

Figure S7

Pace of the outbreak

Each grey line on the left hand panels indicates the total infected across all administrative units in a metapopulation simulation with parameters reflecting the country indicated by the plot title, assuming interventions are constant. Increases after the first peak indicate the pathogen reaching a new administrative 2 unit. In Malawi-like settings (higher connectivity), more administrative units are reached rapidly, whereas in Madagascar-like settings (lower connectivity), a lower proportion of the administrative units are reached by a given time, as fewer introductions occur before the outbreak has burned out in the administrative 2 unit with the largest population. More generally, rapid disappearance of the outbreak (top right hand plot, y axis shows time to extinction) could either indicate rapid spread with a high proportion of the countries' population reached (top right hand plot, x axis) or slow spread, with many administrative units unreached, and therefore remaining susceptible. The pattern of between-administrative unit travel also echoes travel time within administrative units (lower panel, right hand side, x axis indicates fraction of administrative units unreached, and upper panel indicates travel time in hours to the nearest city of 50,000 or more people).

