James Clarke
University of Bath, UK
e-mail: J.P.Clarke@bath.ac.uk
Dr. K.A. Jane White
University of Bath, UK
e-mail: maskajw@bath.ac.uk
Dr. Katy Turner
University of Bristol, UK
e-mail: katy.turner@bristol.ac.uk

Control of Chlamydia from a public health viewpoint

Infection with *Chlamydia trachomatis* poses a significant public health problem in the UK and worldwide. Left untreated the infection can cause further problems in individuals, including PID, epididymitis, and infertility. People with Chlamydia infection, (or other bacterial STIs) are also more likely to be infected with HIV through sexual contact. We have been comparing the efficacy of random screening, contact tracing, and combinations of the two with respect to controlling Chlamydia levels in a population in which the infection is already endemic. Our model system involves a pair approximation approach to mimic sexual contact structure and we explore the impact of changes in key control parameters over timescales of relevance to public health policy makers. In particular we use our model analysis to answer the question: what combination of screening and contact tracing should be employed to minimise prevalence of Chlamydia over realistic time intervals?