

# Pneumonia

With Dr. Katherine Baumgarten

Diane (00:00):

Well, it was bound to happen. Today we discuss pneumonia.

Clay (00:11):

Pneumonia, you've probably heard of it before, but today we're here to understand it. The disease has affected masses of people over centuries, but its notorious legacy took a major hit when scientists developed a vaccine. Dr. Katherine Baumgarten, Medical Director of Infection Prevention and Control at Ochsner Health is here with us today to talk you through it all. Hey Doc.

Dr. Baumgarten (00:36):

Thanks so much for having me. So appreciate the opportunity to speak to you and to be here today.

Diane (00:41):

We're looking forward to a great conversation because this is something that everybody knows about, but maybe they don't know enough about. So let's start out with a simple question, obviously. What's the name of the vaccine that Clay just mentioned that helps prevent pneumonia?

Dr. Baumgarten (00:59):

Well, we have a pneumococcal vaccine. Um, there are multiple preparations of the pneumococcal vaccine, but that vaccine in particular helps to be, prevent pneumonia.

Clay (01:11):

Mm-hmm. Well, you know, it's, it's interesting because there's so much talk, especially in this part of the country now, every year. (laughs). Uh, people talk about pneumonia and, and as after COVID and its impact on the way we view vaccines. It, it heightens people's-

Diane (01:27):

Awareness. Yeah.

Clay (01:27):

... interest and, and, and awareness and knowing about it. But, uh, let's talk about the pneumococcal disease. What exactly is that?

Dr. Baumgarten (01:34):

So when we talk about pneumococcal disease, we're talking about a specific type of bacteria that causes pneumonia. Um, there are many, many organisms that can cause pneumonia. Those could be viruses, bacteria, other types of organisms. But when we talk about pneumococcal pneumonia, we're talking about a specific organism that's called strep pneumoniae.

Dr. Baumgarten (02:00):

Um, or we, um, kind of shorten that to strep pneumo when we're talking about it in the medical field. But that's a particular bacteria that is commonly the cause of pneumonia. And those that are over the age of 65 or under the age of two are particularly susceptible to that bacteria. Now, the bacteria can also cause milder disease. It doesn't just cause pneumonia.

Dr. Baumgarten (02:25):

It can cause things like, um, sinusitis, like ear infections. It can also cause more serious diseases, things such as, um, meningitis, pneumonia. Um, so we see a spectrum, but it all can be related to that one bacteria called strep pneumoniae.

Diane (02:46):

Well, is it hard to isolate? I mean, could it mimic another type of disease? Do you know? I mean, how do you know if you have pneumonia?

Dr. Baumgarten (02:55):

So the symptoms of pneumonia are typically fever, um, feeling fatigued, having cough. You can cough, have shortness of breath. You may have what we call pleuritic chest pain, which is just pain in the lung area or the chest area, especially when a person coughs. Um, but when you have pneumonia, you will have most likely fever and then cough with or without sputum and shortness of breath.

Dr. Baumgarten (03:22):

Those strep pneumoniae, characteristically, um, can cause some sputum. It doesn't have to all the time, but sometimes it will cause that sputum. Um, but we don't know what the cause of pneumonia is.

Diane (03:35):

Mm-hmm.

Dr. Baumgarten (03:35):

As I said, there are many types and many things that could cause pneumonia unless we do specific testing looking for that. But most people recover and recuperate without that testing being done. And most often if we suspect that it's not a viral pneumonia, then it's more of a bacterial pneumonia such as strep pneumo, then we may decide to treat with medications.

Diane (03:58):

I think a lot of people, myself included, when you hear pneumonia, you just think the umbrella of pneumonia.

Clay (04:03):

Mm-hmm.

Diane (04:04):

Don't, you don't realize there are different variances or different types. And some of the things that you were mentioning just a moment ago, doctor, about, uh, some of the symptoms that almost sounds like flu.

Clay (04:14):  
Right.

Diane (04:14):  
You know, some of those things too.

Clay (04:15):  
Yeah.

Diane (04:16):  
Do people come in thinking or think they have the flu and actually they have pneumonia?

