Figures

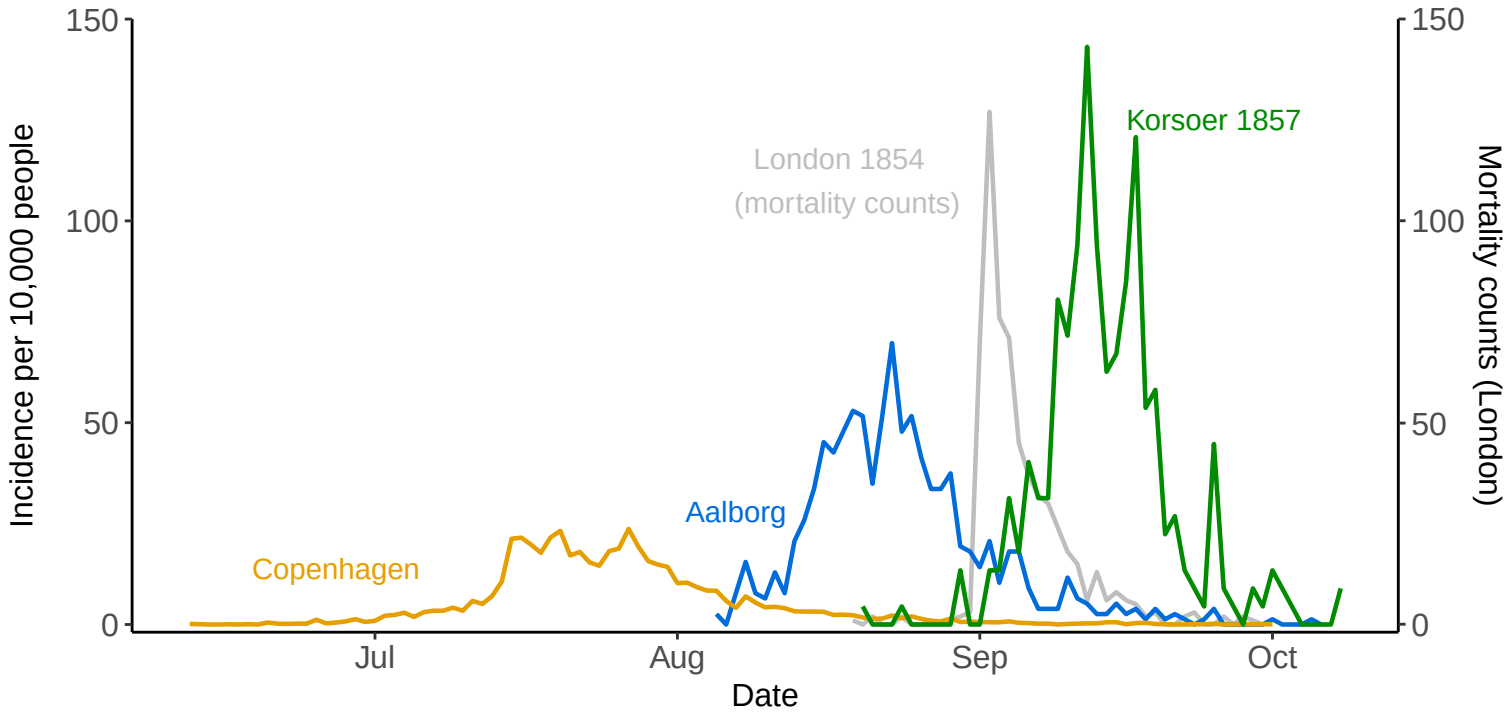

Figure 1

Daily cholera case incidence per 10,000 people and seasonality of outbreaks in three cities with inset map showing city locations and populations at time of outbreak. Mortality counts from the Broad Street outbreak in London (1854) are included in grey as reference.

