

# Health Department

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March 19, 2019

House Committee on Energy and Environment  
900 Court St. NE - HR D  
Salem, Oregon 97301

Re: HB 2007 - Relating to engine emissions

Chair Helm, Vice-Chairs Reschke and Schouten, and members of the Committee. My name is Paul Lewis and I am the Multnomah County Health Officer and a practicing pediatrician for over 30 years. Today I testify in support of HB 2007, a step toward making our environment safer for everyone. HB 2007 takes several steps that will reduce harmful emissions from unnecessarily dirty diesel engines and improve health for all Oregonians from infants to seniors.

Diesel engine exhaust is a dirty mixture of gases and extraordinarily tiny toxic particles. The immediate consequence of breathing diesel exhaust is respiratory irritation and worsening of lung conditions like asthma. Even more problematic however are the extensive harmful effects throughout the body including heart and lung disease, cancer and stroke. The tiny particles are so small they are measured in nanometers and can avoid the body's usual tools for eliminating toxins. Most profound to me as a pediatrician is the impact on pregnant women and the link between diesel exposure and both low-birth weight and premature birth.

Many things influence the danger and composition of diesel exhaust including the type of engine, running conditions, fuel, and emissions control technology. The good news is that the understanding of the health danger from diesel emissions is so well known that technology, now decades old, exists to dramatically reduce the threat. We do not need new inventions, we only need broader use of existing solutions.

Because it is Oregon's most urban county, Multnomah County has the highest concentration of diesel particulates in the state. Sadly, our county is also home to a serious health disparity related to diesel exhaust exposure. A DEQ study found that modeled (on-road mobile and non-road mobile) pollutants within the Portland Metro region are higher in census block groups with higher proportionality of low-income

households and people of color. Our County's own Report Card on Racial and Ethnic Disparities report found that census tracts that had at least 15% of its populations identifying as Black/African American, Asian/Pacific Islander, or Latinx had two to three times higher levels of diesel particulate matter compared to primarily white census tracts. Exposure to diesel particulate matter is directly linked with proximity to source, meaning that communities living near highways or other transportation corridors are disproportionately exposed.<sup>1</sup> Consequently this is not only a public health issue but also one of environmental justice.

In closing, I will emphasize that we can not chose which air to breathe and an improvement in air quality benefits everyone. In the case of diesel, we have a special opportunity to improve the health of disadvantaged and low-income communities that bear the greatest burden of diesel air pollution. 2019 would be a good time to begin catching up to our neighbors in California and Washington in making the transition to safer diesel engines and to implement policies that speed up this important process.

Thank you for the opportunity to talk to you today.

Paul Lewis, MD, MPH  
Health Officer  
Multnomah County Health Department

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<sup>1</sup> Brugge, D. (2007). Near-Highway Pollutants in Motor Vehicle Exhaust: A Review of Epidemiologic Evidence of Cardiac and Pulmonary Health Risks. *Environmental Health*. 2007 6:23.  
<https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-6-23>