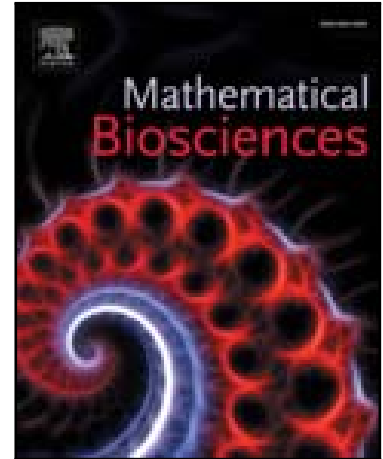


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Global dynamics of a mathematical model for the possible re-emergence of polio

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## Highlights

- A compartmental model to study the risk of re-emergence of polio is proposed.
- Global stability of one of the equilibria depending on basic reproduction number.
- Main tools of the proofs: persistence theory and Lyapunov functions.
- Vaccinating only the newly arriving might be insufficient to prevent re-emergence.

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