



COVID – 19
Research and Advisory Team:
Report and Recommendations
March 16, 2020

SFV Members: Barbara Kivowitz, Bob Horn and Patricia Tsang

Research & Advisory Team Report #1 March 16, 2020

This initial report is a wide range, comprehensive overview of what is known about Covid 19 - nationally and locally, as of March 16, 2020. It includes findings on the current state, the symptoms and spread of the virus, the implications for people over 60 and those with chronic diseases, and the actions needed to mitigate the impact of the virus. This report also contains our recommendations for actions SFV should consider taking now. Future reports will focus on the changes in the current state, along with emerging recommendations for action.

Note: we used multiple reliable sources for the key findings such as: WHO, CDC, SFDPH, Johns Hopkins, clinical journals, reports from epidemiologists, public health professionals, health researchers, etc.

Current State of Covid 19

1) What the numbers tell us:

- 40-70% of the US population will be infected over the next 12-18 months. Unlike flu this is entirely novel to humans, so there is no latent immunity in the population.
- We can expect that we'll continue to see a doubling of cases every 6 days. As the numbers of infected increase, the doubling of cases may occur every 2 days.
- Every infected person infects 2-3 others
- Assume 50% of US population, that's 160M people infected. 70% is 225M
- With 1% mortality rate that's 1.6M Americans die over the next 12-18 months. Countries that are overwhelmed will have a fatality rate between 3%-5%
 - The fatality rate is in the range of 10 times that of the flu.
 - This assumes no drug is found effective and made available.
- It is estimated that 80% of people with the virus will have a mild case. 5.0% will need to be admitted to the ICU, 2.3% will need to undergo invasive mechanical ventilation, and 1.4% will die (1.4% of 225M people is 3,150,000)
- If 10% of cases require hospitalization by about May 8th, all open hospital beds in the US will be filled. (these beds may not be suitable for isolation of patients with a highly infectious virus)

2) How does Covid 19 spread:

- The spread is now community based, no longer limited to contact with a person infected outside the country.
- The virus is thought to spread mainly from person-to-person -- between people who are in close contact with one another (within 6 feet) -- through respiratory droplets produced when an infected person coughs or sneezes.

- These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- People are thought to be most contagious when they are most symptomatic. Some spread might be possible before people show symptoms
- The virus survives for up to 9 days on different surfaces such as metal, ceramics and plastics. That means things like doorknobs, tables, or elevator buttons can be terrible infection vectors.

3) What does this mean for people over 60, especially those with chronic health conditions:

- The death rate varies hugely by age.

AGE	DEATH RATE confirmed cases	DEATH RATE all cases
80+ years old	21.9%	14.8%
70-79 years old		8.0%
60-69 years old		3.6%
50-59 years old		1.3%
40-49 years old		0.4%
30-39 years old		0.2%
20-29 years old		0.2%
10-19 years old		0.2%
0-9 years old		no fatalities

- Around 20% of cases require hospitalization, 5% of cases require the Intensive Care Unit (ICU), and around 2.5% require very intensive help, with items such as ventilators.
- At a 10% hospitalization rate, all hospital beds in the U.S. will be filled by about May 10. And with many patients requiring weeks of care, turnover will slow to a crawl as beds fill with Covid-19 patients.

4) What are the symptoms of Covid 19:

- Close to 90% of cases had a fever and two-thirds had a dry cough.
- The third most common symptom was fatigue. Almost 40% of cases suffered from it.
- Many of the most common symptoms are shared with those of the common flu or cold. It is good to know which common symptoms of the common flu or the

common cold are *not* symptoms of COVID-19. COVID-19 infection seems to rarely cause a runny nose.

COVID-19 compared to other common conditions

SYMPTOM	COVID-19	COMMON COLD	FLU	ALLERGIES
Fever	Common	Rare	Common	Sometimes
Dry cough	Common	Mild	Common	Sometimes
Shortness of breath	Common	No	No	Common
Headaches	Sometimes	Rare	Common	Sometimes
Aches and pains	Sometimes	Common	Common	No
Sore throat	Sometimes	Common	Common	No
Fatigue	Sometimes	Sometimes	Common	Sometimes
Diarrhea	Rare	No	Sometimes*	No
Runny nose	Rare	Common	Sometimes	Common
Sneezing	No	Common	No	Common

