

Confusion at our First "Regular" Dinner Party in a Year April 24, 2021

Deborah and David intend to host a family dinner. They are now more than two weeks past their second vaccination, as are many of their friends and family members. Why is this all still so confusing?

Today started as absolutely the best day ever. We (Deborah and David) just returned from a wonderful month in Northampton, MA with our youngest daughter. She had given birth to her second son, our fifth grandchild. Everyone is healthy and well. While we were away, the builders working on the new addition to our house finished most of the interior painting and the new space is ready to move in. The spring weather is warm and inviting; it's glorious to sit out on the new front porch. Most important, while we were away in Northampton, both of us completed the two-week waiting period after our second vaccination shot, making us now "fully vaccinated". The CDC has announced that fully vaccinated adults can now gather in limited ways without masks, including sharing meals indoors in small groups.

New Guidance from CDC

(from https://xkcd.com/2434/)

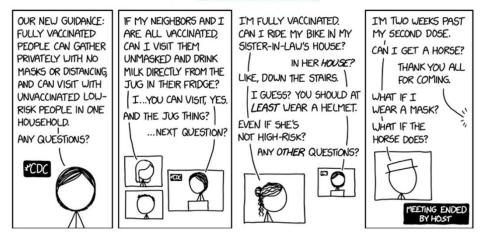


Figure 1: New guidance from the CDC is good news, but often confusing news. Careful attention to protocols is still in order.

To celebrate this glorious sense of new beginnings, today was the day for our first family gathering with David's brother in over 14 months. We would share dinner on the new porch. Deborah cooked up a special recipe. The guests gathered. And then things got complicated. David had overlooked the fact that our three granddaughters, who live in in a shared

bubble next door, are not fully vaccinated adults. That meant the family couldn't all sit down together at one big table—even outdoors on the porch. The easy, familiar practices of serving and sharing a festive meal as in pre-COVID days were still not all allowed. On the other hand, those protocols that we

¹ You can access all of the "Diaries During Lockdown" <u>here</u>. "Diaries During Lockdown" is a network of professionally trained mathematical modelers (along with some of their friends and colleagues) who are using the tools of system dynamics and systems thinking to explain many of the complex choices facing individuals, organizations, and governments as we collectively grapple with the COVID19 pandemic. The apparent voice of this story is that of David Andersen, a retired Professor of System Dynamics and Public Policy who lives on New Fadum Farm. This voice is actually the synthesis of a number of different analysts and writers.

developed over the past fourteen months didn't entirely apply any more, either. Our lovely family dinner became a bit awkward and complicated: we all wanted to do the right thing, but weren't quite sure what that might be.

Our daughter brought the group up to speed on the new protocol that their family was using—the "two out of three" rule. When interacting with fully vaccinated adults the girls have to apply two out of these three rules: (1) Wear a mask, (2) Keep 6 feet of social distance, (3) Stay outdoors. At any time when their children—David and Deborah's grandchildren—are observing two of these three rules, so should we.

This "two of three" rule helped answer questions about how to hold the dinner. How to arrange seating, even though everybody was outdoors? What about using the bathroom? Our families have gotten good at describing and adhering to protocols over the past fourteen months, but on this glorious day it hadn't occurred to us that we would still be constrained by protocols (even if modified by vaccine status). We just so much wanted to be free of all this protocol stuff.

Just to confirm how necessary the rules still were, David checked the Albany County Health department's website for data on COVID-19 levels in the county. Alas, the number of active cases was still higher than it was one year earlier. A year ago everyone (well, *almost* everyone) was certain that we had to be totally cautious. In the New York Times' daily update and assessment of this same data, Albany County was still classified as "Very High Risk".

Today is still a great day. Vaccines are making a big difference. But Ali's model and common sense remind us that shifts in our behavior, letting down our guard, can and will cause another surge. Our safety protocols can be loosened to allow us more ease and spontaneity, but we still need to adhere to them and to keep paying attention to the data.

This Story Has a Lesson: In Ali's model, the pattern of repeating surges and remissions in numbers of infected persons has less to do with the biology of passing on the infection and more to do with changes in human behavior. In Ali's model, the virus is a mathematically constant opportunistic agent that will take whatever opportunities that we give it to find new hosts. What changes to cause a surge and remission is our human behavior, not changes in what the virus is up to. We relax and the virus surges. We stay vigilant and the virus recedes. Until the vaccines become fully effective (which is not yet), we need to stick to our (now modified) protocols for interacting with each other.

Technical Modeler's Notes:

- 1. Ali's CORONA1 Model. You can download and run Ali's model here: CORONA1.mdl. Please right-click on the file and select "Save link as ..." You will need to download a free version of the simulation software VENSIMPLE to open and run this model.
- **2. Professional Presentations.** Ali's professional briefings with an introduction to his model and its conclusions can be found at <u>Spread of Corona</u>, <u>Waves of Corona</u> and <u>Policies to control Corona</u>.