AMA webinar series: Project Firstline–CDC’s new national training collaborative for infection control

On Oct. 29, 2020, the AMA hosted the third webinar in the "COVID-19: What physicians need to know" series.

About the event

Hosted by AMA physician leaders, each installment of this webinar series aims to gain fact-based insights from the nation’s highest-ranking subject matter experts working to protect the health of the public, particularly during the COVID-19 pandemic.

Host

- Susan R. Bailey, MD, AMA President

Guest

- Mike Bell, MD, Deputy Director of Division of Healthcare Quality Promotion, CDC

Transcript
Dr. Bailey: Good afternoon, everyone. Thank you for joining us for our latest installment in the series, what physicians need to know about COVID-19 and other pressing issues in health care. I'm Dr. Susan Bailey, president of the American Medical Association. In previous webinars, we hosted representatives from the Food and Drug Administration and the CDC, we explored aspects of COVID-19 vaccine development, allocation and distribution. Now, if you weren't able to join us for those sessions, I encourage you to watch replays of the videos which are available for free on the website ama-assn.org/COVID-19-webinars. Or you can simply visit our main page and look for COVID-19 webinars.

Today's webinar is a little different as we'll be introducing Project Firstline, the CDC's new comprehensive infection control training initiative for millions of physicians and health care personnel in the United States. The goal of this new CDC-led collaborative is to help prevent the spread of infectious diseases in U S health care settings, including hospitals, outpatient centers, nursing homes and other facilities. Health care professionals will learn ... effective infection control practices through a series of online training modules, town hall discussions and tele-monitoring to empower physicians with the knowledge of how to apply these control methods into their daily practices, as well as the science and the reasoning behind them.

In fact, the training modules will soon be available in the AMA Ed Hub™, our online learning platform that is home to hundreds of videos, audio files, podcasts, and interactive CME training modules across specialties. I also urge you to check out everything on the AMA head hub that the AMA has to offer, amaedhub.com. As we all know, COVID-19 has exposed many significant gaps that exist in our nation's health system, which have really hampered our ability to contain this pandemic as cases, once again, begin to surge across the country. Among the most important tools we have to prevent and contain the next outbreak is improved infection prevention and control strategies. Project Firstline is the result of collaboration between the CDC, the AMA and other health care, public health and academic partners, as well as dozens of state and local health departments.

Today, we are joined by Dr. Mike Bell, deputy director of the Division of Healthcare Quality Promotion at the CDC. Dr. Bell's career has focused on investigating and preventing transmission of health care associated illnesses for hospital patients and staff. He's here to answer your questions so you can confidently apply infection control principles, and protocols to protect yourselves, your family, your facility, and your community. Thanks to everyone who has already submitted questions. So, I'm just going to go ahead and just jump right into it. Dr. Bell, our first set of questions relates to the transmission of SARS-CoV-2. So, our first question is from Steven Farrow: Should we assume that COVID-19 has an effective airborne transmission? If so, how do we go about this and how do we educate others about it?

Dr. Bell: So, great starting question. The transmission mode of respiratory infections is something that I think has been evolving for about 20 or 30 years. Many of us were trained back in the day when...
the approach to transmission description was very black and white. It was a binary description of either direct splashes within three feet, you may remember that. That is actually quite outdated. In fact, the original three-foot range, some of you may recall, was based on meningococcal carriage in school students. They showed that carriage levels increased dramatically from the desks were three feet apart or closer. And so, beyond three feet was an initial range for that kind of respiratory droplet transmission. That got moved over to medical care back when we had open wards and we had multiple beds with a ward, and the very practical question was, how many can we squeeze in here? How much space do you need? And it was actually a very rational thing to say, "Well, let's say at least three feet between beds." Right?

Fortunately we don't have to deal with that reality in our hospitals today, at least not very much, but it's also important to remember that spacing people who are not facing each other or interacting is very different from what it means to be taking care of the patient. And three feet is very, very close when it comes to the ability of my respiratory secretions to splash onto somebody else. So, first and foremost, the three foot thing is gone. We now talk about a range of about six feet, which is a little more realistic, but I'll say more about what the meaning behind that really is. The other thing that's changing in addition to that distance piece is what actually transmits infection.

