#### The Data that Changed the CDC Advice

With respect to the pandemic, it is still as if we are building and modifying an airplane while trying to fly it. Last week the CDC urged all areas with substantial or high transmission to recommend masking for all regardless of vaccination status when in public indoor spaces. They also recommended that asymptomatic fully vaccinated individuals who have had <u>close contact with a COVID case</u> should be tested at 3-5 days after that exposure and mask in all public spaces for 14 days. The data that prompted these recommendations came from a cluster of cases in <u>Provincetown, MA</u> following multiple densely packed indoor and outdoor events that occurred 7/3/2021 to 7/17/2021.

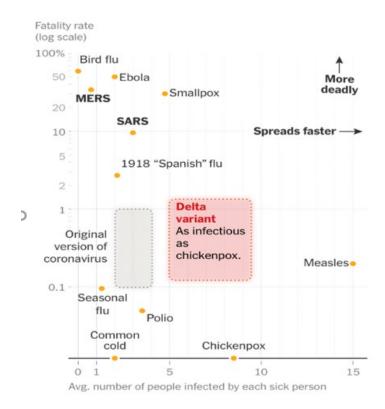
Overall, 69% of Massachusetts residents are fully vaccinated. In the first 469 cases linked to these events, 346 (74%) of them occurred in fully vaccinated persons; 80% of those fully vaccinated persons identified as cases were asymptomatic. There were 133 cases in which genomic sequencing was done and 89% were found to be the Delta variant. The most disturbing finding was that fully vaccinated and unvaccinated cases possessed nearly identical concentrations of virus in the nose. This was measured by reporting the cycle threshold (Ct) for the reverse transcriptase polymerase chain reaction test (RT-PCR) that diagnosed the cases. RT-PCRs are the very sensitive tests done on nasal, nasopharyngeal and sometimes oral swabs when looking for COVID infection in symptomatic persons or persons who have had close contact with a case. You won't see a Ct value reported with your negative or positive COVID test result but it exists and it represents the number of cycles of amplification required for the virus in the sample to become detectable. A lower Ct value means there was a higher initial concentration of the virus detected in the nose. The 127 asymptomatic fully vaccinated cases for whom Ct was reported had an average Ct of 22.8. The 84 unvaccinated cases for whom Ct values were reported averaged 21.5.

To provide a reference point, most RT-PCR machines are set up to call a specimen negative if virus is not detected after 40 rounds of amplification. Many would consider Ct values of ≥35 to be indeterminate. The Ct values for the fully vaccinated and unvaccinated persons in this study represent high levels of virus detected by the RT-PCR nasal swab test.

## Balancing the Cost of Delayed Vaccination vs. Greater Side Effect Certainty for Children Under 12

The FDA has asked Pfizer and Moderna to <u>expand the number of children</u> ages 5 through 11 in their vaccine trials. The desire is to be more certain whether the rare cardiac inflammation seen in older children and young adults occurs with any further increased frequency in these younger children. Greater numbers in the Phase 3 trials for children 5 through 11 would improve the chance of observing this and any other rare side effects that may be specific to this age group. Expert opinion since late June 2021 has been that the <u>benefits of mRNA vaccination</u> clearly outweigh the risks of cardiac inflammation for persons 12 and older.

Dr. Paul Offit is a pediatrician, the director of the Vaccine Education Center at Children's Hospital of Philadelphia and an internationally recognized expert in virology and immunology. He reminds us that COVID illness carries a risk for children and perhaps more so now with the high viral loads of the Delta variant. Some 4 million U.S. children and adolescents have been diagnosed with COVID so far and 346 have died. Delays in authorizing vaccination because of expanded trials can be expected to continue the exposure of these children to COVID. In Offit's words, "there is always a human price for knowledge".



# New Estimates of Transmission and Lethality of Delta Compared to Original COVID

An internal CDC document that became available on 7/30/2021 states that the Delta variant of COVID is almost as contagious as chickenpox. It may also be more likely to cause severe disease though it is extremely difficult to control for the multiple factors that contribute to severity of illness.

You can see that transmissibility and lethality for the original and Delta variant of COVID are represented as ranges of values within a rectangle rather than the point estimates for seasonal flu, SARS, chickenpox and other illnesses.

### **Basic Preventive Measures**

- Becoming fully vaccinated as soon as possible is your strongest protection
- L.A. County Public Health guidance about when to wear a mask
- Avoid confined spaces with poor ventilation, crowds and close contact to reduce your risk
- Isolate/guarantine when indicated (see below)

#### **Quick Links to Resources**

- If you are looking for a test because you had close contact with a suspected/confirmed case and are not fully vaccinated, you need to quarantine: <a href="mailto:ph.lacounty.gov/covidquarantine">ph.lacounty.gov/covidquarantine</a>
- If you are looking for a test because you have symptoms, you need to isolate: ph.lacounty.gov/covidisolation
- CDC Vaccine information in multiple languages
- Free testing in <u>L.A. County</u>

#### Vaccine Availability

- Persons 12 and older are eligible for vaccination. Use <u>myturn.ca.gov</u> for availability all over California.
- Access Los Angeles vaccine providers through <u>vaccinateLAcounty.com</u>; many sites available without an appointment. Call 833-540-0473 if you need help with appointments or transportation.
- Vaccines.gov is a national level approach to connecting people to vaccine providers.
- Pasadena Public Health lists several vaccination opportunities.
- Remember there is no cost to you for the vaccine, and eligibility does not depend on health insurance, citizenship, or documentation status.

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