

Exhaust Fumes; Daily Dosage Kills Slowly...



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There is nothing like rolling down your windows for fresh air anymore, because one or two vehicles ahead of you will be puffing out smoke like the chimney of a coal factory. The products of combustion of petroleum products have long been known to be a health hazard. Unfortunately, while other regions of the world are converting to zero-emission and electric cars, some of our drivers have now discovered the fashion of the smoking engine.

The problem

With the number of vehicles on our streets increasing many times faster than the population growth rate, it is not surprising that we have a lot more pollution from these machines. The problem is compounded by the poor maintenance culture that prevails.

But even more damning is the fact that these vehicles all hold valid road worthiness certificates. There is obviously some jiggery-pokery going on. But who is to blame? I guess there are more questions than there are answers.

Apart from affecting the environment and contributing to global warming, vehicle exhaust is hazardous to our health.

Short-term exposure to vehicle exhaust can cause: Irritation of the eyes, throat and lungs; lightheadedness; fatigue; headaches; insomnia; and respiratory symptoms like coughing. Many of these symptoms are due to acute carbon monoxide poisoning, and it can be fatal if the exposure is significantly long or large (e.g. operating a vehicle in an enclosed space). Chronic carbon monoxide

poisoning, like what that hawker on the streets of Tudu, Agbogbloshie or Adum will suffer, is a more insidious illness, with chronic fatigue, unexplained headaches, memory impairment and sleep disturbance featuring prominently. Brief exposures may also incite allergic reactions (of eye, skin and respiratory tract) and can trigger asthmatic attacks.

Long-term exposure to vehicle exhaust may lead to chronic cough and excessive mucus production, chest tightness and wheezing, and impaired lung function. It also worsens chronic lung diseases such as asthma, emphysema and chronic bronchitis.

Long term exposure may also contribute to the occurrence of heart disease or worsening of pre-existing heart conditions.

Cancer is another detrimental long term effect of exhaust fumes. A 2012 study by the World Health Organization found an increased risk of lung cancer in people who are regularly exposed to diesel fumes (WHO, 2012). Though concrete scientific evidence is lacking, vehicle exhaust is also believed to be a contributor to other forms of cancer.

According to a 2012 publication by the Mount Sinai- Irving J. Selikoff Centre for Occupational and Environmental Medicine, “the chemicals in diesel exhaust contribute to heat-trapping greenhouse gases, and can react in the atmosphere to produce smog, acid rain and ozone. These pollutants, along with pollution from gasoline engines, can add to the disease burden of diesel exhaust. Adverse reproductive effects, such as low birth weight and premature birth, have been associated with increases in traffic-related air pollution.”

The Solution

It goes without saying that acute exposure to exhaust fumes resulting in immediate symptoms (as listed above) warrants prompt medical attention. Additionally, chronic exposure must be avoided by all means possible. Protective gear must be worn if exposure is inevitable (e.g. with traffic wardens). But this is just window dressing if the root cause is left unchecked.

Regulation 33 of the ROAD TRAFFIC OFFENCES REGULATIONS, 1974 (LI 952) states that “No person shall drive a motor vehicle which emits exhaust fumes in such quantities as to be a hazard or annoyance to road users or pedestrians.” I was amazed to find out such a provision existed, because its implementation leaves a lot to be desired. This law is crucial, and it must be employed to the letter. Those who fall foul to it must be appropriately dealt with.

The national policy that banned the importation of vehicles that are older than 10 years must be strictly implemented. The newer the vehicle, the more likely it is to be eco-friendly.

Lastly, we must all be individually convicted to regularly maintain our vehicles. This individual effort will produce an immeasurable collective good.

It is a fact that urbanization has made the motor vehicle a necessary part of our life and work, but we have to make a deliberate effort to forestall the negative impact of this important piece of technology. Our health is at risk if we remain unconcerned. It will start with teary eyes and a fleeting cough and end in chronic lung disease, heart disease, cancer and death. Let’s not allow exhaust fumes to further shorten our already diminishing life span.

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