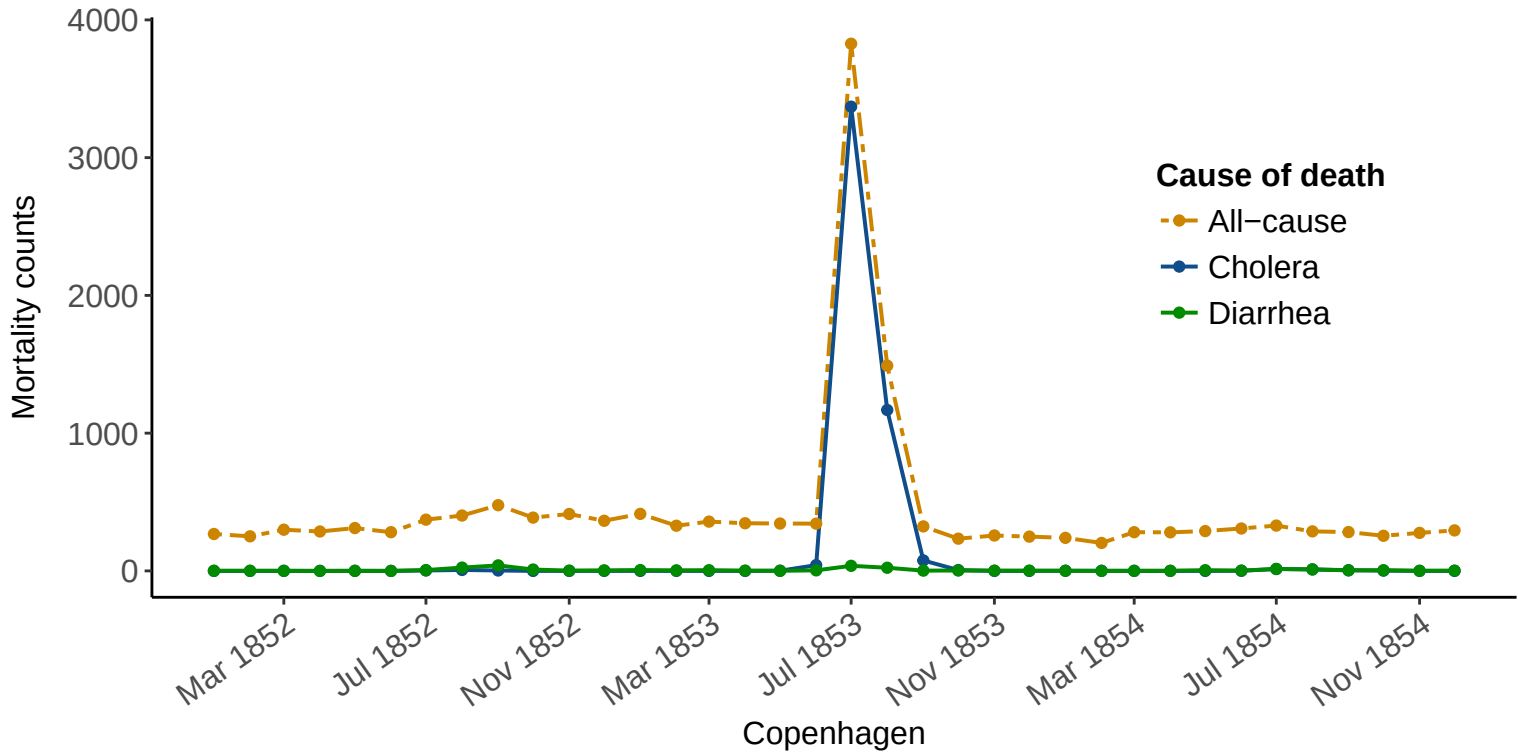

Figure 2

Monthly number of recorded deaths in Copenhagen due to cholera, diarrhea, and all-causes from January 1852 to December 1854.

