Community infections **Schools Out-of-School Activities** Households Students + siblings + 2 adults Classrooms (students + teacher) Childcare School staff + 1 adult Rotating teachers (arts, special ed) **Out-of-school activities** Other (admin, janitorial staff, counselors) Reduced transmission Symptomatic Classroom (masks, distancing, hygiene) quarantine isolation Alternative schedules

Figure 1: Model diagram. The model includes 3 primary domains: households, schools, and out-of-school social/childcare mixing and incorporates a range of interventions to prevent or reduce transmission.

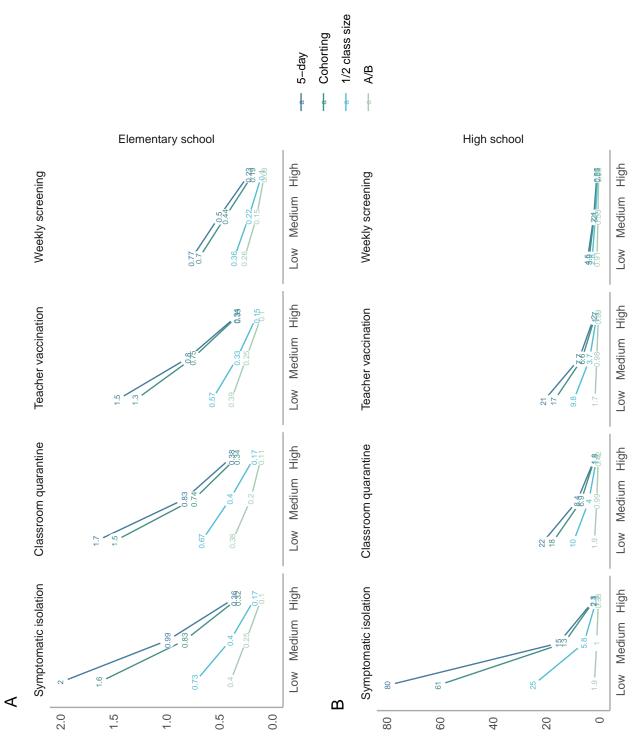


Figure 2: Average number of total secondary transmissions over 30 days (outside of the index case's household) following a single introduction into a school community. These include both transmission directly from the index case, as well as from secondary and tertiary cases. The top panel shows elementary schools, where children are assumed to be less susceptible and less infectious, while the bottom panel shows high schools. Note that axes differ across rows. The x-axes varies the level of prevention measure uptake, with low uptake assuming minimal interventions and high uptake assuming intensive interventions. Line colors correspond to scheduling strategies.

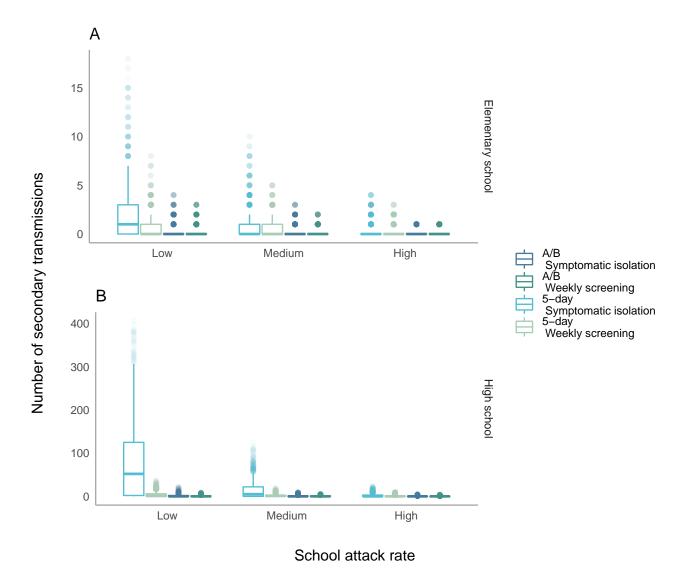


Figure 3: Distribution of secondary transmissions when a single case is introduced assuming self-isolation of individuals with clinical symptoms ('Symptomatic isolation'). The y-axis displays the number of secondary transmissions (outside of the index case's household) when a case is introduced. Transmissions include both those directly from the index case, as well as those from secondary and tertiary cases. Distributions are truncated at the 99.5th quantile, i.e. all outcomes occur with at least probability 1/200.

