

– MANJULA: Imagine this scene: you grab a cup of coffee; you find a quiet spot outside.

You're ready for a few minutes of summer bliss.

And then someone fires up a lawnmower.

(Lawnmower engine)

– HUGH: So, noise doesn't have to be loud.

It simply has to be unwanted or harmful to be classified as noise.

– MANJULA: Hugh Davies is a professor of the School of Population and Public Health at the University of British Columbia.

He studies the effects of noise on people's health in the long term.

– HUGH: Yeah, so I think our relationship to noise changes throughout the day.

You go to a concert, you want to hear loud noise.

If you go to a Formula 1 race, you want the cars to be loud.

So, its stimulus is positive in many ways, which further complicates the relationship we have.

I think the part that people perhaps don't fully understand is the hazard of these, this background noise is.

– MANJULA: Rex Banks says noise pollution is pervasive, and unfortunately invisible.

– REX: Yeah, it makes it easier to ignore or underestimate its potential harm.

– MANJULA: Banks is the director of Hearing Health at Canadian Hearing Services, an organization that provides services to people who are deaf and hard of hearing.

He's also a doctor of audiology.

– REX: It can cause what we call a temporary hearing loss, or it can also cause ringing in the ear, which is known as tinnitus.

A prolonged exposure to high levels of noise can lead to more permanent hearing loss.

It will affect our quality of life and prevent us from doing the things that we want to do.

– MANJULA: But the impact of noise pollution goes beyond our auditory senses.

In a 2022 report, the UNEP, the United Nations Environment Program, turned its lens on noise as a growing health hazard in cities.

It says, "Noise increases the risk of diabetes, heart disease and poor mental health."

The report references a 15-year-long Toronto study published in the *Journal of the American Heart Association*.

The study looked at the health impact of traffic noise on 1 million people in Toronto.

The researchers found a 2% increase in incidents of hypertension and an 8% increase in incidents of diabetes.

Here's Hugh Davies of UBC.

– HUGH: For non-auditory effects of noise, we think there are probably more than one disease pathway, but the simplest one to describe is probably just that it's a stress pathway.

So, noise is a very potent stressor, and I think we all experience that when noise is causing us annoyance.

Or if it goes on for a length of time, it can cause stress.

If that stress is unresolved and goes on for any length of time, then you start to see physiological responses like increased blood pressure.

– MANJULA: So, what should we watch out for with the sounds around us?

The length of our exposure, the proximity of the noise, and how loud it is in decibels.

– HUGH: Noise is measured on a logarithmic scale.

You don't need a very large increase in decibels to have a very large change in power and loudness.

So, every 3 db difference is a doubling or halving of noise power.

– MANJULA: A hairdryer comes in around 100 db.

A jackhammer can be as high as 130 db.

Rex Banks of Canadian Hearing Services says people should think about the noise levels they're surrounded by throughout the day.

– REX: So, exposure to sound at 85 db is generally considered to be safe for up to 8 hours a day.

And this is comparable to noise level of, for example, heavy traffic or a busy restaurant.

But as you increase that sound level by every 3 db, then you should reduce your exposure to that sound by half.

The World Health Organization might indicate that closer to 70 db might be safer.

– MANJULA: A good start to managing what you hear is understanding how loud it all is. You can download a sound meter app like Decibel X or Decibel Pro to your iPhone or Android.

Decibel X is free to download with in-app purchases; Decibel Pro is \$40 per year.

These give you immediate readings of the noise in your environment.

The Health app on your iPhone can send you notifications when the level has risen to a point where your hearing can be affected.

– REX: You could also use noise-cancelling headphones, but you could also look into the way that you live your life.

You can buy quiet appliances today.

Even automobiles today, you can have quiet cars.

I think quiet is really important for our overall emotional well-being.

– MANJULA: Embrace quiet, find quiet, and be quiet for the sake of our collective health. For CBC Radio, I'm Manjula Selvarajah.