

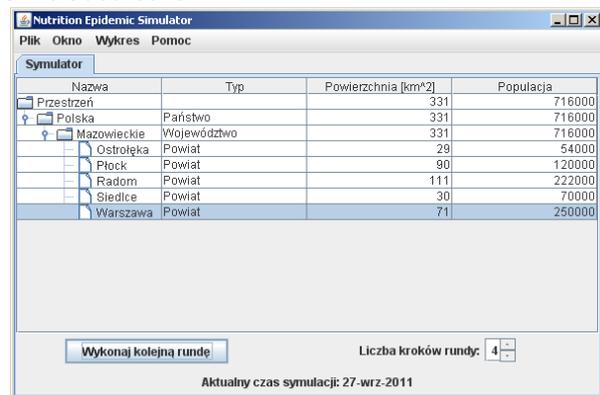
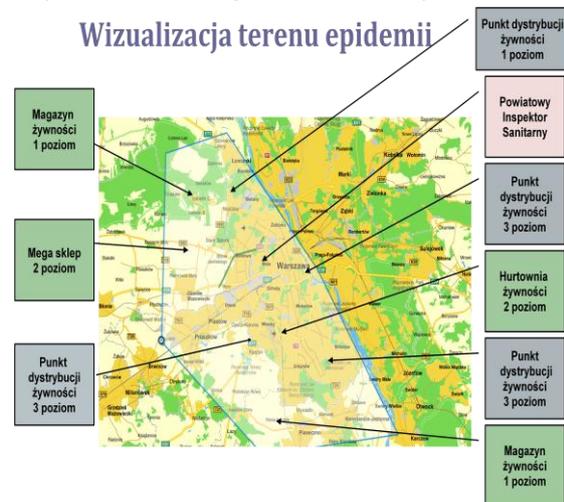
The Simulator of Food-Borne Diseases Epidemic Development.



Project: Modeling and simulation of processes and identification of computer aided procedures for risk management of food and nutrition safety. Consortium: Military Hygiene and Epidemiology Institute, Military University of Technology, Warsaw University of Technology, Warsaw University of Life Sciences, Institute of Nuclear Chemistry and Technology.

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This work is related to the issue of simulation testing processes and the course of the spread of the epidemic of food-borne diseases, which is associated with micro-organisms and toxins infected the human body with food. Through computer simulation, it is possible not only to predict the course of the epidemic, but also the estimation of the impact of preventive and remedial actions - and thus effectively prevent epidemics. The simulator takes into account: the number of outbreaks, the mass of the substance of the pathogen, disease intensity within the regional inter-intensity cases, the impact of financing activities against the epidemic, the development of the epidemic and the impact of professional teams to reduce the intensity of the disease. This is achieved in this way, the possibility of testing the characteristics of the impact of sanitary inspection activity against the development of the epidemic. Simulator gives possibility to simulating the process of the sanitary inspectors reaching the individual patient and epidemic outbreaks.



There is a defined area in which the model will be the appearance of symptoms and further development of the epidemic for the selected pathogen.

There is also the opportunity to interrupt the operation of the simulator and the initiation of the action (even several times) with different parameter values (After Action Review module).

The simulator keeps a history of the disease: symptoms, risk and spread of the epidemic. It gives many characteristics of sanitary inspector activities. You can simulate the simultaneous effects of several different pathogens. It is also possible to stop the simulator and overview the epidemic state, history of illness, etc.