Dr. Baumgarten (04:20):  
That could happen. And so it is important, especially when we know there are various, um, viruses that circulate. We've talked a lot these past three years about different viruses-

Diane (04:30):  
Mm-hmm.

Dr. Baumgarten (04:31):  
... and I think people have, um, become more knowledgeable about the various viruses that can then lead to respiratory infection and sometimes even pneumonia. And so when we talk about that, of course in the past three years, all of us have been talking about COVID. Whether we wanna continue to talk about it or not is another story.

Dr. Baumgarten (04:50):  
But certainly, that's been on the forefront and certainly that could cause pneumonia. But we do have testing available for COVID. So it is important if a person is having symptoms and they're not sure of the cause to be tested, and we have home tests available for COVID. Now, there is now a newer home test for flu that's just been approved-

Diane (05:12):  
Oh, really?

Dr. Baumgarten (05:12):  
... by the FDA. Right. So these things will become more and more readily available. And if the symptoms are severe and your COVID test has been negative at home, you may want to seek care, especially if you're having shortness of breath or and fever and things are getting worse over a day or two and not better because we do have diagnostic techniques we can use to further establish, okay, do we need to treat COVID?

Diane (05:37):

Mm-hmm.

Dr. Baumgarten (05:37):

Do we need to treat flu? Or could this be something that we need to treat with different medications such as an antibiotic?

Clay (05:44):

That's interesting. It, you know, you were talking about pneumococcal disease earlier and just circling back to that, are there complications that could arise from someone getting that disease?

Dr. Baumgarten (05:55):

Sure. Um, from any pneumonia you can get complications, but when we're talking about pneumococcal, um, disease in particular, some of the complications from pneumonia can be things like fluid around the lung. Um, we call that in an empyema in medical terms, if we see fluid collecting around the lung or between the lung and the, what we call the pleural cavity.

Dr. Baumgarten (06:19):

Um, sometimes, rarely we might see it involve the heart or the heart valve or the, um, uh, the membrane around the heart. Um, so we can rarely see that. And also, rarely we might see meningitis, which is infected, uh, infection of the brain, um, or, um, infection of the area around the brain. So those are rare complications, but of course they can occur and, um, have been related to pneumococcal pneumonia or strep pneumoniae.

Diane (06:48):

You know, there's also, from what I understand there is the invasive and non-invasive type. Could you kind of talk about that and clarify what that means and the impact on, you know, a person's body?

Dr. Baumgarten (07:02):

So in general, when we talk about invasive versus non-invasive diseases, non-invasive diseases are things in which we might normally see bacteria. So for instance, um, people do carry, um, pneumonia or strep pneumoniae in their respiratory tract sometimes, and it may not cause any symptoms at all. And that can happen, especially in people that are in congregate living settings or things such as daycares with children, um, areas where we have group homes, that sort of thing.

Dr. Baumgarten (07:35):

And it's normal to carry that bacteria in your respiratory tract, meaning your throat, um, and you might not have symptoms at all. And then the next step, or the next thing that can happen is sometimes people might get then what we call n- non-invasive disease. So that might be something like a sinus infection or, um, it might be something like an ear infection where that bacteria is in a cavity, um, but not necessarily invading tissues, if that makes sense.

Dr. Baumgarten (08:04):

And those things we can, of course, diagnose usually pretty easily and treat in the case of a bacterial infection with antibiotics. And then the next step in that is invasive disease. And when we're talking about invasive disease, um, we're talking about areas that normally would not have bacteria in them but then get infected and that bacteria then invades that area.

Dr. Baumgarten (08:29):

So that might be something like in the brain where we don't normally have any bacteria at all. If pneumococcal bacteria gets in the brain, then that is considered invasive disease. Um, so there are different layers and different seriousness of disease depending on what's involved and where the bacteria is and then how deeply it goes into a person's body.

Clay (08:55):

Maybe a s- a silly question, but how, how does that get into the brain?

Dr. Baumgarten (09:00):

Sometimes what happens with invasive disease is that the bacteria can get into the blood.

Clay (09:05):

Okay.

