







breath

sneeze

cough

talk











surface touch

face touch

sanitize hands

clean

Triggering contagion-related behaviours

The event timing of contagion-related behaviours can be handled using a transition probability (P_u) per time step (Δt) .

$$p_{u} = \int_{0}^{\Delta t_{s}} \left(\frac{1}{\tau^{\gamma}}e^{-\frac{t}{\tau^{\gamma}}}\right)dt = \int_{\Delta t_{s}}^{0} \left(e^{-\frac{t}{\tau^{\gamma}}}\right)dt = 1 - e^{-\frac{\Delta t_{s}}{\tau}}$$

 $\begin{cases} \tau : time interval \\ p_u : transition probability \end{cases}$

 Δt_s : time step

y: behaviour state coefficient