# RSV:
# The OTHER
# Respiratory Virus

OnMedicalGrounds

**PODCAST 5 - Part 2**

Dr. Jill Sellers:
Welcome to the *On Medical Grounds* podcast. I'm Dr. Jill Sellers, your host. *On Medical Grounds* is a casual, friendly place where you can find an authentic, audible blend of timely scientific and medical knowledge. We talk with experts about their experiences and knowledge, the utilization of new therapies and challenges within the world of healthcare. Select podcasts offer continuing medical education credits for those of you needing an additional why you should listen. We provide perks to all posted podcasts by linking content so you can drink in more if you so choose.

Welcome to part two of the *On Medical Grounds* podcast on respiratory syncytial virus, otherwise known as RSV. Many of you may be aware by now that RSV is on the rise around the globe during a season in which we normally do not see it. This is a winter virus, not a summer virus. This discussion will focus on the available diagnostic tools, developments on the horizon to protect against the virus and how RSV impacts older adults.

Our first guest today is Dr. Jonathan Temte, who is associate Dean for public health and community engagement at the University of Wisconsin School of Medicine and Public Health, where he also serves as professor of family medicine and community health. Dr. Temte was the first family practice physician to serve on and chair the U.S. Advisory Committee on immunization practices. He currently chairs the Wisconsin Council on Immunization Practices, is a member of the CDC's Board of Scientific Counselors, and is the AAFP representative on the CDC's Advisory Committee on Immunization Practices COVID-19 Vaccine work group. Dr. Temte is the principal investigator in multiple studies and has been very involved with the COVID-19 response at local state and national levels. I will link to a more complete bio of Dr. Temte in the show notes. Welcome to the On Medical Grounds podcast, Dr. Temte.

Dr. Jonathan Temte:
Well, thank you very much for the invitation. It's a great pleasure to be here today.

Dr. Jill Sellers:
I am looking forward to this discussion and I'm going to jump right in with some of my questions. So how serious is RSV and does it often go undetected or overlooked when trying to make a diagnosis?

Dr. Jonathan Temte:
The easy answer to that second question is yes, we oftentimes don't even consider this as a possibility. We usually think of RSV as a significant disease of infants and young children, but it is also a very significant pathogen for older adults and those with underlying pulmonary conditions. It contributes to thousands of pediatric hospital admissions every year, and now is increasingly recognized as a driver of hospitalizations and death in elders and in people with underlying COPD and asthma.

And I have to mention that outbreaks of RSV in long-term care facilities are common and result in increased morbidity and mortality. My research and surveillance team conduct studies in primary care settings, in long-term care facilities and in schools. And I've been struck by how common RSV is across the entire age spectrum. Now, in terms of our detection, we do very little testing on average in primary care, in long-term care and in other settings. And our testing is usually dependent on the age, situation in place. And I would say that most commonly, we do testing for ill infants at the time of hospital admission. It's occasionally done for hospitalized patients, particularly as part of a respiratory panel, but testing for RSV is rarely done in the ambulatory setting.

Dr. Jill Sellers:
Interesting. How does the presentation of RSV differ in a pediatric patient versus a middle-aged patient versus an older adult patient?

Dr. Jonathan Temte:
I'll have to confess that early on in our surveillance program, I was struck by a woman in her thirties who presented primarily with a sore throat and it turned out to be RSV. And that has led me down the line of really paying attention to what we see. We typically think of RSV in infants as rhinorrhea with cough. And oftentimes, I describe this to my residents as being the green 11 sign where you have thick copious, nasal discharge coming out of both nostrils. But oftentimes with other people, we'll find a milder illness in older children, healthy adults, and then exacerbations of asthma and COPD in older adults. So it runs the whole spectrum of a respiratory virus with a multitude of symptoms.

Dr. Jill Sellers:
So what are some of the common methods of testing for and diagnosing RSV? Are they the same in all those populations or do they vary depending on the patient?

