

## FEASIBLE SETS FOR SEIR-MODEL WITH CONTROL

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Mathematical models of the morbidity dynamics (often called “epidemiological models”) are traditionally considered extremely important for solving the problems of predicting and controlling human infectious diseases [1]. The current urgency of this range of problems is due to such factors as large-scale migration flows [2], the emergence of resistant strains of pathogens [3], a clearly growing need for economic analysis of anti-epidemic procedures [4,5].

This paper analyzes the SEIR model [1] of morbidity dynamics, taking into account migration and morbidity control (vaccination) [6]. Feasible sets for the SEIR system are found to assess the most accessible control possibilities. The influence of the model input data (initial conditions) uncertainty is considered. The results obtained form the basis for choosing the most effective way to use limited resources during vaccination and other anti-epidemic measures.

### References.

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