

# Study Links Childhood Asthma to Living near Busy Roads

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Category : Health

## Unlocking Word Meanings

Read the following words/expressions found in today’s article.

- 1. **inhale** / **ɪnˈheɪl** / (v) – to breathe in  
*Example:* My doctor instructed me to **inhale** so she can examine my breathing rate.
- 2. **airway** / **ˈer weɪ** / (n) – the part of the throat where air passes to and from the lungs  
*Example:* The patient with blocked **airway** has breathing difficulties.
- 3. **malady** / **ˈmæl ə di** / (n) – an illness  
*Example:* My friend still pushed through with her trip despite her **malady**.
- 4. **adjacent** / **əˈdʒeɪ sənt** / (adj) – close or near a certain area  
*Example:* Let’s use the meeting room **adjacent** to the lobby so the others can easily find us.
- 5. **peripheral** / **pəˈrɪf əɹ əl** / (adj) – describing something that is away from the center of something  
*Example:* The legs are **peripheral** to the chest.

## Article

Read the text below.

A new study found that living near busy roads increases the risk of asthma among children.

Researchers from Beth Israel Deaconess Medical Center and Harvard T.H. Chan School of Public Health analyzed the data of 1,522 children born from 1999 to 2002 in Boston, Massachusetts /ˌmæs.əˈtʃu.srts / . They analyzed information like medical and residential history through the children’s mothers who previously participated in a study called Project Viva. This study aimed to learn about the effects of behavioral and environmental factors on children’s health.

Using mapping technologies, the researchers calculated the distance between the children’s houses and the nearest busy road, as well as pollution levels in their area of residence.

汚染レベルと同じくらいに

Results revealed that most children are exposed to soot or black carbon particles that enter the lungs when **inhaled**. As a result, children who live less than 100 meters away from a busy road are more prone to asthma than those who live more than 400 meters away. According to the study’s co-author Mary Rice, children have smaller **airways**, which make them more at risk of experiencing asthma symptoms like breathing difficulties.

すす(soot : 煤)、それか黒いカーボン粒子にさらされている(particle : 粒子 expose : 晒す)

吸い込んだ時(inhale : 吸い込む)

100m離れている所の方が400m離れている所よりも喘息になりがち(prone : 〜がち)

小さな気道(airway : 気道、空気の通る所)

呼吸しづらい

Apart from asthma, **maladies** like heart diseases and dementia—a condition associated with memory loss—have also been linked to living **adjacent** to busy roads. Previous studies found that high blood pressure and **peripheral** artery disease, or the tightening of arteries in body parts like legs and the stomach, are common among those living near busy roads. On the other hand, factors such as traffic and noise were found to contribute to the increasing rates of dementia.

心臓病や痴呆症の様な病気(malady : 重めな病気、弊害 dementia : 痴呆 heart disease : 心臓病)

記憶障害に関連づく(associate with : 〜に関連づく)

〜の近隣に住む事が関連付けられた(adjacent : 近隣、隣接)

高血圧や動脈周辺の病気( peripheral : 〜の周辺 artery : 動脈)

動脈の収縮(tighten : 縮まる、収縮する)

## Viewpoint Discussion

Enjoy a discussion with your tutor.

### Discussion A

- Aside from those mentioned in the article, what do you think are the other dangers associated with living near busy roads? Discuss.

- Do you think that adults who live near busy roads should also be tested for asthma? Explain.

**Discussion B**

- What do you think people can do to avoid illnesses caused by pollution?

- Do you think that avoiding the effects of pollution alone will greatly help in preventing illnesses? Explain.