**S3 Fig.** The effect of a smaller infection rate on the prevalence of the virus. Here, the infection rate outside is 0.001 and the home infection rate is still 100 times larger, i.e. 0.1. The rest of the parameters are the same as those used in the paper. (A) Given 70 initial spreaders randomly located in the city, the evolution of the number of infected population per quarter in the city. The inset shows the accumulated infected population in different days. (B) The evolution of the number of infected people (per quarter) of different ages. Inset shows the evolution of the fraction of infected people (per quarter) of different ages. (C) The evolution of the number of infected people (per quarter) of different professions in the city. The inset is the evolution of the fraction of infected people of different professions. (D) The evolution of the number of infected people in different types of locations. The inset is the evolution of the fraction of infected people in different types of locations.