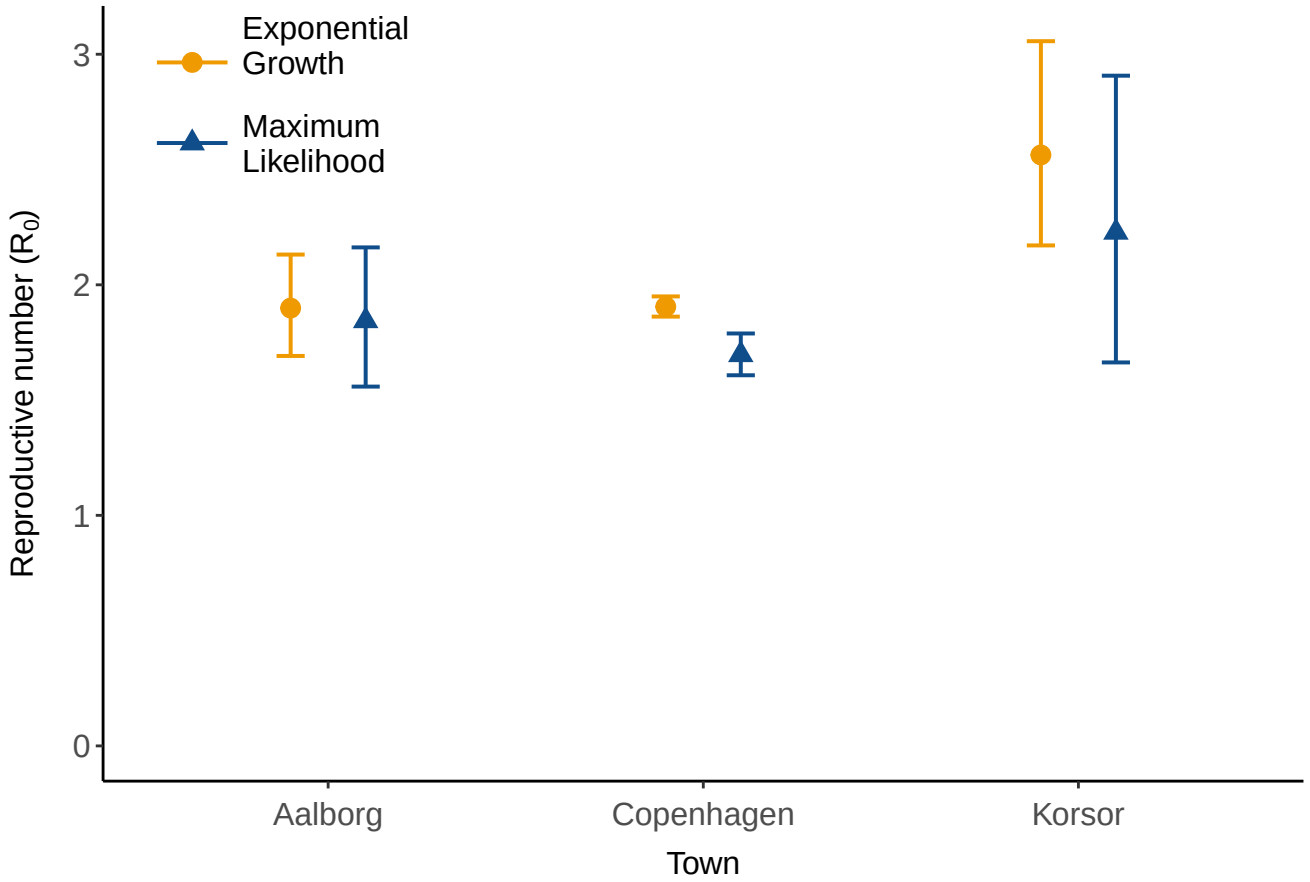

Figure 3

The reproductive number (R0) in three Danish locations using two different methods to estimate R0.