Dr. Jonathan Temte:
They very dependent on the patient, the age and the setting. But the common tests out there are reverse transcriptase polymerase chain reaction, rapid molecular testing, direct fluorescent antibody testing, and rapid antigen testing. In the past, we used to use culture, but this is a technique that is rarely used anymore. But again, I think the important concept of our two, three across here is testing is often dependent on the location. And so for example, with an infant admitted to hospital, we largely rely on polymerase chain reaction testing. And on outpatient settings where they're used, we can use the rapid molecular and the rapid antigen testing.

Dr. Jill Sellers:
And are those relatively easy, the rapid tests, are those relatively easy to use?

Dr. Jonathan Temte:
In general, they are very easy to use. They tend to be CLIA-waived tests and they tend to be fairly straightforward tests to conduct. But the important thing is first, acquiring a respiratory specimen. And this is actually pretty easy. We use nasal swabs, nasal pharyngeal swabs, or nasal aspirates. And in general, these are samples that are easy and very safe to collect.

Dr. Jill Sellers:
When we talk about these tests and these methods of testing, which of them are more accurate and reliable? I know that you've said it depends on the patient and the setting. Are there certain tests that are used in certain settings that are more accurate and reliable than others?

Dr. Jonathan Temte:
Absolutely. So the clear winner for accuracy is the PCR-based tests. These have the highest sensitivity and specificity. However, and this is an important consideration, these tests are not easily available in outpatient settings, and they require time for specimen transfer, for testing and reporting. And so it really depends on the situation. Do I need the answer quickly, or can I wait for a few hours? And typically, with a hospital admission, we have time on our hand because our treatments are supportive, we don't have any definitive treatment for respiratory syncytial virus, and that patient isn't going anywhere.

On the other hand, in a primary care setting, once that patient episode is done, and I have a result coming in, it requires me to locate the patient, communicate with a patient, get the information across. And if something comes back to me, three or four hours later, it really represents a pain that I have to deal with. And so we really like the rapid tests in settings where they can be used rapidly. And I'm going to just divert a little bit here. We did a study looking at rapid influenza testing in long-term care facilities. And even though the rapid flu test has a lower sensitivity than the PCR, the rapidity of resulting allowed facilities to respond much more quickly to outbreak situations. And so I think it's really, really important to carry across, it depends on the location, depends on the need for timing and it depends on who you're looking at.

Dr. Jill Sellers:
But there's no difference in the accuracy and reliability of the rapid test versus the longer term when you have more time test, correct?

Dr. Jonathan Temte:
The PCR tests clearly have a higher sensitivity and specificity, and we're willing to trade some of that away with a more rapid test in clinical settings. And so in general, the rapid tests have a lower sensitivity, and oftentimes a lower specificity. But the specificities are usually very, very high.

Dr. Jill Sellers:
Okay. Understood. What are the current CDC guidelines and health department reporting requirements regarding RSV?

Dr. Jonathan Temte:
Well in general, there is no mandatory reporting of RSV and the exception may be an outbreak in a long-term care facility or a hospital. But unlike a number of our other respiratory pathogens, such as SARS-CoV-2, measles, diptheria, pertussis, chickenpox, RSV is not reportable. And so it fits into that same class as influenza. Influenza's only reportable if there's a laboratory confirmed pediatric death. So we don't have good ways of tracking RSV because of that lack of reporting.

Dr. Jill Sellers:
How has the emergence of COVID-19 changed the diagnosis and treatment of RSV, or has it?

Dr. Jonathan Temte:
Well first and foremost, there are no specific treatments for RSV. Basically, our approach in the inpatient setting is supportive and this has not changed over decades. In the outpatient setting, the most important thing with RSV is the recognition and the anticipatory guidance and education of patients. So the COVID-19 pandemic hasn't changed anything along that line. However, one of the amazing things with this pandemic has been the fact that our public health interventions, our masking, distancing, hand-washing and so on has had a profound effect on RSV. RSV largely has disappeared because of these public health interventions. And this has been really educational to me and to other clinicians because we see the incredible effect that we can have with these non-pharmacologic measures out there. On the flip side, what we're seeing as we relax these measures is a resurgence of RSV.

