BERLIN — Faced with new, more contagious, strains of the coronavirus and a winter surge in cases, European nations have begun to tighten mask regulations in the hope that they can slow the spread of the virus.

Germany on Tuesday night made it mandatory for people riding on public transport or in supermarkets to wear medical style masks: either N95s, the Chinese or European equivalent KN95 or FFP2s, or a surgical mask.

It follows a stricter regulation from the German state of Bavaria this week that required N95 equivalents in stores and on public transport. Austria will introduce the same measures from Monday.

Meanwhile in France, the country’s health advisory council on Monday discouraged the wearing of inefficient cloth and homemade masks, also arguing they may not offer sufficient protection against the more highly transmissible coronavirus variants.

“Since we don’t have any new weapons against them, the only thing we can do is improve the ones we already have,” Daniel Camus, a member of the council, told France’s public broadcaster.

The new European recommendations follow increases in supply since the early days of the pandemic, when there were concerns that the use of medical masks by the public would mean there would not be enough for front-line medical workers. But critics still point to the cost for families and the impact on the environment, while there are still debates over the helpfulness of such measures.

There is a growing body of scientific evidence that has indicated that mask use in general can help prevent the spread of the coronavirus. One study published in the Lancet medical journal in June compared transmission rates across 16 countries and found that “both N95 and surgical masks have a stronger association with protection compared with single-layer masks.”

Another, by Duke University in August, compared the efficacy of different face coverings and found that fitted N95 masks were the most effective. Normal surgical masks are about three times more effective than cloth masks in preventing the spread of virus droplets, according to a 2013 study.

Still, the World Health Organization advises that medical masks be restricted to medical workers, people who have coronavirus symptoms, those coming into contact with them, and those who are over 60 or at high risk. It recommends fabric masks for the general public.

N95 masks are manufactured by 3M inside an Aberdeen, S.D., plant. Six months into the pandemic, there continues to be a shortage of these respirators. (3M) And while French health authorities are recommending the use of masks that filter a high ratio of particles, such as surgical masks and industrial equivalents, they actually discourage public use of the higher grade fitted masks like the FFP2.
The possibility of them being worn incorrectly may actually increase transmission risks, France’s health advisory council argued.

However, Markus Söder, the state premier of Bavaria, said that the decision to require them there was “very simple.”

If the virus becomes more dangerous, the mask has to get better,” Söder said. He said he thought it was “absolutely necessary” to have a higher level of protection on public transport and in retail and work places.

Chancellor Angela Merkel cited the new mutation that had driven what she described as a “huge increase” in infections in Britain and Ireland as the reason for the new nationwide regulations. It is not yet known how extensively it has spread in Germany, “but scientists tell us that it is not yet dominant,” she said.

Another new variant was found in a hospital in Bavaria this week, though it is not clear if it is more contagious or deadly than the dominant strains.

“There is still time to contain the danger,” Merkel said. “So it’s about prevention.”