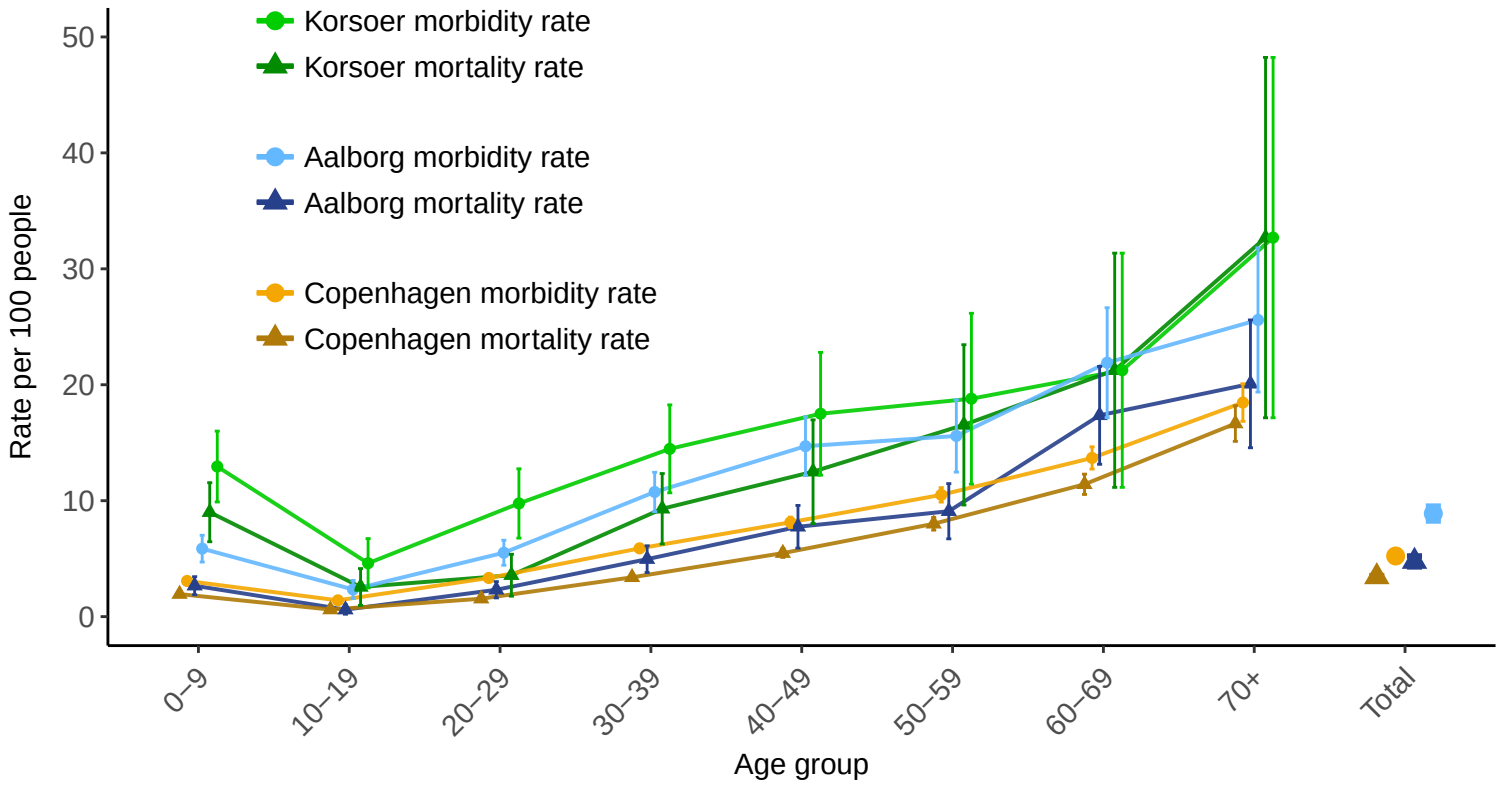

Figure 4

Cholera morbidity and mortality per 1,000 people disaggregated by age for three cities.

