

# Noise may shorten sparrow lives, study finds

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A sparrow sits on a branch of a blooming cherry blossom tree in Tokyo on March 26, 2015

The noise of cars honking and zooming through the streets may shorten the lifespan of sparrows growing up near the clamour, scientists said Wednesday.

Researchers from France's National Centre for Scientific Research (CNRS) noticed that [chicks](#) conceived and raised in the din of city

traffic have shorter caps on their chromosomes than those reared in a quieter place.

Often likened to shoelace tips, these protective ends dubbed [telomeres](#), can predict how cells age. Numerous studies have shown a link between longer telomeres and a [longer life](#).

"Our results provide the first experimental evidence that [noise](#) alone can affect a wild (animal's) early-life telomere length," said the study published in the Royal Society journal *Biology Letters*.

For the experiment, researchers blasted pre-recorded traffic noise six hours a day, seven days a week, at the chicks' parents and then the 21 baby birds themselves.

Another 16 chicks were born and raised in the relative quiet of the French countryside.

When the chicks in both groups were just nine days old, scientists gave the [baby birds](#) a full physical exam, which included harvesting their telomeres.

They found that chicks reared near the racket had "significantly shorter telomeres".

The team was not sure why noise hurts telomeres, but speculate it may disrupt the chicks' sleep and cause them stress.

They could not actually measure whether birds in the quiet group lived longer.

"We tracked the chicks only up to their first flight. It would be interesting to follow them longer to see how long it takes for the shorter

telomeres to have an impact on the birds' lives," said study co-author Alizee Meillere.

The effect on bird telomeres adds to the list of negative impacts of [noise pollution](#) on wild creatures.

"Noise interferes with acoustic communication, which is very important, especially for birds," Meillere said.

"In a noisy place, they are unable to find a good partner, they can't hear their chicks and feed them when needed," she added.

Scientists believe that as telomeres wear down, so does the protection they give to chromosomes, impairing DNA replication and boosting the risk of cellular malfunction and diseases, including cancer.

**More information:** Traffic noise exposure affects telomere length in nestling house sparrows, [rsbl.royalsocietypublishing.org ... .1098/rsbl.2015.0559](https://rsbl.royalsocietypublishing.org/doi/10.1098/rsbl.2015.0559)

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