

Key messages for Transport Health and Environment Pan European Programme (THE PEP) toolbox: what works?

In order to create a successful modal shift towards more environmentally friendly transport, such as public transport, a package of measures is needed, which, preferably, also improves conditions for walking and cycling. In general, successful policy options consist of a combination of spatial planning, modal split policy, technical solutions and campaigns aimed at influencing behaviour and financial instruments. Measures such as vehicle taxation are also effective. In urban areas, a shift towards cycling and walking can be achieved by making car use unattractive (for example, by introducing traffic restrictions and high parking fees) and cycling safe and quick. In the Netherlands, high parking fees in the city centre of Amsterdam resulted in a decrease in car movements (-14 per cent) and an increase in bicycle movements (+36 per cent). Nowadays, the bicycle has overtaken the car as most frequently used transport vehicle in the city centre of Amsterdam.

Regulatory

Reduce and control emissions through technical, legal and financial measures. A combination of these measures has actually reduced vehicle exhaust emissions in Western Europe. Technical measures include equipping vehicles with particle filters, developing low or zero-emission vehicles, decreasing sulphur levels in fuel and the development of alternative combustion fuels and engine technology such as electric and hybrid cars. Biofuels are also an option, but their costs and benefits need to be evaluated carefully to rule out potential new health risks and avoid competition with food production. Legal measures include banning the use of leaded fuel (which is still used in some EECCA and SEE countries) and setting emission standards for vehicles. Fuel-efficient driving (eco-driving) should also be considered.

Camden walking plan – London

As part of an integrated transport strategy, nine new 20 mph zones were introduced in residential areas and near schools. The number of traffic injuries in these areas dropped by 58 per cent after introduction.

Give priority to speed reduction and control. Regulatory measures include vehicle safety, setting and controlling speed limits and controlling maximum alcohol limits to prevent drink driving. The risk of death can be decreased by up to eight times by lowering speed limits. Positive progress on the reduction of injuries has been made across the EU. Better enforcement of speed and alcohol limits have led to significant reductions in fatality rates, despite the strong growth in transport demand. In addition, ‘demerit points’, which are used to add up minor traffic code violations and can lead to revocation of the driving license, has been very effective in, for example, Denmark.

Infrastructural

Invest in infrastructure with a focus on traffic safety. Infrastructural measures include improved crossings and intersections and segregated bicycle paths. Traffic accidents are the leading cause of death among young people. More than 127,000 people are killed each year by traffic accidents in the 53 countries of the WHO European Region. At least 2.4 million people are recorded injured each year. Transport accidents represent a high cost to society, and with the continuing rise in traffic volumes, transport safety should be high on the agenda.

Cycle policy – Copenhagen

One of the measures included the improvement of signalized intersections in the city of Copenhagen. The number of seriously injured cyclists was reduced by 42 per cent.

Investment in a cycling and walking friendly infrastructure is a basic condition for creating a modal shift towards cycling or walking as a mode of transport. The level of cycling tends to be higher in countries that have a more cycling-friendly environment. The two countries with the highest levels of cycling – Denmark and the Netherlands – are also those that have a long tradition of cycle-friendliness in terms of dedicated investment and recognition within transport policy.

Cycle plan – San Sebastian

A combination of promotion and infrastructural measures was taken to encourage citizens to use their bikes more often. In five years, the use of a bicycle for journeys within the city has tripled.

of trips currently made by car are shorter than 3 km and there is great potential for more trips being made on foot or by bicycle, especially in urban areas. Invest in safety measures for pedestrians and cyclists and promote the health benefits.

Approximately 600,000 people die every year as a result of physical inactivity. WHO estimates that lack of physical activity causes about 10 to 16 per cent of the occurrences of breast, colon and rectal cancers as well as diabetes mellitus, and about 22 per cent of the occurrences of ischaemic heart diseases. The contribution of transport-related walking and cycling to overall levels of physical activity is unclear, but as the modal shift towards car travel continues, levels of walking and cycling will further decline.

