

Figure S1: The origins and intermediate hosts of SARS-CoV-2, SARS-CoV, and MERS-CoV

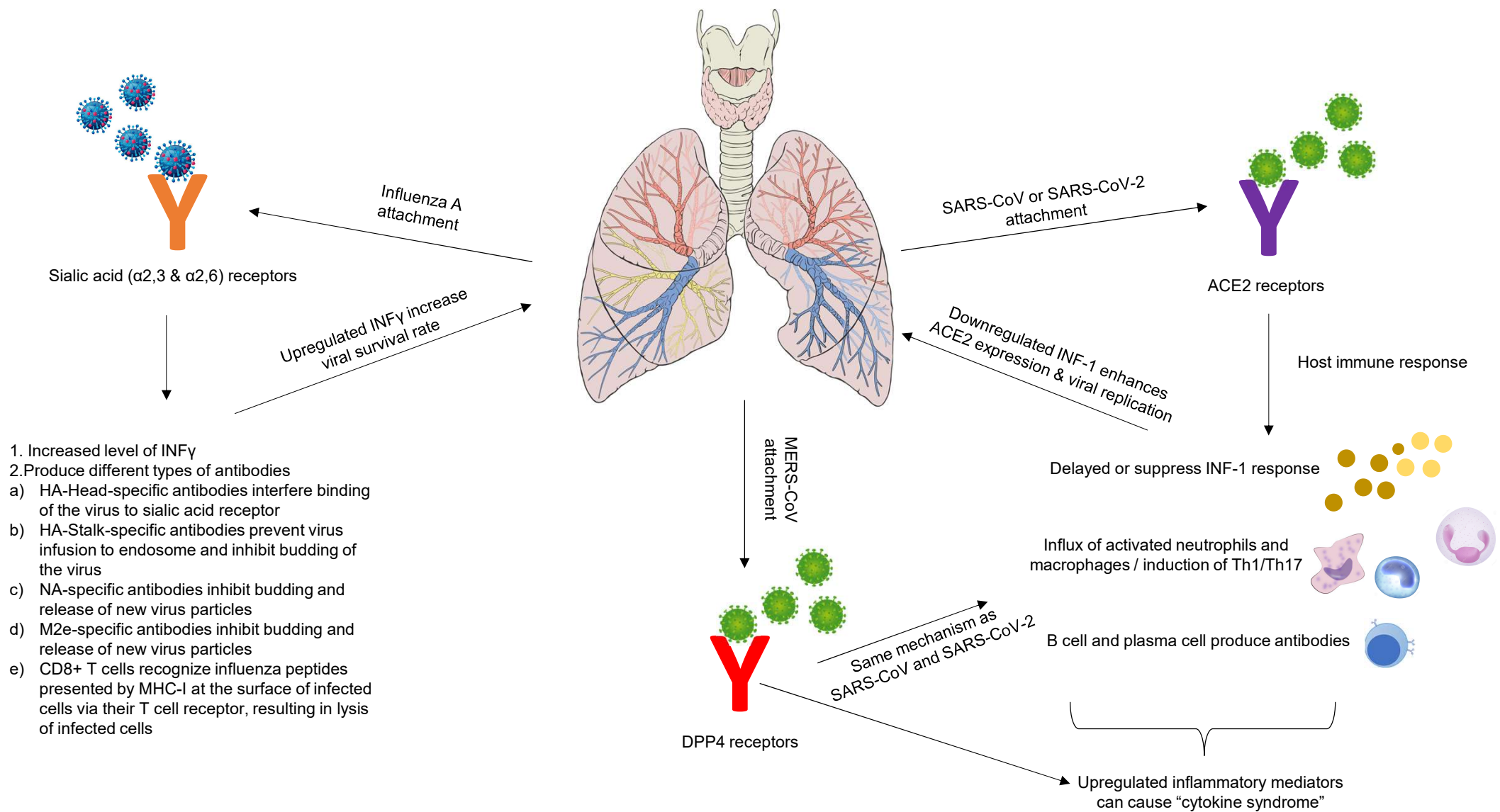


Figure S2. Virus-host interaction. Th1, T helper 1; Th17, T helper 17; ACE2, angiotensin-converting enzyme 2; INF-1, interferon 1; INF γ , interferon gamma; DPP4, dipeptidyl peptidase-4; HA, hemagglutinin; NA, neuraminidase; M2e, Matrix 2 protein; MHC-1, major histocompatibility complex class 1.

