SAN MATEO COUNTY HEALTH
PUBLIC HEALTH, POLICY & PLANNING

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Attention: Directors of Congregate Care Facilities in San Mateo County

Regarding: COVID-19 Mass Testing Strategy for Congregate Settings in San Mateo County

At the beginning of the COVID-19 outbreak, we focused our efforts on case finding and contact tracing investigations as well as testing of symptomatic frontline workers and mitigating outbreaks in congregate settings, with the goal of protecting our most vulnerable populations. **Testing asymptomatic residents and staff of congregate settings** is a decisive move to protect these most vulnerable people, and their care givers, who are at high risk in case of an outbreak. In alignment with the rest of the Bay Area, San Mateo County's goal is for congregate settings to test all staff and all residents on a recurring weekly testing cycle.

Universal testing of residents and employees of congregate settings is consistent with the San Mateo County Health Officer Order dated October 29, 2020 and the California Department of Public Health (CDPH) All Facility Letters (AFL) 20-52, AFL 20-53 and AFL 20-38.

As described in the New England Journal of Medicine article Pre-symptomatic SARS-CoV-2 Infections and Transmission in a Skilled Nursing Facility, congregate settings serve some of the county's most vulnerable populations including older adults and residents with underlying health conditions. Additionally, the congregate nature of these facilities means residents live near each other and have extensive contact with fellow residents and facility staff. Once introduced into a facility, COVID-19 can spread rapidly, and residents are at high risk of becoming seriously ill, or even dying, if they become sick.

As long as COVID-19 is circulating in the community, residents and staff of congregate settings remain at risk. Testing determines who is COVID-19 positive and allows facilities to immediately establish necessary protocols, including cohorting of residents and implementing adequate infection control measures.

Although testing is a critical tool to identify asymptomatic COVID-19 positive cases, it is just one aspect of the County's response. In addition, the San Mateo County Communicable Disease Control Program (SMC CD Control) has created a set of protocols in a checklist format that offers an array of strategies to mitigate transmission risk and outbreaks. Testing is one piece of a larger strategy that includes preventive measures such as social distancing, frequent hand washing and appropriate use of personal protective equipment (PPE).

Thank you for working with us to keep your residents and staff safe and healthy.

Sincerely,

Scott Morrow, MD, MPH, MBA
San Mateo County Health Officer

As of November 2, 2020

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COVID-19 Mass Testing Strategy for Congregate Settings in San Mateo County

1. **Background:**
   COVID-19 testing provides us with a powerful tool to intervene earlier to prevent and control outbreaks in congregate settings. In our experience with COVID- 19 in congregate settings, we have found through mass testing that when a single or small number of symptomatic cases are identified, there may be many additional asymptomatic or mild cases among residents and staff. Without testing to identify and act on these additional cases, we cannot effectively control the outbreak. We have identified the following benefits of mass testing:
   - **a.** We can make better-informed decisions about cohorting. For example, for facilities with a large number of asymptomatic COVID-19 positive residents, we may recommend to "reverse isolate" the negative patients. If there is a small number of COVID-19 positive residents we may recommend sending these residents to a dedicated COVID-19 facility if feasible.
   - **b.** We can make more informed decisions about appropriately cohorting residents. With limited testing, uninfected residents may be unintentionally exposed to infectious asymptomatic and pre-symptomatic COVID-19 residents or staff members.
   - **c.** Asymptomatic staff who test positive will be excluded from work per the SMC CD Control guidelines, thus preventing unintentional spread of COVID-19 to other patients and staff.

2. **Mass Testing Strategies:**

We have identified 2 strategies for mass testing that will be implemented in parallel:

Strategy 1: Facilities with COVID-19 infected staff or residents. **Facilities experiencing single cases or outbreaks of COVID-19 among residents and/or staff members.** This response driven testing strategy includes the following steps:

- **a.** Serial testing of residents:
  - i. As soon as possible after one (or more) COVID-19 positive individual (resident or staff members) is identified in a facility, serial retesting of all residents who tested negative upon initial testing should be performed **every 7 days** until no new cases are identified in two sequential rounds of testing
  - ii. Facilities should use the following criteria to determine when residents who previously tested positive should be included in subsequent facility-wide serial testing.
    1. Residents who previously tested positive and remain asymptomatic after recovering should not be re-tested until 3 months have elapsed since symptom onset or the date of their positive test if they never had symptoms. In addition, during this 3-month period, these residents do not need to be quarantined if they are in close contact with a confirmed COVID-19 case.
    2. If during this 3-month period, residents develop new symptoms consistent with COVID-19 and if an alternative etiology cannot be identified, consider repeat testing after consultation with an infectious disease or infection control expert. Consider reinstituting quarantine, isolation and transmission-based precautions if new symptoms develop within 14 days following close contact with a confirmed COVID-19 case.
  - iii. Place residents into three separate cohorts based on the test results:
    1. Positive result
    2. Negative result but exposed within the last 14 days
    3. Negative result without known exposure within the last 14 days

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b. Serial testing of staff members:
   i. As soon as possible after one (or more) COVID-19 positive individual (resident or staff member) is identified in a facility, serial retesting of all staff members who tested negative upon initial testing should be performed **every 7 days** until no new cases are identified in two sequential rounds of testing; the facility may then resume its regular surveillance testing schedule for staff members.
   ii. Staff members who previously tested positive and remain asymptomatic after recovering should not be re-tested until 3 months have elapsed since symptom onset or the date of their positive test if they never had symptoms. In addition, during this 3-month period, these staff members do not need to be quarantined if they are in close contact with a confirmed COVID-19 case.
   iii. If during this 3-month period, staff members develop new symptoms consistent with COVID-19 and if an alternative etiology cannot be identified, consider repeat testing after consultation with an infectious disease or infection control expert. Consider reinstituting quarantine, isolation and transmission-based precautions if new symptoms develop within 14 days following close contact with a confirmed COVID-19 case.

c. Cohort all COVID-19 positive residents and staff as outlined below or consider transferring COVID-19 positive residents to a designated COVID-19 receiving facility, if feasible, after approval by SMC CD Control.

d. We strongly recommend all staff attend/review the following recorded trainings:
   i. Stanford School of Medicine Webinar – Strategies to Prevent the Spread of Coronavirus in Your Facility
   ii. CDC Webinar Series – COVID-19 Prevention Messages for Long Term Care Staff

***Strategy 2: Pre-emptive intervention*. Prospective surveillance of facilities not currently experiencing outbreaks.**

a. Conduct baseline testing for all residents and staff members.

b. After baseline testing is completed, continue with surveillance testing as follows:
   I. In facilities without any positive COVID-19 cases: implement testing of 25% of all staff members every 7 days including staff from multiple shifts and facility locations. The testing plan should ensure that 100% of facility staff are tested each month.
   II. Any symptomatic resident or staff member should be tested immediately.
   III. In facilities with a positive COVID-19 case, implement response-driven testing as described in *Strategy 1*.

c. Consider periodic surveillance testing and cohorting for residents who regularly leave the facility for dialysis, clinic visits, ED visits, or hospitalization of less than 24-hour duration.

3. Testing Logistics:

Successful implementation of these testing strategies will require substantial collaboration between the facilities' leadership and public health investigators.

a. Test Types

   i. **PCR testing** is useful during outbreaks when residents or staff are shedding virus in the days and weeks after initial infection.
      1. PCR testing should be used for facility-wide testing of staff and residents as described in this document.
      2. PCR testing is not 100% sensitive, so some individuals with negative tests may still have COVID-19.

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3. The PCR test selected should have a high sensitivity and high specificity. Quick laboratory turn-around time (e.g., within 48 hours) is critical.

ii. **Serologic/antibody testing** may become useful in the future, but is not currently recommended.

b. Individual facilities should develop plans for ongoing testing

i. While San Mateo County Health initially provided help to facilities that did not have a readily accessible alternative, the large scope of the pandemic now requires facilities to use their own resources.

ii. Facilities should develop relationships with commercial laboratories. Please see *California COVID-19 Testing Task Force Labs with Testing Capacity* for a list of laboratories that offer COVID-19 testing.

iii. Facilities should identify or hire staff to perform specimen collection on an ongoing basis.

iv. Facilities that have previously identified cases of COVID-19 and that have been cleared by SMC CD Control should immediately implement *Strategy 2: Pre-emptive intervention*, as described above.

v. In order to identify transmission early, facilities that do not have known cases of COVID-19 should plan to test 25% of staff on a rotating basis every 7 days. If there are any positive results in the sampled population, the facility should immediately implement facility-wide testing as described in *Strategy 1.*

vi. Facilities should develop a procedure for residents or staff members who decline or are unable to be tested (e.g., a symptomatic resident refusing testing in a facility with positive COVID-19 cases should be managed with transmission-based precautions).