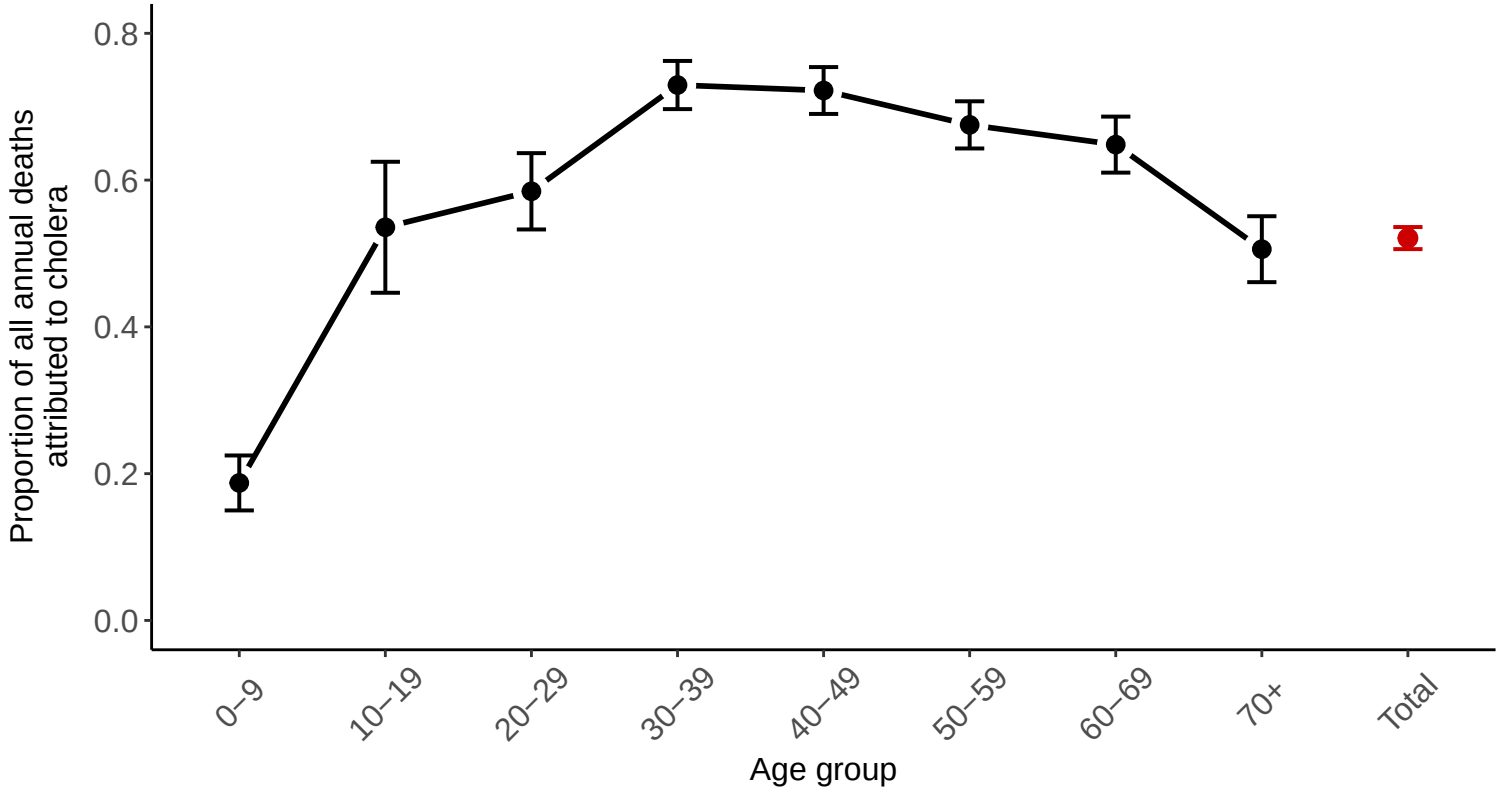

Figure 5

Proportion of all deaths in Copenhagen, 1853, attributed to cholera disaggregated by age.

