## Appendix:

1.Population statistics of England and Wales including merged population, birth rate, and death data from 1949 to 1960. The data is adapted from "Vital Statistics: Population and Health Reference Tables" (attached as "annualreferencetablesummer2015\_tcm77-416007.xls") File name: "EWpop\_short.csv"

year p	ор	birth	death
1960	45906725	0.0171	0.0114638541
1959	45363697	0.0165	0.0116315696
1958	45165549	0.0164	0.0116647094
1957	44930497	0.0161	0.0114592545
1956	44607325	0.0157	0.0116871165
1955	44520733	0.015	0.0116544352
1954	44319145	0.0152	0.0113245868
1953	44153032	0.0155	0.0114041771
1952	44034967	0.0153	0.0112974763
1951	43711548	0.0155	0.0125683033
1950	44974000	0.0155	0.011346578
1949	43483214.2857143	0.0168	0.0117455898

2. Measles infection cases in England and Wales from 1950-1959 is a courtesy from Dr. Lewis Philip (UCL, cell and development).

Filename: "measles\_data.csv"

3. Python Code to reproduce the used figures, in the form of Jupyter pyhton2 notebook Filename:measles.ipynb