

# FAQ for the Frisch decision to require 14 days post exposure before returning to school

## Executive Summary of FAQs

1. The CDC recognizes that the safest option with regards to post-exposure quarantine of asymptomatic individuals is 14 days- no new data has been reviewed that contradicts this fact. The decision to provide other “acceptable” options was an effort to improve compliance with quarantine among the general population; our goal is different- to keep our school open and safe.
2. High school students tend to “behave” more like adults when it comes to severity of disease with Covid infection, as well as with regard to post-infectious complications. They also spread Covid more effectively than elementary school children do.
3. Reducing the length of quarantine to 10 days (without testing) may have a residual transmission risk of up to 10.6%, which, at our school, is unacceptable. Unfortunately, the availability of testing for asymptomatic individuals is sufficiently limited in our area at this time so that we cannot universally recommend testing on day 10 with a potential return on day 11. Maintaining the 14 day post-exposure quarantine compensates for this lack of sensitive and available testing and will enable our school to continue to be a safe community for all of its members.
4. If a family wishes to pursue a “testing out” strategy in order to return to school earlier than 14 days post-exposure, an acceptable option is to obtain a PCR assay on day 10 after the last exposure to the covid positive person. While the test is pending the student may not return to school. If negative, that student may return to school upon receiving the negative results. It is important to keep in mind that if this test on day 10 is positive, the student must stay out an **additional** 10 days from the date of the positive test. And again, we recognize that obtaining asymptomatic testing in our area may not always be feasible.

## Detailed FAQ

For any number provided there are ranges that can be legitimately considered. For the purpose of clarity we provide a single value to demonstrate the thought process.

### Philosophy:

No one strategy is foolproof to prevent dramatic exponential growth of covid infection and spread in a school. We use multiple strategies. Among those:

1. Reduce the likelihood that a student enters the school with covid
2. Even if a student enters the school shedding covid, reduce the amount of covid shed to reduce its infectivity
3. Reduce the duration that the student with covid remains in school
4. Reduce the transmissibility in school by masking the source student (25% reduction) and recipient student (1/6 reduction) for a total reduction to 1/24 of the original transmissibility risk and by maintaining distance between students to prevent droplet infection
5. Improve ventilation in school and in bus (windows open with regular surveillance of windows).

Our decision on post exposure exclusion of in person school is based upon the first two principles.

In a simplistic outline here is the sequence of thought

1. After exposure to a known case, for those who ultimately develop covid, 50% will develop their disease 4-7 days after exposure. Let's use 7 days for simplicity.
2. 50% will not have any symptoms ever. In the outbreak on the ship Theodore Roosevelt where 26% of the crew were infected, 77% were without symptoms at the time of diagnosis, and 55% never developed symptoms.
3. Without testing, relying on symptoms, after day 9 you have 2.5% who will subsequently develop disease and you still have your 50% who are missed because they are asymptomatic. We will not go into the sensitivity of the test itself to detect disease.
4. General availability of PCR testing (testing with adequate sensitivity in asymptomatic patients) cannot support the testing of all the exposed on day 10. Efforts for rapid testing in Bergen county are overwhelmed even for students who present with symptoms that can be otherwise confused with the common cold. This is a key consideration.

Implications of the lack of easy availability of PCR tests with rapid turnaround:

1. Day 7 return to school without testing will miss 75% of those exposed who ultimately develop disease.
2. Day 10 return to school will miss (2.5% +50%) of those exposed who ultimately develop disease.

## What is the primary advantage of 14 days?

If you wait 14 days before you return to school, 97% of those with asymptomatic infection will have 4-5 days of recovery. This will dramatically reduce their viral shedding. We normally wait 10 days after known infection before allowing return to school, but viral shedding is dramatically reduced in the first five days so in concert with our other mitigation efforts, this policy compensates for the lack of sensitive and available testing.

## Why does the CDC not choose 14 days?

1. In fact, CDC recognizes the superiority of 14 days, and explicitly states that there are certain environments of long duration and contact where the longer quarantine period is desirable if sustainable.
2. CDC is currently struggling with getting cooperation with contact tracing in order to remove from the general population the symptomatic active shedders and their contacts. In N.J., Governor Murphy has stated that only 30% are cooperating with contact tracing. It is our belief that to improve compliance in this first order effort of identification, reducing the burden for those “reported on” will increase compliance. In the overall picture, this may be a reasonable public health approach but does not impact on populations who have a different goal – to keep schools and synagogues open.
3. **Even the CDC modeling reveals that choosing the 10 days without testing will have a residual post quarantine transmission risk of 10.6%. <https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-options-to-reduce-quarantine.html>**

## Do different age groups represent different risks of transmission?

While there is no definitive answer to this, many practitioners believe that adults and by extension “proto-adults – high school students” are more effective at spreading disease than are elementary school children. Pre-schoolers probably represent a different level of risk because of their inability to exercise distance and masking.

## Why should the quarantine rules be different in a school?

In the public space, everyone can choose to do whatever they want. You can choose to avoid riskier environments based upon your personal tolerance. However, a school or a synagogue is a shared communal space where there are limited choices. We need to keep the school a safer place for the at risk community who need to participate in that space – faculty or students with risk factors for bad outcome (age, immunocompromised,...).

## Is there a “test out” option?

Since the vast benefit of the 14 days is to attenuate the contribution of late undetected covid incubators, the bulk of whom are asymptomatic, an acceptable alternative strategy is to use a highly sensitive PCR assay on day 10 and if negative, return to school early. While the test is pending, the student cannot return to school. If positive, the student must stay out an additional 10 days from the day the positive test was collected. Day 10 starts from the first full day after the exposure. We will not

accept a negative test done earlier than Day 10. Nor will be accept a negative rapid test in place of a PCR.