*Sometimes for children

Sources: CDC, WHO, American College of Allergy, Asthma and Immunology

BUSINESS INSIDER

- Incubation phase can vary from 1-14 days. The average is 5-6 days.
- On average the disease lasts two weeks.
 - Median time from onset to clinical recovery for mild cases is approximately 2 weeks.
 - For severe and critical cases it is 3 to 6 weeks.
 - For those who eventually died, the time from symptom onset to death ranged from 2 to 8 weeks.
- It seems to be common that symptoms start with a fever, followed by a dry cough.
- After several days some patients experience shortness of breath.
- Symptoms can increase in severity. In severe and critical cases it can lead to severe pneumonia, respiratory failure, septic shock, and multiple organ dysfunction or failure.
- More than 10% of those diagnosed with COVID-19 who already had a cardiovascular disease, died as a result of the virus. Diabetes, chronic respiratory diseases, hypertension, and cancer were all risk factors

5) What's Happening in San Francisco:

- Stopping short of a state order, Gov. Gavin Newsom on 3/15 called for the home isolation of all seniors 65 and older and those who are health compromised in the state of California and the immediate shutdown of bars, nightclubs, brew pubs and wineries
- 37 confirmed cases - the likely number of unrecognized or asymptomatic cases is much higher

- Restrictions include:
 - Limitations of hospital visitors
 - No gathering of more than 100 people in an enclosed space
 - No visitors to nursing homes
 - No non-essential gatherings at city-owned spaces
 - No residential evictions associated with financial strain due to Covid 19
 - All SFUSD schools closed for 3 weeks
- Testing for Covid 19
 - There is no on-demand testing for COVID-19
 - If you are sick, do not go to any laboratory to request COVID-19 testing. Instead, contact your healthcare provider.
 - The test samples can only be taken by a healthcare provider, and laboratories can only test samples that are sent to them by a healthcare provider.
 - Right now, public health has very limited capacity to test, and must prioritize testing people who are at highest risk of having COVID-19 or of transmitting it to others
 - Testing is available through the San Francisco Department of Public Health Laboratory only for patients who have been hospitalized with pneumonia, but the cause cannot be found and who have symptoms of fever and cough AND were in close contact with someone confirmed to have COVID-19.
 - Your healthcare provider may be able to send COVID-19 tests to a non-public health laboratory.
 - For vulnerable populations, don't go to gatherings (of 10 people or more) unless it is essential. If you can telecommute, you should. Avoid people who are sick.

6) What Needs to Happen Now:

- “Flattening the Curve”:
 - If we reduce the infections as much as possible now, our healthcare system will be able to handle cases much better, driving the fatality rate down.
 - If we spread infections over time, we will reach a point where those who recovered from infection will likely be immune to Covid 19 and will provide “herd immunity” - fewer opportunities for the virus to be transmitted.
 - Also, a vaccine may prove effective in preventing the spread.
- Social Distancing: staying at home, is the only truly effective way to reduce the spread, and to stay as safe as possible.
- The CDC recommends that people at higher risk (over 60, chronic health condition) stay home as much as possible and consider ways of getting food brought to your house through family, social, or commercial networks.

- It is believed that “lockdown” was largely responsible for slowing the spread in China and South Korea.
- Italy has now mandated that all commercial activities, offices, cafes and shops be closed. Only transportation, pharmacies, groceries will remain open.
- This has already been proven effective in the past. Namely, in the 1918 flu pandemic.
- Effectively, each of us can choose to reduce our personal R0 — the number of people each one of us would go on to infect if we developed Covid-19 — will help flatten the curve. If you can drive the effective R0 below 1, you can slow down and stop the spread.

Recommendations for Action Steps Week of 3/16/2020

SFV knows how essential community is at all times, and especially during times of crisis and uncertainty. Organizations like the CDC, WHO, and SFDPH provide critical information to help people keep physically safe. SFV can play a critical in the lives of its members by helping them stay emotionally grounded and socially connected. This will require early action, creative approaches, and some technology.

What follows are our recommendations for rapid action. Some of these may dovetail with your thinking or add additional perspectives, some may be different, and some recommendations may need modifications to better work for SFV and its members. We believe that in this situation speed matters. We also realize that Kate and staff resources are stretched, and this crisis adds complexity and the need for rapid response. This may be an opportunity to tap into the talents of the Board, members, and volunteer resources (Note: how quickly this Research & Advisory team formed using Board and member resources and produced this report, and will produce future ones).

