

Facts and Figures: Draft Key messages

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This document is based on the first draft of the 'facts and figures' document, consultations with thematic experts from different countries and updated with comments of Bureau members.

Questions to the Steering group:

- Are these messages complete, is anything missing?
- Which messages have the highest priority?
- For which messages would you like to see more evidence?

Air pollution

- (a) Transport is one of the main sources of air pollution and air pollution poses one of the largest health risk: in 2018 7 out of 10 of the EU urban population breathed air that exceeded the PM_{2.5} WHO Air Quality Guideline;
- (b) Although the overall volume of air pollutants (NO₂ and PM) has decreased, a further reduction can still improve human health, especially within urban areas where transport is an important sector;
- (c) In urban areas transport is the most important source of air pollution of NO₂, which is not reflected in average national levels of air pollution;
- (d) The UNECE region has different situations as the physiochemical composition of transport emissions and thereby the health impact varies for different modes of transport, fuel types and quality of combustion and the vehicle fleet is different for those regions;
- (e) Air pollution related to transport consists of a mixture of components
 - particulate matter
 - nitrogen dioxide (NO₂)
 - black carbon
 - evaluating the health effects of air pollution, mortality, morbidity and the costs of air pollution should be considered;
- (f) Also health aspects need to be considered when introducing new measures like technology (e.g. electric vehicles) or biofuels (e.g. biodiesel). Reduction of emission does not necessarily imply a gain in health impact.

Noise

- (a) Noise is a serious issue that affects the wellbeing and health of people. Noise exposure from motorized transport is associated with annoyance, sleep disturbance, cardiovascular disease and metabolic effects, cognitive impairment and other health outcomes;
- (b) Noise limits are generally above WHO guidelines. Implementing WHO noise guidelines contribute to noise abatement and help to reduce the negative health impact from traffic noise;
- (c) At least 20% of the population in the EU lives in areas where traffic noise levels are harmful to health. In urban areas the numbers are even higher with a large number of cities having more than 50% of its inhabitants exposed to harmful levels of road traffic noise;
- (d) The population exposed to environmental noise is projected to increase because of future urban growth and an increased demand for mobility;
- (e) Data on traffic noise is incomplete. Noise maps collected under the European Union Environmental Noise Directive don't comprehensively cover all urban areas, roads, railways and airports across Europe nor levels of noise below the END reporting thresholds (i.e 55dB L_{den} and 50dB L_{night});
- (f) An overarching health objective in terms of road traffic noise instead of a limit is needed to prevent the problem getting worse;
- (g) Policy objectives on environmental noise in the 7th Environment Action Program have not yet been achieved: The number of people exposed to high levels of noise has not decreased, and millions of people remain exposed to noise levels harmful to health;
- (h) Noise exposure needs to be reduced by source measures with a focus on road traffic noise. Rail is also important, especially with the potential for modal shift from road and air transport to rail in mind;

- (i) Evaluating the benefits of noise interventions in terms of health outcomes is hampered by lack of knowledge since generally only impact on noise levels is addressed.

Greenhouse gas emissions (GHG)

- (a) Inland transport is one of the largest contributors to greenhouse gas emissions, responsible for about 22 per cent of all emissions in the EU, in 2017, with the road transport sector covering more than two-thirds of that;
- (b) The transport sector is growing and is projected to grow for the next 20 years due to increasing wealth;
- (c) The use of fossil fuels in the transport sector is the key source to de-carbonization. Passenger cars and trucks contribute the most;
- (d) GHG emissions vary in the ECE region: look at sub-regional variations to have a better understanding of the trends in the ECE region;
- (e) GHG strongly contribute to climate change. Despite a temporary dip in emissions due to the corona measures, it is expected that emissions will continue to rise. If no measures are taken, the temperature in the European region will further rise. We are already confronted with some of the impact, such as heatwaves, flooding and droughts. This will damage our environment, our homes and affect the health and wellbeing of our citizens;
- (f) Climate mitigating measures such as zero-emissions will also improve air quality.

