Dengue constitutes a severe public health problem worldwide, especially in most tropical countries where environmental conditions favour the development and proliferation of Aedes aegypti. 

**Objective** To identify priority areas of risk in various areas creating a numerical scale designated as low, moderate or high risk. 

**Methodology** A retrospective descriptive study was done of historical accumulated cases during the years 2006–2007, 2008–2009, 2009–2010. The capital city and surrounding districts were selected for the study and the following indicators were calculated: the mean incidence rates of the three epidemic periods; the general house larval infestation rate by district before the SE 14-2010 (peak of the last epidemic); and the historical movement of different serotypes in each district. 

**Results** Nine districts met the condition of population density. The average incidence rates of the three periods makes Asuncion first with 636.60 and Luque last with 167.69 per 100,000 inhabitants. The house larval infestation rate is in all districts of the metropolitan area >1%. The highest is 18.46% in Fernando de la Mora and the lowest 4.94% in Mariano Roque Alonso (MRA). The history of viral circulation shows that in the metropolitan area three serotypes, DEN 1, DEN 2, and DEN 3 have circulated. In the nine Metropolitan districts, four are at moderate risk and five are at high risk. 

**Conclusion** This epidemiological risk scale for dengue fever may be useful for the allocation of resources in a more rational way and address the actions with a risk approach. 

**P1-74** IS IRON INTAKE DURING EARLY PREGNANCY ASSOCIATED WITH SIZE AT BIRTH? INSIGHTS REVEALED THROUGH STRUCTURAL EQUATION MODELLING

doi:10.1136/jech.2011.142976c.67


**Introduction** Iron deficiency during early pregnancy is associated with adverse birth outcomes. Results of studies investigating the relationship between dietary iron intake during pregnancy and birth size are conflicting. 

**Methods** We aimed to investigate the association between iron intake during pregnancy and birth size in a prospective cohort of 1274 pregnant women (18–45 years) in Leeds, UK, where iron supplements are not routinely recommended during pregnancy. Dietary intake was reported in a 24 h recall administered by a midwife at 12 weeks gestation. Dietary supplement intake was ascertained using dietary recall and three questionnaires throughout pregnancy. 

**Results** 80% of women reported dietary iron intake below the UK Reference Nutrient Intake of 14.8 mg/day. 24%, 15% and 8% reported taking iron-containing supplements in the first, second and third trimesters respectively. Women with dietary iron intake >14.8 mg/day were more likely to be older, have a university degree and take daily supplements during the first trimester. They were less likely to be smokers and live in a deprived area. Structural equation modelling was used to analyse the relationship between iron, vitamin C intakes and birth size taking into account socio-economic status and smoking using Mplus software. The model showed excellent fit ($\chi^2=2.7, p=0.8$, df=5, RMSEA<0.001). The directions of the causal paths were the same as the apriori model. 

**Conclusion** The positive effect of iron status on customised birth size is influenced by both iron and vitamin C intakes. Using SEM describes the relevant relationships in a more holistic way than traditional regression modelling.