

ANTI-EARPLUGS? I DON'T WANT TO HEAR IT

By Matthew Allsop

I'm in the pen. It's a gorgeous day. The sun is shining. In a few minutes, I'll be the king of the sky. "Can you check me, mate?" Andrew calls.

Of course I check him. That's what we do in the UK, right? (I'm pretty sure that the UK has such a sterling safety record in great part due to the likes of flightline checks, and I'm still astonished that it isn't mandatory in other countries.)

"Small ring, middle ring, big ring, yellow thing," I start. "Chest strap. Hook knife. Leg straps. AAD on? Yeah? Green in the window. Happy with your pull? Right. Helmet. Alti set to zero. Audible. Chest strap. Positive attitude?"

"Yes!"

"Then let's rock and roll."

Sounds complete, right?

Well, as it turns out – in my opinion – **we missed something. Something important.**

I religiously jump with something else on every jump. Andrew doesn't. That "something" is *way up there* in terms of skydiving health and safety. For the cost of a few pence, it has the potential to prevent the likes of irreversible hearing loss, **tinnitus**, cognitive decline, social isolation, depression and dementia.

Yes, we are skydivers. No, we are not invincible.

Using a basic sound-level metre, I measured noise levels of 105dB on the way to altitude during that jump. That's 25dB *higher* than the level for which the Government requires that hearing protection be made available if this were a place of work, rather than a place of leisure. The rules go even further, stating that "hearing protection *must be enforced* by the employer when levels go above 85dB."

The big question, then, might be obvious now: **why do so few skydivers wear hearing protection?**

At these levels anything more than *two* minutes per day in a plane on the way to altitude is the most your ears can take before your ear reaches its daily allowance for noise exposure. TWO MINUTES. No wonder it's possible to finish a day of jumping with ringing ears. That ringing potentially represents a little bit of irreversible damage to your ears and hearing. With enough repeated exposure and damage, they won't bounce back, and that damage can become permanent.

Each of us is born with 12,000 outer hair cells in each ear. Hearing loss occurs when these hair cells no longer stand to attention. It's not just noise exposure that can damage them; certain medications and other environmental factors can too, but exposure to loud sounds is the most common way of damaging them, and the easiest to prevent. Once they're gone, they're gone. Rather incredibly, certain animals, such as birds, have the ability to regenerate damaged outer hair cells. However, mammals like your average skydiver lack the ability to regenerate these cells. All we can do is stick in a hearing aid and hope for the best.

Hearing loss isn't even the worst that can happen, arguably. Listening to continual phantom roaring for the rest of your life might actually be worse. Unsure? Talk to anybody who suffers from tinnitus and ask them if they'd have taken precautions to prevent it.

So, what can be done about it? It's simple. **Reduce the volume** by wearing earplugs.

You might still have some arguments in mind. Let's address the myths together.

I WON'T HEAR MY AUDIBLE AT BREAK OFF.

In my opinion, if hearing protection had caused enough of a safety issue with audibles, then an investigation would have been called due to an increase in incidents involving skydivers that use them. No such differential exists.

I myself have custom-made hearing protection with 17dB attenuation in my left ear (the ear with my audible), and a 20dB filter in my other ear. If you're very cautious, that might be the choice for you, too, but that is by no means necessary.

Kássia Melo



I WON'T HEAR OTHERS SHOUTING AT ME UNDER CANOPY.

Whilst, as I mentioned before, I have different attenuation in both filters, I personally choose to pop out my hearing protection at around 12,000ft whilst doing my final check on the plane. This protects my hearing all the way to altitude, but I still feel connected with everyone on the jump and in the sky on the way to the ground. In my opinion, this way of doing things gives me the best of both worlds, but many savvy skydivers safely wear their hearing protection from ground to ground.

THE PRESSURE WILL GIVE ME A PERFORATION.

It won't. It just won't. If you experience a perforation from jumping, it will be because you chose to jump with a cold, not because you were wearing hearing protection.

If you're *really* worried about this, or if equalising tends to be a challenge for you, then custom-made hearing protection can be made by using earplugs fitted with a vent to allow for pressure changes, or you can buy an inexpensive pair of standard-sized vented earplugs.

THEY'RE UNCOMFORTABLE.

Foam earplugs are very cheap, but wearing them with a helmet on top might get uncomfortable over the course of a busy day of jumping. Luckily, that is an extremely solvable problem: If you're a very active skydiver for work or for pleasure, you'll find it's *well worth* having impressions taken of your ears and getting fully customised hearing protection.

I'LL GET AN EAR INFECTION.

Absolutely not.

According to **a study of sixty long-range patrol-aircraft crew members**, the idea that disposable foam earplugs cause ear infections is a total myth. The crew members were randomly divided into three groups: one wearing fancy custom-moulded earplugs, the second using foam earplugs that they washed after each use, and the third group using foam earplugs washed only once per week. The study lasted eight weeks and included examinations by a medical officer as well as skin scrapings for bacterial culture and fungal examinations. The results indicated no fungal infections or clinically significant bacterial infections, and no differences in positive bacterial culture between the groups.

THEY'RE EXPENSIVE.

Your rig: ~£7k
Your helmet: ~£450
Your altimeter: ~£265
Your audible: ~£250
Your jumpsuit: ~£500

Foam earplugs come in at less than 10 pence per set. Even the highest-end custom earplugs are less than £150.

Enough said.

THE MORAL OF THE STORY? LOOK AFTER YOUR EARS.

I would make the argument that hearing protection should be one of the mandatory checks we do before every jump. Unfortunately, there is ZERO education on hearing loss during skydiving training, so how are skydivers to know about hearing protection and the serious dangers of noise exposure?

I work with people with hearing loss every day, so I get to see the impact that it has on people's lives. Let me assure you, it's not pretty.

Protect your hearing so that you don't end up sitting in my clinic room one day, looking at the cost of hearing aids so you can participate in daily life again. You'll be glad you did.



BIO:

Matthew Allsop is one of the Partners and the Operations Director at Harley Street Hearing, London's largest independent hearing clinic. He started his career in audiology in 2014, and has practised in both the NHS and the private sector.