And I have to mention, I just got an email this morning from a colleague in Australia with a pre-print attached, showing that in Australia, as the public health measures were relaxed, they experienced a great resurgence of RSV. So this is something that we have to keep in mind as we're, hopefully in the next months, coming out of this pandemic. The other thing out there that's really important for our guests is the fact that as we're coming out of this pandemic and we're seeing resurgence of other respiratory pathogens, this is going to be incredibly, incredibly confusing for clinicians and it's going to be a source of worry for patients. And I say this simply because as we're seeing the presence of the Delta variant and increased transmissibility of COVID, and if this is happening at the same time that we see other respiratory pathogens come back with a vengeance, people are going to be confused as to what they have. And this is going to be really confusing for public health guidance. There's going to be a lot of testing required, and it's going to be a chaotic time, for several weeks to months.

Dr. Jill Sellers:
So if you had to look into that crystal ball for the future, based on what we know right now with COVID-19 and RSV, if the COVID-19 test was negative, what would be the next respiratory illness that would be tested for, or what we're going to look to in the future? What do you think would be the next progression?

Dr. Jonathan Temte:
I think our biggest worry right now is that for a significant influenza outbreak. And I mention that simply because influenza, we do have vaccines that are effective and we do have therapeutics that are effective if started early. So there are some of the rapid tests that are dual tests for SARS and influenza. But I think we have to consider the whole gamut out there. And this really brings to bear the importance of having intact surveillance systems that can help let us know what's in circulation. For example, we're running a surveillance program on our university campus right now, and I can tell you that the people who are ill right now are ill with rhinovirus and with parainfluenza. But unless you have the facility and the capability to test widely, you don't have that situational awareness.

Dr. Jill Sellers:
That makes sense. So let's discuss some of the precautions taken to contain RSV once a patient has been diagnosed. We discussed it a little bit earlier with the resurgence of COVID-19 and how we haven't seen much RSV because of some things. But let's talk a little bit about those precautions taken to contain RSV.

Dr. Jonathan Temte:
I think it's important to understand that RSV is a virus that is shed for a longer period than things like

influenza. And typically, we use eight or nine days as the shedding period. But when we start at very young, so the infants or people who are immunocompromised, we can see shedding going on for three to four weeks after initial infection. And this is really important because RSV can persist on surfaces and stay viable for hours to days. And so this is definitely a virus that can be easily spread by contact. Somebody coughs or sneezes on a surface, hours later somebody else comes along, wipes their hand and touches their nose or their eye, that can lead to transmission. And so in both hospital and ambulatory settings, it's really important if RSV is recognized to have that full contact precaution. This is the bane to my life when I'm doing inpatient attending, because it requires gowning, gloving, masking and eye protection. And then also, surface decontamination because we can easily spread this in a nosocomial fashion. So I think it's really important to just understand the dynamics of transmission here.

Dr. Jill Sellers:
It all goes back to let's wash our hands and take care of our personal hygiene, right?

Dr. Jonathan Temte:
That is so very, very important. And this is why we see this incredible benefit of our public health measures during the pandemic. And we've seen not only affects on RSV and influenza, but virtually all the other respiratory viruses.

Dr. Jill Sellers:
How has the use of the device ID NOW™ impacted the diagnosis, treatment and follow-up in RSV patients?

Dr. Jonathan Temte:
The ID NOW™ RSV test is one of the options for rapid RSV detection. And this is a molecular test. We see results within 15 minutes, and this has a higher sensitivity than the rapid antigen test. So in my mind, the ideal settings for this type of test would be in an outpatient setting or in a long-term care facility where having the result early can have incredible impact. In an outpatient setting, it provides me the ability to give results to worried parents quickly. In a long-term care setting, I think more importantly, it allows those public health measures, the patient isolation, the contact precautions, and so on that are really essential to prevent this from spreading widely through a facility.

