

TramForward

Campaigning for Light Rail

PRESS RELEASE FROM *TramForward*

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***TramForward* urges tackling air pollution particles linked to Alzheimer's disease**

TramForward once again urges the adoption of electric powered public transport to improve public health by reducing vehicle-related air pollution, which has now been linked to Alzheimer's disease.

Research recently published in the journal "Proceedings of the National Academy of Sciences" has found that tiny magnetic particles produced by internal combustion engines and vehicle brakes can travel into the human brain and may trigger Alzheimer's disease.

Researchers at Lancaster, Oxford and Manchester universities discovered microscopic spheres of the mineral magnetite in the brains of 37 people in Manchester and Mexico who had suffered neurodegenerative disease.

The mineral magnetite is known to be toxic and is linked to the production of free radicals which are associated with Alzheimer's disease.

Although magnetite has previously been found in the brains of people who had died of Alzheimer's disease, it was thought to have occurred naturally. However, these tiny spheres had a fused surface, which suggested they had been formed during extreme heat, such as in a car engine.

Magnetite - a form of iron oxide - is known to be produced in car engines - particularly diesel engines, which can emit up to 22 times more particulates than petrol engines, as well as when brakes are used. It can also be produced by open fires and poorly fitted stoves.

Modern trams have been shown to encourage the switch from cars to public transport and can replace diesel-powered buses on heavily used transport corridors in cities. Thus the tram can significantly reduce air pollution in cities. Although trams are fitted with disc brakes, which have been identified as one source of these pollutants, most also use regenerative braking where electric power is fed back into the network and which slows the vehicle down, reducing the need for conventional braking.

"The time has come for government intervention" said LRTA Chairman, Andrew Braddock, "and a clear policy favouring the development of tram systems in our towns and cities is essential to counter the harmful effects of poor air quality on the nation's health".

NOTES FOR EDITORS

1. ***TramForward*** is the campaigning arm of the Light Rail Transit Association (LRTA).
2. The LRTA is the world's leading organisation campaigning for better public transport in urban areas through light rail, tramway and metro systems and has been in existence for more than 75 years. It also supports the revitalisation of suburban and rural transport through the application of light rail and TramTrain technology.
3. The LRTA acts through its network of local branches, which campaign for better transport in their areas.
4. Membership of the LRTA costs less than 14p a day. To join, visit www.lrta.org or write to the Membership Secretary, LRTA, 38 Wolseley Road, Sale, Greater Manchester, M33 7AU. Members receive the monthly magazine *Tramways & Urban Transit* - written and read by experts in the field - and gain other benefits including discounts on videos and books, tours of transport systems and cut-price admission to selected transport museums.
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