sizes from national data are often used by researchers while actual
portions are often much larger, and therefore include more calories.
Finally, data on the food sources of nutrients are not publicly avail-
able. Current data describes food item sales yet nutrient quantities
are not available for each item, preventing determination of company
and food item sources of nutrient intake. To successfully improve
the food environment and promote health through diet, measure-
ment of dietary intake quality and supply must be improved.

P1-127 SPATIAL AND TEMPORAL DYNAMICS OF DENGUE FEVER CASES IN ARARAQUARA CITY, BRAZIL
M A De Oliveira,* H Ribeiro, M Inenami, R G da Silva. Public Health School, University of São Paulo, São Paulo, Brazil

Background Dengue fever represents a serious public health issue in
Brazil. Araraquara is a city, in state of São Paulo that has been having
serious outbreaks of dengue fever in the last decade, in spite of its
relatively good social and economical conditions. This study
mapped and analysed spatial and time distribution of the cases of
dengue fever in Araraquara.

Methods Registered and confirmed cases of years 2007 and 2008
from the National System of Diseases Notification (SINAN) were
geo-referenced using a street based map and a Geographic Infor-
ination System (GIS). To analyse spatial temporal distribution
pattern of dengue fever cases, density Kernel were used on the
events according to epidemiological week.

Results In 2007, 335 cases were confirmed, and in 2008, 1233 new
cases. Spatial analysis presented occurrence of dengue fever cases almost all around the urban area of the municipality of Araraquara.
Important spatial variations on the distribution pattern along the
epidemiological weeks were identified. In the two analysed years,
most areas that presented high concentration of cases in a specific
week tended to have few cases on the following week. However,
in some areas of the city were identified clusters of dengue fever that
remained in the same place.

Conclusion The results showed that, at a local intra urban level, the
analysis of cases per epidemiological week can be an way to identify
spatial and time important differences on the incidence of the
disease and possible factors associated.

P1-128 A SYSTEMATIC REVIEW OF SEXUAL RISK FACTORS FOR HIV IN INDIA
1N Dhingra, 1P Arora, 1P Jha. 1National AIDS Control Organization, Ministry of Health
and Family Welfare, Government of India, New Delhi, India; 2Centre fro Global Health
Research, Li Ka Shing Knowledge Institute, St Michael’s Hospital, Dalla Lana School of
Public Health, University of Toronto, Toronto, Canada

Introduction India’s large HIV epidemic and the potential for
epidemic HIV spread in some areas demands a full understanding of
HIV transmission. Factors associated with HIV infection in India
include: commercial sex work, sexually transmitted infections (STI),
numbers of sex partners and male circumcision. We wished to
quantify effects of the above risk factors, roughly estimating their
size, for each gender and in high- and low-HIV risk populations.

Methods Meta-analysis of risk factors for HIV from 34 studies
identified through literature search of multiple on-line databases.
Risk factors were: male circumcision/religion, biologically confirmed
infection with Herpes Simplex Virus 2, syphilis or gonorrhoea, self-
reported genital ulcers, multiple sexual partners and paid sex work.
Random-effects meta-analysis of effects was conducted.

Results Each of the seven risk factors were significantly associated
with HIV status in both men and women. The strongest effect size
among men was HSV-2 infection (OR: 4.68; 95% CI 2.40 to 5.43)
while the strongest effect among women was ever being paid for sex
(OR: 5.06; 95% CI 3.69 to 6.95). The effect of multiple sexual partners
was similar among men (2.80; 95% CI 2.09 to 3.77,) and
women (3.00; 95% CI 1.88 to 4.79) and was similar when further
stratified by HIV-risk group. Syphilis and multiple sexual partners as
risk factors for HIV were significantly associated with lower HIV-
risk study populations.

Conclusions The risk factors examined in our analysis should remain
targets of HIV prevention programs. Our results confirm that sexual
risk factors for HIV infection remain an important part of the HIV
epidemic in India.

P1-129 THE IMPORTANCE OF REPRODUCTIVE HEALTH AND HIV/AIDS EDUCATION PROGRAM FOR YOUNG PEOPLE IN PAPUA AND WEST PAPUA PROVINCES, INDONESIA
W Diarsvitri,* 1I Dwisetyani. 1Department of Community Health, Faculty of Medicine,
Hang Tuah University, Surabaya, East Java, Indonesia; 2Australian Demographic and
Social Research Institute, The Australian National University, Canberra, ACT, Australia

Introduction Papua and West Papua Provinces have the highest HIV/
AIDS prevalence in Indonesia. In 2009, 94.4% HIV/AIDS cases in
Papua Province were transmitted through heterosexual intercourse
and the cases among 15–19 years age group were in the fourth rank.
A study in 2007 revealed 46.9% Junior High School students had
misconception on HIV/AIDS transmission and prevention. These
features motivated the author to carry out the 2009 Reducing the
Risk of HIV/AIDS: Intervention Trial for Young Papuans Study.
The aim of this study was to evaluate the reproductive health and
HIV/AIDS education program in changing young people’s knowl-
edge, attitudes and behaviour intention associated with HIV/AIDS
and sexuality.

Materials and Methods Sixteen senior high schools were randomly
selected to either receive the program or to act as a control group.
Students of Year 11 from the selected schools (n=1082) took a pre-
intervention test and 2 months later, a post-intervention test.
Changes in knowledge, attitude and behavioural intentions between
the two groups were compared using a mixed model.

Results Findings showed that the intervention was associated with
0.11 points higher knowledge (95% CI 0.08 to 0.12), 0.13 points
higher attitude (95% CI 0.09 to 0.22) and 0.18 points higher
behavioural intentions (95% CI 0.11 to 0.33) after adjusting for age,
gender, previous sexual experience, ethnicity and pre test mean score.

Conclusions Our reproductive health and HIV/AIDS education
program was effective in changing knowledge, attitude and behav-
ioral intentions of students. It is important to promote its inclu-
sion in the school curricula.

P1-130 CREUTZFELDT-JAKOB DISEASE: REPORT OF CASES
J Dias.* Secretary of State of Health of Bahia, Salvador, Bahia, Brazil

Introduction Creutzfeldt-Jakob disease (CJD) is an infectious disease
attributed to a proteinaceous infectious particle (prion), which
attacks the central nervous system. The form of acquisition is still
unknown and may occur by four known mechanisms of trans-
mission: sporadic, hereditary, iatrogenic and variant (vCJD), which
occurs by eating contaminated beef carrier of mad cow disease.

Methods Reporting of cases of CJD has occurred in Bahia between
August 2007 and December 2010.

Results There have been 14 suspected cases of sporadic CJD, eight
confirmed, two probable (WHO criteria), one discarded and three