Dr. Baumgarten (09:06):

And so from, let's say a sinus cavity or, you know, even when you brush your teeth, um, people may not realize this, but even when you brush your teeth, bacteria gets in the blood from you brushing your teeth.

Clay (09:18):

Uh-huh?

Dr. Baumgarten (09:19):

Not to say you shouldn't brush your teeth, we want you to brush your teeth.

Clay (09:21):

No, we're fans of that. (laughs).

Diane (09:22):

(laughs) Yeah.

Dr. Baumgarten (09:23):

Yeah. Yes. I mean, it's very important to have good dental hygiene.

Clay (09:26):

Yeah.

Dr. Baumgarten (09:27):

But even a simple act like that can introduce blood bacteria in the bloodstream. Um, let's say you had a cut somewhere that might introduce bacteria in the bloodstream, not necessarily pneumonia bacteria, but some sort of bacteria. So once-

Clay (09:42):

[inaudible 00:09:43].

Dr. Baumgarten (09:42):

... that bacteria is in the bloodstream, it can then what I call setup shop in other areas of the body. So it might go to the brain, it might go to the heart, to other areas where it normally is not. Now what happens most often with, um, what we're talking about today, strep pneumoniae, is that it's in the respiratory tract. You are exposed to it through somebody who has it in their respiratory tract through, um, drinking after them, kissing them, um, droplets, you know, somebody coughing directly in your face, that sort of thing.

Dr. Baumgarten (10:15):

And then when it gets introduced, it can then go through the respiratory tract to the sinuses, to the ears, to the lungs, and then cause local infection that way.

Diane (10:26):

So what is it? Is it contagious? Is that what-

Dr. Baumgarten (10:28):

It-

Diane (10:28):

... you're saying?

Dr. Baumgarten (10:28):

... is contagious. Um-

Diane (10:28):

Okay. Mm-hmm.

Dr. Baumgarten (10:31):

But it's not the same in terms of contagious as other, um, pathogens-

Diane (10:37):

Okay.

Dr. Baumgarten (10:37):

... such as we know that COVID is spread through aerosols. This is not spread through aerosols, it's more of what we call droplet in terms of its contagious. So it's more like, you know, kissing somebody, drinking after somebody, contact with saliva or respiratory secretions. But it is not something that's transmitted through the, the air or through aerosols.

Clay (11:01):

Wow. Uh, you know, what are, this is, you talked about this, what are different types of pneumo- uh, pneumococcal vaccines?

Dr. Baumgarten (11:09):

So there are a variety of pneumococcal vaccines and, um, you know, they were, they've developed over the years based on what has happened in terms of the technology related to vaccines. Um, but there are vaccines that we use that cover different serotypes. And so, um, when we think about the pneumococcal bacteria, um, the surface of the bacteria has different pieces on it and those can cause disease.

Dr. Baumgarten (11:40):

Um, and so there's multiple serotypes of the bacteria. I guess how I would best explain it when I was thinking about this would be, let's say you're at a parade and you get a different color bead or a different type of bead. The bacteria is like different beads and there are 90 different serotypes or different types of beads of this bacteria.

Dr. Baumgarten (12:00):

And so when you get that particular bead or catch that particular bead, um, the immunity to it, um, is to that particular bacteria or bead or serotype.

Clay (12:12):

How do you know, h- how do you know, how does it know? I mean, again, just fascinating that there, you have vaccines that are specific to the type of, of pneumonia, but how do you know what you are attacking or isolating to, to deal with within the body?

Dr. Baumgarten (12:27):

Your body recognizes these different, I'm gonna call them beads again. And when you develop immunity, you develop immunity to each of those types of bacteria or each bead. And your body just knows your body recognizes these different pieces or these different, I would say, colors of beads, types of beads and reacts to each one of them. But the bacteria is smart, so that's why there's different flavors and the bacteria are different types of beads.

Dr. Baumgarten (12:55):

And in order to get this, um, immunity to develop to all of these types, you are exposed over time to them, and your body then recognizes them and then develops immunity to each one. But for specifically strep pneumo, there's 90 different types of serotypes that we've identified so far. So your body has to then produce immunity to each one of those serotypes.