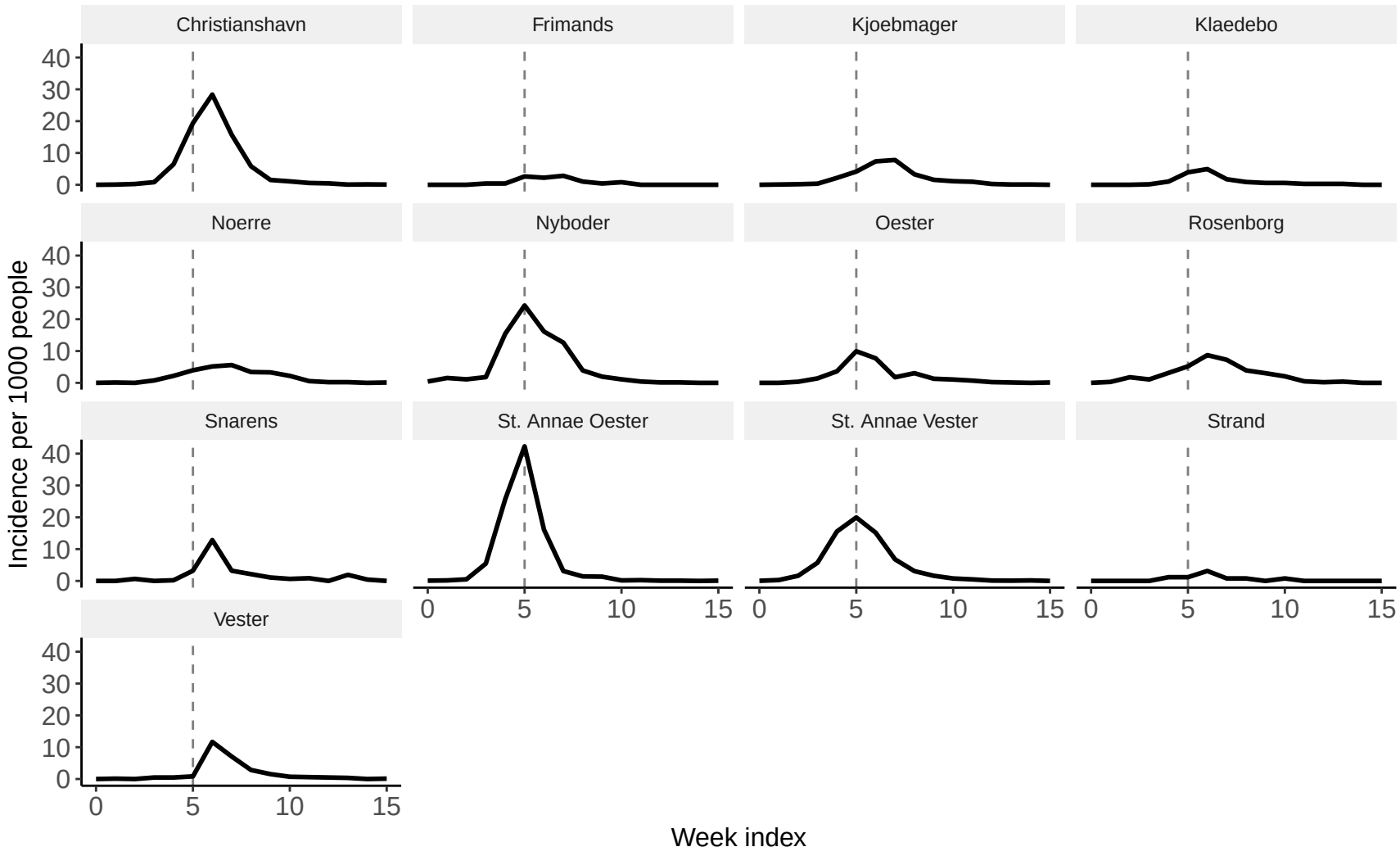

Figure S1

Incidence rate per 100 people in the neighborhoods of Copenhagen, 1853.

