Long-term Scenario Forecasts: Impact of Social Distancing Practice on COVID-19 Patient Hospitalizations in Stanislaus County

California has been slowly reducing the restrictions on businesses and individuals, and Stanislaus County applied for and was awarded a local variance to further reopen the community (visit the [County Variance Page](#)). Due to these changes, Stanislaus County Health Services Agency has investigated several potential scenarios to estimate COVID-19 patient hospitalizations if the levels social distancing were to change. Figure 1 displays five different scenarios and their corresponding COVID-19 patient hospitalization estimates along with actual hospitalization (black-squared line) and estimated available hospital beds for COVID-19 patients (straight blue line). It is important to note that these estimates from the model account for the robust contact tracing initiative of Stanislaus County Public Health. Phase 1 represents the time period with a 40% reduction in social contacts after the implementation of the statewide stay-at-home order. Phase 2 represents a time period under a looser set of restrictions with potentially differing levels of reduction in social contacts. The five scenarios and their corresponding levels of reduction in social contacts among individuals in Phase 2 are specified as follows:

- **Scenario 1)** Phase 2: 40% reduction
- **Scenario 2)** Phase 2: 30% reduction
- **Scenario 3)** Phase 2: 20% reduction
- **Scenario 4)** Phase 2: 10% reduction
- **Scenario 5)** Phase 2: 0% reduction

![Figure 1](#)  
*Figure 1* Projected Daily Census of COVID-19 Patient Hospitalization in Phase 2
The differences in the projected COVID-19 patient hospitalizations under these five different scenarios indicates that a small change in the reduction of physical contacts via social gatherings has a large impact on the COVID-19 patient hospitalization. Figure 2 below is a magnification of corresponding projections to given scenarios and actual hospitalizations shown in Figure 1. It is too early to determine which one of the five scenarios the County is currently heading towards but suggesting that the current practice of social distancing among individuals in the County has significantly decreased. According to the publicly available platforms (e.g., unacast, cuebiq), less than 20% reduction in social contacts with people outside of a household is occurring now.

It is critical that all County residents stay vigilant in taking preventative measures, especially for those or their loved ones are at higher risk for getting seriously ill, such as:

1. **Stay** at home as much as you can
2. **Wash** hands often
3. **Cover** your cough
4. **Keep** 6-feet distancing from one another as they return to their places of work, shop at local businesses, and visit public spaces and
5. **Wear** face coverings in public.

Stanislaus County is coordinating with local hospitals to monitor what resources are currently in use and available for new patients. Please visit our dashboard and go to the hospital tab to see the hospital resource information.

Figure 2 Magnification of Projected Daily Census of COVID-19 Patient Hospitalization in Phase 2