



## SoundBites Podcast Transcript

### Episode: Luke Maresh

- Dave Fabry: Welcome to Starkey Sound Bites. I'm your host, Dave Fabry. Starkey's Chief Innovation Officer. October is Protect Your Hearing Month, and today we're joined by an expert on that topic of hearing protection, Luke Maresh. He's the product manager for SoundGear, which is a high tech hearing protection device made by Starkey.
- Dave Fabry: Luke, thank you for joining us today on the podcast.
- Luke Maresh: Well, thanks for having me. I'm excited to be here.
- Dave Fabry: Well, and as I said, October is protect your hearing month, and I can think of no better time than to talk about this. And this is a topic rather near and dear to my heart. I've abused my ears with sound from drumming and motorcycling long before I ever thought I was going to become an audiologist. And I think it's admirable that a company like Starkey is focused not only on fixing what's broken, but thinking about the SoundGear platform that protects people from getting hearing loss before it occurs due to non-occupational or occupational means.
- Luke Maresh: Absolutely. And I think it really just comes down to being part of the overall hearing healthcare journey. There's obviously prevention as well as treatment, and in preventing potential hearing loss earlier in life, you're making people more aware of their hearing. You're making them more aware of the situations that they're in. And in turn, the longer you can prevent them coming in for hearing treatment, the better you'll be. But inevitably, if they're partaking in some of those louder environments, some of those more acoustically dangerous environments, they're ultimately going to become a client or a potential patient down the road either way. So you've established that relationship early.
- Dave Fabry: And I know a lot of professionals take for granted because they've devoted their careers to the study of hearing and balanced disorders, but many individuals in the community aren't aware that the damage that occurs from noise exposure is irreversible. And yet people take it for granted and think when you're younger, you think my ears are tough enough and I can engage in this activity or that activity, and I know it's a little noisy or go to loud concerts, but then they don't really notice the damage that has occurred until it's too late.
- Luke Maresh: Absolutely. And I think as a formerly younger person myself at one point in my life, I think the biggest thing with hearing loss is it's so gradual. You don't notice that something is affecting your hearing in the moment most of the time. There's always those dramatic situations where like, boom, this was the difference. But generally speaking, it's cumulative over many years where you



just get exposure and exposure and exposure. And then finally you do have that hearing loss.

And the other thing is that it's generally not painful. So even though you are damaging your hearing, you don't really realize it till later. You may have some ringing, you may have some uncomfotability, but at the end of the day, after a few minutes, that usually goes away. You didn't realize what you have just done that could potentially affect your hearing for the rest of your life or for many years to come.

Dave Fabry: And I think that those are great reminders of that, that need to have that sense of urgency and their sense of protection. I talked about non-occupational ways that you can damage your hearing. Talk about some of the occupations that people may or may not think of that are at risk for damage due to noise exposure.

Luke Maresh: I think people think right away of a more stereotypical, loud environments, production facilities, manufacturing facilities, police and law enforcement come to mind. Although hopefully they're not doing a lot of shooting on the job. There's a ton of training and things that go into that. But what people don't realize is that the sound of a nail gun or a loud saw at a construction job site is extremely similar to that of shooting a gun as a law enforcement agent or anything else. And so construction, lawn mowing services, medical people practices right now, dentists are highly susceptible to hearing loss from the high frequency derived from the tools that they're using.

Dave Fabry: The drills and the suction actually too, I know over the years.

Luke Maresh: And they do it for years and years and years. And similarly to, like we mentioned, this isn't something that happens overnight. It's gradual, it's cumulative. Over years of practicing and working with those tools, we're seeing a lot more activity with our hearing protection in these more professional environments, not just the hobbyists and gun sport enthusiasts. And I think a big part of that is just the awareness. People are just more aware that their job and that life in general is noisy. And so there's ways to protect it. And we've come up with many solutions for that to accommodate all different types of situations.

