

Campus Recreation is exceeding minimum standards and following industry best practices to help minimize the spread of COVID-19 on campus.

# A Face Covering is Required during Exercise

- Remember: If you feel dizzy, lightheaded, or short of breath. slow down/reduce exercise intensity and or stop exercising until these symptoms go away (Capritto, 2020).
- The average person may experience an increase of 8-10 heart beats per minutes (bpm) while exercising with a face covering (ACE, 2020). Take it slow, ease into your workout, and allow several days to a few weeks to fully acclimate if you haven'te been working out with a face covering.
- You are not at risk of breating in Carbon Dixoide (CO2). If you find it difficult to wear a face coveirng, try a differnet material and follow the tips below.

# Tips on Proper Wear of a Face Covering during Exercise

(adapted from Boone, 2020; CDC, 2020; Sweeney, 2020)

- Make sure your mask is big enough to cover your nose and face for proper protection.
- The mask should feel comfortable and snug around your cheeks and nose. Try not to fidget with the mask while you are working out.
- If the mask restricts your breathing prior to exercise, it will not be good to wear during exercise.
- Wash your hands PRIOR to putting on your mask. Soap and water are fine or use an alcohol-based hand rub.
- Make sure you do not touch your eyes, nose or mouth when removing your mask. Wash your hands AFTER taking off your mask.
- It is best to remove your mask by the ear loops because the front of the mask is where germs will collect.
- A great advantage of a cloth mask is that it can be washed. Exercise enthusiasts who exercise regularly are encouraged to have a few masks so there is a clean, dry mask ready for each workout. Any laundry detergent will be fine for washing cloth face masks.
- When you talk, keep your mask over your nose and mouth. Do not pull it down as this defeats the purpose of blocking respiratory droplets from being released in the air.
- If you tend to sweat a lot when you workout (indoors or outdoors), perhaps bring a second mask with you and replace when it becomes damp. It is best to replace a damp mask (from workout sweat or outdoor humidity).
- For people who wear glasses, sometimes they fog up if too much air is released near the nose of the face mask. Readjust the mask to be snug over the nose. Furthermore, it has been shown that washing glasses with soapy water, without rinsing, and letting them dry prior to wearing a face mask reduces fogging. Alas, folding a tissue and placing underneath your glasses may absorb any escaping moisture from your breath.

Please read the attached article for additional information form the American Council on Exercise



https://www.acefitness.org/education-and-resources/professional/expert-articles/7578/exercising-with-a-face-covering-safety-do-s-and-don-ts/

American Council on Exercise is the leading nonprofit exercise professional and health coach certification organization. Our goal is to set the highest industry standards, elevate the careers of professionals and help people worldwide make movement their mission. Our commitment to create global impact inspires us to facilitate partnerships with policymakers, fitness industry leaders, community organizations and the Healthcare Industry. We are determined to expand the healthcare continuum and integrate ACE Professionals, so activity is prescribed to prevent inactivity related diseases. By offering NCCA-accredited certifications, continuing education, and access to science-based health and fitness information, we are investing in our mission to get people moving—so everybody has the resources they need to lead active, healthy lives.

### By Len Kravitz, PhD, Zachary Mang, MS, Juliet St. Germain, BS, and Cedric X. Bryant, PhD.

The Centers for Disease Control and Prevention (CDC 2020) presently recommends that everyone wear a cloth face covering (mask) in public settings, where other social distancing measures are difficult to maintain in order to slow the spread of COVID-19. Symptoms of COVID-19 include a cough, difficulty breathing, fever or chills, fatigue, body aches, headache, loss of taste or smell, sore throat, runny nose, nausea and diarrhea. Importantly, the CDC scientists report that recent studies indicate that many individuals with COVID-19 lack symptoms (i.e., are "asymptomatic") and can transmit COVID-19 to others before showing any discernible sign of having the illness. The evidence suggests that the virus can spread between people interacting in close proximity—for example, speaking, singing, coughing, or sneezing—even if those persons are not exhibiting any symptoms.

### Is it Safe to Exercise with a Face Covering?

Exercise centers, gyms and fitness studios are now starting to re-open as the stay-at-home directives begin to ease throughout the U.S. and other countries. Exercise enthusiasts are wondering if it is safe to return to their favorite workout facility and what precautions need to be in place for everyone to remain safe. With no COVID-19 national safety directives in place for all gyms and exercise facilities, policies are sure to vary throughout the country and among fitness businesses. One big question being asked by fitness pros and exercise enthusiasts is, "Should I wear a face mask when I workout in a fitness facility?"

Most people can perform their regular workouts while wearing a face covering, which will provide protection from virus spread for everyone (Capritto, 2020). It is essential to remind exercise enthusiasts to monitor how they feel during the workout and to take particular notice if they feel dizzy, lightheaded, or short of breath (Capritto, 2020). If so, slow down/reduce exercise intensity and or stop exercising until these symptoms go away. If a client stops exercising due to shortness of breath and he or she remains short of breath, have the person remove the covering to allow for better air flow into the lungs. Remember, these symptoms (i.e., dizziness, lightheadedness, shortness of breath) during exercise may also reflect a number of health conditions including the following: overexertion (particularly if a person hasn't worked out for some time or at his or her usual intensity levels, due to stay-at-home

rules), dehydration, low blood pressure, low blood glucose, heart arrhythmia (sometimes exercise triggers an irregular heart rhythm) or lack of oxygen.

