

Developing Germophobia

March 29 Nursing Notes

Good morning to you all. I hope you remain healthy and that, so far, you are fending off cabin fever as you change your daily rituals and routines in light of the Covid-19 pandemic.

Aldo students and families, stay tuned for an update regarding our plans for what an Aldo education will look like for the rest of the school year. As most of you know by now, the Public Education Department has mandated that **New Mexico students will not return to the classroom this academic year**. Aldo teachers have been meeting online and formulating a plan for how we want to proceed with the Fourth Quarter. As a state charter public school, we must of course abide by NMPED's ruling. An official plan from both our middle school and high school will reach your e-mailboxes this week and will also appear in this space on Aldo's website.

For many of us, our focus so far has been on practical health precautions—how to manage social distancing, how to identify signs and symptoms of Covid-19, how to avoid spreading the disease, and perhaps most immediate for so many of us, how to rearrange our lives when schools, churches, and many businesses have closed their doors—including those where we work and earn our pay. Today's Nursing Notes address a common concern about interacting with the world outside of our homes. For next week's notes, though, I'd like to change my focus and assemble some data regarding the toll the coronavirus is taking our mental health, along with some strategies for helping us confront news that grows more alarming each week—even each day.

A few days ago, I made a trip to the grocery store, and I have to admit that I spent more time washing my purchases when I returned home than actually filling my cart at the store. Ordinarily, I'm not what you'd call a "germophobe," but since I continue to have some contact with the public, I have taken extra precautions to stay virus-free. Though I doubted I would be infected by handling any of my newly purchased groceries, as I stood at the sink with my grocery bags I considered all the hands that had touched, for instance, that bag of Cuties: the pickers in the groves, the crew boss that loaded and sorted the fruit as it arrived trucksideside, the workers who unloaded the warehouse delivery truck, the grocery-store personnel who stacked the fruit on their display counter, the shoppers who sorted through the stacks and perhaps rejected the one I chose, the clerk and the bagger in the checkout line—the usual crew of dedicated people who make it easy for me to have a mandarin orange in my fruit bowl somewhere in the middle of the high desert in March. I figured the littlest job among all those I just listed was to rinse those oranges in my sink.

After that scrub session, I went in search of some data to share about how to deal with food, mail, packages delivered to my door, and the lunches we pass out each day at Guadalupe Montessori. Here's the best short article I could find—a science-based piece from *The Washington Post*. Below, I copied the article without ads, but if you would like

to read it online, you can find it at https://www.washingtonpost.com/opinions/2020/03/26/dont-panic-about-shopping-getting-delivery-or-accepting-packages/?utm_campaign=wp_week_in_ideas&utm_medium=email&utm_source=newsletter&wpisrc=nl_ideas. Note that *The Post* is offering articles on the Covid-19 pandemic for free.

Don't panic about shopping, getting delivery or accepting packages

Joseph G. Allen

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PLEASE NOTE

The Washington Post is providing this story for free so that all readers have access to this important information about the coronavirus. For more free stories, sign up for our daily Coronavirus Updates newsletter.

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A recent study in the New England Journal of Medicine is making people think twice about how they might be exposed to covid-19 if they open a box delivered by UPS, touch packages at the grocery store or accept food delivery.

The risk is low. Let me explain.

First, disease transmission from inanimate surfaces is real, so I don't want to minimize that. It's something we have known for a long time; as early as the 1500s, infected surfaces were thought of as "seeds of disease," able to transfer disease from one person to another.

In that new NEJM study, here's the finding that is grabbing headlines: The coronavirus that causes covid-19 "was detectable . . . up to four hours on copper, up to 24 hours on cardboard and up to two to three days on plastic and stainless steel."

The key word here is "detectable."

Yes, the virus can be *detected* on some surfaces for up to a day, but the reality is that the levels drop off quickly. For example, the article shows that the virus's half-life on stainless steel and plastic was 5.6 hours and 6.8 hours, respectively. (Half-life is how long it takes the viral concentration to decrease by half, then half of that half, and so on until it's gone.)

Now, let's examine the full causal chain that would have to exist for you to get sick from a contaminated Amazon package at your door or a gallon of milk from the grocery store. In the case of the Amazon package, the driver would have to be infected and still working despite limited symptoms. (If they were very ill, they would most likely be home; if they had no symptoms, it's unlikely they would be coughing or sneezing frequently.) Let's say

they wipe their nose, don't wash their hands and then transfer some virus to your package.

Even then, there would be a time lag from when they transferred the virus until you picked up the package at your door, with the virus degrading all the while. In the worst-case scenario, a visibly sick driver picks up your package from the truck, walks to your front door and sneezes into their hands or directly on the package immediately before handing it to you.

Even in that highly unlikely scenario, you can break this causal chain.

In the epidemiological world, we have a helpful way to think about it: the "Sufficient-Component Cause model." Think of this model as pieces of a pie. For disease to happen, all of the pieces of the pie have to be there: sick driver, sneezing/coughing, viral particles transferred to the package, a very short time lapse before delivery, you touching the exact same spot on the package as the sneeze, you then touching your face or mouth before hand-washing.

In this model, the virus on the package is a *necessary* component, but it alone is not *sufficient* to get you sick. Many other pieces of the pie would have to be in place. So this is what you can do to disassemble the pie — to cut the chain.

You can leave that cardboard package at your door for a few hours — or bring it inside and leave it right inside your door, then wash your hands again. If you're still concerned there was any virus on the package, you could wipe down the exterior with a disinfectant, or open it outdoors and put the packaging in the recycling can. (Then wash your hands again.)

What about going to the grocery store? The same approach applies.

Shop when you need to (keeping six feet from other customers) and load items into your cart or basket. Keep your hands away from your face while shopping, and wash them as soon as you're home. Put away your groceries, and then wash your hands again. If you wait even a few hours before using anything you just purchased, most of the virus that was on any package will be significantly reduced. If you need to use something immediately, and want to take extra precautions, wipe the package down with a disinfectant. Last, wash all fruits and vegetables as you normally would.

We should all be grateful for those who continue to work in food production, distribution and sales, and for all those delivery drivers. They're keeping us all safer by allowing us to stay home. And, as I said, the risk of disease transmission from surfaces is real. We can never eliminate all risk; the goal is to minimize it — because we all will occasionally need to go grocery shopping and receive supplies in the mail.

But if you take basic precautions, including washing your hands frequently, the danger from accepting a package from a delivery driver or from takeout from a local restaurant or

from buying groceries is de minimis. That's a scientific way of saying, "The risks are small, and manageable."