Dr. Jill Sellers:
We've talked a lot about RSV the disease, how it's transmitted, how it's diagnosed. It would be nice if we didn't even have to worry about it. So I know there are clinical trials ongoing with vaccines for RSV. And so I'm curious, once FDA approved, is the RSV vaccine one you would recommend to patients and which patient populations should get it without question and why?

Dr. Jonathan Temte:
This really depends on what the FDA licensure is for and what information the companies take forward for that licensure. But if I use my crystal ball, I can see certain targets out there that are going to be important. So currently we have no licensed vaccine, although there are several in the pipeline. And when I look into the future, I think the targets out there are elders, people over the age of 65, adults with pre-existing medical conditions such as COPD or asthma, and trying to provide protection for infants.

And for infants, it's a challenge because oftentimes vaccines are not terribly immunogenic in infants. So I think there's been a lot of work looking at the role of providing vaccine to pregnant women so infants are born with maternal antibody in circulation. So it really depends on which vaccines are out there and what the licensure is for. But, should a candidate become licensed and receive ACIP recommendation? I think it's going to be really, really important for individual and public health. And once it comes through ACIP, they have such a nice evidence-based recommendation process. Anything that they make a recommendation for, I would echo that strong recommendation for the indicated recipients. And then I think the important thing, and that's I think one of the reasons why podcasts like this are very important, this is going to require a great deal of education of clinicians and of patients, of mothers and others out there about the underlying nature of RSV disease and it's significance.

Dr. Jill Sellers:
Agreed. Education will be key for sure. Do you believe that the availability of an RSV vaccine will change how the disease is viewed?

Dr. Jonathan Temte:
I really think so. And again, I have to go back and look at colleagues in primary care across this country. And we all have a good sense of RSV, but our impressions are limited. We tend to think of RSV as that nasty virus that causes hospitalizations in infants. And I think we have to develop a broader perspective and see how this is an important disease across the age spectrum. And in particular, how it really not only affects the infants, but those older individuals with significant morbidity and mortality.

Dr. Jill Sellers:
Agreed. We talked a little bit about COVID-19 and how it has changed some things with RSV detection and incidence, I guess. So in general, I can't let you go on this podcast without asking a general question, has the COVID-19 pandemic changed views towards testing and surveillance of infectious diseases?

Dr. Jonathan Temte:
Yeah. I have to go back to the comments I made before, and this has been an incredibly profound test case for what we do in public health. And the combined forces of school closure, physical distancing, masking, hand-washing has just had such an incredible reduction in respiratory viruses, including RSV. And I dare say this has been very, very effective when used properly for COVID-19. So I think that is the context of this whole pandemic. But the other thing, when we talk about laboratory testing, is the importance of ongoing surveillance as a tool for all of us, for situational awareness, for both medical and public health personnel. If we can understand what pathogens are in circulation at which time and who they're affecting, we can make much better decisions in terms of prevention, testing, response, and treatment.

Dr. Jill Sellers:
And that's what we're here for to make these better decisions, right? To have a better, healthier public.

Dr. Jonathan Temte:
Exactly.

Dr. Jill Sellers:
Our time is coming to a close. Do you have any final thoughts on what our audience should know and be aware of, regarding RSV?

Dr. Jonathan Temte:
Well, as I mentioned before, there have been very few changes in approach to RSV over decades. But the good news is our approach to RSV is likely to evolve rapidly in the next several years. As we see new vaccines, new approaches to vaccines and novel therapeutics. And we're really looking forward to the advent of safe and effective vaccines and other effective preventive and therapeutic options for individuals who are at high risk for morbidity and mortality. So I think I would say stay tuned, keep that antenna up, looking for the newer developments in RSV and keep in mind that this is an important pathogen out there that we have to be aware of, especially as we start relaxing those measures for COVID-19.