And as opposed to the big splash of droplets that we used to describe, right? Big goobers that land in my eyes, nose or mouth, and cause an infection, that can still happen. In all fairness, anybody who's held up a toddler recently and been sneezed at in close proximity, knows that you can get and droplets in your eye very easily. But we generate much more than those big droplets whether we're speaking, coughing; we're learning more and more about things like singing and shouting, thanks to COVID. We generate a wide range of small droplets and big ones. And many of those small droplets can float around for minutes. And while it's not the same as tuberculosis or measles, which can float around for hours and stay infectious, even with something like COVID-19, those small droplets that float around, minutes is long enough if I'm face to face with you, within about six feet, for you to inhale something.

And so, it's probably a spectrum of exposure that includes a little bit of dread splashing if you're very unlucky and your timing is terrible, but also probably a little bit of near range inhalation. This is something that you can't tease apart just by the epidemiologic patterns. So, we can do the opposite. We can show based on epidemiologic patterns when something is like measles. Because when something is transmitted like measles, then an entire building will become at least seropositive, if not actively sick all at once. Think about the chicken pox outbreaks related to summer camps, right? Everyone comes back from summer camp and exactly a day and a half later, every kid starts erupting with little vesicles. That is extremely efficient, airborne transmission. Tuberculosis is harder to pin down because the incubation period is so long and we don't actually detect the onset the same way that we do with measles and chickenpox. But certainly it is a very durable, long-distance transmission.
With these respiratory viruses like SARS, SARS-COVID number 2, but also original SARS, MERS that came by a few years back, pandemic influenza, there's another factor that I want to underscore when it comes to how we think about transmission. That is the fact that we don't have a specific, highly effective antiviral treatment, and we don't have an effective vaccine yet. That means that there's a large proportion of people who could become very sick without recourse to very easy treatment, and also the number of people who are still susceptible. We have seroprevalence data, even from heavily affected locations, that are around 5%, which means over 90% of Americans are still susceptible. What that means for our hospital systems, and those of you who are actually manning the front lines in acute care centers, emergency departments, ICUs, you're seeing that our health system is already very stretched. And so, we take more precautions when it to recommending respiratory protection, for example, for those types of infections where we don't have a safety net.

I bring this up because a very rational observation would be to say, "Well, for seasonal flu, we don't do any of this." But for seasonal flu, we tend to have residual population immunity, we have vaccines. They vary in effectiveness. I got mine yesterday. And we also have antiviral treatment. And so, the likelihood of seasonal flu absolutely swamping our health system or affecting huge numbers of people and not allowing us to take care of them well, that is much less with seasonal flu.

So, getting back to the original question. I know that was long, but I wanted to give you the background of how we're thinking about this. This isn't a black and white, cut and dry, we've changed our mind kind of situation. This is an evolution of understanding that is showing us that you can inhale small things in close proximity. A lot of the time we're not as concerned. But when something is severe and not treatable, we are concerned. Which is why, if you go back each time to these very concerning outbreaks, we're consistently recommending the use of something like a respirator, specifically a respirator when you're taking care of somebody you think is infectious. And that is because there is a possibility of inhalation within close range.

**Dr. Bailey:** Along those lines, going from distance to time, this is a question from Dr. Trey Pegrum, Is there any validity to limiting time spent in the room with each patient to minimize the likelihood of transmission?

**Dr. Bell:** Absolutely. The risk of infection is a combination of how much infectious material is being generated. And so, this is a reflection of whether the individual who is ill is manifesting symptoms. We have data that some people are able to generate a lot more droplets, a lot more more droplets, a lot more aerosols, even when they're speaking quietly, not even from coughing. We've all seen a range of season cough behaviors, I'm sure. There are some people who cough very discreetly and others who are fairly heroic in their manifestation. That's usually the guy who's behind me in line at airports for whatever reason. But depending on who you're with and what the infection source looks like, that's one factor, people generating a lot of material. Related to that is the pathophysiology for the infected...
individual themselves. Is there a large amount of infectious virus being generated? So are you making a lot and then are you projecting a lot? So that's the source piece.