Dr. Baumgarten (13:20):

Um, so that's what the vaccines target. And what scientists do is look for the types of bacteria or serotypes of bacteria that are seen commonly in the community causing infection and then develop those vaccines based on those serotypes. So it'd be like if you had, you know, one particular bead that was thrown from the, um, you know, from the float, then they can just check that that's the one they need to make, um, and that's the one that's circulating and that's the one that they would target to make a vaccine.

Dr. Baumgarten (13:56):

So there's different vaccines with different serotypes. Um, and so those serotypes have increased in these vaccines over the years, which is a good thing. And there are different types of vaccines too, that it's just different preparations. Um, and so your physician can help guide which vaccine is right for you. Um, in the children's arena, we use one particular vaccine, um, and then in those that are over the age of 65 or having immuno com- compromised conditions, we use other vaccines.

Dr. Baumgarten (14:28):

So there's different types depending on your age or what's going on with your health condition that your physician can help guide you through.

Diane (14:35):

That's a very interesting point because I knew, and I've known about, uh, the vaccine, the pneumonia vaccine for older folks, older individuals. I didn't know that you had this for children too. I, I had no idea.

Dr. Baumgarten (14:48):

We do, and the reason we do is that we know that these, um, organisms, the strep pneumonia does circulate more highly and can cause more significant disease in children under the age of two. Um, children in that age group are more susceptible to, um, invasive disease or more serious infection. And as you know, even with a child that's getting frequent ear infections that can cau- um, affect their hearing, which then can affect their speech, which then has downstream effects.

Dr. Baumgarten (15:18):

So even recurrent ear infections due to this organism can be very debilitating. But now we have vaccines that prevent that, thank goodness. And that vaccine is given to children under the age of two, um, to help prevent sinus infection, to help prevent ear infections, um, so that those children don't have days home from daycare from school. They're not limited in terms of their ability to hear or learn or speak.

Dr. Baumgarten (15:45):

Um, so it's a very effective vaccine at preventing that. And that is part of the childhood routine immunization schedule.

Diane (15:52):

Oh, it is on the schedule. Okay.

Dr. Baumgarten (15:54):



It is. It is.

Diane (15:55):

Well, my question then, how long have we had these different pneumonia vaccines? Has it been in the past 10, 20, 30 years? That, you know what I, I'm, I'm sure that it's been very challenging, as you said, for researchers to try to isolate. You know, I just thought it was pneumonia, you know-

Clay (16:11):

Right.

Diane (16:12):

... just pneumonia, you know, the, the layperson here. So how long has this been around that we've had this, this is fabulous for children. 'Cause I know so many of my friends, their children would have the ear, you know, horrible earaches and just a always seemed like they were sick. And maybe that was why I, I, I don't know that, but I'm just curious about how long we've been able to give vaccines for pneumonia.

Dr. Baumgarten (16:30):

So they first started developing the vaccines actually years ago in the 1911 was actually their first documented-

Diane (16:36):

Oh.

Dr. Baumgarten (16:36):

... um, development of um, or at least looking at these vaccines. But really when we started to use them in the United States, um, successfully for children was about, uh, 2000. And that was with one serotype. And it did show, that was the serotype that was circulating most prevalent, uh, was most prevalent in the population at the time and was causing significant disease. And so in 2000 is when they started using it, um, broadly. And that's, they did see a decrease in disease caused by that particular serotype. So it was very successful in preventing disease.

Dr. Baumgarten (17:12):

Um, what happened now, it's an interesting story because as you, you know, decrease one serotype, then you get exposed to others 'cause they're in the environment, right? So what they discovered is that one serotype went down, which was great, they saw less disease, but then eventually what happened is the other serotypes creep in and start causing disease too. So that's why they started developing additional serotypes in the vaccine based on what was, as I said before, circulating in the community, identifying the serotypes, and then developing additional, um, vaccines or changing the existing vaccine to include those serotypes that then would cover more of the organisms in the environment that we're circulating.

Dr. Baumgarten (17:57):

And that has subsequently happened over the years following the introduction in 2000 and has successfully decreased those serotypes that are likely to cause disease.

Clay (18:08):

That's so fascinating, right?

