
ABBA GUMEL, University of Manitoba
Mathematics of Chlamydia Transmission Dynamics

Chlamydia, caused by the bacterium *Chlamydia trachomatis*, is the commonest sexually-transmitted bacterial disease in European countries and the United States. The annual burden of the disease and its consequences in the USA is estimated at \$2 billion. If undetected and treated, the disease could inflict irreversible complications, such as chronic pelvic pain, infertility in females and potentially fatal ectopic pregnancy. The talk will address the problem of the transmission dynamics of *chlamydia trachomatis* in a population using a mathematical model. The population level impact of various treatment strategies, based on the use of suitable antibiotics, will be discussed.