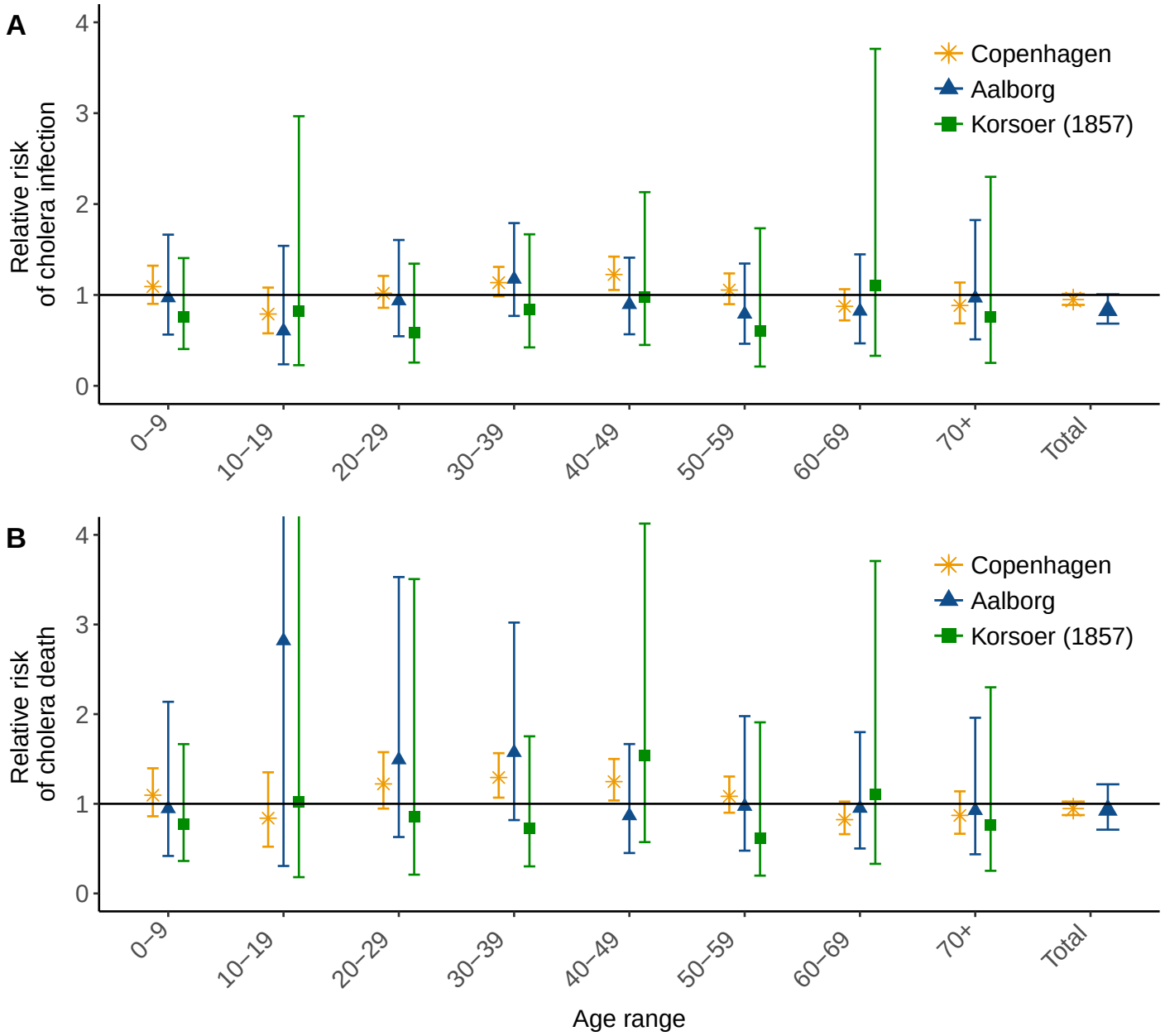
A
Relative risk
of cholera infection
4
3
2
1
0
Copenhagen
Aalborg
Korsoer (1857)
0–9
10–19
20–29
30–39
40–49
50–59
60–69
70+
Total
B
Relative risk
of cholera death
4
3
2
1
0
Copenhagen
Aalborg
Korsoer (1857)
0–9
10–19
20–29
30–39
40–49
50–59
60–69
70+
Total
Age range

Figure S2

Relative risk of cholera morbidity (A) and mortality (B) by age and gender. Values above 1.0 indicates a greater risk in females as compared to males.