The environment piece is the second step. Are you in a very well ventilated, outdoor location, or are you in a small space with very little air exchange? Those are the two extremes. And in the former, your risk is much lower. Dilution is a very effective means of reducing risk. In the latter category, your risk is much higher. What we’re seeing is that in enclosed places and places with poor air exchange, we are much more likely to see transmission from a patient to multiple individuals. The examples that we've seen so far include things like exercise classes that were in small, not well ventilated locations where one person who was shouting and breathing hard during exercise managed to infect a large proportion of the people in that small space. We don't see that systematically, but we can when the conditions are right. Similarly in a choir practice, there’ve been a couple of examples of this now. We've seen places where, without great air exchange, somebody who is aggressively generating aerosols by singing, not intentionally, was able to impact a large number of people nearby. So the environment that you're in is the second factor.

And then the third factor is what sort of mitigation actions are being taken. If the person who’s the source is wearing a mask, that vastly reduces the efficiency of release. I'll say a little bit more about source control later. I think there’s another question coming up. But also, if you're wearing a barrier, even if it's not a fit-tested N95 respirator, there is some effect. We're starting to see data that shows that the range goes from really great with the fit-tested respirator to not zero, maybe 40% or 50% with something like surgical masks. So there's some benefit to wearing protection as well as keeping from exposing others to your own secretions.

So those are sort of the three factors. There are probably additional things like your inherent susceptibility based on your genetic makeup, but those are the factors that I think about. And with that in mind, the time that you spend in that context is also related to your likelihood of receiving enough of a dose to initiate an infection. There's always an infectious dose special. So a single virion probably isn't going to do it. But with each different pathogen, you see in different level of infectious dose requirement, and the longer you're in that exposed setting, the more likely you are to hit that threshold.

We use the number 15 minutes. This was initially proposed as a single 15-minute exposure time. There's a little bit of discussion underway right now, and you'll be seeing more about this in the coming weeks, related to an outbreak that occurred in a prison set. And what we saw there was that there was a relationship with time, but it wasn't just a single episode. It was cumulative. It makes sense that a cumulative series of exposures to shorter periods would add up to be greater risk. It's not as though you breathe for 14.99 minutes, and then only once you cross the threshold do you become infected. That's not how it works. And so sequential exposures. Basically, if you think about it from a probability perspective, if you're spending two minutes with eight people, there's a possibility that one of those people is going to be shedding a ton of virus, and you might be unlucky enough to become
infected in that two minute segment. And so if you're having lots of segments, that's probably bad as well as having one big one.

Dr. Bailey: And one last question about exposure before we go onto the PPE questions. Dr. Melissa Enriquez asks about fomites. Are we still worried about transmission via fomites?

Dr. Bell: So at the beginning of this outbreak, we included a lot of attention to surfaces and contaminated equipment. We still think it’s important. Virologic evidence shows that COVID-19 virus can actually persist and be infectious for many minutes, in some cases hours or longer. So that is true.

On the other hand, if we think about what needs to happen for something that's a surface contamination source to create a risk for me in terms of catching a respiratory virus, I really do need to somehow pick that up and inoculate my eyes, nose, or mouth. We're not seeing anything in the sense of, for example, hunter viruses, where we know that sweeping or aerosol generation by hosing out the back of the truck or something, we're not seeing examples of that kind of transmission. But we believe that it's possible that if you touch a surface, don't clean your hands, and then rub your eyes or nose or mouth, you could self inoculate. I think it's worth being careful. And frankly, it's because there's so many other things that are transmitted that way as well, that we really don't want to be picking up other cold viruses or anything else, especially right now.

So breaking the transmission chain from a surface to your face is really all about common sense things: hand hygiene, proper glove removal. I know that this is the audience that already knows all of this, but I do tend to point out that when you see colleagues wearing gloves and not taking them off properly, there is an escalation of risk to themselves. They can accidentally rearrange their hair and touch their faces, not thinking about what they're doing. But they can also contaminate surfaces around them and put other health care workers and patients at risk. So prompt, appropriate glove removal and hand hygiene is something that we like to remind people of.