1. OUTREACH TO MEMBERS TO FIND OUT HOW THEY'RE DOING AND WHAT THEIR NEEDS ARE, AND TO CONVEY HOW SFV IS CREATING COMMUNITY IN THIS CRISIS

- Telephone a sample of SFV members, beginning with the leaders of the neighborhood circles, specialty groups (e.g. knitting group), and the “regulars” who attend events.
- Sample questions: While it's important to have the voice-to-voice connection, if all the questions can't be covered, one option is to ask the member if she would be willing to answer the remaining questions via email (or a form that could be snail mailed)

- What is your health like today?
- Do you have any symptoms? Fever? Cough? Shortness of breath?
- Do you have enough food and medication? Is there anything else you are short of?
- Who are you closest to? And the next person you are close to? How often are you in communication with them?
- What is the health like of the people you live with or those who are close to you?
- What can a SFV volunteer help you with in this week? Next week?
- Are you in a neighborhood circle or a specialty group?
- Are you in regular contact with other SFV members? Which ones?
- How do you communicate with your family and friends: by Phone? Skype? Email? Do you have a computer and Internet connection at home?
- Document the information in a way that it can be updated and shared with relevant parties (e.g. all staff, and perhaps the Board, the Research & Advisory team). Anonymize the data, if necessary.
- Staff, board members, and appropriate volunteers, SFV circle leaders, and others reach out to more members to check in and ask the questions (ideally, all members will receive an initial phone call. If this is not possible, prioritize members whom you know are more isolated)

2. BEGIN BUILDING/SUPPORTING “VIRTUAL” NETWORKS: MEMBER-TO-MEMBER AND GROUP COMMUNICATION

- Neighborhood Circles: work with Circle leaders to assess if the circle would be able to use a tool like Zoom or Skype, or a phone conference call. Make the chosen tool available to leaders and teach them how to use the tool from both the technology and the meeting facilitation perspectives. With staff present and providing support, test the use of Zoom/Skype and the use of a conference call with 2 circles (1 circle for each tool). Learn about the challenges members experienced and make necessary adaptations. Widen the virtual circle meetings to more circles.
 - Staff will need to learn how to best use these tools and how to facilitate virtual groups in order to teach circle leaders and some other members (Barbara and other board members and Sarah can help with facilitation tips; maybe another Board member or Sarah can help with the technical side)
 - Teach others (volunteers, members, etc.) who are interested and have some facility how to become “virtual” meeting facilitators (tool use and facilitation techniques)
- Expand this approach to specialty groups – e.g. knitting, meditation, writing, groups, Spanish speakers, solo agers, etc.
- Create “buddy” groups of 2 or 3 (or more) members who can check in with each other once or twice a week.
 - There are already natural pairings and buddy groups of SFV members who have become friends. The groups will likely only need

encouragement to continue doing what they are doing and to be aware of the resources SFV can offer.

- Circle leaders may be able to organize dyads or triads of members who can check in with each other weekly (or more often)
- Others could be invited to be part of a buddy group based on similar interests (e.g. Spanish speakers), zip code, etc.
- Be sure buddy groups have the tools they need to communicate – e.g. a conference line number (teach one buddy in each group how to get a free conference line from freeconference.com)
- Group facilitators and staff should also track those members who are not participating and those who may have particular needs. These names should be reported to staff who can reach out to them by phone.

3. PROVIDE INFORMATION TO MEMBERS (THROUGH EMAIL, NEWSLETTERS, SNAIL MAIL, PHONE CALL (to those you know need a phone call):

- How SFV will remain active to maintain and strengthen community. What resources SFV can provide during this crisis
- How to use the health system should they develop symptoms of Covid 19 or another illness.
- Where to look for reliable information about:
 - a. The spread of Covid 19 in SF and elsewhere
 - b. What symptoms to look for and how to differentiate Covid 19 from the flu
 - c. How to do self care at home
 - d. How to take the recommended precautions (e.g. stay at home, maintain social distance, hand washing)
 - e. How to stay emotionally healthy during this crisis
 - f. Consider having an outgoing after hours/weekend office message that directs people to call their doctor (who likely has an on call provider) or a hospital emergency room if they are sick (Note: This is not ideal, but reports are that the current system in SF is deficient and I don't think SF had a 24 hour Covid 19 hotline)
- SFV should probably refer people to info sources (websites and phone numbers) rather than be a direct provider of information given potential liability issues and the changing nature of the crisis