Dave Fabry: It's really interesting you bring up the dentists because when I've worked clinically, I've worked with quite a few dentists over the years, and one of the things is not only the suction and the drills that they're exposed to during their work hours, but many of them have hobbies you would, stands to reason, you that might want to work with their hands. Lathes, woodworking tools. They have things that they enjoy doing outside of the workplace that also puts them at risk for noise exposure. And as you said, it's cumulative and it's really, the ear really has a remarkable ability to recover from noise exposures within a 24 hour



period. But it also is the case that during a 24 hour period of time, it's your occupational and non-occupational exposure that adds up to levels that can be damaging.

In addition to the measurable hearing loss, what else can come along with that noise exposure? Are there other health related symptoms? I mean, we've been talking about comorbidities between hearing loss and other conditions. Are there any studies or stats that you have that support or suggest that with a noise-induced hearing loss, there are specific other physiological or health conditions that go along with that?

Luke Maresh: Yeah, and that's a good point. I mean, because we talk a lot about the repercussions of your overall hearing health due to the exposure of loud noises. However, there's additional factors that come into play for being surrounded with noise for a consistent amount of time. So I think everybody can understand if you are... Just put yourself into a place where there is constant noise being played over and over and over, it's going to add to stress and anxiety for sure. Statistically, they show that it can increase blood pressure, it increases your heart rate, you can get an upset stomach, it can affect your ability to sleep even after the sound has been gone. So imagine being in a factory all day and you hear these machines all day long, you go home and try to sleep, What do you hear? You still hear those machines. I mean it's something that affects everybody that way.

Dave Fabry: We know also that if tinnitus ringing in the ears, often a company's noise-induced hearing loss and tinnitus has been known to raise blood pressure, raise stress, anxiety, tension. And so it stands to reason that not only hearing those phantom sounds, as you said, or being hypersensitive to different noises. But then also if you suffer any of the effects beyond the hearing loss, including ringing in your ears, that can be a complicating factor.

Luke Maresh: And probably one of the biggest ones too, that wasn't even on my list, but just overall fatigue. You get tired, you get cranky, you get just worn down from this constant state of stimulus. And I think even in the hearing world, when you notice when somebody has a set of hearing aids, it's working well for them. They're more relaxed, they can sit back, they don't have to put so much time and focus and effort into being able to hear and communicate with those that they're speaking with. I mean, you can physically see a difference in their body language, they're able to relax. And so imagine that being very similar to being in a loud environment for several hours at a time to be able to relax and come out of that once you're away from that noise exposure.

Dave Fabry: Absolutely. We've addressed what can cause high frequency hearing loss. Let's talk about how to prevent that from occurring. And SoundGear is a great way to do that. So talk a little bit about what types of technologies and products are available from SoundGear.



Luke Maresh: One of the great things about SoundGear is we really do have a solution for any sound environment that you're in. And so when it comes down to which product is going to be the most appropriate, it's great to have a conversation with this potential consumer that you're speaking with. Where are you going to be using this? What is your primary goal while protecting your hearing? Do you need to be able to communicate and at what level do you need to have enhanced speech? Do you need to be able to hear better while you're wearing this product? Or is your primary goal to deter those loud noises and the effects of hearing loss? Because due to noise exposure.

And from that point, that's where you can start to dwindle it down to a specific product that we have. And so we really separated out into two buckets. We have passive hearing protection, which is nonelectronic, it's primary goal is to protect. And then we have active hearing protection and electronic hearing protection, which is dual purpose. It's going to protect, but also enhance speech and other sounds. And within those two groups we have varying levels of adjustability. And you can choose which product is most appropriate based on the activity that the wear is going to be partaking in.

Dave Fabry: So are most of these products the type of traditional earplug interface, they're a standard a triple flange or double flange earplug? Or are there customized solutions as well?

Luke Maresh: So we've really focused on custom, and we do that for a few different reasons. First and foremost, Starkey makes custom products better than any other manufacturer on the planet. So we know our strength, we want to play to our strength, and we want to give the professionals the ability to use their skills and their professionalism to be able to fit a high quality custom product. You cannot buy a custom product from a big box retailer. So with these custom products, not only do we build them the best, but they are the most consistent fit for any individual wearing them. You're going to get a consistent feel, you're going to get a consistent protection level. And that's something that a non-custom product just cannot supply.

