

Harmful Effects Of Air Pollution Caused Due To Traffic In The Urban Areas

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Abstract: Air pollution has become a major worldwide problem, it has effected millions of life. There are various reasons for this unregulated rise in the pollution levels of the air, one of the major reasons is vehicular pollution which is effecting the life of numerous people who use roads as the major transportation facility which is nearly everyone in the world .The pollutants that are found in vehicle exhausts significantly affect the health of the people living in urban areas. High levels of nitrogen oxide, carbon di oxide are toxic to humans. Sulphur dioxidecausesacid rain. Carbon dioxide contributes to climate change causing global warming. Due this there needs to be change, a change that can help save the environment .There are various methods that can applied to save on our fossil fuels, reduce pollution and also improve our traffic conditions and improve road safety.

Key words: Air Pollution; Emission; Eco-Friendly; Traffic; Carpooling;

I. INTRODUCTION

There is a rapid growth in motor vehicle activity at a global level and has resulted in serious energy security and climate change implications. The transport sector consumes nearly half of the world's fuel supply. In urban areas in both developing and developed countries, it is predominately mobile or vehicular pollution that use the roadways as there transportation facility that contributes to air pollution. The major sources of pollutants include emissions from the combustion of fossil fuels in motor vehicles and for industrial processes, energy production, domestic cooking and heating, and high dust levels due to local construction, smoking, unpaved roads, sweeping, hotels, restaurants and long-range transport. Due to all this the quality of air has become very poor that, it has started to affect every individual present. The rapid growth in motor vehicle activity has become a challenge to overcome in urban areas. This has brought a serious range of socio-economic, road safety, environmental, health, and welfare impacts on environmental degradation. The rapid growth in motor vehicles in urban areas is important not only because of their locally harmful air pollution effects, but also because of their regional and global impacts So the paper deals with the harmful effects of air pollution caused by traffic present in the urban areas .

II. PROBLEMS

One of the main problems that is overlooked across the globe is pollution. The Pollution is evident in many different forms, such as, water, sound, light, radioactive, land, and air. The only way is to reduce the problem of air pollution is the elimination or reduction of fossil fuels used by vehicles. Thus, the increases in population, increase in traffic,

migration, uncontrolled urban expansion, income, economic growth, energy consumption and mobility have created a serious for air pollution problems, in cities throughout the world. The study is to find the emissions from the vehicles and their impact on traffic and the environment. The worst thing about vehicular pollution is that it cannot be avoided as the vehicular emissions are emitted at the nearground level where we breathe. The problem of vehicular air pollution especially relates to urban areas due the traffic problems present there.

A. Air pollution due to traffic jams

The major issue that people in urban area face is the prolonged traffic jams, which happen due to various reasons .During this period many drivers don't switch off the vehicle dude to slow movements of the traffic this leads to burning of a lot fuel along with emissions of harmful gases into the atmosphere. As the vehicles in the urban areas increases this problem is also increasing



B. Harmful emissions from vehicles effecting the atmosphere and other commuters

As known every vehicle have certain emission tests that which show that the emission conditions of a vehicle .many times these emissions are not monitored as they are required to be especially in

the case larger vehicles like buses, trucks, lorry's, etc. the emissions produced by these and not to miss out older vehicles are more harmful when compared to the others these emissions not only effect the atmosphere but also effects the other commuters especially the ones who use two wheels for commutation ,it effects there vision ,respiration, etc. which can lead to accidents on the roads .



C. Health effects of traffic-related air pollution

Air pollution from traffic has been linked to many negative health effects, including:

- worsening asthma symptoms
- asthma development in children
- lung cancer
- reduced lung function
- heart disease
- increased risk of death from heart conditions

Air pollution may worsen symptoms for people with existing heart and lung conditions.



D. Effects of air pollution due to traffic on children

Children are more sensitive to air pollution than people in other age groups. This is because children breathe in more air in relation to their body weight. This means that they breathe in more contaminants, so air pollution can affect them more. The body's defence and lung systems are also not fully developed in children. Therefore, the health of young children may be more affected by air pollution. Children living in areas with heavy traffic have a higher risk of having breathing problems than other children. Exposure to traffic pollution can worsen asthma in children and may increase the risk of asthma development.

III. SOLUTIONS

A. Minimizing risks to health

You can minimize your risk of health effects from traffic-related air pollution by:

- choosing low-traffic routes and eco-friendly ways of transportation:
 - cycling
 - walking
 - running
 - using of electric cars
- exercising in parks and green spaces, away from major roadways
- reducing outdoor air pollution in your home by closing windows and using:
 - a ventilation system with filtration
 - air conditioning on very hot days
- considering local traffic patterns and avoiding high-traffic areas when choosing a:
 - school
 - day-care
 - offices
 - place to live
- limiting time spent outdoors when pollution levels are high, especially for vulnerable groups, such as:
 - infants
 - children
 - diabetics
 - the elderly
 - those with heart or lung problems
- avoiding idling your vehicle in an attached garage, and keeping any doors between your house and the garage closed
- also trying not to use vehicles for shorter distances and to use eco-friendly ways instead

B. The Air Quality Health Index

The Air Quality Health Index (AQHI) can help you learn about local air pollution and its impact on your health. The AQHI measures the air quality in relation to your health on a scale from 1 to 10. It provides advice for making decisions to protect yourself and those in your care from the risks of air pollution.

Check the AQHI in your community regularly. If it is not yet available in your area, check your provincial environment ministry website for local air quality information.

Talk to your health care provider about other ways to protect your health when air pollution levels are high. This is especially important for people with heart and lung conditions.

C. Reducing traffic-related air pollution

You can help reduce pollution from traffic by:

- choosing alternate ways to travel, such as:

- walking or cycling
- public transit
- carpooling
- driving at a steady speed and avoiding rapidly accelerating when possible
- warming your engine with a block heater on cold days before starting it (emissions are higher when the engine is cold)
- consulting the Fuel Consumption Ratings Search Tool before buying a vehicle
- turning off your engine when stopped for more than 10 seconds, unless you are in traffic or at an intersection
- reducing fuel consumption and emissions by:
 - maintaining your vehicle's engine
 - Keeping your tires properly inflated as indicated by the manufacturer.

D. Innovations and design to reduce traffic to help reduce air pollution

The World Health Organization estimates that more than one million deaths each year are attributed to air pollution, of which a large proportion is caused by vehicular traffic. In addition, traffic results in human and wildlife fatalities through road accidents, and in economic losses from missed business-related activities.

Public transportation services such as taxis could be modified to reduce traffic by promoting the sharing of cars or minivans that is carpooling. Encouraging carpooling by peers will help significantly in the traffic problems caused which will also help reduction of pollution that would be caused if every individual would use their own transportation. The public transport system also helps in the similar manner. It can help in large cut down in the traffic and pollution caused due to it.

In contrary, using of different means of public transportation is environmentally friendly but it's not a perfect system. It might help reduce the number of cars on the road, but it does not necessarily reduce the distance driven, and it definitely does not reduce the amount of pollution generated by gas engines. One of the main ways in which that could be accomplished is through innovations designed to reduce traffic.

IV. CONCLUSION

There are various methods that one can employ in their individual lives in order to reduce air pollution caused due to traffic like switch off cars during a long red light signals, long traffic jams.

One should approach the use of more eco-friendly ways, also the government should encourage public to follow such practices which will help us save our ecosystem majorly atmosphere as breathing fresh air is not only a right of every organism but a compulsory requirement

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