

## 1. INTRODUCTION

The conditions in which we live and work, and the lifestyle choices we make, have a strong influence on our health and how long we live.

We can think of the main determinants of health as concentric rings of influence with the individual in the centre, surrounded by a series of social and economic factors operating at successively broader levels of society. While we have decision-making power over some of these factors (for example, diet and physical activity), scientific evidence has revealed the important influence that social and economic conditions, which are often beyond our control, can have on our ability to maintain health.

How we transport ourselves directly affects our health, for good or ill. Transport gives us access to goods and services, opportunities for individual mobility and a better quality of life, and is important to the economic and social development of our communities. It promotes our health indirectly through the achievement and maintenance of social networks, and directly, in the case of cycling and walking, through increased physical activity and reduction of obesity. Conversely, lack of transport may damage health by denying access to people, goods and services. Furthermore, use of the dominant form of transport, private vehicles, can damage our health through accidents and injury, air pollution, noise and community severance, and in the longer term, through its effect on the food chain, ecology and climate.

Scientific knowledge of the adverse impacts of transport, especially road transport, on the environment and health has been accumulating for decades. The most obvious of these effects – deaths from road accidents – has been declining due to government action but the links between motor vehicle emissions and mortality and morbidity, and the scale of the potential public health problem which this poses, are becoming increasingly apparent.

In 1990, the European Charter on Environment and Health identified the environment and health impact of road transport as an urgent issue to which governments and other public authorities should pay particular attention.

**“Current, non-sustainable transport policies represent a large-scale experiment with people’s lives. It is very costly, it is thought to have large benefits, but we know it has significant disbenefits, including health damage, and cannot be sustained into the future. The experiment is car dependency. The time has now arrived to vary the diet and to experiment with other kinds of mobility, accessibility, urban form and living environments.**

**...Public health specialists...have a role to play in making choices available and moving public policy in the direction of healthier people and healthier places. There is nothing to lose and everything to gain.”**

*Whitelegg, 1997*

Later in the decade, the World Health Organisation (WHO) stressed the need for healthier transport systems (based on reduced road traffic and more walking and cycling, backed up by better public transport) to achieve higher standards of population health in the developed industrial countries of Europe (Wilkinson & Marmot, 1998).

Then, in an important move earlier this year, European governments adopted a Charter on Transport, Environment and Health which establishes principles, targets and a strategy for action to reduce the human health costs of transport. The health targets will be on air quality, injury, physical activity and noise.

The Charter aims to ensure that transport and land use policies take health into account to maximise the health and economic benefits. Prompted by WHO concerns that the health risks posed by road traffic were being recognised only partially and too slowly, the Charter calls for better co-ordination on environment, transport and health policies; the development of tools for integrated environmental impact assessment of transport

strategies; implementation of monitoring systems; and the production of environmental health guidelines for transport.

Australia has experienced similar transport trends as countries in Europe and North America: rising demand for transport, growth in road traffic, increasing use of private cars, and declining use of public transport, cycling and walking. We also share with North America a dispersed pattern of settlement and land use that has made use of a motor vehicle a virtual necessity.

While the quantum of epidemiological studies may be less, there is sufficient Australian evidence on the effects of air pollution on mortality and morbidity to prompt public health action. Our high levels of car ownership and use, the growth in the diesel fleet, and the relatively old age of our motor vehicles are highly likely to generate a greater airborne threat to health in our State capitals than exists in equivalent overseas cities.

There is no room for complacency. But Australian governments have yet to acknowledge the scale and complexity of the damaging effects of our car-dominated transport system on individual and societal health, much less take on board the policy changes required to create a transport system less injurious to health.

It would be misleading to underestimate the size of the challenge for Australia to quit its addiction to the motor vehicle. By their daily practice of car travel, millions of individuals support continuation of the current transport system. Many believe that they do not have any other choice; under current transport and land use arrangements, that may well be true. Choices individuals make are constrained by time, lack of suitable alternatives, or lack of knowledge of those alternatives.

Besides the mobility and independence conferred on the driver by a motor vehicle, generations of children are growing up with little transport experience other than the private car. In addition, the automotive and associated industries have a vested interest in, and are in a strong position to encourage, growth in car ownership and use through the media and influence on transport and taxation policy.

However, in the face of existing scientific evidence, the cost of failing to take action to tackle car dependence and curb traffic growth could be very high in terms of deaths, ill-health and medical treatment. From a public health perspective, intervention to change transport policy priorities and achieve a more balanced and equitable transport system is the only option to reduce the risk of disease and premature death from vehicle emissions, obesity, and social isolation.

Moving away from a reliance on car-based transport also makes good economic sense with those cities that invest heavily in public transport and emphasise cycling and walking, spending significantly less of their wealth on transport than those cities which spend heavily on roads.

Health agencies have a role to play in promoting policy-makers' awareness, debate and action on the effects of transport and land use policies on public health, and in working with relevant departments to re-shape these policies so that they promote rather than damage health.

Through appropriate education and marketing measures, agencies such as VicHealth can effectively bring to people's attention how their individual transport choices can have socially damaging consequences while at the same time suggesting practical and positive alternatives to current travel practice.

VicHealth will not be acting alone. Organisations concerned with environmental protection, social justice, and access for all, have closely parallel interests in encouraging alternatives to a transport system dominated by the use of motor vehicles.

**"To manage a city with traffic problems is a big challenge but the evidence we have...indicates that it can be done. However, the process must begin with a dream that is fostered by a city's people until the insistent solutions of traffic engineers are quietened and the commonsense of the common good is heard."**

*Newman, 1999a*