San Francisco Department of Public Health

Guidance

Risk of Being Indoors or in Enclosed Spaces During the COVID-19 Pandemic

Updated October 23, 2020

The following guidance was developed by the San Francisco Department of Public and is posted at sfcdcp.org/indoorrisk. This guidance may change as information is updated.

Purpose. Attending events, eating meals, socializing, and engaging in other activities indoors or in enclosed spaces significantly increases the risk of COVID-19 transmission. This guidance serves as information for businesses and the general public about the risk of activities that occur indoors or in enclosed spaces (e.g., vehicles, airplanes, elevators, small office rooms or locker/changing rooms with poor ventilation, tents, saunas, etc.) and ways to reduce that risk.

Audience. San Francisco residents and visitors. The material is also designed for use by San Francisco employers and anyone producing materials to inform the public about COVID-19 risk.

BEING INDOORS OR IN ENCLOSED SPACES INCREASES COVID-19 RISK

Scientists agree that the risk of transmitting COVID-19 is generally **much greater** indoors than outdoors because **the COVID-19 virus can travel in the air more than 6 feet and collects indoors and in enclosed spaces.** You must consider the increased risk to yourself and your community before participating in activities that are indoors or in enclosed spaces (e.g., vehicles, airplanes, elevators, small office rooms or locker/changing rooms with poor ventilation, tents, saunas, etc.).

How Does Covid-19 Spread?

Our current understanding is that COVID-19 is mostly spread from person-to-person in the air through virus-containing droplets in the breath of someone with COVID-19. These droplets enter the air when a person breathes. Even more droplets can get in the air when infected people talk, sing, cough, or sneeze. People with COVID-19 may have no symptoms and can still be breathing out virus-containing droplets that can infect others. Transmission can occur through:

- Larger droplets. These larger droplets are sometimes called “ballistic droplets” because they travel in straight lines and are pulled down by gravity. People nearby, usually within 6 feet, are infected when they breathe in these droplets or if the droplets land in their eyes, nose, or mouth.
- Smaller droplets or infectious particles. These can float in the air for a period of time and/or travel beyond 6 feet on indoor air currents, especially in enclosed spaces with poor ventilation. People sharing the same space are infected when they breathe in these smaller droplets and particles or the droplets or particles land on their eyes, nose, or mouth – even if they are further than 6 feet away. These droplets are sometimes referred to as “aerosols” or “bioaerosols”.

COVID-19 can also spread if a person touches a surface that is contaminated and then touches their eyes, nose, or mouth. Contaminated surfaces are sometimes called “fomites”. However, this is less common.

Generally, whenever possible, choose outdoor activities over indoor activities, and if you need to go indoors or be in an enclosed space, limit your time there if you are with people who are not in your household. Avoid indoor and enclosed spaces that are crowded and have poor ventilation.

FREQUENTLY ASKED QUESTIONS

1) Is it really riskier to be indoors or in enclosed spaces?
    a. Generally, yes. The same activity is usually much riskier indoors than outdoors because of the risk of aerosol transmission indoors.

2) How much more risky?
    a. Precise numbers are difficult to calculate but the science is clear: the COVID-19 virus can build up indoors and many individuals can get sick indoors even if they were more than 6 feet away from the infected person.
    b. Each of these factors adds to your risk:
        - participating in multiple indoor activities
        - being indoors with many other people from other households
        - **being indoors in areas where there is poor or no ventilation** (see www.sfcdcp.org/COVID-ventilation for how to optimize ventilation)
        - **taking your face covering off for any amount of time or being around others who have their face covering off**
        - being closer than 6 feet to other people
        - being around others who are singing or shouting

    Activities that combine these risk factors multiply your risk even more.

3) How can we reduce risk when indoors or in enclosed spaces?
    a. Consider potential outdoor and in-home alternatives
    b. Find options for outdoors, curbside, delivery or take out
    c. Decide not to socialize indoors (private social indoor gatherings are currently banned by the State and County)
    d. Plan and consider safety precautions for indoor activities well in advance
    e. Limit travel in vehicles that contain people outside your household to only essential needs (going to work, getting food, social services, medical care, etc)
    f. Limit your group to members of your own household
    g. Limit the time spent indoors and in enclosed spaces. **Minimize time in places where masks are not worn consistently**
    h. Find times when the location will not be busy or crowded
    i. Choose locations which have larger interior spaces and high ceilings
    j. **Look for good ventilation**, including good air flow from open doors or open windows, ventilation systems with ribbon or tissue showing they're operating, and portable air cleaners. See www.sfcdcp.org/COVID-ventilation for more on how to optimize ventilation.
    k. To the extent possible, avoid settings where there are people not wearing masks and maintaining at least 6 feet social distance
    l. Singing, shouting, sneezing, or coughing carries much higher risk: go back outdoors if you see or hear these activities indoors
    m. Guard your minimum 6 feet of social distance
    n. Keep your mask on at all times

References

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