Protecting HEALTH from climate change

DID YOU KNOW? ... BY TAKING ACTION ON CLIMATE CHANGE YOU ARE PROTECTING HUMAN HEALTH

Why should you care? What can you do?

Messages to different groups and sectors

Message: High carbon transport is bad for health and the environment.
Sustainable transport creates healthier and safer communities.

Why should the transport sector care?

- Transport's contribution to global emissions is very large. Transport is one of the largest contributors to carbon dioxide (CO2) emissions and climate change. Globally, transport accounts for approximately 13% of total energy consumption.
- The situation is likely to get much worse, with rapid increases projected in both Organisation for **Economic Co-operation and Development (OECD)** and non-OECD countries. Over the next 25 years, demand for petroleum and other liquid fuels is expected to increase more rapidly in the transport sector than in any of the other end-use sectors. Energy demand for transport in the OECD economies is projected to grow at an average annual rate of o.9%; in non-OECD countries the growth rate will be 2.9% per year (more than three times as much). Among the non-OECD countries, China and India are expected to be the most significant contributors to growth in transport sector energy consumption. Historically, growth in transport activity has been tied to income growth1
- 3. There are large differences in transport profiles between countries. The global passenger car fleet now exceeds 531 million vehicles, growing by about 11 million annually. About one quarter of these cars are found on roads in the United States of America, where cars and light trucks account for 40% of the nation's oil use and contribute about as much to climate change as the entire economic activity of Japan. Today, nearly 92% of downtown Tokyo travellers commute by rail, and the Japanese do only 55% of their travelling by car. Western Europeans now use public transport for 10% of all urban trips, and Canadians for 7%, compared with United States of America(USA) citizens at 2% 1.
- 4. Transport-related pollution, injuries, "inactivity" and noise have major adverse health effects.

 Transport is one of the main sources of air pollution and has other effects on health and mortality that are direct (traffic injuries, deaths and noise) and indirect (inactivity). Globally, there are 800 000 annual deaths from urban air pollution.

Traffic-related ozone pollution (through its effects on global warming) and particulate matter (PM) account for a significant share of this burden. Traffic-related air pollution increases respiratory and asthma problems, the number of admissions to hospital, and days of work and schooling lost. There are 1.2 million deaths and 50 million injuries from road traffic globally each year: 90% of these road traffic deaths and injuries occur in low-income and middle-income countries. Transport injuries are the biggest killers of young people aged 15-19 years. Transport-related "inactivity" (use of motorized transport as opposed to walking and cycling) accounts for 1.9 million deaths and 19 million years of healthy life lost per year. Noise related to road traffic leads to hearing impairment and mental stress2.

- 5. Active sustainable transport policies can be very beneficial to health, the environment and the economy. Active transport policies that support cycling and walking can help to increase physical activity levels and have been shown to reduce obesity, heart disease, diabetes, cancer and osteoporosis. Thirty minutes a day of physical activity is enough to reduce by 50% the risk of developing coronary heart disease; by 50% the risk of developing noninsulin-dependent diabetes and obesity; and by 30% the risk of developing hypertension. Regular physical activity has been shown to reduce the risk of colon and breast cancer and helps to maintain bone mass and protect against osteoporosis².
- 6. Cost savings from healthier transport policies can be large and can offset costs of reductions in greenhouse gas emissions (mitigation). The costs of emissions have up to now been considered economic "externalities" and, as such, the transport sector as well as other companies and governments have not been held responsible for their environmental and health impacts. This situation is likely to change as concerns regarding emissions grow. Transport policies that reduce greenhouse gases can have very beneficial effects on some major health challenges, e.g. obesity, diabetes and heart disease, and money saved from not having to cover the health-care cost of problems related to climate



change (e.g. respiratory difficulties caused by air pollution) often matches or exceeds the costs of tackling the hazardous emissions!³

What can the transport sector do to protect health?

- 7. Use health impact assessments to guide planning and development. The transport sector can work with the health sector to identify best ways to coordinate decisions so that plans and policies are developed that are good for the environment, health and the economy.
- Research and implement new behavioural and policy measures aimed at improving health by influencing people's transport choices. Current policies, which focus on fuel and vehicle efficiency, have demonstrated a limited capacity to control the overall growth of transport energy consumption. Projections of massive global increases in motorized transport call for urgent behavioural and policy research into approaches that can curb demand in both developed and developing countries. A wide variety of good practice experience exists (e.g. congestion charges in cities, safer cycling paths and monetary incentives). This needs to be systematically reviewed, shared and integrated into transport planning in all countries.
- Advocate the adoption of healthier transport policies. The health sector can join voices with transport planners and environmentalists in ad-

- vocating for much needed changes in transport policy. The health arguments are strong, and climate change concerns give these efforts new momentum. Strong international advocacy is needed to overcome the opposition of vested interest groups and the global normalization and glamorization of motorized transport. Lessons can be learned from tobacco control.
- 10. The transport sector can work to reduce its own carbon footprint. The transport sector can demonstrate good corporate practice and citizenship and utilize its size and financial power to reduce its environmental footprint, improve health and save money. Six action areas that can benefit the social, environmental and economic conditions within which corporations function are: managing energy, transport, procurement (including food), buildings and landscape, employment and skills, and community engagement. Good practice in these areas can lead to increased cost savings, improved staff morale and a healthier local population (see Annex 2 and http://www.corporatecitizen.nhs.uk).
- Monitor progress and report results. The transport sector can report on its health-related climate change policies and action in its annual reports. These reports could usefully include information on carbon footprint reduction strategies and effectiveness. The Global Reporting Initiative (GRI) has developed a Sustainability Reporting Framework and guidelines for companies (see http://www.globalreporting.org/Home).

References

- 1. United States Energy Information Administration(EIA, 2007). Energy consumption (DOE/EIA-0484).May 2007.
- Dora C, Racioppi F. Politiques de transport, santé et environnement: vers une synergie [Transport
 policy, health and environment: towards a synergy]. Rome, World Health Organization and European Centre for Environment and Health,
- 3. United States Environment Protection Agency (USEPA). The benefits and costs of the Clean Air Act: 1970 to 1990. USEPA,1997 (http://www.epa.gov/oar/sect812/accessed 22 January 2007).

Visit www.who.int/phe

The messages provided are a global mix, some more applicable to developed and some to developing countries. The World Health Organization (WHO) strongly encourages adaptations to suit local conditions and reach a local audience.