Promotional

Promote walking and cycling. Around one-third

Progress on the promotion of walking and cycling

A number of countries have made progress in promoting walking and cycling as healthy and environmentally friendly modes of transport through specific national plans: e.g. Austria, the Czech Republic, Finland, France, Germany, Norway and Switzerland.

For instance, Belgrade has embarked on a program to build more bicycle paths, and Austria has implemented an integrated plan for cycling aimed at increasing the share of bicycle traffic, reducing greenhouse gas emissions, air pollutants and noise, and increasing the positive health effects due to improved physical activity.

Campaigns promoting walking to school are very successful: more children walk, there is less traffic near schools and they help raise awareness among children and parents. A number of countries are promoting similar walking or cycling to school projects, for example, the *walking school bus* in Örebro Sweden, *go to school on foot, by cycle or by bus* in Udine Italy and *awareness for clean urban transport* in Vilnius Lithuania.

We are biking to work – Denmark

A nationwide campaign was set up as a lottery where people who did a certain amount of cycling in teams (usually made up of people working at the same company) could win trips, bicycles and bicycle accessories. The campaign created a modal shift from car use to cycling: among those who never used the bicycle before to commute to work 45% claimed to have made a sustainable shift to cycling.

Bike campaigns directed at companies that have a competitive element can be an effective way of generating a modal shift towards cycling.

Promote environmentally friendly public transport, preferably while improving conditions for walking and cycling. Public transport should be environmentally friendly, effective, comfortable and accessible. In order for public transport to become competitive, it must be included in policies

and urban development plans. The allocation of space for the necessary infrastructure (railways, bus lanes, bicycle paths, etc.) is essential, as is zoning for specific transport modes.

Safeguard the competitive position of rail transport because of its good performance (e.g. less emissions). This requires the coordination of industrial development and modernization of the railway system. The EECCA countries have a high share of rail transport, but investments in road transport and the expected growth in transport volumes may lead to a major shift towards road transport and a decline in rail transport, as has been

observed in the EU-10 member states. Investments are necessary to keep the share of rail transport in the EECCA countries high and ensure a shift towards more rail transport in the EU-25 member states.

Recommendations for future projects/implementation issues

- **Use a package of measures to create a successful modal shift.** Integrated transport plans using infrastructural measures combined with promotional campaigns to raise awareness and change behaviour go hand in hand.

Examples of integrated transport plans and intersectoral collaboration

The Camden walking plan in London and the cycling policy in Copenhagen are two examples of integrated transport plans. To achieve an integrated transport strategy, intersectoral collaboration is crucial. In the Camden walking plan, stakeholders from the transport sector and the health care sector helped make the plan a success.

- **Intersectoral collaboration is crucial** when developing solutions for transport problems, because there can be major benefits for both the environment and health. When interests are shared, fruitful intersectoral collaboration is achieved. Promising practices have revealed several examples of successfully integrated transport plans that tackle problems and have a considerable effect on our health and the environment. Capacity building to exchange good practices between the responsible bodies, authorities and stakeholders can promote the dialogue between the different sectors.
- **Communication about the intervention is key.** Communication raises awareness, which can change behaviour.
- **Involve stakeholders to get support from different fields** including the general public. Stakeholders are more willing to cooperate if they are informed about plans and policies and/or given a role in the design process.
- **Create a list of indicators for transport, the environment and health and evaluate the situation before and after a plan is introduced.** In this way, the impacts of a certain plan or policy can be assessed. This will stimulate others to adopt a similar plan or policy.

Sources:

EEA, Europe's environment, The fourth assessment, Copenhagen: EEA, 2007

Toolbox: Evidence briefings

WHO-UNECE, Amsterdam declaration, 2009

UNECE-WHO, Transport, health and the Environment: Trends and developments in the UNECE-WHO European Region (1997 – 2007). Prepared under the auspices of the Transport, Health and Environment Pan-European Programme. UNECE-WHO, New York and Geneva, 2008

Toolbox: assessment case-studies

Glossary

EECCA (Eastern Europe, Caucasus and Central Asia)

CIS (Commonwealth of Independent States: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan)

SEE countries (South-Eastern Europe): Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia, and the former Yugoslav Republic of Macedonia

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