

CDC'S ISOLATION POLICY STRAYS FURTHER FROM THE SCIENCE

CDC's 2024 Updated Isolation Guidance Not Supported.
Minimum 14-day Isolation Period Needed.

By Shea O'Neil, last edited 4-23-24

The [CDC updated their Isolation Guidance this March 2024](#), straying from the current research on COVID-19, and making recommendations that endanger the public by encouraging contagious people to return to normal activities—such as work and school— while proposing inadequate compensations for the increases in infectious people in buildings.

In their updated guidance the CDC recommends that people *stay home and away from others until **at least 24 hours** after both their **symptoms are getting better** overall, and they have **not had a fever** (and are not using fever-reducing medication)*. The guidance admits that people may still be contagious, saying: "**Since some people remain contagious beyond the “stay-at-home” period” they encourage “added precaution over the next five days.”** For higher risk people, they state: “**Since it may take people with weakened immune systems**

longer to recover from respiratory viruses, this may influence choices on precautions after returning to normal activities following time at home sick” but fails to give guidance beyond that on how to protect themselves and others.

The “added precautions” they refer to include methods such as one-way masking, unspecified air ventilation improvements, and vaccination. However, these protections all have caveats when in settings with higher viral densities, like those occupied by actively shedding and contagious people.

For instance, in regards to masking: A [CDC study](#) showed that one-way protection from surgical masks (which are commonly recommended or handed out for use) was only about 56.1% without modifications. Another [2021 study](#) showed medical masks (i.e. surgical masks or procedure masks) without modification blocked approximately 56% of cough aerosols and only 42% of exhaled aerosols (the primary spread of COVID-19 is through aerosols). Even respirator masks, such as N95s, [work much better in lower viral densities](#).

Ventilation and filtration guidelines for infection control also work better in areas with lower viral densities, and these methods will be less effective with active shedders

encouraged to attend work and school. Also, CDC did not include specifics needed for ventilation and filtration for the purposes of control of infectious aerosols, especially when the sources of infection are present in the building.

However, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) set [Ventilation for Industrial Settings During the COVID-19 Pandemic](#) in 2022, recommending facilities “*Maintain between six and twelve air changes per hour (ACH), which will provide a greater than 99% purge in 30-60 minutes.*” They note: “*This reduction applies when the building is unoccupied – **the concept of purging does not apply if a source is still present***” (i.e., potentially infectious individuals are still in the space).

In 2023 ASHRAE set [Standard 241 Control of Infectious Aerosols](#), which can be previewed [here](#) under Standard 241-2023, setting minimum equivalent clean air flow rates for infection risk mitigations for long range transmission according to the building’s occupancy category. For a classroom setting it uses 40 cfm per person, or 20 l/s per persons, which for an average classroom of 25 occupants [converts](#) to approximately 8 air changes per hour (ACH)*.

Most schools don't meet even pre-covid [minimum ventilation standards](#), much less the 8 or more ACH they

need for infection control. [CDC's last report](#) showed most schools have not upgraded ventilation or filtration. This means at this time **the CDC should be trying to reduce the amount of infectious aerosols coming into the classroom, not increase it.**

Furthermore, ASHRAE 241 states that its scope ***“Addresses only indoor long-range transmission resulting from inhalation of infectious aerosol emitted by an infector who is not in close proximity to a susceptible occupant”***, further indicating the limitations of ventilation to reduce infection, and that it will not protect people near the contagious person from transmission. At the very least, it is an indicator that people with known or suspected COVID-19 should stay home during the known contagious period of COVID-19, which studies show is between 8 and 14 days in most people. A [2023 study](#) showed a significant amount of infectious virus was detected in the exhaled breath of COVID-positive people for **8 days regardless of vaccination status, and including asymptomatic and mild cases**. A person could therefore be infectious longer than the CDC guidelines, even in mild and asymptomatic cases, or cases when symptoms are improving or have stopped.