Diane (18:10):

Mm-hmm. Mm-hmm.

Clay (18:11):

So pneumococcal polysaccharide, pneumococcal conjugate, which by the way pushes me dangerously close to-

Diane (18:18):

(laughs).

Clay (18:18):

... exceeding my syllable limit for today.

Dr. Baumgarten (18:20):

(laughs).

Clay (18:20):

But let's talk a little bit about what that is, uh, (laughs), and how, why, why people should know about it.

Dr. Baumgarten (18:26):

Um, the pneumococcal polysaccharide is, um, a vaccine with 23 serotypes in it. And um, basically what that means is they're taking a little piece of the bacteria, um, that would cause immunity and putting that in the vaccine, it's all dead, it's not alive, it's, you know, not harmful to take. Um, and then you develop when that vaccine is given to you, immunity to those 23 serotypes.

Dr. Baumgarten (18:53):

Now, that immunity, um, is different depending on the type of vaccine. And that's the polysaccharide vaccine. And we give that to adults that have immuno compromising conditions or to adults over the age of 65. And the immunity is good, but it's, um, not as long lasting as the other vaccine, which is the conjugate vaccine. The conjugate, conjugate va- vaccine means that we put a little bit of that piece, um, of the bacteria with something to boost your immune response to it, in this case a protein.

Dr. Baumgarten (19:26):

And that protein just helps that, um, body to boost your response so you get a better, um, response to the vaccine. Um, and so that's what that conjugate means. And so with the conjugate vaccine, there are different, um, types of that vaccine with different serotypes in it. So it depends on your age and your condition as to what you might get. And that's why it's important to talk with your pediatrician or doctor so that, um, you get those vaccines, and your pediatrician and doctor would know which vaccine is appropriate for your age, your health condition, and what would be appropriate for you to receive.

Clay (20:06):

You know, one of the big things about this, and you've referenced it a couple times, is that you see, um, pneumonias an umbrella, a- ailment, you don't realize, (laughs), all of the differing factors that come along with this. And I know we, we've still got more conversation to have, but it's some, if someone's wondering how do I learn more about this? So I'm, uh, more up to speed on it, especially if you've got young children, where would you direct them?

Dr. Baumgarten (20:30):

The CDC has great information about vaccines and also is very helpful in determining what we call the vaccine schedule. So not just about pneumonia vaccine, but for any vaccine that protects, um, or is given either in childhood or adulthood. There's a lot of great resources and information and frequently asked questions at the [cdc.gov](http://cdc.gov) website.

Dr. Baumgarten (20:57):

And so that's, um, somewhere where we look to, um, for schedules because although the vaccines, um, are established and are vetted by the CDC and, and particularly other, um, committees as well, to be sure they're safe and effective before they're put into, um, physician's offices. And so that is the place that I would recommend that people go to learn more and to read more.

Dr. Baumgarten (21:27):

It also has the appropriate schedules in terms of what vaccinations are recommended for what age groups and for what conditions. Because I think people are aware that there are some of us, um, that are more vulnerable to diseases. Maybe people that are immunocompromised that have had cancer or on chemotherapy. Um, perhaps we have people that are listening that have had transplants.

Dr. Baumgarten (21:51):

And so of course we do give additional protection, um, at times to those groups and those populations to protect them because they are more at risk for serious diseases because their immune systems are not, um, quite as good as they would've been without those conditions. So those things are also identified in the CDC website. And then I would also recommend, um, you know, we have other resources such as your physician, your provider, um, to talk about vaccines as well.

Dr. Baumgarten (22:23):

Especially, you know, we know the pediatric age group, it's especially important to get your pediatric vaccines for your children. Um, because these diseases, especially in young children, can be so much more severe. Um, and we know that from previous, um, you know, data and studies when we didn't have these vaccines available. And so it's especially important to get the pediatric vaccines as a child and get those updated, um, to keep children safe and out of the hospital and from getting serious things such as ear infections repeatedly or meningitis or something of that serious nature.

Diane (23:01):

So do, do children, adolescents, uh, teenagers, young adults, do they all need a pneumonia vaccine at some point?