Dr. Bailey: Great. Well, let's move on to some PPE questions. Dr. Robert Fralke asks, "Are regular surgical masks adequate for routine patient encounters, or should we and our staff always wear N95 masks?"

Dr. Bell: So our recommendations right now are tiered. There are certain things for which we think you should always be using an N95, assuming we have them. And full disclosure, we're painfully aware of the supply chain challenges that many facilities and institutions are experiencing. This is a very frustrating situation in the context of something like the COVID pandemic. There are currently recommendations that say that if for any reason you're not able to use respirators in a single use disposable kind of way, we have available crisis standards. And this isn't intended to be normal practice, but if you're up against the wall and you're needing to do something, we have suggestions for how to extend the use of respirators. In other words, keep them on and go from patient to patient. Or if you're absolutely out, using surgical masks as a temporary alternative. They're not as good, but
they're definitely better than nothing. And so we have some of those crisis recommendations that you can see on our website.

Getting back to the current recommendation, we do recommend N95 respirators or better ... whatever you are using and are fit-tested for, using those for any aerosol generating procedures. And those are things like bronchoscopies, induced sputums, that kind of thing. And in addition, if you're taking care of a patient directly who you think has COVID or who you know has COVID, then we would recommend of an N95 respirator in addition to eye protection. That having been said, surgical masks for routine patient care if when you don't think the person has COVID-19 is fine. If you're in a place where the community incidents has been high or the prevalence is high, then we recommend considering eye protection as well, just because you're likely to bump into somebody who may not be symptomatic yet, but could be infectious just based on community rates.

**Dr. Bailey:** So that brings us to the next question from Elite Bor-Shavit about eye gear when treating patients in the office. What type of eye gear is really recommended? A face shield, goggles, just regular old glasses?

**Dr. Bell:** So these are not good enough. And for those of you who work in emergency department in similar settings, the safety glasses often aren't perfect in terms of covering your eyes from splashes. I've seen a couple of colleagues end up with blood splatters on their eyelids, despite having been wearing their safety glasses. Some of them have little gaps and they're not quite as reliable. So in terms of what we recommend, goggles are very, very effective. They completely cover your eyes. They are also miserable to wear. I personally am an expert at fogging two layers of lenses in a heartbeat. And frankly, if things are foggy, you run the risk of needle stick injuries to yourself or to others. There are some downsides that are quite dangerous. So that brings us to face shields.. So goggles are fine if you're able to wear them.

Do remember that goggles need to be reprocessed appropriately between use. So if you've been wearing a pair, you take them off, before you use them again, or someone else does. They need to be cleaned and disinfected according to the manufacturer's instructions. Face shields are a lot more pleasant to wear, in my opinion. And we have many disposable types that are handy to wear, they have the sponge across the forehead, the elastic strap, and the transparent thin barrier in front of your face. When you're using face shields, it's important to take a look at them and see how far around the sides they go. If they stop right here and you're at risk of being splashed from the side, that's not a good thing. And similarly, if they go barely below your nose and you're doing a task that involves, for example, if you're discarding irrigation fluid in a sink or a hopper there's risk of splashing upwards.
And so if you’re doing something like that, having something that goes further down is very important. Similarly, to the goggles, if you’re using the really nicely built official reusable face shields, the ones that look like a welder’s mask, only they’re not black. Those too, need to be cleaned and disinfected again before reuse, just like with the goggles.

**Dr. Bailey:** And it should go without saying, but we should say it any way that a face shield without a mask is not super helpful. Now, what are the optimal procedures or PPE that’s necessary when we do have a vaccine and start to administer that? That question is from Dr. Lynn Taylor. What are the optimal procedures for vaccination, phlebotomy, things like that?

**Dr. Bell:** So phlebotomy and vaccine practices are really part and parcel of any routine medical care. There’s not anything magical about that. What I would say is that just as I said earlier, at a minimum, everyone doing anything in a health care facility right now needs to have a mask over their nose and mouth, that’s for source control. And if I may digress momentarily, since I brought it up. The impact of not releasing secretions into the surroundings is tremendous. There are some mannequin studies that show that having a respirator over the source of a cough versus not doing that and having a respirator on the recipient, having the source contained is far more protective. And that is beneficial, not only for one person, but for everyone around you.