CDC also states vaccine protection as a reason for policy change, because more people are now protected. They

neglect to mention protection wanes over time and offers limited protection from new variants. A recent report shows it is [not as protective from infection of newer variants like JN.1](#), the most prevalent variant in the US at this time. **Also, vaccination does not prevent long COVID, which is a significant risk after COVID infection.**

A [2022 study published in Nature](#), found a 15% reduction in long Covid amongst those vaccinated. The authors concluded that *“vaccination before infection confers only partial protection in the post-acute phase of the disease; hence, reliance on it as a sole mitigation strategy may not optimally reduce long-term health consequences of SARS-CoV-2 infection.”*

A [2023 population-level analysis](#) found vaccines reduced long COVID by 15-20%, with the authors concluding *“Complementing vaccination campaigns with potential therapies, as well as **further investing on prevention**, might reduce the prevalence of long COVID and, consequently, should be considered for public health policies in the next future.”*

A [2023 Swedish study](#) analysis found vaccine effectiveness against long COVID was 21% for one dose, 59% for 2 doses, and 73% for 3 or more doses, showing

the importance of staying up-to-date on vaccinations, something that is currently lacking in the general population.

Also, vaccine protection is not all or nothing. A [2023 study](#) shows **vaccines are much more effective in preventing transmission when the person inhales a smaller viral load**. Having more contagious people present, and thus more virus in the air, will only increase the amount of virus, or viral load, inhaled.

The CDC states part of its rationale for updating the Infection Control Guidelines is to make it align better with other respiratory infections such as the flu. However, research continues to show [COVID-19 is not like the flu](#). It [poses much higher risks](#) in both its acute infection state as well as in its long-term risks. It also has a higher rate of transmissibility, greater ease at [getting into cells throughout the body causing system-wide damage](#), does not have a season but instead poses a threat year-round, is better at evading prior immunity, and it poses [higher risks with every reinfection](#)— all of which makes it different than [other viruses we know of](#).

The World Health Network recommends a [minimum 14 day isolation period](#), as the gold standard for isolation necessary for infection control from COVID-19. This

recommendation is supported by growing bodies of research.

For instance, a [2022 study](#) showed that, among the SARS-CoV-2 Omicron variant infected patients, viral shedding continues for **more than 10 days** in 13.5% of all cases, and 11% in symptom-free cases— which means isolation should not be stopped based on symptoms reducing it stopping, and should be continued at least for 10 days.

Researchers further showed that **determining infectiousness by symptoms is not accurate**: *“In 19% of the cases, the duration of shedding was longer than the duration of the symptoms. On day 5, four patients declared no more symptoms, although viruses were isolated by the culture. The rate of viral shedding among symptom-free cases was **58% on day 7, whereas they were 11% on day 10 and 5% on day 14**”, showing infectious virus shedding **continued up to 2 days after symptom resolution**.*

The CDC’s March 2024 updated Isolation Guidance is not the first time they made changes that were not supported by research, but it is the worst. For example, there has not been a reduction in contagiousness of COVID-19 variants over time, but the CDC has modified its isolation

standards from its 2020 [14-day minimum, to a 10-day minimum](#) in 2022. In 2023, they further modified a 10-day isolation minimum in 2023 to [a 5-day minimum, with a mishmash of confusing contingencies](#), such as increasing that time based on a person's symptoms, their oxygen saturation, their underlying diseases, their ability to avoid vulnerable people, their immunocompetency level, the results of testing, testing type, and consultation visits.

The guidance stated: *those with asymptomatic or mild cases (as defined by symptoms and oxygen saturation level) are recommended **5 days isolation followed by 5 days of masking**; A **10-day** period is recommended for moderate or severe cases; Those with severe COVID-19 may remain infectious beyond 10 days and may need to extend isolation for **up to 20 days**. People who are moderately or severely immunocompromised should isolate through **at least day 20**, as well as serial test and consult with an infectious disease specialist prior to ending isolation. And a **10-day minimum** is recommended for anyone before being around a person who is at higher risk of severe disease. They stated that these recommendations do not change **even if you have no symptoms** and that these **recommendations do not change based on COVID-19 hospitalization levels**.*

Although the former CDC recommendations were closer to the research than current recommendations, a **14-day gold standard for isolation remains to be aligned with the current research on both contagiousness and within the correct context of severity, including both acute and long-term effects of COVID-19 on the general public.** The newer CDC guidelines have taken a step further from the science instead of closer to it.

You can view WHN Isolation and Exit Time guidelines in detail [here](#). We, along with other groups, are pushing back against CDCs reduced isolation guidance, and advocating for 14 day minimum isolation standard.

*8 ACH was found by taking the 40 cfm per person ASHRAE Standard 241 recommendation for classrooms and multiplying it by 20 people to get 800 cfm, and then putting that into a [CFM to ACH converter](#) to see that in a 25'x25'x9' classroom size with 800 cfm would reach 8.5 ACH.