ODE models in R
Summary

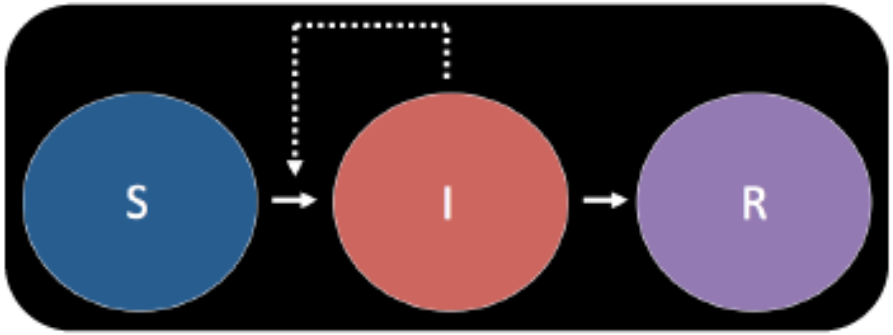
Goals

create a function describing a system of ODE's

use the package deSolve to numerically analyze a system of ODE's

plot the output of different types of functions

Summary



No birth and deaths

beta = 3.6 (transmission coefficient)

gamma = 1/5 (recovery rate)

We used *lsoda* to solve the ODEs:

- Initial conditions
- Time points
- Function to evaluate
- Vector of parameters

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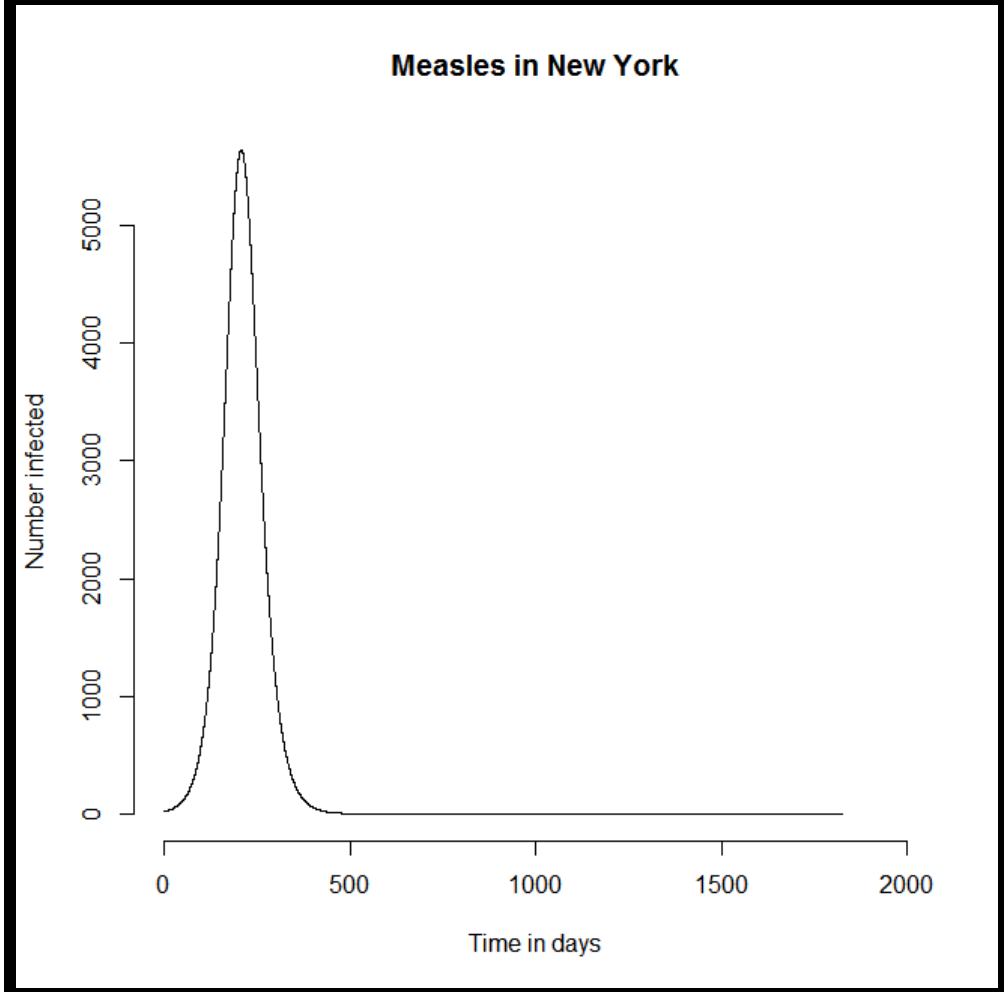
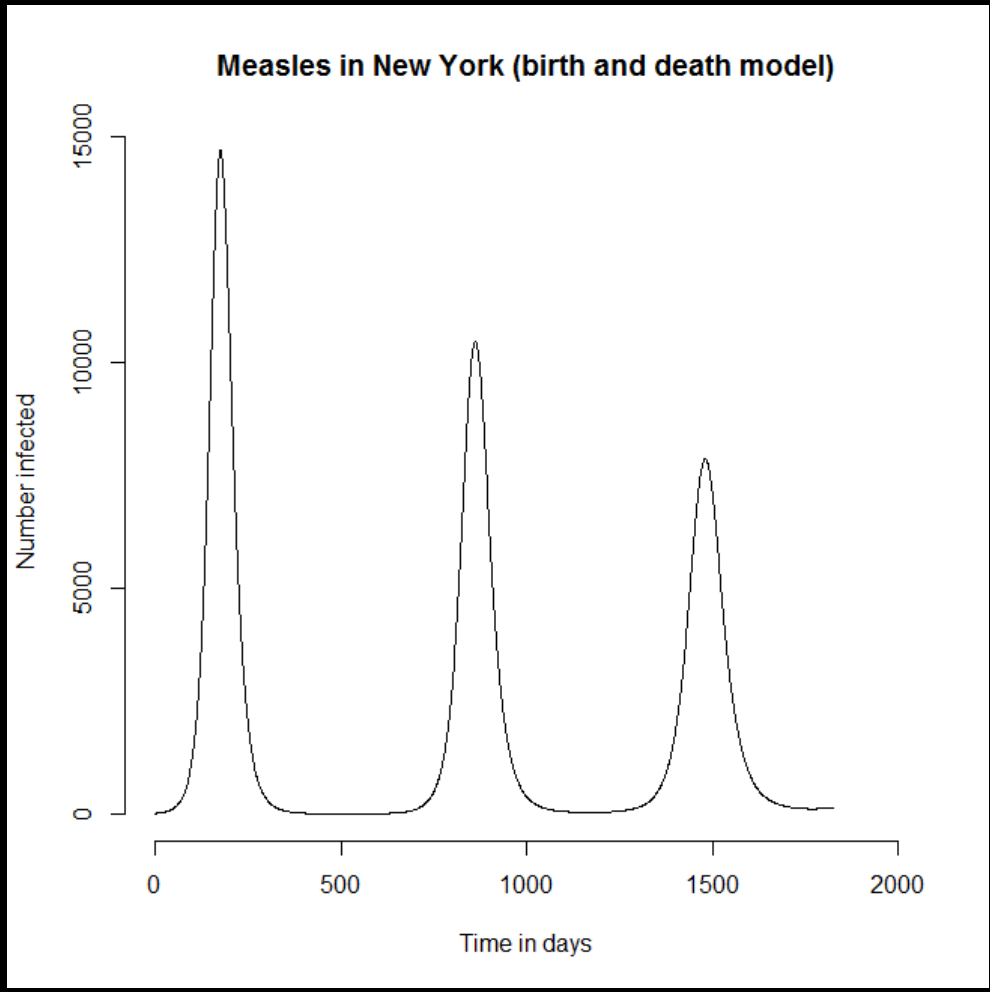
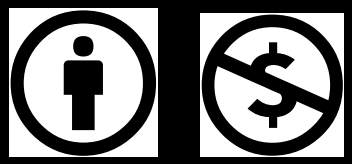
Summary


Measles in New York
Number infected
0
1000
2000
3000
4000
5000
0
500
1000
1500
2000
Time in days


Measles in New York (birth and death model)
Number infected
0
5000
10000
15000
0
500
1000
1500
2000
Time in days



Title: **ODE Models in R: Lab 1 Summary**

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Source URL: www.ici3d.org/MMED/tutorials/Lab1_summary.pdf

For further information please contact admin@ici3d.org.