



Town of New Castle, NH
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COVID Update May 14, 2021

1) CDC lifts indoor mask guidance for VACCINATED people: ‘You can shed your mask’

The Centers for Disease Control and Prevention said on Thursday that people fully vaccinated no longer have to wear masks in many indoor situations. The new guidance reflects evidence that vaccines are highly effective in preventing serious and critical cases of COVID-19, the disease caused by the coronavirus.

“Anyone who is fully vaccinated can participate in indoor and outdoor activities large or small without wearing a mask or physical distancing,” CDC Director Rochelle Walensky said.

A new notice on the agency’s website explained that masks should still be worn on “planes, buses, trains, and other forms of public transportation,” as well as in “correctional facilities and homeless shelters.”

The debate about masks will almost surely continue since CDC guidance is not law; states and localities can make their own rules, as can businesses like restaurants. But in her remarks on Thursday, Walensky clearly sought to extricate the agency she leads from the mask culture wars.

Walensky cited the “scientific data on the performance of our vaccines and our understanding of how the virus spreads” as reasons for lifting the mask guidance. Not only do the vaccines prevent people from falling ill with COVID-19, they also prevent people from spreading the virus to others who might then be sickened.

There are caveats. Even vaccinated individuals must cover their faces and physically distance when:

- visiting doctors’ offices, hospitals or long-term care facilities like nursing homes.
- traveling by bus, plane, train or other modes of public transportation.
- going to transportation hubs like airports and bus stations.
- visiting prisons, jails or homeless shelters.

Guidance has not changed for those who choose not to be vaccinated, nor for those who are not yet eligible (such as children at MHT).

Portsmouth still has a mask mandate in place through June 30, 2021.

2) People ages 12 and up are now eligible for the COVID vaccine:

New Hampshire gave the green light to vaccinating children ages 12-15 with the Pfizer vaccine after the CDC Advisory committee recommended granting Emergency Use Authorization to this group. Appointments will be available in VINI for 12- to 15-year-olds. They'll be able to get vaccinated at any state-run vaccine site and participating pharmacies. State officials said VINI will be offering appointments as early as Thursday,

The FDA's and CDC's decision came after reviewing data that showed that young teens who received the vaccine developed high levels of coronavirus-fighting antibodies. The levels are higher than young adults developed. They also had the same sort of side effects, ranging from none whatsoever to sore arms to chills and fever that last for about a day.

For parents and teens wishing for additional details beyond the CDC website:

Brief-19 May 11, 2021-'Pfizer/BioNtech vaccine data indicates 100 percent reduction in SARS-CoV-2 among US children ages 12-15. Will it save any lives? Almost certainly.

The US Food and Drug Administration extended the Emergency Use Authorization for the Pfizer/BioNtech vaccine to adolescents ages 12-15 on Monday. The FDA published data on the safety and efficacy of the mRNA-based vaccine, which has been administered to millions of adults in 93 countries without any major safety concerns so far.

The short of it is that the vaccine performed well, according to data that followed the outcomes of adolescents who received either the vaccine or a placebo. There were 16 cases of covid-19 among adolescents who received placebo and *zero* among those who received the Pfizer/BioNtech vaccine. We do not know how serious the cases in the placebo group were.

But first and foremost, this was a safety assessment. Over half of the adolescents who received the vaccine experienced headache or fatigue after the first dose and nearly 2/3 of recipients had these symptoms after the second dose. As with the adults, a lower but still impressive number of people who received a placebo shot also reported these symptoms (around 35-40%). Interestingly, the number of subjects with these symptoms was *lower* after the second placebo dose, implying that psychological effects of were higher after the first sham shot than the second. In fact, rates of most side effects were higher after subjects got their second "real" dose, while almost all of those same side effects went down the second time among those getting placebo. The rate of severe symptoms was generally under 1%, though for a few systemic reactions like headache, up to 2% reported a "severe" instance, and 2.3% reported fevers as high as 102-104F (38.9C-40.0C).

But what about "serious adverse events," defined as death, a life-threatening adverse event, hospitalization (or prolonging of an existing hospitalization), disruption of the ability to conduct normal life functions, or any "important medical event"? In the placebo group 0.1% of the 1,100 subjects (or around 1 person) reported such an occurrence, compared to 0.4% (4 people) in the vaccine group. We were not given granular details on these 5 events, but it's more likely that the events were of the milder nature of these "severe adverse events" (i.e. prolongation of existing hospitalization as opposed to death), both by virtue of the odds of death in general being low, and the absolute scandal that it would be if 4 deaths out of 1,100 kids in the vaccine arm were



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not mentioned to the FDA. The FDA document states that there were “no notable patterns or numerical imbalances between treatment groups for specific categories of serious adverse events that would suggest a causal relationship to Pfizer-BioNTech COVID-19 Vaccine.”

Meanwhile, antibody levels taken one month after the second dose were excellent among 12-15-year old subjects included in the dataset. In fact, the levels were more robust than those seen among 16-25-year old test subjects from previous studies.