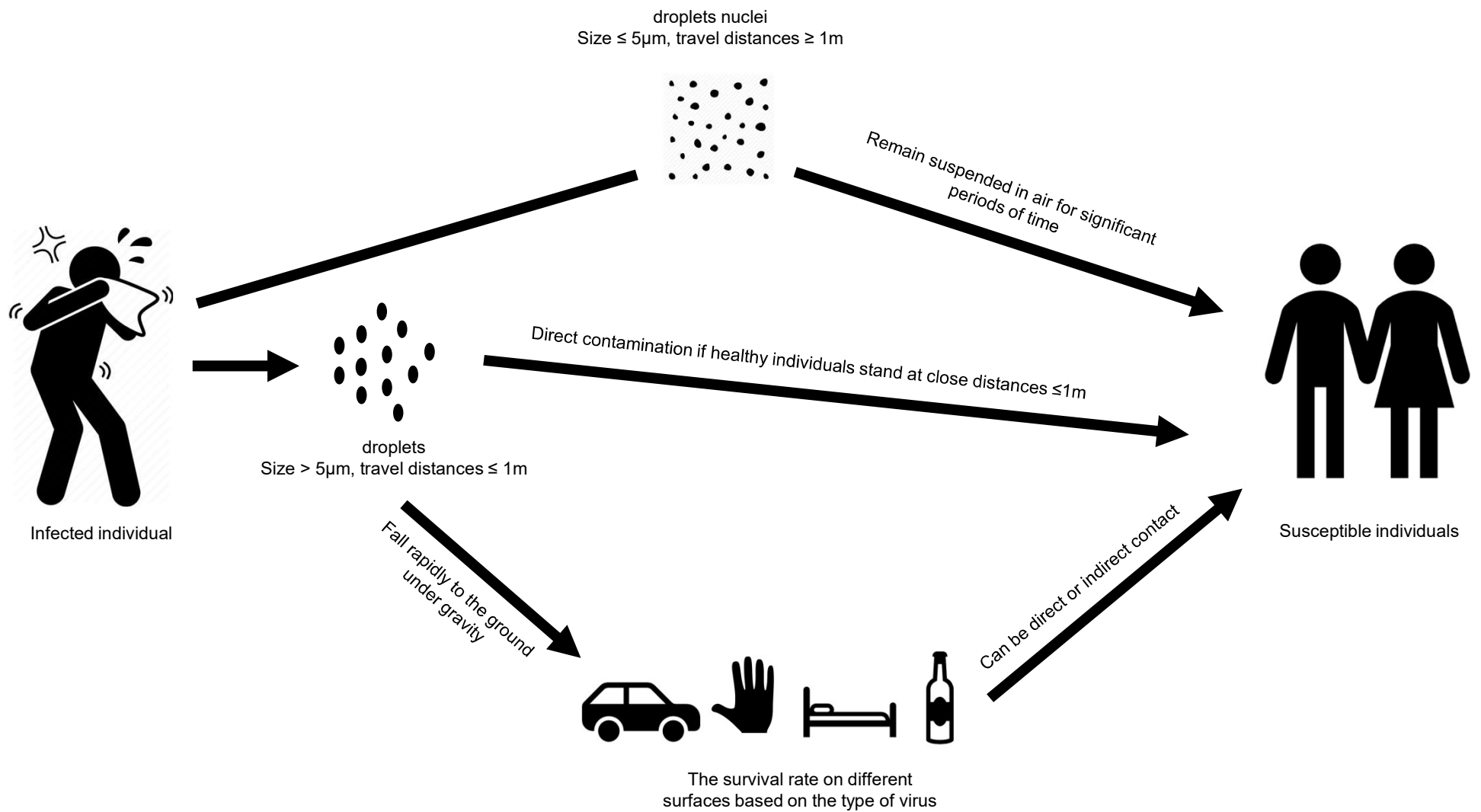


Figure S3: Potential transmission routes of respiratory infection between infected and susceptible individuals (112). Respiratory infections with a droplet nuclei size $\leq 5\ \mu\text{m}$ can travel to a distance $\geq 1\ \text{m}$. In contrast, respiratory infections with a droplet nuclei size $\geq 5\ \mu\text{m}$ cannot travel to a distance $\geq 1\ \text{m}$. Large droplets may fall on different surfaces and infect healthy individuals through direct or indirect contact.