Dr. Baumgarten (23:11):

They should have gotten it in the first two years of life.

Diane (23:14):

Oh.

Dr. Baumgarten (23:14):

But yes, everybody should have gotten a pneumonia vaccine at this point. Yes.

Clay (23:20):

So let's talk a little bit about the efficacy of these vaccines because if someone's wondering, hey, you know, we hear about this get vaccinated, but what's the impact on the person?

Dr. Baumgarten (23:30):

So the impact on the person is to reduce the risk of first of all getting the infection to begin with. Um, but it is possible to still get infections. Um, but the vaccines have been shown to reduce the risk of invasive disease, which we talked about earlier. The definition of an invasive disease is that bacteria that goes into an area that normally a bacteria shouldn't be. So we do know that these vaccines effectively prevent that.

Dr. Baumgarten (23:58):

Um, and they do prevent more serious disease. They also can decrease the duration of an illness, meaning the length of time one has the illness. So, um, the vaccines have been proven to be effective. Um, and that's why the CDC, um, has, uh, condoned them. That's why they've been FDA approved, um, because they have shown significant decreases in amount of disease and illness.

Diane (24:23):

So if you've had, um, the pneumonia shot as a youngster, do you need to have one later as an adult or an older person? How many pneumonia shots do you need to have in theory in your lifetime?

Dr. Baumgarten (24:36):

Well, that's evolving just because of, as I said, we have new vaccines available. Our most recent pneumonia, pneumococcal pneumonia vaccine just came out within the past year. Um, so the, the recommendations, I just wanna preface my statement by saying they can change over time.

Diane (24:51):

Okay.

Dr. Baumgarten (24:51):

So what I'm saying is applicable to today-

Diane (24:54):

Okay.

Dr. Baumgarten (24:54):

... in this day and age and this time. Um, but one who, once somebody has their pneumococcal vaccines as a child, they are recommended again for certain people ages 18 to 64. And those people are those that have immuno compromising conditions. And we mentioned some of those before. Somebody that's on chemotherapy, somebody that may have had a transplant that's on medications to suppress their immune system and so they should be seeking a pneumonia or pneumococcal vaccine. And then the next group is anybody over the age of 65 should have at least one pneumonia vaccine.

Dr. Baumgarten (25:31):

And it depends on the preparation 'cause there are different preparations as we mentioned. So if you get different prep- prepara- um, preparations, it may in fact be two. So it depends on which, um, vaccine preparation your doctor or your doctor's office or your pharmacy has. Um, but at least, um, over the age 18, if immuno compromising conditions and then at least one as well if you're over the age of 65-

Diane (25:57):

So-

Dr. Baumgarten (25:58):

... depending on the preparation.

Diane (25:59):

So this isn't like a flu shot, you don't have to do this every year, correct?

Dr. Baumgarten (26:03):

No.

Diane (26:03):

Okay.

Dr. Baumgarten (26:04):

It's not like a flu shot. Um, you do not have to do it every year. These serotypes tend to be pretty stable, whereas the flu is a little different because it mutates and changes every year. And we see diff- different strains circulate every year. That's why everyone has to get a flu shot every year because those flu, um, viruses are very likely to mutate, drift and change. Um, it's different than the pneumonia vaccine. That pneumonia vaccine, um, is only recommended at certain time periods as we stated earlier.

Clay (26:37):

What about, uh, uh, recent changes in and recommendations for the pneumococcal vaccines?

Dr. Baumgarten (26:44):

So the recent changes have been made based on a new preparation.

Clay (26:48):

Okay.

Dr. Baumgarten (26:48):

We talked a little bit about the different types of vaccines. So there's a new preparation, a conjugate, uh, pneumococcal 20, which covers 20 serotypes, and there's also, uh, conjugate pneumococcal 15, which covers 15 serotypes. And so those are the newer vaccines, the newer kids on the block. And so that's why we have different recommendations from the CDC based on which type your doctor happens to have. And that's why these vaccine recommendations have been updated recently because of these new vaccines, which is exciting.

