

# Mathematical models for the evaluation of antibiotic resistance in hospitals: a systematic review

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## SUMMARY

*As the appearance and spread of antibiotic resistance is becoming an increasingly serious public health problem, there is a definite need for further studies by simulation, experiment and observation. Mathematical models may provide very useful tools to develop a rationale to extend the effective life of existing and newly introduced antimicrobial agents. In this work we systematically reviewed a number of mathematical models recently presented in the literature, in order to provide a brief and informative tool for public health policy makers, regarding the spread of antibiotic resistance, worldwide.*

*Key words:* antibiotic resistance, mathematical models

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