

HEALTHY BREATHING ACT OF 2011

An Act Reducing Human Exposure to Particulate Matter Pollution House Bill 2753

Lead Sponsor: Representative Denise Provost

What is “particulate matter?”

Tailpipe exhaust from motor vehicles contains both gases and suspended particles. These particles, ranging in size from coarse to ultra-fine, are known as “particulate matter.”

What are the HEALTH EFFECTS of exposure to particulates in traffic exhaust?

- Health effects studies have found that particulate matter pollution results in **PREMATURE DEATH** and **IMPAIRED QUALITY OF LIFE**.
- People **living near major roads** can expect to **LIVE SHORTER LIVES**. Their risk of dying from heart or lung disease increases by 95%.¹
- Older **WOMEN** living in areas with high exposure to fine particulates are at greater risk for cardiovascular events like **HEART ATTACK** and **STROKE**, and at greater risk for **DYING** from these events—and the greater the exposure, the greater the risk.²
- **CHILDREN** living near **HIGHWAYS** do not develop normal **LUNG FUNCTION**, and suffer increased risk of **RESPIRATORY DISEASE**.³
- **CHILDREN** living closer to **HIGHWAYS** are more likely to develop **ASTHMA**—the closer the home to the highway, the greater the incidence of asthma, and of asthma attacks.^{4, 5}
- **WOMEN** living close to busy roads suffer more **BRONCHITIS, REDUCED LUNG FUNCTION**, and **CHRONIC OBSTRUCTIVE PULMONARY DISEASE**.⁶
- **MEN** living where there is high **AIR POLLUTION** have a much higher incidence of **LUNG CANCER**.⁷

Overview of The Healthy Breathing Act of 2011

Modeled after a California law that restricts construction of schools within 500 feet of highways, this bill would limit construction of certain facilities in areas with elevated particulate matter pollution.

- Protected facilities include: residential developments, hospitals, long-term care facilities, schools, day care centers and public open spaces.
- These facilities shall not be built within 500 feet of a high-activity roadway or a train yard or train station serving diesel locomotives (unless a health risk assessment determines that short-term and long-term exposure to air at the site poses no significant health risk or can be mitigated).

For more information or to request complete citations please contact:
Representative Denise Provost at 617-722-2263 or denise.provost@mahouse.gov

¹ Hoek, G., et al. Association between mortality and indicators of traffic-related air pollution in the Netherlands: a cohort study. *The Lancet*. Oct. 19, 2002.

² Miller, K., et al. Long term exposure to air pollution and incidence of cardiovascular events in women. *New England Journal of Medicine*. Feb. 1, 2007.

³ Gauderman, W., et al. Effect of exposure to traffic on lung development from 10 to 18 years of age: a cohort study. *The Lancet*, Jan. 26, 2007.

⁴ Gauderman, W., et al. Childhood asthma and exposure to traffic and nitrogen oxide. *Epidemiology*, Nov. 2005.

⁵ McConnell, R., et al. Traffic, susceptibility, and childhood asthma. *Environmental Health Perspectives*, May 2006.

⁶ Schikowski, T., et al. Long-term air pollution exposure and living close to busy roads are associated with COPD in women. *Respiratory Research*, Dec. 22, 2005.

⁷ Nyberg, F., et al. Urban air pollution and lung cancer in Stockholm. *Epidemiology*, Sept. 2000.