Dr. Jill Sellers:
Thank you, Dr. Temte, this has been excellent. We appreciate you being our guest for the *On Medical Grounds* podcast. We especially appreciate your time educating us on RSV and all the work you are doing to move public health forward. Thank you so much.

Dr. Jonathan Temte:
Thank you so much for the opportunity today. It's been a pleasure speaking with you.

Dr. Jill Sellers:
Our second guest today is Dr. Angela Branche, an assistant professor at the University of Rochester School of Medicine and an infectious disease specialist from the University of Rochester Medical Center in New York. Dr. Branche received her bachelor of arts degree from the University of Pennsylvania and her doctor of medicine degree from the American University of the Caribbean. She completed her residency in internal medicine at NYU Lutheran in Brooklyn, New York, and an infectious disease fellowship at the University of Rochester. Dr. Branche is board certified in internal medicine and infectious diseases. Her current clinical practice is comprised of patients with general infectious diseases and HIV.

I will link to a more complete bio for Dr. Branche in the show notes. Welcome to the *On Medical Grounds podcast*, Dr. Branche.

Dr. Angela Branche:
Thank you.

Dr. Jill Sellers:
My primary clinical practice was with the geriatric population. Therefore, I have a keen interest in RSV in the elderly and the potential of it being overlooked when trying to make a diagnosis. So allow me just to jump in with my questions, how serious is a respiratory syncytial virus in the elderly, and does it often go undetected or overlooked when trying to make a diagnosis?

Dr. Angela Branche:
Those are great questions. So RSV was actually initially described as the cause of nursing home outbreaks and respiratory diseases. It was first discovered in the fifties as something that caused illnesses in chimpanzees, actually. And then it became clear that it was something that was causing a lot of illness in children, especially young children under the age of two. Really severe bronchiolitis, lots of bronchitis and respiratory disease, and even potentially a trigger for things like asthma. And so for decades, after its discovery, it was thought to be primarily a disease of childhood. In the late eighties and early nineties,

some investigators, and in fact, some of them here at the University of Rochester who are good colleagues, started to describe outbreaks in daycares and nursing home facilities of older adults that congregated in these settings. And since then, that's led to national and international interests that RSV could in fact be a significant disease in adulthood and who were the populations most affected.

And now numerous studies around the world have demonstrated that it is in fact something that we've become periodically infected with throughout life. You do develop some immunity, but that immunity is partial. And it's really not enough to prevent you from getting reinfected. But for most of your adulthood, it'll just be a cold. Until you become somewhat older and you have some underlying medical conditions and you're a little bit more frail. And that's when having a cold is not just the cold. That's what having a cold can be bronchitis, it can cause exacerbations of heart failure and COPD. It can lead to pneumonia, it can lead to incapacity and weakness and worsening of frailty. And older adults very often we'll end up hospitalized with RSV infections. I don't think people are aware that RSV in older adults, the attack rates can actually exceed influenza in some seasons, and it can cause similar numbers of hospitalizations.

And even in some seasons, RSV's the number one virus that's associated with hospitalizations in older adults. It can also be equally complicated by pneumonia and respiratory failure and the need for mechanical ventilation, as what you might expect with flu. So if we're vaccinating older adults and really making sure that they're protected against influenza, we should also really be thinking about that with RSV. One of the reasons why it often goes undetected is that for a long time, people didn't understand that RSV was such a big player. But even with better education and better knowledge, there's not a lot of desire or push to test because we don't have treatments. And so because there's no treatment for RSV, there's really little motivation to make a diagnosis because treatment is just supportive and people just expect, "Oh, it's just another virus." Not true. And so RSV testing isn't always routinely performed and you really have to be thinking about RSV to test for it.

Dr. Jill Sellers:
So do you think most of the time, because it's not routinely thought of, and then it's not routinely tested for, it just goes overlooked?

Dr. Angela Branche:
I think there's a significant underdiagnosis of RSV nationally and worldwide. We like to say that RSV has an identity problem because people just say, "You have a cold or you have another virus." No, no, this person has RSV and it actually means something in this population. So make a diagnosis, make sure that they're not spreading it around and be prepared to have to give a lot of supportive care. That might be what it takes in some vulnerable populations.

