As scientists continue to unfurl their understanding of the coronavirus that causes COVID-19, it’s becoming clearer that it is most often transmitted through respiratory droplets and that masks over the mouth and nose can significantly cut the spread.

Experts at the Centers for Disease Control and Prevention (CDC) say that knowledge means the U.S. is not defenseless against the disease and that the most powerful tools to get the pandemic under control are good hand-washing, physical distancing and face coverings.

Educating everyone about the public health importance of wearing a mask—and getting everyone in the nation to properly wear a face covering—is crucial to quashing the outbreak, CDC Director Robert R. Redfield, MD, told viewers during a JAMA Network™ livestreamed video interview where he discussed the COVID-19 pandemic and the CDC’s latest recommendations.

Dr. Redfield, along with two other CDC physician experts, also penned a JAMA® editorial, “Universal Masking to Prevent SARS-CoV-2 Transmission—The Time Is Now.” The piece outlines how emerging scientific evidence supports the need for everyone to wear face coverings.

**Toward universal masking**

Early in the pandemic, guidelines were that anyone experiencing COVID-19-like symptoms should wear a face covering. Now, however, researchers understand that a large percentage of infected people never show COVID-19 symptoms, but can still infect others, Dr. Redfield explained during the video interview.

He also pointed to new studies that show face coverings help reduce the spread. That includes a research letter published in JAMA that found virus transmission slowed among the 75,000 health care
workers at the largest health system in Massachusetts after universal masking was implemented in late March along with routine symptom screening and diagnostic testing for those who showed COVID-19 symptoms.

Before the mandatory masks, new infections among health care workers who had direct or indirect patient contact were increasing exponentially, from 0% to 21.3%, an average increase of 1.16% per day, the study found. After the policy, the proportion of symptomatic health care workers with positive test results steadily fell, from 14.7% to 11.5%, an average drop of 0.49% per day.

“The data is clearly there that masking works,” Dr. Redfield said. “Masking is not a political issue. It is a public health issue. It really is a personal responsibility for all of us. … If we really embrace masking, if we really embrace the social distancing and hand washing, we could bring this outbreak to its knees.”

In the livestreamed interview led by Howard Bauchner, MD, editor-in-chief of JAMA and senior vice president of AMA scientific publications and multimedia applications, Dr. Redfield also discussed the latest on vaccines and treatments, what may be driving the surges being seen today, the importance of flu vaccines this fall, the need to boost public health funding and more.

Subscribe to the “Conversations with Dr. Bauchner” podcast. Each week, he interviews leading researchers and thinkers in health care about their recent JAMA articles. Go beyond an article recap, and delve into the background, context and implications of the study or editorial.

Layering protections

In a recent episode of the “AMA COVID-19 Update,” Hannah L. Kirking, MD, a medical epidemiologist in the Division of Viral Diseases at the CDC, explained that physical distancing offers good protection against the virus, but not 100% protection. Using a mask while physical distancing adds another layer of protection, she said. And being outdoors adds a third layer to reduce the risk of spreading or contracting the virus.

“It seems we want an easy fix for this pandemic; I don’t think we have one,” she said. “Therefore, layering on the different strategies is really what will help us reduce transmission and hopefully keep more people safe.”

You can stay up to speed on the AMA’s COVID-19 advocacy efforts and track the fast-moving pandemic with the AMA's COVID-19 resource center, which offers a library of the most up-to-date resources from JAMA Network™, the CDC, and the World Health Organization.