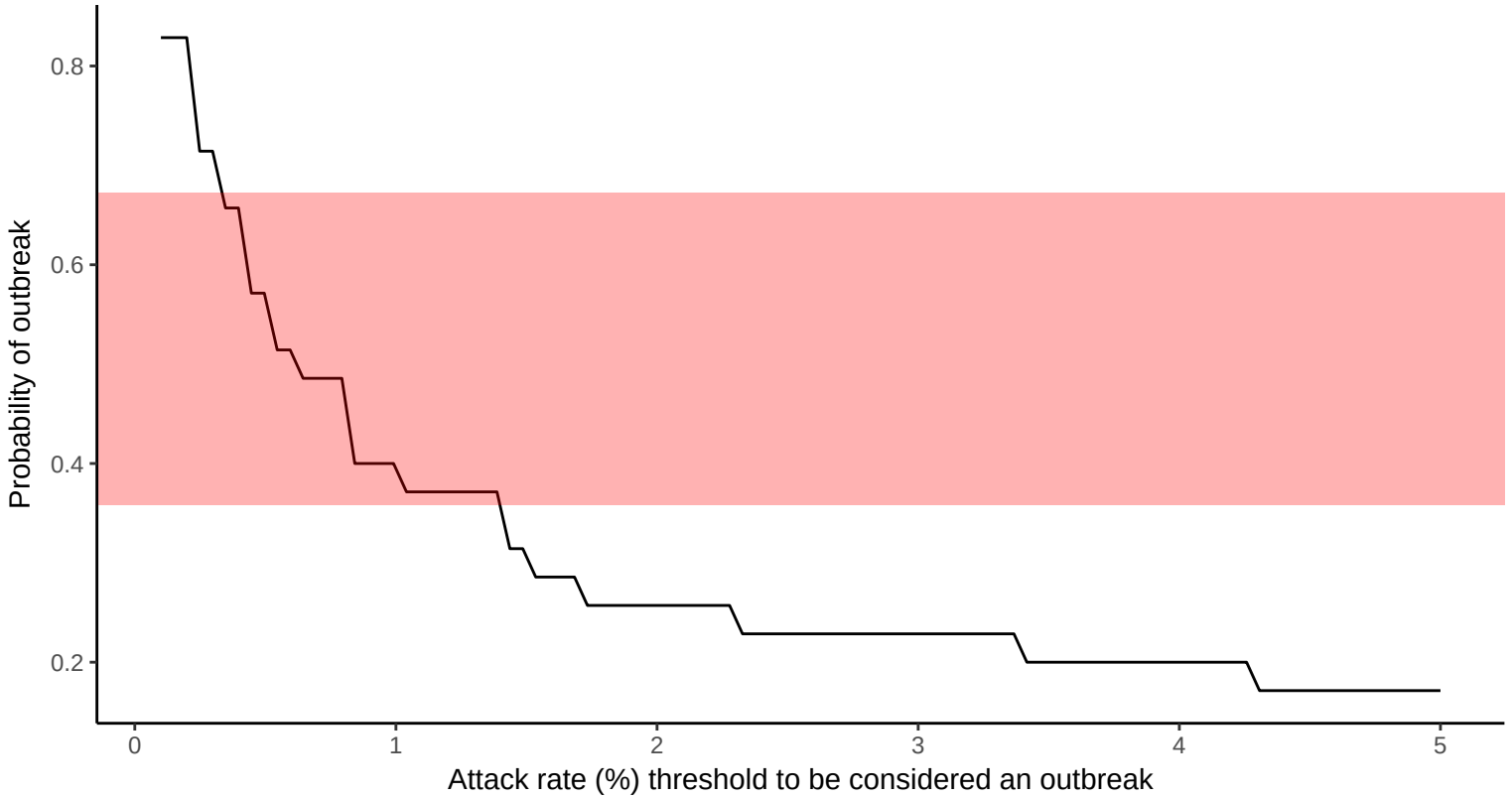

Figure S3

Using data from church parishes where at least one cholera case was recorded (n=53) on the islands of Zealand, Fuen, Lolland, Fester and Moen, we calculated the probability that the outbreak "succeeded" and progressed to a large outbreak (black line) while varying the attack-rate threshold required to be considered a large outbreak (x-axis). The red shaded region is the expected probability of an outbreak succeeding as calculated from the 95% CI range of R0 values from Aalborg, Korsør, and Copenhagen. R0 is related to Pr(outbreak), assuming a exponentially distributed infectious period, via:

$$Pr(outbreak) = 1 - 1/R_0$$