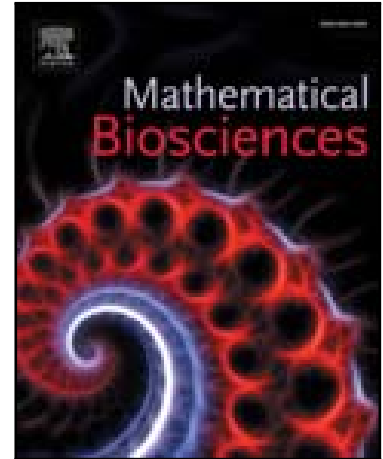


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Intervention to maximise the probability of epidemic fade-out

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Highlights

- Our goal is to maximise p_0 , the probability of epidemic fade-out in the SIR-with-demography model.
- We consider when is the best time to reduce the transmission rate parameter β .
- The optimal policy is calculated using Markov decision theory.
- We derive a simple and explicit expression, which gives a near-optimal policy.
- This near-optimal policy gives a significantly higher p_0 than a constant β policy.

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