

Beatrix Oroszi	
Position:	Dep. Head of Department
Institution:	Office of the Chief Medical Officer, Budapest
Contact:	E.mail: beatrix.oroszi@oth.antsz.hu
The place and role of mathematical modelling in the epidemiology of communicable diseases in Hungary	
<p>Mathematical models are one of the most important types of epidemiological models. The roles of modern outbreak analysis and modelling in public health decision making is increasingly recognised. Models have benefit of making assumptions explicit and being testable.</p> <p>During the presentation the author will describe the three main areas, where mathematical modelling is generally applied in epidemiology; defining optimal control strategies, predicting future numbers of cases and better understanding of disease occurrence patterns. Examples coming from the modelling of pandemic influenza 2009 and other diseases, and from the design and evaluation of intervention programs, such as vaccination, will demonstrate some of the main applications of mathematical modelling in public health.</p> <p>Advanced analysis and modelling is useful to assist in public health policy making at strategic and tactical levels, however, there are some difficulties in the application of the results and predictions in the practical field work and in decision making.</p>	