

# Simulating vaccinations

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## Influence of vaccination rate on the eradication of diseases

Modelling the dynamics of disease spreading with and without vaccinations

### Vaccination scares

- UK 1970s pertussis
- MMR starting 1998

### – Game Theory

- Maximising personal gain
- Perceived risk of side effects vs risk of infection
- Benefits and risks for society

### – SIR: spreading of diseases

### – Nash Equilibrium