Individuals with a pre-existing respiratory or cardiovascular condition are encouraged to take caution when exercising with a face mask (Capritto, 2020). Specifically, those clients who have chronic obstructive pulmonary disorder, asthma, chronic bronchitis, pulmonary fibrosis and any other lung conditions should consult (i.e., via telemedicine) with a medical professional for personal instructions on exercising with a face mask (Capritto, 2020).

Also, feeling dizzy after a workout (with or without wearing a face mask) may indicate that a person has low blood pressure. This may also occur in pregnant women. Dizziness after exercise may sometimes indicate a heart problem or symptoms of type 2 diabetes (low blood sugar levels). Medical attention is necessary if this condition persists.

### How Hard Should a Client Exercise While Wearing a Face Covering?

Monitoring exercise intensity is always essential for a safe and effective workout, with or without wearing a face covering. However, wearing any type of covering over the nose and mouth while exercising is likely to reduce the flow of oxygen into a person's lungs (Capritto, 2020). Some workouts, such as high-intensity interval training (HIIT), which have been shown to be very demanding on the cardiorespiratory system, may feel a little more difficult. This could be a direct result of reduced amounts of oxygen reaching the vigorously exercising muscles. Less oxygen to exercising skeletal muscle reduces the ATP production to provide the needed energy to maintain the exercise intensity and duration (Hargreaves, 2016). Therefore, a slightly lowered oxygen level reaching the muscle is a central contributing factor to fatigue (Hargreaves, 2016). Some exercisers who wear face masks may notice they are not able to complete an otherwise "normal" workout, or they feel more fatigued than usual during and after the workout.

To minimize early symptoms of fatigue during exercise with a face mask, exercise professionals should encourage clients not to push themselves as hard as usual. They should be encouraged to use rating of perceived exertion (RPE) in combination with heart rate to monitor exercise intensity. Advise clients to allow their cardiorespiratory system time to gradually adapt to the slight restriction of air flow (from the face mask). Fitness adaptations to changes in overload during workout programs usually take weeks to occur. Therefore, educate face mask wearing clients that it may take several workouts before they are fully training at their regular exercise intensities.

#### What Type of Face Covering Should a Client Wear for Exercise?

The purpose of the face mask is to help block respiratory droplets from being sprayed into the air when a person coughs, sneezes, breathes or talks (Sweeney 2020). Surgical masks (also called medical masks) and N95 masks (which are a form of a respirator) are critical masks used by health care workers, who wear them when treating high-risk patients and where social distancing is not possible. However, the efficacy of wearing a medical mask during exercise has not been investigated. For repeated use, cloth masks are a very good option during exercise. It is best if the cloth mask has multiple layers of fabric (Sweeney, 2020). A person can buy a cloth mask or make one. Masks made of a scarf, bandana or T-shirt are not a great option (Sweeney, 2020), as they usually do not fit the face as well as a cloth mask. A neck gaiter (also called a buff) is a flexible tube fabric worn to keep the neck and face warm in cold weather. Neck gaiters are not a good option for exercise enthusiasts because they are designed to keep the face and neck warm, and during exercise it is important to dissipate heat from the body (to cool it off). Also, avoid using masks that have plastic valves in the front, as these only filter air that a person breathes in and does not block the air breathed out (Sweeney, 2020). Finally, face shields offer yet another face

covering option for exercisers. Face shields provide wearers protection (entire face—eyes, nose and mouth) without impacting breathing. The unfortunate downside is that face shields tend to be less available than other face-covering options.

## **Summary Thoughts**

Face masks, which are a staple in the medical industry, are now becoming safety tools for fitness enthusiasts working out among fellow devotees in exercise clubs. When exercising, the mask should be looked at as a barrier, not a complete shield, in terms of blocking virus particles. Therefore, whenever possible, social distancing measures should always be adhered to in the gym, and commonly touched surfaces should be routinely sanitized. Remind clients that the outside of the mask may become contaminated, so they should not touch it and instead use correct safety measures when removing it, to avoid negatively impacting the positive health effects of the mask. Lastly, it is important to regularly check the CDC and World Health Organization websites for updated recommendations on preventive measures.

Watch our recent live webinar "Exercise and Face Coverings: Safety Do's and Don'ts"

#### **References:**

Boone, L. (2020). *The Do's and Don'ts of Wearing a Face Mask Correctly (and Comfortably).* (Accessed May 27, 2020). https://www.latimes.com/lifestyle/story/2020-04-16/tips-on-how-to-wear-a-mask-correctly

Capritto, A. (2020). *Exercising with a Face Mask: The Do's and Don'ts.* (Accessed May 27, 2020). https://www.cnet.com/health/should-you-exercise-with-a-face-mask-how-to-do-it-safely/

Centers for Disease Control and Prevention (2020). *Recommendation Regarding the Use of Cloth Face Coverings, Especially in Areas of Significant Community-based Transmission.* (Accessed May 27, 2020). https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html

Hargreaves, M. (2016). Metabolic factors in fatigue. Sport Science Exchange, 29, 155, 1–5.

Sweeney, K. (2020). The Do's and Don'ts of Face Masks. (Accessed May 27, 2020). https://www.chla.org/blog/health-and-safety-tips/the-do-s-and-don-ts-face-masks