

# AFP Clinical Answers

## Decompression Surgery, Fabric Masks, Heat Stroke, e-Cigarette Use

### Is decompression surgery effective for shoulder impingement syndrome?

Decompression surgery is no more effective than exercise for shoulder impingement syndrome and has the same results as no surgery according to a multicenter randomized controlled trial in Finland. In patients with chronic subacromial shoulder pain and no history of trauma, do not routinely refer the patient for surgical decompression of the subacromial space.

<https://www.aafp.org/afp/2019/0901/p290.html>

### Are fabric masks effective for the prevention of coronavirus disease 2019?

The National Academies of Sciences reviewed the evidence for the effectiveness of homemade fabric masks in preventing the spread of influenza and severe acute respiratory syndrome coronavirus 2 (SAR-CoV-2), in a report published on April 8, 2020. These viruses can be spread by visible and invisible droplets as small as 5  $\mu\text{m}$  and even smaller bioaerosols. The size that is the most dangerous is unknown. Effectiveness depends on how the mask is made and how well it is made. The fit must be as tight as possible to prevent leakage. Patients should consider filtration efficiency and how much the mask impedes breathing (i.e., wearability). Seven studies evaluated the ability of the mask to protect the wearer or to prevent the spread of infection from a wearer. Performance ranged from very poor to reducing exposure to the wearer by approximately 60% depending on the material used. A study found a filtration of only 0.7% of 0.3  $\mu\text{m}$ -sized particles for a four-layer woven handkerchief fabric, 35.3% for a five-layer woven brushed fabric, and 50% for a four-layer polyester-knitted cut-pile fabric.

A recent study of patients infected with SAR-CoV-2 found that surgical and cotton masks were not effective at blocking the virus from disseminating during coughing. On the other hand, two studies of cotton mask wearers suggest moderate

protection against inhalation of infectious-sized particles. In the only randomized trial performed in health care workers, two-layer cotton masks were much less effective than medical masks (three layers of nonwoven material) in protecting from respiratory infection (relative risk = 13).

<https://www.aafp.org/journals/afp/explore/covid-19-daily-briefs.html>

### What is the most effective treatment modality for heat stroke?

Ice water and cold water immersion are the most effective cooling modalities in the treatment of heat stroke. Patients with heat stroke should be cooled to a core body temperature of 101°F (38.3°C) within 30 minutes after recognition of symptoms.

<https://www.aafp.org/afp/2019/0415/p482.html>

### How should youth and adults be queried about e-cigarette use?

Ask about e-cigarettes when screening for tobacco use in youth and adults, including pregnant women. Multiple terms should be used, including slang terms and brand names (especially the popular brand Juul), to help identify all e-cigarette users.

<https://www.aafp.org/afp/2019/0815/p227.html>

#### Tip for Using AFP at the Point of Care

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