Dr. Jill Sellers:
So how does the presentation of RSV differ in an older adult patient than an infant?

Dr. Angela Branche:
Again, RSV in childhood is recognized as this really significant disease because a lot of babies end up in the hospital and they have really severe bronchiolitis. It's just a really scary thing that happens in early, early childhood, usually in infancy. And so that's all we hear about and really all that's recognized. But in fact, more adults are hospitalized and die from RSV every year than children, more adults over the age of 60.

In adults, you'll often have a really prolonged illness. It might start as a cold and then seven, 10 days later, you're not better. And then you really start to struggle to breathe and you end up in the hospital, and it turns out that now you have pneumonia. Or it's triggered hospitalizations because your heart failure or your emphysema has now been exacerbated and you're in the hospital for those. That's how older adults present. It's quite different than the dramatic bronchiolitis picture of children, but it's in sometimes some cases more deadly. It's very devastating because it does cause this tremendous loss of function in older adults.

Dr. Jill Sellers:
Let's discuss some of the common methods of testing for and diagnosing RSV. So do the testing methods differ depending on the age of the patient, and which of these testing methods is more accurate and reliable?

Dr. Angela Branche:
Absolutely. So some of the earlier tests for RSV are the least sensitive. So 30 years ago in order to diagnose RSV, you actually had to be able to collect a respiratory sample like sputum and try to culture the virus. And you would only find it if the person really had RSV about a third time, which is just an incredibly insensitive test. And also virus viral cultures are just really hard to do. We don't really have that expertise anymore because they're obviously difficult. And then in the eighties and nineties, antigen based tests were developed, which are a really great point-of-care rapid test that you can do in your office. They're quick, they're easy, they have really good performance in young children. In fact, the sensitivities is about 90% in young children because they have a lot of virus.

And so you'll detect it. But we've shown that in older children and adults, for whom the amount of virus they might have in their nose is maybe a little bit lower and they're shedding virus for a shorter duration of period, antigen based tests are actually sometimes in some cases less than 70% sensitive. So not a great test, which is sad because it's so easy to do and so widely and readily available in most primary care practices. So how we diagnose RSV in adults is we have to use a PCR based test, so a molecular assay where you're looking for the genetic material of the virus. And in fact, that's become the gold standard because it's 95% or better sensitive for all agents. It's usually duplex for flu. So for most hospitals that do PCR testing for flu, that's linked and duplex with a test for RSV. So you're actually getting two for the price of one, but most people don't even know that. And the results are often available within an hour.

Dr. Jill Sellers:
Has the emergence of COVID-19 changed the diagnosis and treatment of RSV? And if so, how?

Dr. Angela Branche:
Well there are no treatments for RSV. And part of the reason is because by the time we detect it, giving an antiviral is not going to make a difference. But I think the impact of COVID has taught us that it's important to make viral diagnoses as early as possible because the earlier you can intervene in somebody that has a virus, whether it's COVID or flu or RSV, the better your chances are of preventing that person to go on to have some more severe disease. And so if there was ever a chance to develop a successful antiviral in RSV, it's really going to take a paradigm shift in people really and practitioners really working hard to make diagnoses of RSV so that you can get them treatment really early. But I think COVID in general has just raised awareness of how older adults are very vulnerable to viral infections. And so I think having that

awareness will be a good starting point for the educational initiatives we're going to have to put in place to help people understand the impact of RSV.

Dr. Jill Sellers:
Have you seen a decline in the cases of RSV during the COVID pandemic?

Dr. Angela Branche:
Yeah. It was really strange. Well, not really, it sort of makes a lot of sense. Everybody was masking up and so from the 2019 and 2020 and 2020 and 2021 winter seasons, which is when you usually see things like flu and RSV, they both pretty much disappeared. It was great. Such a lesson on what mitigation strategies can do when people actually wash their hands and wear masks and cover their coughs. But then we had this weird spike of RSV in the summer, which nobody would have predicted because dogma has always said these viruses really only circulate in the winter seasons when people are crowded indoors, cold weather is better for viruses. And so it has turned everything we know about seasonality of these viruses upside down.

