Oh, the places you'll go when flu season hits

Karen Titus

September 2020—The twinned challenge of testing for SARS-CoV-2 and the upcoming influenza season has a bit of *The Cat in the Hat* energy running through it. How does one manage to keep Thing One and Thing Two from creating unmitigated chaos?

Maybe one doesn't, not completely. A pandemic-based flu season will by its very nature be protean. So as she eyes the uncertainties that could lie ahead, Beverly Rogers, MD, offers only one clear prediction. "Until you get to coinfection time, it's all speculation," says Dr. Rogers, chief of pathology, Children's Healthcare of Atlanta, and adjunct professor of pathology and pediatrics, Emory University School of Medicine.

Dr. Rogers and her colleagues are looking ahead and planning, plainly. They've been doing so for months. As far back as April, Dr. Rogers, in an earlier interview with CAP TODAY, spoke about learning from the unfolding pandemic in anticipation of a second wave of SARS-CoV-2 infections in the fall.

Now, from a position of relative calm at Children's in early August, here's how Dr. Rogers is taking stock of what might lie ahead.

All was quiet on the flu front, unsurprisingly. "We aren't seeing flu right now—just a bit of rhinovirus," she says, because the respiratory season—with its large number of rhinovirus infections and influenza, as well as respiratory syncytial virus—hadn't started.

"When those begin to hit, however, there's overlap in symptomatology with SARS-CoV-2 infection. To ferret that out, you're going to need to test for multiple pathogens," says Dr. Rogers.

At Children's, the laboratory typically runs two platforms that test for influenza type A and type B during the respiratory season. "One platform offers a flu A/B duplex and another offers multiplex testing for multiple respiratory pathogens. Both platforms are available based on patient condition and clinical decision."

SARS-CoV-2 testing is being added to both platforms, she says, "because clearly you're going to want to test for that as well in the symptomatic patient."

Symptoms aren't necessarily going to offer the best guidance for testing, however. Despite their similarities with flu, SARS-CoV-2 symptoms are frustratingly variable. "What a bizarre virus," as Dr. Rogers puts it. A child presenting with diarrhea could be infected with SARS-CoV-2, but that symptom wouldn't necessarily prompt a respiratory panel. "And it's not on the GI panel," Dr. Rogers says. It's not yet clear to her how laboratories and clinicians will negotiate their way through that testing maze, though her lab intends to offer respiratory panels with SARS-CoV-2 as well as standalone SARS-CoV-2 tests.

One ongoing practice might ease some pressure as she and her colleagues try to plan for the flu season: Children's focuses tightly on what she calls symptomatic isolation—any child exhibiting flu- or COVID-like symptoms will be somewhat isolated if admitted to the hospital, even before test results are available.

Clinical colleagues are asking for rapid tests for SARS-CoV-2, which "is a bit of a challenge," Dr. Rogers concedes. The false-negative rates of the currently available antigen assays have been problematic, to put it mildly. "We need more point-of-care testing with high sensitivity to detect the virus."

"We suffer in the outpatient arena," she adds. "Urgent care laboratories need a solution, but the current waived testing platforms tend to lack sensitivity."

Dr. Rogers raises concerns about supplies as flu season approaches. Shortages, a vexation of the pandemic, might continue to be a problem, for both SARS-CoV-2 and respiratory viruses "because of the world we live in right now,"

Dr. Rogers says. "The honest truth is, we don't actually know if there's going to be any supply issues with the panels. We'll just have to find out."

Fortunately, she continued, the earlier supply problems—including shortages of collection kits—that affected Children's had become a thing of the past, and in August the lab was operating at capacity. With four platforms up and running, she anticipated SARS-CoV-2 testing demands could be met, at least for the foreseeable future.

That has been a relief, she says. She and her lab colleagues finally have the ability to know "at least some facts about what is and what isn't available. The manufacturers have really stepped up."

Dr. Rogers has also been keeping a close eye on staffing. Though she's pleased the lab is finally at capacity, returning to a degree of normalcy, she describes the past few months as tiring. "The techs are actually getting a chance to breathe a little bit," she says, "and they've realized how exhausted they are." At the same time, the lab is beginning to offer additional tests "that have been holding for months, because there was absolutely no bandwidth to think about doing anything else" besides SARS-CoV-2 testing.



Dr. Rogers

As the lab becomes busier in a normal sense, it's hard to say if "normal" will last. Even a normal flu season—Thing One—can feel like a roll of the dice. With SARS-CoV-2 joining the fray, bedlam might feel imminent. "Probably the thing that keeps us off balance the most is we never know what's going to be happening with this virus," Dr. Rogers says.

So much depends on human behavior. "Who knows what's going to happen in the months ahead?" she asks. The respiratory season may be less severe if people are masking and otherwise protecting themselves from SARS-CoV-2. "Or maybe not," she says. "Maybe people are going to get tired of it and go out without masks. Nobody knows."

Will more people than usual seek the flu vaccine than in years past? Or will misinformation and mistrust of vaccines drive folks away from the flu shot, not to mention from a future SARS-CoV-2 vaccine? Dr. Rogers has already heard misgivings voiced about the latter. "These are times like we've never seen before," she says.

As she contemplates the months ahead, she comes back to the thing she finds simultaneously predictable and unsettling. "I am surprised that we as a nation have ignored staying safe." She pauses, then adds: "But people are people. And trust me—I don't fault anyone. It's exhausting not to hug anyone. That's very difficult. It's a difficult time for the world."

Dr. Rogers also finds herself a bit taken aback. "I'm surprised by the spikes we're seeing this summer," she says.

In the deus ex machina ending of Dr. Seuss' tale, the behatted cat literally rode a machine to the rescue (although it wasn't a molecular platform). The ending may have seemed like a miracle, but the anxiety wasn't put to rest. Questions lingered.

So, too, with SARS-CoV-2 and the respiratory season. "I thought it would be more under control at this point," says Dr. Rogers. "I don't know how this is going to end up."

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