And so 70% of people say that, or excuse me, 70% of people that use the foamy inserts don't put them incorrectly. Whether they don't push them in far enough, they don't squeeze them to get them deep enough, or they just don't simply hold them in long enough for the foam to expand to create that tight seal. And so right out of the gates, if you don't put them in properly, you're not going to be protecting your hearing properly.

Dave Fabry: Yeah, that's one of my real pet peeves. I see people at a concert or at a noisy event and the foamies they're wearing are, I can see two thirds of them sticking out of their ear, which means that there's just a little bit of product in the ear canal. And always I have to restrain myself from going in and showing them how to properly insert them. But I think you're absolutely right on the custom



solution, at least you're ensuring consistent placement. And then as you say for the hearing care professional, it enables them to flex some of their skill set muscles by working with a potential patient to customize the solution by making ear mold impressions.

Luke Maresh: I think when people think of a custom anything, right, whether it's hearing protection or the word custom, it just breeds that animosity that it might be something more expensive. And when it comes to our products, I mean even from our solid plugs all the way up to our most advanced electronic hearing protection, I always talk to people, especially that are going to be wearing this a lot. I mean, it's an investment in protecting your hearing. It's better than the foamies and it protects better than the foamies do. So we see a lot more people going towards these custom solutions because quite frankly, they're dealing with elderly people or older people and their family and they're literally telling us that I need to do something, I need to do it now. I can't even be around my dad anymore because he can't hear anything and I'm not going to turn out like him. And so people understand the importance of buying quality hearing protection and they're willing to take the step to do the custom.

Dave Fabry: Well, so we talk about custom and standard solutions. What about rechargeable versus replaceable batteries and who might be more appropriate for one versus the other?

Luke Maresh: That brings us into one of really the premier product on the market right now, which is our Phantom electronic hearing protection. And that is hitting the market by storm because we are the only ones that offer a custom rechargeable Bluetooth solution. And so the market was really craving this device for two reasons, first and foremost Bluetooth to be able to stream music and phone calls. I mean, it didn't exist in a custom platform. People have been demanding it. We were finally able to come to the table and answer their demands. And we've been well, very, very well received. People are buying these things like crazy. When it comes to rechargeability, to not have to fiddle around with little batteries is an awesome addition to the Phantom product there.

Dave Fabry: Especially if it's fall or winter in Minnesota, you're already wearing gloves or you're wearing gear and to fiddle around with inserting or removing a battery or replacing it when you're out in the field. I mean, huge convenience factor.

Luke Maresh: And just to remember that to even have them, they're very small. Yeah, that's a great transferability aspect of a hearing aid battery. But it's also easy to lose them. It's easy to forget them. And so with the Phantom product, we have the premium charger, so there's a battery on board for that. So you're not tethered to the wall for power. You can still bring the case with and charge the devices when you're on the go. So you still have the flexibility like a battery device has, but you don't have the additional costs, you don't have the additional hassle. And it's again, at this point in time, rechargeability is just what everybody's used



to, whether it's a cell phone or anything else. It's just a nice way to not have to deal with all those batteries all the time.

Dave Fabry: So how long can I wear my Phantom devices before I have to recharge them?

Luke Maresh: So the Phantoms are rated for 23 hours of continual use. And that is if you're streaming for four of those 23 hours. So generally speaking, people that are going out are going to wear these for anywhere from four to 12 hours a day if you're hunting, and they're lasting them all day and then some, to be able to just have to charge them at night when you sleep and they're good to go.

Dave Fabry: And we talk about all hearing aids work in a hostile work environment, the ear. And then when you add in a hunter wearing this Phantom device that you're referencing and they're out in the elements, it's often raining or they're perspiring because they're moving a lot, how moisture resistant are these devices?

Luke Maresh: So we use the same moisture resistant nano coating that we use for hearing aids. Basically they're not submersible so you cannot swim with them, but we're not getting them coming back with water damage or damage from the elements. So they're very robust, very flexible for those environments.

