BACKGROUND
Better understanding of the epidemiology of Chlamydia trachomatis would assist in prevention and control, which is currently focussed on those aged <25 years. Research is hindered by asymptomatic infections and analyses based upon clinical data; care must be taken when extrapolating such findings as they depend on who is being tested. Improved serological detection of Chlamydia infection in epidemiological studies could more confidently estimate past exposure. To assess this, we explored Chlamydia incidence by age-period in a cohort study, using a combination of a recently characterised serological assay (with higher sensitivity than commercially available assays and proven antibody persistence) and self-reported diagnoses.

METHODS
Sexual health (including self-reported Chlamydia diagnosis) and behaviour information was collected from a cohort of 1,037 participants born in Dunedin, New Zealand in 1972/3, at regular intervals up to age 38. Sera drawn at ages 26, 32 and 38 were tested for antibodies to C. trachomatis-specific Pgp3 antigen using a sandwich enzyme-linked immunosorbent assay.

Chlamydia incidence, calculated using self-reported diagnoses and seropositivity, was examined by age-period (up to age 26; 26–32; and 32–38 years) and sexual behaviour for men and women; incidence rate ratios were modelled using Poisson regression.

REFERENCES