The other thing that I’ll say, is that even though we tend to focus a great deal on the infection risk from patients, we’re seeing a great deal of transmission within health care between colleagues. We’re seeing it in break rooms, we’re seeing it in hallways, we’re seeing it in carpools, you name it. And that is I think, a good reminder for all of us that we all have to be constantly thinking about source control, especially when we’re in the work setting.

The other thing that I’ll share with regard to source control is that you’re probably seeing a wide range of products being used and the early data that we have, some of this I believe is in press right now. So you’ll be able to see some of this in writing soon. But it ranges from really excellent source control with a fit tested N95 respirator, nothing gets out really that is likely to reach others, it’s like 98% effective. That drops down to things like surgical masks, procedure masks, which are in the 50 or 60% range roughly, down to maybe the 45% range for the cloth masks that everybody has been using in public settings. And then for the face shield, as Dr. Bailey mentioned, if you’re just wearing a face shield it’s down at the two to five percent containment rate, it doesn’t do much at all. But then also anyone being ... vaccinated really needs to be maintaining source controlled as well.

The other piece of early evidence that I'll share with you anecdotally, is that we have modeling data that's suggesting that even if you're wearing a 50% effective control thing and only half of the community is doing it, you can have a profound impact on the transmission dynamics of this infection. Once again, we would suggest considering eye protection, that is just out of a greater sense of caution, since some people can be shedding virus without any symptoms. This is also the rationale...
for being really persistent in source control, implementation amongst colleagues, because we again have seen multiple health care personnel not realizing they're ill.

I had two surgical residents just yesterday who finished a case, one of them got picked up by fever screening when they came back from lunch and it turned out both of them were COVID positive, no symptoms at all. So ensuring that everyone in the health care facility is always using source control is absolute.

Dr. Bailey: Okay. There are a number of questions from outpatient facilities about the use of HEPA filters in office settings, especially in a small exam rooms, many of which will not have windows. How helpful is a HEPA filter in this setting?

Dr. Bell: So it's not a blanket easy answer, they're great, they'll solve all your problems. I wish it were. The HEPA filter is likely to help. It kind of depends on where it is and how much of the air is moving through it. So if you have a small unit that is only filtering a small proportion of the air in a large room, the net benefit is likely to be limited. If on the other hand, you have a HEPA filter that's able to process the air within a space very efficiently and a lot of that air is getting through the filter, then you might have a better impact. I think that HEPA filters are really worth thinking about when you have no other option, but it's also very important to be thinking about your facility writ large, whether it's an outpatient facility, a clinic setting or anything else.

I know that when I was in practice, I never even thought about the air handling system, unless maybe the temperature was somehow not warm enough or cold enough. But in reality, I think it's a great reminder that we all need to be talking with our facilities management team, whether it's a leased facility or a large tertiary care facility, having a conversation with people who maintain the HVAC system. And asking the very simple question of, what are the air exchanges, how much outdoor air is being added to our mix on an hourly basis? There are clear standards that are recommended. We have them on our website, ASHRAE maintains them as well. So there are many resources for ensuring that you've optimized the air handling. And really right now going into winter and flu season would be a terrific time to make that phone call and make sure that anything that can be done to optimize the air handling in your clinic is done now.

In addition to that, if it turns out that the best that can be done doesn't quite reach optimal air exchanges, if you don't have a window then adding a HEPA unit is not a bad idea. Just make sure that the HEPA unit is well-maintained. If the filter is not well-maintained and the air is not going through it anymore, then you're not going to get the benefit. Lastly, one word of caution, if you're in a facility that decides to add HEPA filters to the HVAC system, make sure that somebody is paying attention to the air balance. This is true in facilities that have negative pressure rooms, airborne isolation rooms. So if you're in an acute care facility, an emergency department, something of that sort, and you have a negative pressure room. If someone adds a HEPA filter to the outflow, then the pressure against the exhaust is going to go up and the air is not going to fight that it's going to go out
the door instead.

