included in a spatial Poisson model (BYM) to estimate the cancer mortality risk associated with the index levels. We fitted models for 33 cancer causes. Also trend tests were computed.

Results Many causes, 19, showed statistical association with at least one level of the factor. Almost all tumours related to the digestive system and the respiratory system showed excess of risk and/or trend linked with the index.

Conclusions The proposed index is a useful tool to explore possible associations between the level of industrialisation of residential areas and its health outcomes, despite of its limitations. Digestive and respiratory system tumours could be associated to residence near to industrial areas.