who had at least one full sibling born in the same period (N=1 381 436). All individuals were followed from age 28 years until the age of death, emigration, or December 2009. Using Cox’ regression analyses, we estimated HRs for mortality according to educational status.

Results Both conventional cohort analyses and intra sibling analyses were carried out. Educational differences observed in the cohort analyses were attenuated in the intra sibling analyses. Conclusion The attenuation of the association in the intra sibling analyses indicates that environment in childhood and/or genetic setup explains some of the association between educational status and mortality. However, significant associations still persisted in intra-sibling analyses, supporting an independent effect of education on mortality.

Conclusion With regard to the issue that most drowned in the sea and occurred in the summer time and the highest number of DALYs was in the age group 10 to 19 years, these findings need to be considered for prevention strategies in these provinces.

Introduction To prevent neural tube defects (NTD) folic acid fortification of wheat and corn flour has been mandatory in Brazil since 2004. The purpose of this study was to examine the effect that folic acid fortification has had on serum folate levels and its contribution of total folate intake.

Methods Data were obtained from two 24 h dietary recalls from a population-based study (2008–2010) in São Paulo-Brazil for 297 participants who also had serum folate concentrations measured. Folate intake was obtained using the software program Nutrition Data System for Research. Descriptive statistics, Pearson’s correlations, Kruskal-Wallis and Student’s t-tests were performed using Stata (Version 10.0).

Results The reference range (5th–95th percentiles) for the population after the introduction of folic acid fortification was 4.6–16.4 ng/ml for serum folate. The prevalence of low (<5 ng/ml) serum folate was 0.6%, while 1.4% of population exceeded the limit value of 20 ng/ml. Synthetic folate (folic acid) contributed 51.3% [49.2 to 53.4 95% CI] of total folate intake. Both natural folate and synthetic folate did not correlate with folate serum concentrations (p>0.05), however participants in the highest serum folate tertile were older (p=0.001), and synthetic folate intake among adults and the elderly was less than the group aged <19 years (p=0.01).

Conclusion There was a very low risk of folate deficiency in the studied population; older participants had higher levels of serum folate and lower intake of synthetic folate. Participants with excessive serum folate concentrations after the folic acid mandatory fortification of flour were identified.

Introduction Dengue fever is an arbovirus of great importance in public health. Currently, the urban population modus vivendi favours transmission and maintenance of breeding sites of the vector, Aedes aegypti. Given the complexity of vector control, epidemiological surveillance for early case detection is of fundamental importance for the prevention of outbreaks of major proportions. This research aims to study the spatial distribution of the risk of dengue in the city of Campinas from January to December 2007.

Methods Spatial RR of dengue fever was calculated for each 4 weeks in Campinas using generalised additive model in a case-control study. All 9018 reported and confirmed autochthonous dengue fever cases of residents in the municipality were geocoded, while controls were generated from a representative sample of the population of Campinas based on IBGE census.