Data

Measles incidence data were obtained for Iceland, from 1900 to 1965, from [1]. This dataset comprises of monthly figures for measles cases reported in 47 medical districts, originally sourced from Heilbrigdisskyrslur (Public Health in Iceland). Medical districts, the basic reporting unit for disease data in Iceland, are composed of hreppar (communes) that are roughly equivalent to English parishes or American townships. Major revisions to the boundaries of medical districts took place twice during the study period: in 1907 and1932. Measles incidence data for the Faroe Islands, from 1900 to 1965 were obtained from [2]. This data was originally sourced from [3]. For Bornholm, measles incidence data from 1925 to 1965 were obtained from [4].

Demographic data for Iceland were obtained from [5]. Annual data on population and number of live births for the entire country were taken from [6]. Decadal population data from 1901 to 1965, for 262 municipalities, were obtained from [7]. Municipality boundaries changed from three to five times during the study period. In addition, many municipalities had missing data. Medical districts and municipalities were matched based on names. Using this procedure, we were able to confidently match four medical districts with municipalities. Several matched districts were discarded either due to missing population data, or lack of confidence in the matching of the geographical boundaries. It is also worth noting that matched medical district - municipality pairs may not encompass the exact same area, but one may be a (potentially partial) subset of the other. With the data available we were able to match four districts: Akuyeri, Reykjavik, Hafnarfjordur, and Vestmannaeyjar.

Data on the demographics of the Faroe Islands were taken from the Statistical Yearbooks of Denmark published by [8], and from Statistics Faroe Islands [9]. Annual data on population and births from 1901-1965 were obtained for all of the islands in the Faroe archipelago.

Demographic data for Bornholm was collected from several publications from [8].

Annual population data for Bornholm were obtained from [10]. Pre-1930 annual birth data were obtained from the *Ægteskaber, Fødte og Døde* (Marriages, Births and Death) available from [11, 12]. Post-1930 annual birth data were obtained from *Befolkningsudvikling og sundhedsforhold 1901 -60* (Population, Development and Health 1901 2013 1960) available from [13].

All locations experienced a slight decline in birth rates just prior to 1940, followed by a sharp increase in births after 1940. In Bornholm, births declined steadily from around 1945 onwards. In Iceland and the Faroe Islands, aggregate births increased steadily from 1940s onwards, with a slight decline in Iceland around 1960.

References

1. Cliff AD, Haggett P, Ord JK, Versey GR (1981) Spatial Diffusion: An Historical Geography of Epidemics in an Island Community. Cambridge University Press.
2. Cliff AD, Haggett P, Smallman-Raynor MR (2000) Island Epidemics. Oxford University Press.
3. Lancaster HO (1990) Expectations of Life: A Study in the Demography, Statistics, and History of World Mortality. Springer-Verlag, New York.
4. Denmark. Medical Report for the Kingdom of Denmark, 1927-1968, National Health Service of Denmark, Copenhagen.
5. Iceland. Statistics Iceland. URL [www.statice.is](http://www.statice.is)
6. Iceland. Statistics Iceland: Births by months 1853-2012. URL [www.statice.is/?PageID=1175&src=https://rannsokn.hagstofa.is/pxen/Dialog/varval.asp?ma=MAN05302%26ti=Births+by+months+1853-2012%26path=../Database/mannfjoldi/faeddir/%26lang=1%26units=number](http://www.statice.is/?PageID=1175&src=https://rannsokn.hagstofa.is/pxen/Dialog/varval.asp?ma=MAN05302%26ti=Births+by+months+1853-2012%26path=../Database/mannfjoldi/faeddir/%26lang=1%26units=number)
7. Iceland. Statistics Iceland: Population by municipalities 1901-1990. URL [www.statice.is/?PageID=1172&src=https://rannsokn.hagstofa.is/pxen/Dialog/varval.asp?ma=MAN02120%26ti=Population+by+municipalities+1901-1990+%26path=../Database/mannfjoldi/sveit\_eldra/%26lang=1%26units=Number](http://www.statice.is/?PageID=1172&src=https://rannsokn.hagstofa.is/pxen/Dialog/varval.asp?ma=MAN02120%26ti=Population+by+municipalities+1901-1990+%26path=../Database/mannfjoldi/sveit_eldra/%26lang=1%26units=Number)
8. Denmark. Denmark Statistik. URL [www.statistikbanken.dk](http://www.statistikbanken.dk)
9. Faroe Islands. Hagstova Foroy a. URL. [www.hagstova.fo](http://www.hagstova.fo)
10. Denmark. Denmark Statistik. Population 1. January by islands URL <http://www.statbank.dk/statbank5a/default.asp?w=1280>
11. Denmark. Denmark Statistik. Ægteskaber, Fødte og Døde 1921 – 1925. URL [www.dst.dk/pukora/epub/upload/20304/aefodo1921-1925.pdf](http://www.dst.dk/pukora/epub/upload/20304/aefodo1921-1925.pdf)
12. Denmark. Denmark Statistik. Ægteskaber, Fødte og Døde 1926 – 30. URL [www.dst.dk/pukora/epub/upload/20305/aefodo1926-1930.pdf](http://www.dst.dk/pukora/epub/upload/20305/aefodo1926-1930.pdf)
13. Denmark. Denmark Statistik. Befolkningsudvikling og sundhedsforhold 1901 -60. URL [www.dst.dk/pukora/epub/upload/19335/befsund.pdf](http://www.dst.dk/pukora/epub/upload/19335/befsund.pdf)