

Figure 1 displays the evolution of the effective reproduction number ( $R_{eff}$ ) over time (Week) for three different quarantine scenarios (0.4, 0.6, 0.8) and two types of quarantine (primary and secondary). The plots show the impact of these interventions on the spread of the virus, with shaded regions indicating confidence intervals.

The x-axis represents the Week (0.0 to 10.0). The y-axis represents the effective reproduction number ( $R_{eff}$ ), with a horizontal line at 1.0 indicating the threshold for sustained transmission.

The top row shows the primary quarantine scenario, and the bottom row shows the secondary quarantine scenario. The columns represent the quarantine level (0.4, 0.6, 0.8).

In the primary quarantine scenario, the red line (representing  $R_{eff}$ ) shows a peak around week 4, followed by a decline. The blue line (representing the primary quarantine) shows a peak around week 4, followed by a decline. The green line (representing the secondary quarantine) shows a peak around week 4, followed by a decline.

In the secondary quarantine scenario, the red line ( $R_{eff}$ ) shows a peak around week 4, followed by a decline. The blue line (primary quarantine) shows a peak around week 4, followed by a decline. The green line (secondary quarantine) shows a peak around week 4, followed by a decline.

Figure 1 displays the number of cases over time (Week) for three different R values (0.4, 0.6, 0.8) under two quarantine scenarios: primary and secondary. The y-axis represents the Number of cases (0 to 300), and the x-axis represents the Week (0.0 to 10.0). The plots show the progression of cases, with shaded areas indicating confidence intervals.

**Primary Quarantine Scenario:**

- R = 0.4:** The total number of cases (red line) rises and plateaus around 160. The secondary cases (orange line) peak around week 3 at approximately 110. The primary cases (green line) peak around week 3 at approximately 60.
- R = 0.6:** The total number of cases (red line) rises and plateaus around 160. The secondary cases (orange line) peak around week 3 at approximately 140. The primary cases (green line) peak around week 3 at approximately 50.
- R = 0.8:** The total number of cases (red line) rises and plateaus around 150. The secondary cases (orange line) peak around week 3 at approximately 160. The primary cases (green line) peak around week 3 at approximately 50.

**Secondary Quarantine Scenario:**

- R = 0.4:** The total number of cases (red line) rises and plateaus around 100. The secondary cases (orange line) peak around week 2 at approximately 280. The primary cases (green line) peak around week 2 at approximately 40.
- R = 0.6:** The total number of cases (red line) rises and plateaus around 90. The secondary cases (orange line) peak around week 2 at approximately 300. The primary cases (green line) peak around week 2 at approximately 30.
- R = 0.8:** The total number of cases (red line) rises and plateaus around 90. The secondary cases (orange line) peak around week 2 at approximately 310. The primary cases (green line) peak around week 2 at approximately 30.