Dr. Jill Sellers:
Yeah. I find it interesting. I think it is also possible that there probably were some RSV cases that maybe were masked as COVID or could that have happened? What do you think?

Dr. Angela Branche:
It depends on when they had those symptoms, where they went to be tested. It's possible. In the State of New York, if you had a respiratory illness and you went to get tested, the State of New York was requiring most institutions to test, not just for COVID, but for RSV and influenza as well. So a lot of data was showing that there just wasn't any RSV or flu around. But that's not true for the whole country or even the whole world.

Dr. Jill Sellers:
You kind of hit on my next question, but I did want to go ahead and ask it. Can we discuss the precautions taken to contain RSV once a patient has been diagnosed?

Dr. Angela Branche:
It depends on what setting you're talking about. If it's in the outpatient setting, very often, RSV in a household or in a family group or in a social setting starts with kids. Kids are just a natural reservoir for viruses and they have lots of secretions and they love to spread those around. And so if you know your child is infected with RSV, the best thing to do is to keep them away from their older, more vulnerable relatives, because there's just no way of cleaning them or keeping their secretions and wiping their noses well enough that you're not going to be able to put other people at risk for contracting RSV.

If you're a mom or dad of a kid that had RSV and now you have it, then a lot of the typical precautions that we put in place for COVID should apply to you, wash your hands, cover your mouth when you cough. And if you're in a hospital, because RSV is transmitted by both respiratory droplets and also to a larger extent than COVID, by contact with patients, with their secretions on wet surfaces, for patients who are in the hospital and have RSV, they have both droplets which means you wear a surgical mask as well as standard precautions, which means you glove, sometimes you wear gowns and then you wash your hands a lot.

Dr. Jill Sellers:
Once the RSV vaccine is approved, would you recommend it to patients? And is there a specific patient population that should get it? And will the availability of an RSV vaccine change how the disease is viewed and treated?

Dr. Angela Branche:
Yeah, I think for a number of decades now, as a medical community, we've been working to develop vaccines for RSV. It's an important vaccine to have both for young children, because there's still a lot of children around the world that die from RSV every year. And it's also an important vaccine in adults over the age of 65, older adults who tend to have more severe disease, particularly those with underlying cardiopulmonary conditions. So I think that I would recommend the vaccine once approved in those populations. I think it will be something that we really have to do a lot of education about and I think it's thinking about what can we do to prevent pneumonia, which we know is really devastating in all older adults. And this is one of the biggest causes of it in this population.

Dr. Jill Sellers:
In general, how has the COVID-19 pandemic changed views towards testing and surveillance of infectious diseases?

Dr. Angela Branche:
Well, I think people are really aware of their vulnerability. We're all vulnerable to COVID, but I think it's just made people more aware that there are viruses that can cause you to be very sick. It's not just influenza. It's not something that you can give antibiotics for. And the answer with many viruses is really about prevention. So I think the COVID pandemic has really put prevention of respiratory viral illnesses at the forefront of people's minds in the medical community and in the general population. So I think in general, people will be thinking, "Well, how do we prevent these illnesses? How can I protect myself?" And I think that'll maybe lead to some greater acceptance of an RSV vaccine.

Dr. Jill Sellers:
Thank you Dr. Branche for joining us on the *On Medical Grounds* podcast. We appreciate you educating our audience on RSV and the elderly and the importance of proper testing and diagnosis.

Dr. Angela Branche:
Okay. Thank you very much for having me.

Dr. Jill Sellers:
And thank you for listening to the *On Medical Grounds* podcast. We know your time is valuable. The resources that were referred to in this podcast can be found at onmedicalgrounds.com. In addition, please be sure to click the subscribe button to be alerted when we post new content.