And so you can completely change what happens to your air handling with a HEPA filter in the HVAC system. And so if that's happening, make sure someone checks to make sure that there's not some accidental unintended consequence. The worst I saw was when this happened in a laboratory that was handling tuberculosis specimens. And the next thing you know, the entire floor was being exposed to TB. So very tricky issue, if it's happened.

Dr. Bailey: As an allergist, we recommend HEPA filters to some of our patients, and if you're in an outpatient office and are thinking about can about getting HEPA filters for your exam rooms. The there will be instructions on the package, on the box that says, "Well, this is designed for this size room." So make sure that you know the dimensions of the room that you're wanting to filter, and I've always recommended that you keep the HEPA filter on a desktop or a counter top as opposed to on the floor, because having it on the floor, especially if it's carpeted can really just stir up stuff. And sometimes can do more harm than good, but that's just the allergist perspective on all this.

Okay. So surface cleaning, what products are the best to clean surfaces in an office? Tad Hall asks, is it hypochlorous acid, how good is UV light? What should I be doing in my outpatient office to keep the surfaces clean?

Dr. Bell: Well, so the good news here is that all of the routine hospital disinfectants that are registered with the EPA, do a very good job of destroying coronaviruses. The things to remember, one of them is technical and the other is more practical. The technical thing is that if you have a large amount of crud in which the virus is hiding, then simply spring it down, may not do the trick. There's bio burden that can protect the virus. And so cleaning, just mechanical cleaning ...and so cleaning, just mechanical cleaning with a spray and wipe detergent. And some products are all in one, which is even nicer. But making sure that the cleaning step isn't forgotten so that you can get a good effect from the disinfectant, that's the technical side. The practical side is who does the cleaning? This is something that we struggle with in many situations. In an outpatient office, I can honestly say that back in the '80s, I don't think I wiped a single surface. I did use the rolling paper thing on the exam table as though that would magically help. I don't think it actually does. And so thinking about how you're going to implement surface cleaning and targeting the surfaces that are most likely to be responsible for cross transmission. The procedure trays, side tables, work surfaces, and of course the exam table. A quick wipe down with the appropriate wetting time, that's the other technical challenge is every product has a required wedding time.

And if it dries up before then, it's not good enough. So whether you're using pre saturated wipes or a spray product, making sure that you're able to use it the way it says it needs to be used. There are some very nice wipes that actually now have a much shorter wedding time and so you can do a single wipe. Many dialysis facilities in fact are finding that very helpful because of the practical need to turn over tables or chairs rather. So that's the easiest solution, it's within reach of I think everybody, but
thinking about who’s responsible for doing it is key. Also, if you have equipment that moves from patient to patient, whether it's a blood pressure cuff, a vital sign column, anything of that sort, be very clear in whose job it is to wipe it down between patients.

A lot of times, if that's not made clear, everyone will assume it was somebody else's job and you might be shocked at how often it doesn't happen. So designating whose job it is for each specific thing. In acute care hospitals, a lot of times it's things like ventilators, mechanical ventilators that the environmental services staff might be frightened to touch. And the respiratory therapists might not realize they should do it, the ICU nurse is busy, and so pretty soon it falls through the cracks and no one has wiped it in a week. This is not good. So thinking about whose responsibility each thing is, is important. And then getting to the question about some of these modern innovations. I'm very excited about a lot of these technologies, whether they're ozone generators, UV generators, fine mist generators with, you mentioned hypochlorous acid.

Dr. Bailey: It really sounds like in an outpatient setting that patients and doctors and staff all need to have source control and where their masks all the time, not just when they’re within six feet of each other. And yay, it looks like we’ve got you back. So we’re running short of time, but there’re some questions about reminders for all staff, Dr. Matilda Peredes asks, “What are some helpful tips, reminders, so that we don’t let our guard down inside or outside health care settings? What do you recommend? What seems to work just in terms of making sure that people just remember to do all these things?”