So far, in the US, 282 children ages 0-17 have died from covid-19. If the vaccines are 95-100% effective in reducing deaths among this group, as they appear to be in younger adults, the new data mean that vaccinating kids could save hundreds if not thousands of pediatric lives in the United States in the coming months. Just how many remains unknown. However, we can make some educated guesses. If it is the case that 50% of US children have already been infected with SARS-CoV-2, then fully vaccinating the entire pediatric population would effectively save 282 pediatric lives (since half remain unexposed and we assume that the mortality rate would apply if the kids were not vaccinated). If merely 20% of US children have been exposed (which is possible, given school closures), vaccines would be poised to save over 1,100 more lives of US children. These numbers, of course, do not take into account the suffering related to far higher rates of hospitalization and other complications such as the multi-system inflammatory syndromes in covid-19 (MISC), which according to the US Centers for Disease Control and Prevention has affected over 3,000 US children as of April 2021.

Pediatric vaccinations appear safe in the short-term. Assuming this continues to be the case in the longer run, vaccinating kids will remain an important tool in ending the covid-19 pandemic.’

—Jeremy Samuel Faust MD MS

3) Vaccine availability locally: Johnson & Johnson vaccine update

Still looking to get the single-dose Johnson & Johnson vaccine? This is the month (May) to get it. Every Saturday in May, the Johnson & Johnson vaccine will be distributed at the state’s fixed vaccination locations in Nashua, Salem, Newington and Concord.

You do need to get an appointment through VINI, the state’s vaccination scheduling system, and appointments are available from 1-6 p.m.

4) Regulating indoor air

A group of 39 scientists are calling for public health reforms for indoor air quality, similar to how the government enacted regulations for clean water, food safety and to ban lead-based paint.

The manifesto of sorts, published today in the journal Science, [called for a “paradigm shift”](#) as virus cases fall and Americans slowly return to a host of indoor spaces.

The authors point to extensive research showing that the coronavirus can linger in the air indoors, floating far beyond the recommended six feet of distance. That puts the onus on policymakers and building engineers to provide clean air in public buildings and minimize risk of respiratory infections, they wrote.

The fixes, they argue, can be simple: adding filters to existing ventilation systems, using portable air cleaners and ultraviolet lights, or even just opening the windows where possible.

5) For the Scientists in New Castle:

Brief 19, Wednesday May 5, 2021; Neuropsychiatric symptoms prevalent among those with long covid-19.

For many who have suffered from covid-19, the initial infection is only the beginning. The lingering effects of covid-19 are referred to as “long covid” or post-covid-19 conditions. Long covid-19 symptoms described in the literature so far include fatigue, muscle weakness, joint pain, chronic chest pain, shortness of breath, and brain fog. Specific medical conditions such as potentially dangerous blood clots, and kidney problems have also been described, though the rates of these problems among recovering covid-19 patients is not known. Increasingly, neuropsychiatric symptoms, such as headache, depression, anxiety, PTSD, *etc.* have been considered symptoms of long covid.

A new systematic review published in the preprint server *medRxiv* (and therefore not peer reviewed) describes the state of the medical literature to-date on persistent neuropsychiatric symptoms after SARS-CoV-2 infection.

A total of 51 studies accounting for approximately 18,917 patients were included in the systematic review. Sex, race/ethnicity, and covid-19 severity were not consistently reported in the included studies. The majority of included patients (> 50 percent) had at one point been hospitalized but eventually discharged to their homes.

The most frequent neuropsychiatric symptom? Sleep disturbance (27.4 percent) This was followed by fatigue (24.4 percent), cognitive impairment (20.2 percent), anxiety (19.1 percent), and post-traumatic stress disorder (15.7 percent). In a sub-group analysis of studies that reported on covid-19 severity and the type of hospital stay (i.e. general medical floors versus intensive care units, *etc.*), there was no difference in the prevalence of neuropsychiatric symptoms.

The literature on this topic should be considered incomplete. Some of gaps in these data included the inability to look at sex, race/ethnic, and socioeconomic disparities in patients with persistent post-covid-19 neuropsychiatric symptoms. Furthermore, almost half of the included studies did not look at covid-19 severity, and there was no consistency with regard to how long patients were followed after their initial illnesses.



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Finally, and somewhat surprisingly, only 2 of 51 studies (4 percent) reported neuropsychiatric symptoms in a control group (i.e. a comparison group that did not have covid-19). This alone makes it very difficult to determine whether covid-19 independently increases risk for neuropsychiatric symptoms compared to baseline rates for all hospitalizations for countless other non-covid-19 reasons for hospitalization.

The reason for and the prevalence of neuropsychiatric symptoms after covid-19 remains unclear. But while this is sorted out, we can surmise that mental health services are likely to continue to be a pressing need, even after the acute phase of the pandemic comes to and end.

—Joshua Niforatos, MD, MTS

Yours in Health,

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