

$$\begin{aligned}
\log\left(\frac{\hat{p}}{1-\hat{p}}\right) &= 2.60 + 0.60x_{\text{age 20-29}} \\
&\quad + 0.38x_{\text{age 30-39}} \\
&\quad + 0.53x_{\text{age 40-49}} \\
&\quad + 0.33x_{\text{age 50-59}} \\
&\quad - 0.61x_{\text{age 70-79}} \\
&\quad - 1.16x_{\text{age 80-89}} \\
&\quad - 1.62x_{\text{age 90+}} \\
&\quad - 0.13x_{\text{male}} \\
&\quad - 0.18x_{\text{community}} \\
&\quad - 0.38x_{\text{health care}} \\
&\quad - 0.43x_{\text{inst.}} \\
&\quad - 0.16x_{\text{outbreak asc}} \\
&\quad - 0.89x_{\text{travel}} \\
&\quad - 1.01x_{\text{hospitalized}} \\
&\quad - 1.26x_{\text{ICU}}
\end{aligned}$$

$$\begin{aligned}
\log\left(\frac{\hat{p}}{1-\hat{p}}\right) &= 2.60 + 0.60(0) + 0.38(0) + 0.53(0) + 0.33(0) - 0.61(0) \\
&\quad - 1.16(0) - 1.62(1) - 0.13(1) - 0.18(0) + 0.38(0) \\
&\quad - 0.43(1) - 0.16(0) + 0.89(0) - 1.01(1) - 1.26(1) \\
&= 2.60 - 1.62 - 0.13 - 0.43 - 1.01 - 1.26 \\
&= -1.85 \\
\therefore \hat{p} &= 0.013
\end{aligned}$$

$$\begin{aligned}
\log\left(\frac{\hat{p}}{1-\hat{p}}\right) &= 2.60 + 0.60(1) + 0.38(0) + 0.53(0) + 0.33(0) - 0.61(0) \\
&\quad - 1.16(0) - 1.62(0) - 0.13(1) - 0.18(0) + 0.38(0) \\
&\quad - 0.43(0) - 0.16(0) + 0.89(1) - 1.01(1) - 1.26(0) \\
&= 2.60 + 0.60 - 0.13 + 0.89 - 1.01 \\
&= 2.95 \\
\therefore \hat{p} &= 0.999
\end{aligned}$$