Dr. Baumgarten (27:22):

Um, it's always exciting to me, but I'm an ID physician, I get it. Um, you know, but it's exciting to me that we have new preparations that are very effective with more serotypes that, um, will help more people and keep people well and out of the hospital. As an infectious disease doctor, of course I see people with pneumonia and unfortunately, we see people that are very sick and can die from pneumonia.

Dr. Baumgarten (27:47):

And that's despite everything we do to try to save them. And so if we can prevent one death by giving vaccines and newer and better preparations, of course, why wouldn't we do that? And so that's something that, um, I'm very passionate about. And these vaccines are safe. They have very few side effects. They've been around a long, long time. Um, you know, some of them, even from the '80s.

Dr. Baumgarten (28:11):

I talked about the more recent use in children in 2000, but they've been around a long time, and we know they're safe and effective over years and years and years. And so why wouldn't we get a vaccine or give a vaccine? Plus, we also know that it protects other people from getting and spreading this sort of pneumonia, this strep pneumonia, um, by giving the vaccine. So it's important to, um, reduce spread of this organism as well in the community.

Diane (28:38):

Well, I think what you said, and you touched on that, that you were excited about this because just of what your answer was to the question. But you know, I think we all, every one of our listeners today should be equally as excited about this because we're trying to do our best quality of life.

Clay (28:55):

Right.

Diane (28:55):

Not only for ourselves, but for our family, for-

Clay (28:57):

Sure.

Diane (28:57):

... our friends, for our community. So this is a big deal.

Clay (29:01):

Yeah.

Diane (29:01):

And as you said, you see people with pneumonia and it can be, you know, a mild case and like you said, you just get over it or you know, unfortunately it's not a mild case.

Clay (29:09):

Yeah.

Diane (29:10):

So whatever we can do to do the best that we can to be proactive about our health.

Clay (29:15):

Right.

Diane (29:15):

We need to respect our bodies and we need to respect our communities as well. You know, doctor, we've had a great conversation today. Is there anything that you can think of that we have not touched on that we have not talked about that in the last few minutes that you would like to leave with our listeners today?

Dr. Baumgarten (29:33):

Sure. I would like to encourage, um, those that are listening to this today to talk with your physician, to talk with, um, your provider when you go in for your appointment, to go to your pharmacies to seek the vaccine, to look online and see if you need the vaccine and then get it. Um, or talk to your loved ones if you think they're at risk and if they haven't gotten the vaccine to talk with them about doing that when they see their physician or go to their pharmacy.

Dr. Baumgarten (30:04):

Um, because of course, um, we wanna protect those around us. We wanna protect our loved ones, our community, those that are around us from becoming sick. And when we talk about getting sick, we always think, oh, well it's just a cold and it'll go away. And a lot of the times that does happen, but it does prevent you from working, from doing-

Clay (30:26):

Right.

Dr. Baumgarten (30:26):

... the things you wanna do-



Clay (30:26):

Yes.

Dr. Baumgarten (30:26):

... from going to Jazz Fest.

Clay (30:26):

Right.

Dr. Baumgarten (30:29):

From going to Mardi Gras, from going to great restaurants we have here, enjoying festivals. So all of those things could be impacted by you being sick, even if it's mild. Um, so you wanna be the healthiest you can be. So these vaccines can help those that need them to stay healthy. And then of course, um, I'm always concerned about those that I see that get more serious disease and end up in the hospital.

Dr. Baumgarten (30:53):

Um, and so we wanna prevent those, um, that can, um, those that we can from being up, ending up in the hospital with more serious disease and ending up on machines or, you know, um, end up really not being able to recover from this. And this is a preventable illness. So, you know, we wanna prevent what we can and make an impact when we, where we can.

Clay (31:14):

Fantastic information. Thank you so much, uh, Dr. Baumgarten and I hope that everyone who's listening took away a lot of great information and actually knows where they can go to get more if they'd, uh, if they'd like to learn more. Thank you so much for spending some time with us today.

Dr. Baumgarten (31:29):

Really appreciate the opportunity. Um, I really appreciate, um, the time and, um, the ability to talk about things that might protect us and vaccines. Appreciate it.

Clay (31:40):

All right. And thank you all for listening to another edition of Vax Matters. Catch you next time.