Dr. Bell: A great question. Let me finish the last answer, just in fairness to the person who asked about all of the other technologies. They're very good, some of them are promising about killing organisms. What we don't have is evidence of how good they are when you implement them in real life. The reality here is that some of them don't get all of the surfaces, some of them need to be positioned in a certain way. Maintenance is important because if it isn't well-maintained, then you may not have the right effect. So it's important to make sure that the real life implementation matches the promise, and we're still working on some of those data. Getting to this very practical question, Dr. Bailey, I think that my one admonition would be help each other. I think that the best tools we have are one another.
And whether it's a practice partner, your nurse, your primary clinician, your physician's assistant, or even your receptionist, talking to each other and keeping an eye on one another. So that if someone walks into a, you know, into an area and it doesn't have their mask on, everyone points it out and says, "Hey Mike, you forgot." And I can pause, take care of myself, and then go back to what I was doing. I think that is our best hope. We can also put up things like signs and reminders, and those are good, but I don't know about you, I tend to grow blind to a poster or a sign once I've seen it a few times, and it's much more helpful if a colleague or a partner can just tap me on the shoulder and say, "Yep, hand-washing you need to do that now." I'm usually the one tapping about hand-washing.

**Dr. Bailey:** Okay. We've got one question that's different in scope than the ones that we've dealt with so far. Dr. Steve Brasington asks, "So if someone in your office or a clinician travels by air, and so they've been on an airliner and they want to come to work the day after they get back, should they self isolate for 14 days if they've been in in a plane or a long time on a train or bus before they see their patients? Should they take a test 10 days after flying?" Because people are starting to come and go more, and what are the guidelines on that?

**Dr. Bell:** Well, so we don't have a specific recommendation related to post travel ... care. We do have a risk assessment tool on our website, that we can share it to your audience if you'd like, that helps gauge the risk of exposures in general for health care personnel, with an eye towards returning to work. But travel alone is not something that we've identified as a specific risk. That doesn't mean there isn't a risk. And the reason I point you to the risk assessment tool is if you were with somebody who might've been ill, if you are notified later that you might've been traveling near somebody who turns out to have test positive, those are things that may actually change your approach.

The other thing that I'll share is that, depending on your patient population, you may have a different threshold for returning to work. I have a very dear colleague who the head and neck surgeon who takes care of many immuno suppressed cancer patients, and she has either canceled trips or self quarantined for the two week period before exposing herself to those patients. I think right now it's still very much a case by case approach, but I would encourage people to take a look at the risk stratification tool just to have a sense of how to consider some of the potential exposures.

**Dr. Bailey:** Right. Do you have any last comments or recommendations you'd like to make about helping keep our offices free of COVID-19?
Dr. Bell: Well first, before I forget, I want to thank AMA for being one of our many partners with Project Firstline. Our goal here is to saturate the waterfront of health care with infection control understanding. In part, so that it's not just your AMA members trying to remind everybody on their practices, what they're supposed to do. But also, like I said, having everyone within the practice understand the basics in a way that helps them also remind us. So there's that part of it and having AMA as part of this is such a wonderful benefit to us, so thank you so much for that.

Overall, I think that the understanding of how difficult this is on so many levels for all of our care providers, not just our medical professionals, but our allied health staff, for our clerical staff, for many, many people providing care, there are so many risks inherent in the day to day, and yet we're continuing to show up. And I find that the most invigorating, inspiring thing imaginable. I am encouraged daily by how our profession is continuing to push forward. Doing so safely though, is something I desperately hope everyone will do. Please keep your masks on. Please attend to hand hygiene. And please remember the need to assess each person that you're caring for as though they could be infectious.

Dr. Bailey: Oh, well thank you so much, Dr. Bell. Thanks to everyone for joining us today and for submitting such great questions. We very much appreciate you sharing what the best practices for infection control and to confidently apply these principles in our offices. The AMA supports and applauds the CDC leadership on this issue, and we really look forward to this collaborative effort to educate and train frontline personnel and to help contain the spread of all infectious diseases. So thanks to our audience for joining us, stay safe, and we hope to see you again virtually at our next webinar. Thank you, and have a good rest of your day.