4. **Public Health Follow-up:**
Based on testing results and depending upon how many staff members and residents are affected, SMC CD Control may recommend a number of interventions.

a. Staff

i. **Staff who test positive for COVID-19 and have respiratory symptoms** should be excluded from work and isolated until they meet the SMC CD Control Return to Work Criteria

ii. Assuming they do not develop symptoms, **asymptomatic staff who test positive for COVID-19** should also be excluded from work and isolated until they meet the SMC CD Control Return to Work Criteria. However, in a setting of critical staffing needs, asymptomatic staff may be allowed to work, but only if facilities can ensure that all the following conditions are met:

1. **Asymptomatic COVID-19 positive staff must only work with COVID-19 positive residents and COVID-19 positive staff.**
2. **Work areas for COVID-19 positive and COVID-19 negative staff must be kept separate**, including break rooms, work stations, and bathrooms.

iii. We do not recommend serial testing or test-of-cure for people testing positive. Instead, the SMC CD Control Return to Work Criteria should be followed.

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b. Residents

i. **Residents testing positive for COVID-19** should be separated from all residents who tested negative (cohorting). Cohorting should be organized as follows:

1. All residents who test positive for COVID-19 should be housed in a separate area within the facility. Ideally this would be a separate building or a separate floor. If there is no way to have separate cohorting areas, then temporary physical barriers (screens, etc.) with clear signage should be used.
2. When patients are roomed together they should be cohorted appropriately (i.e. only COVID-19 negative residents with other COVID-19 negative residents and COVID-19 positive residents with other COVID-19 positive residents). Cohorting should be done with as much separation as possible and with a minimum of 6 feet of separation, as always, the multi-drug resistant organism (MDRO) status of residents needs to be considered.
3. COVID-19 positive and COVID-19 negative groups should not share common areas or bathrooms.
4. Staff, equipment, etc. should be dedicated to a cohort (positive or negative) and should not be shared.
5. **Residents who test positive but remain asymptomatic** should be considered infectious for 14 days after the date of the initial positive test.

ii. **Residents who have symptoms highly suggestive of COVID-19 (e.g., new loss of taste or smell), but test negative** should still be presumed to have COVID-19. These residents should be placed on contact and droplet precautions, and isolated away from both COVID-19-positive and COVID-19-negative residents if possible. Re-testing can be performed prior to the next scheduled testing cycle if results will impact cohorting decisions.

iii. If after mass testing is done, only a small number of individuals are identified in one category, and if it is feasible, consider relocating this minority to another facility. Given the risk of spreading infections to other facilities, all potential transfers must be approved by SMC CD Control.

c. Completion of Cohorting:
Residents who test positive for COVID-19 can be removed from the COVID-19 designated cohort area when they are no longer considered to be infectious. For details, please refer to the SMC CD Control Congregate Setting Admission, Readmission, and Discontinuation of Transmission-Based Precautions guidelines and/or call SMC CD Control.

5. Resources:

a. San Mateo County Health Officer Orders and Statements
b. Stanford School of Medicine Webinar – Strategies to Prevent the Spread of Coronavirus in Your Facility
c. CDC Webinar Series – COVID-19 Prevention Messages for Long Term Care Staff
d. AFL 20-52: Coronavirus Disease 2019 (COVID-19) Mitigation Plan Implementation and

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Submission Requirements for Skilled Nursing Facilities (SNF) and Infection Control Guidance for Health Care Personnel (HCP)

e. AFL 20-53: Coronavirus Disease 2019 (COVID-19) Mitigation Plan Recommendations for Testing of Health Care Personnel (HCP) and Residents at Skilled Nursing Facilities (SNF)

f. AFL 20-38: Visitor Limitations Guidance

g. COVID-19 Testing Task Force Laboratories List (The latest list can be found under the *Lab Resources* section on the California COVID-19 Testing Task Force website.)