Speaking of the Phantom, just one more quick point on that and what I think people need to realize is that, people get so excited about the rechargeability, they get so excited about the Bluetooth streaming and all that. And at the end of the day, what you just have to remember is that people forget that it protects your hearing. That basically any sound over 90 decibels, it's going to instantly suppress. We have different listening modes on the product. So you can choose the environment that's right for whatever you're using it for, whether that's a concert or if it's hunting or if it's trap shooting, or if you are on a construction site. I mean it is still intended to protect your hearing.

And so it kills me when I see guys out at the shooting range wearing AirPods and they're like, well it's got noise canceling. No, this Phantom is not noise canceling. It is a hearing protection device that is rated to protect your hearing. It's going to suppress at 90 decibels. It allows for up to 30 decibels of amplification. I mean it is built for this specifically, not for everything else.

Now part of the great part about it is that you can use it for so many other things, mowing the lawn, if I own a lawn service, I would buy these for every single guy on my team because it's protecting, you can mute the external mics and you can stream music all day long on the lawnmower and protect your hearing. And so it just really opened the channels of different people looking to buy these things and to use them for lots of different applications. No longer is it just the hunting and shooting communities that are really coming after hearing protection.



Dave Fabry: And I think the important thing is many of these folks who are inclined to use the SoundGear type products, including these Phantoms that have the active mics on the outside, may already have experienced a little bit of hearing loss before they discovered hearing protection that works when they need it. Because as you mentioned, a lot of times people eschew the use of hearing protection because they want to hear around them, they want to hear other people who are hunting, they want to hear game. And if they just have traditional foamies or devices that use passive-only protection, they can't do that as you've said. But they may find that it benefits them to have them in their ears and enable them to hear those people even a little bit better than they would if they had no protection in at all.

Luke Maresh: Absolutely. I mean, whether it's communicating with people on a team, if you're trap shooting or just having conversation to not have to take them in and out all the time, or if it is for an advantage while you're hunting to be able to hear better in the field, these devices are seeing a lot more traction with those. And what it's really doing is a lot of the guys we talk to, they realize that they haven't worn hearing protection either enough or appropriately in the past. And it's a gateway into the potential for hearing aids. And so not only can hear, but you can hear better with these, that's attractive to them. You can put it into our high frequency boost setting. And we get a lot of guys saying, I would prefer to wear these during my conversations because I can hear and understand better.

And so that being said, when somebody comes in looking for hearing protection, you know already have somebody in your office that is concerned about their hearing enough to take that step to look into the investment of something electronic and understands the importance and the value of a custom solution that they're coming in to talk to their hearing care professional about it.

Dave Fabry: And every professional I know is looking to try to minimize that five to seven year time period that transpires from when a person first thinks that he or she might have some hearing loss until they actually purchase hearing aids. This, as you said, is a gateway into that by protecting if they're engaged in noisy activities. But some of them probably already acquired some hearing loss. It's a qualified lead for practices. And then really leveraging the expertise to help them identify which product is best for them, the form factor, make those ear mold impressions, talk with them about the use of the amplification in addition to the passive attenuation. And really work to try to work with that individual to ensure that they protect their hearing. But then when they are ready to go to that next step, because maybe there is damage done already previously, they already know who to go to and who to trust.

Luke Maresh: And October's a great time to do that, to get the word out. It's Hearing Protection Month, it's hunting season a lot in most areas. Farmers are in the fields taking crops out. I was helping my father-in-law last weekend and the amount of noise around the grain bin, the equipment, I mean it's just insane.



And people don't really associate that with it. I mean every once in a while you see a dusty set of earmuffs laying there, but they never protect their hearing. And doing what I do now I'm like, holy cow, this is super loud. There's so many different areas.

And so when it's time like October to promote your business to get out there, maybe it's an extra advertisement in the newspaper, maybe it's your business card at the local shooting range, it's a great time to talk to them about it. And when they come in, you have that lead to be able to discuss the options for hearing protection. But also most of these guys probably already have some degree of hearing loss. So it's really just promoting yourself and getting yourself out there to let them know that hearing protection is available at a hearing aid clinic.

Dave Fabry: So where are you going? What's the next step with SoundGear or Phantom or what can you tell us a little bit about the future?

