

From: [Schwartz, David](#)
Subject: DOM Covid Communication
Date: Saturday, December 12, 2020 7:34:54 PM
Attachments: [VaccineSafety.pdf](#)
[VaccineEfficacy.pdf](#)
[Pfizer mRNA Covid-19 Vaccine.pdf](#)
[image003.png](#)
[image005.png](#)
[IHME Briefing Colorado.pdf](#)
[image002.png](#)

Dear Friends and Colleagues,

This week we have 2 things to celebrate – a slight decrease in hospitalized cases of Covid and the roll out of the Pfizer vaccine.

Hospitalized Cases of Covid

Covid cases have stabilized but will likely increase:

- Over the past week, there's been an average of about 4,400 cases per day in Colorado, a decrease of 6% from the average 2 weeks earlier.
- This decrease in cases per day is reflected in the census data at UCH and the state-wide hospitalization data with both peaking and slowly going down over the past week (see graphs on right).
- Given the national trend in cases (daily average >200,000 cases with an 25% increase over the past 2 weeks), hospitalizations (daily average > 100,000 or 20% increase over the past 2 weeks), and deaths (daily average of >2900 deaths or a 60% increase over the past 2 weeks), we are likely experiencing a temporary lull in hospitalized cases in Colorado.
- With an average of 40 deaths per day statewide, Covid-19 is the number 1 cause of death in Colorado this past week.
- IHME continues to indicate that cases, hospitalizations, and deaths will increase in Colorado through the end of January (<http://www.healthdata.org/covid/updates>).
- I found a new source of information on the IHME website, a Covid-19 Briefing specific for Colorado that was updated December 10th. Please see attached PDF and go to their website if you'd like more information (<http://www.healthdata.org/covid/updates>).

Covid Vaccine Developments

mRNA Vaccines are Efficacious and Pfizer has received FDA EUA approval: Pfizer recently announced that its vaccine candidate was found to be 95% effective at preventing symptomatic Covid-19, and a week later, Moderna announced that its vaccine candidate was found to be 94.5% effective. Attached is the *NEJM* paper (Pfizer mRNA Covid-19 Vaccine.pdf) that presents the efficacy and safety of the Pfizer mRNA vaccine trial. In the figure on your right, you can see that the Pfizer vaccine is effective in preventing Covid-19 infection after the first dose. Importantly, a second dose is needed to produce antibodies with several-fold greater affinity for the antigen as a result of somatic hypermutation and selection by T_{FH} cells (https://en.m.wikipedia.org/wiki/Affinity_maturation). The Pfizer vaccine was also safe over a median of 2 months (see figure 2 from paper). These findings prompted the FDA to grant emergency use authorization (EUA) for the Pfizer vaccine and the FDA will likely do the same for the Moderna vaccine.

Safety of Vaccines: Vaccines are safe and effective and prevent about 6 million deaths globally each year. In the attached PDF (VaccineSafety.pdf), the history of vaccine safety issues are discussed in relation to current regulations and protocols, including the triggers to pause clinical trials to ensure safety. Vaccine development has led to rigorous safety protocols to ensure the lessons from history are not repeated. The importance of competing phase 3 trials is also discussed to collect comprehensive safety data. Dr. Anuj Mehta gave a terrific talk at Denver Health this past week, "Covid-19 vaccination: Reasons not to be scared", that I recommend for your viewing - <https://youtu.be/Nk6YW5FZQCo>.

Importance of Ongoing Vaccine Trials: VaccineEfficacy.pdf (attached) discusses the tradeoffs in completing a placebo-controlled trial after the vaccine has been found to be efficacious (duration of protective effect, impact in subgroups, and protection against subclinical infections/transmission) and the potential importance in testing other vaccine candidates (efficacy, immunity, subpopulation efficacy, protection against severe disease, subclinical infection, and transmission, costs, and practical considerations related to administration). This article may be helpful when you're talking with patients that either have been involved in trials or are wondering why you're offering them a vaccine when vaccine trials are ongoing.

Vaccine Distribution: This past week we had a Town Hall that focused on vaccine distribution at UCH, Denver Health, and the VA, led by Michelle Barron, Heather Young, and Mary Bessesen ([Vaccine Distribution](#)). In addition, UCH is planning a Virtual Town Hall on December 17th to discuss vaccine distribution and has also established a [COVID-19 vaccine information page](#) and [FAQ](#) on The Source. Bottom line is that healthcare workers will be given vaccine in the following order (mandated by the state):

- 1A: Those with the most frequent and direct contact with COVID-19 patients.
- 1B: Those who have less frequent or indirect contact with COVID-19 patients,
- 1C: All others including those in non-clinical roles.

Post Vaccine: It's important that you continue to protect yourselves and those with whom you live even after you receive the vaccine. After receiving the vaccine, it's remains possible that you can develop a less symptomatic form of Covid or that you may transmit the infection – we simply don't know at this point. So continue to wear a mask, practice social distancing, wash your hands frequently, avoid gatherings involving food or drink, restrict travel (please, don't travel over Christmas), and stay at home if you're sick.

This has been a long haul and we've still got some tough times ahead. Given the fatigue and isolation that many of us are experiencing, it's that much more important that we take care of each other. Our next **DOM Town Hall topic is Your Charge is Low: How to Manage Pandemic Depletion** (Thursday, December 17, 7-8PM; Zoom Link: <https://ucdenver.zoom.us/j/92532756293>) and will feature Laura McGladrey (Instructor of Clinical Teaching, College of Nursing) and Steven Berkowitz (Professor, Department of Psychiatry). Laura and Steve have a great deal of expertise in helping others to recharge and reconnect, something all of us need to do over the holidays.

Please get in touch with me if there's anything I can do for you. My very best wishes to you and your family. Stay well and thanks so much for everything you're doing.

David

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