

Chorus or cacophony? Cicada song hits some ears harder than others

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Shhhooo. Wee-uuu. Chick, chick, chick. That's the sound of three

different cicada species. For some people, those sounds are the song of the summer. Others wish the insects would turn it down. The cacophony can be especially irritating for people on the autism spectrum who have hearing sensitivity.

Warren Rickly, 14, lives in suburban south St. Louis County, Missouri. Warren, who has autism, was at the [bus stop](#) recently waiting for his younger brother when the sound of cicadas became too much to bear.

"He said it sounds like there's always a train running next to him," his mother, Jamie Reed, said.

Warren told her the noise hurt.

Starting this spring, trillions of the red-eyed insects crawled their way out of the ground across the Midwest and Southeast. It's part of a rare simultaneous emergence of two broods—one that appears every 13 years, the other every 17.

The noisy insects can be stressful. People with autism can have a sensitivity to texture, brightness, and sound.

"I think the difference for individuals with autism is the level of intensity or how upsetting some of these sensory differences are," said Rachel Follmer, a developmental and behavioral pediatrician at Lurie Children's Hospital in Chicago.

"It can get to the extreme where it can cause physical discomfort," she said.

When a large group of cicadas starts to sing, the chorus can be as loud as a motorcycle. Researchers at the University of Missouri-St. Louis this year crowdsourced cicada noise levels as high as 86 decibels, about as

loud as a food blender.

That can be stressful, not melodic, Follmer said.

To help children cope, she suggests giving them a primer before they encounter a noisy situation. For cicadas, that could mean explaining what they are, that they don't bite or sting, and that they'll be here for just a short time.

"When something is uncomfortable, not having power in that situation can be very scary for a lot of individuals, whether you're on the spectrum or not," Follmer said.

Jamie Reed's family has been using this and other strategies to help her son. Warren wears noise-canceling headphones, listens to music, and has been teaching himself about cicadas.

"For him, researching it and looking into it I think grounds him a little bit," Reed said.

Fatima Husain is a professor and neuroscientist at the University of Illinois Urbana-Champaign and studies how the brain processes sound. She said people with [tinnitus](#) may also struggle with cicada song.

Tinnitus, a ringing or other noise in the ears, is a person's perception of sound without an external source.

"Some people say it sounds like buzzing, like wind blowing through trees, and ironically, quite a few people say it sounds like cicadas," Husain said.

For most people with tinnitus the cicada's song is harmless background noise, according to Husain, but for others the ringing can prevent easy

conversation or sleep. Those with tinnitus are also more likely to have anxiety or depression. A loud persistent sound, like singing cicadas, can make someone's tinnitus worse, Husain said.

It's not always bad, though. The cicada's song can also be a relief.

For some, tinnitus gets worse in a quiet environment. Husain said she's seen reports this year of patients saying the cicadas' song has been like soothing white noise.

"The sound is loud enough that in some ways it's drowning their internal tinnitus," Husain said.

As loud as the cicadas can be, they won't necessarily damage anyone's hearing, according to the Centers for Disease Control and Prevention. Hearing loss builds up over time from repeated exposure to [loud sounds](#). Cicadas aren't loud enough for long enough to do lasting damage, Husain said.

Everyday sources of noise come with a higher risk. Husain said constant exposure to loud highways, an airport, industrial sites, or household appliances like blenders and hair dryers can be a concern. And they can take a toll on someone's emotional well-being.

"If you are being exposed to very loud sounds for a part of your school day or your working day, it may make you more stressed out; it may make you more angry about things," she said.

Unlike the highway or an airport, [cicadas](#) won't be around long. Most of the current brood will be gone soon. Just in time for another noisy summer event: the Fourth of July.

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