Luke Maresh: So the future is broad for SoundGear. There's so many markets we've really focused in on hunting and shooting. With the launch of Phantom, it's opened the doors to so many more opportunities in so many areas that we really want to focus. And so we want to take time to learn about those markets, what products do we need to look at? But also to just continue on to promote and get these products into the ears of the people that need them the most.

And it's a challenge. I think the hearing care professional offices do a tremendous job at fitting hearing aids, diagnosing hearing loss, and really working to better people's lives. Getting the word out about hearing protection to get that conversation started earlier is one of my primary goals. So we're working to get more communication out there for the office to understand what is SoundGear, what does it do, how do we recommend it? We're doing a lot more trainings and webinars with people because they know it exists, but they don't either feel comfortable with it because they don't use it a lot. And so I think the custom hearing protection industry has so much room for growth and the professionals have so much weight in that. You can't go to a store and get it. We need you guys for this and this is the best protection on the market to get people as custom.

Dave Fabry: I couldn't agree more. And I think so often hearing care providers get caught up in treating the loss after it occurs. And this is a great way to educate patients, potential patients, their family members. And we've focused on occupations, we've focused on hunting. I think one thing too that often goes without saying is we've seen that since the advent of smartphones and wireless earphones, there has been a dramatic increase in noise-induced hearing loss in teenagers. I believe the numbers somewhere around one in six or one in seven teens already have some measurable hearing loss.



And how does that relate to this? I think even among professionals out there, they may have kids who are musicians or in school band and are practicing a lot, even that element in combination with streaming music at high levels can cause damage. So even for the providers, what they say, the shoemaker son or daughter often goes shoeless. For those providers out there thinking about their kids as well as themselves first before they start going out there and trying to boil the ocean, thinking about ways that they can find other patients is an important reminder.

Luke Maresh: And just keep in mind that most hearing losses, it's a relation to length of duration of time to intensity of sound. When kids nowadays are wearing loud headphones for six, seven, eight hours a day, it's not quite the same as, hey, I went to one concert back in the day and it was super loud and I think that's when I lost my hearing. This is constant exposure.

Dave Fabry: It's roughly equivalent to the levels that a factory worker might experience working for eight hours a day when everyone's streaming now.

Luke Maresh: If not more. When you hear some of these things come by and you hear how loud these kids have them, maybe that's my age shining through a little bit to start to rip on these little kids a little bit. But no, it's a hundred percent. You see headphones, everything. People are just constantly exposing themselves. So durations starting to catch up with them.

Dave Fabry: Well I appreciate your sharing that and updating with SoundGear and Phantom and the other devices available. Where can people get more information for this?

Luke Maresh: I would recommend that if you have questions, go to our website [soundgear.com](http://soundgear.com) and from there you can look at the products, you can see the specs on them. If there's any questions from there, you can either email or call us directly from the number on [soundgear.com](http://soundgear.com). I'm always accessible, so if you need to ask for me, my name's Luke Maresh, you can call Starkey and get transferred to me and I can go through and answer any questions about any SoundGear products that we offer.

Dave Fabry: Excellent, thank you Luke. And so final question, I mean it's Protect Your Hearing month. What are some of the sounds that you are trying to protect so that you can continue to hear them? What are some of your favorite sounds that you like to hear?

Luke Maresh: Silence in the morning is my favorite sound. I get up early, and when I walk out of my house, there's just something different about a cold, crisp Minnesota morning when there's nothing to be heard. So my favorite sound is a lack of sound.



Dave Fabry: And again, protecting your hearing means that when there's a lack of sound, they won't be ringing like mine are right now. So protecting your hearing means that you can continue to appreciate that silence, if you will.

Luke Maresh: Absolutely. And for now I'm good because I've been protecting my hearing.

Dave Fabry: Well thanks Luke. It's been an absolute pleasure to chat with you today. And to our listeners, thanks for listening to this episode of Starkey Sound Bites. If you enjoyed this conversation, please rate and review us on your preferred podcast platform and share with your friends and network. You can also follow us by hitting subscribe to be sure that you don't miss a single episode. Thanks, and we'll look forward to hearing you again soon.

Luke Maresh: Thanks for having me, Dave.