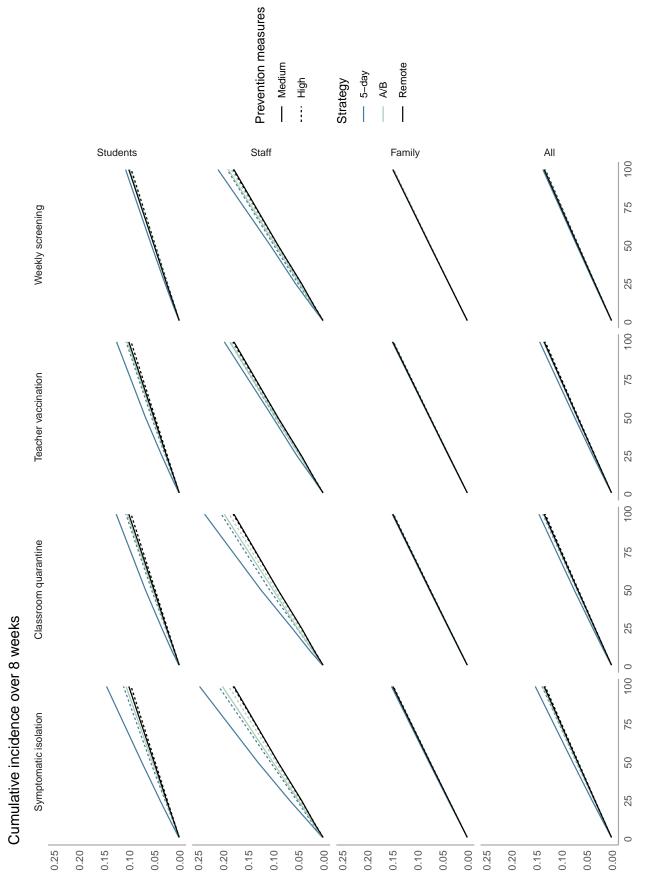


Figure 4: Cumulative incidence over 8 weeks in elementary schools. The x-axis shows the average daily community incidence per 100,000 population. The y-axis shows cumulative incidence over 8 weeks. Columns denote different isolation, quarantine, vaccination, and detection strategies, while rows show different population subgroups.

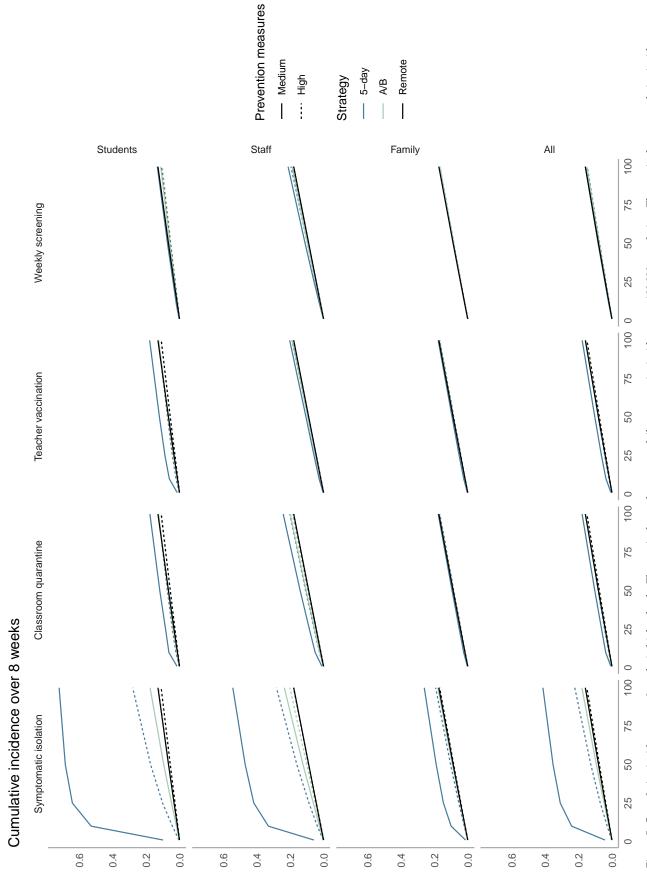


Figure 5: Cumulative incidence over 8 weeks in high schools. The x-axis shows the average daily community incidence per 100,000 population. The y-axis shows cumulative incidence over 8 weeks. Columns denote different isolation, quarantine, vaccination, and detection strategies, while rows show different population subgroups.