Road safety

- (a) 'We need to work more towards road safety, in order to prevent the 110,000 deaths every year'. This represents an average of about 300 persons dying each day from road traffic accidents in the region. In addition to these deaths, countries reported that about 4.6 million people were injured in 2018. In general, road safety / road traffic injuries are a major public health concern and are the second cause of death for persons aged 5–30 years.
- (b) There is a pronounced reduction in road traffic fatalities between 2007 and 2010, but still a lot needs to be done to reach the UNECE goal 'cutting road traffic deaths and injuries in half by 2020'.
- (c) Disaggregation to show who is a victim will send an important message, however data is not all comparable or limited.
- (d) There are some marked regional differences. First, Both North America and other UNECE member States outside the European Union (EU) and European Free Trade Association (EFTA) reported a fatality rate greater than the total average whereas EU and EFTA countries reported a fatality rate considerably lower than the total average. Furthermore, the decrease in road traffic deaths during 2007-2017 was strongest in EU and EFTA countries followed by the rest of UNECE (covering Central Asia and Eastern Europe) and North America. The data show large disparities between countries up to a factor 10 in 2017.
- (e) Both road traffic fatality rates and injury rates are higher in men than in women in all UNECE member states.
- (f) Over 59 per cent of fatalities due to road traffic accidents occur among persons aged between 25 and 64 years. Of all the age groups, those under 18 years of age have the lowest number of fatalities.
- (g) Disaggregation per nature of accident is difficult because of limited data; the limited data show that it is unevenly distributed within the separate countries.
- (h) Road accidents from new innovations like the electric bicycle and the scooter deserve attention.
- (i) Take account of vulnerable road users, especially cyclists and pedestrians, for example by creating or ensuring safe infrastructure in the context of the amendment of Directive 2008/96/EC on road safety management and through improvements in the field of vehicle technology.

Physical (in)activity

- (a) Regular physical activity helps to prevent and reduce physical and mental health problems and promotes sustainability in the UNECE region (Graz Declaration, 2018);
- (b) Physical activity levels are lower than we would like to see in the region. More cycling and walking can help to increase physical activity levels and achieve the WHO recommendation for physical activity¹;
- (c) Substitution of motorized transport with more active mobility such as cycling or walking will help to achieve necessary levels of daily physical activity and will also improve air quality;
- (d) A substantial percentage of daily car-trips have a small radius (e.g. in EU, less than five kilometres) and could be replaced by cycling or walking;

¹ WHO recommendation: 150 minutes of moderate-intensity activity per week for adults and at least 60 minutes of moderate-to-vigorous-intensity physical activity daily for children and young people aged 5 to 17

- (e) A safe and attractive cycling and walking infrastructure is a major prerequisite for increasing the share of active mobility and consequently increasing the overall physical activity and environmental health in cities and countries of the pan-European region;
- (f) Due to COVID-19: physical distance measures in many cities have created more space for pedestrians and cyclists. Synergy Sustainable Transport Plans;
- (g) Investing in policies on active mobility can support the achievement of different Sustainable Development Goals. Examples are: Goal 3, 7, 9, 10, 11, and 13;
- (h) Facilitating active mobility, as a theme, can support targets of other themes as it helps to connect different sectors and sectoral targets;
- (i) Different messages should be used, according to the target group and age:
 - going to school and learning about traffic rules and dealing with traffic safety (children);
 - walking and cycling for commuting and to public transport hubs (people of working age); and
 - safe use of (e-)bikes and walking (elderly people);
- (j) Improve the data collection and monitoring of physical activity and active mobility in a comparable and relevant way between countries. At this moment the best comparable indicator for physical activity is "time per km spent walking and/or cycling per person per day" (WHO indicator²).

Overall conclusions/context/levers for change

- (a) Motorised transport is an important source of CO₂ emissions, air pollution and noise in the European Region, has a strong impact on climate change, exerts pressure on green and urban space, affecting millions of people in the European Region;
- (b) Across all European countries, lower socioeconomic groups are more likely to live in areas with higher than average air pollution levels, and are more often exposed to traffic-related air pollutants, contributing to health inequalities;
- (c) For many people across the EU, personal car use continues to be the principal means of transportation for the most recurring tasks, such as commuting to work, or shopping. Social norms, habits, and the design of urban spaces continue to prioritise motorised vehicles;
- (d) Many people like the idea of more walkable and cycle-able areas, for which ensuring good quality and affordable public transport is also crucial (Source: Five-country survey INHERIT);
- (e) Replacing passenger-car-kilometres by cycling reduces fuel consumption, GHG and air pollutant emissions and noise³. It will also help in reducing car crash fatalities and injuries. The indirect economic benefits of avoiding car accidents by doubling the current level of cycling is estimated at €3.0 billion per year⁴. Attention needs to be paid though to safe cycling infrastructures and the safe use of e-bikes, in order to prevent an increase in cycling accidents;
- (f) Encouraging pertinent sectors can help to design transport-related policies that deliver benefits to environment, health and climate (the 'triple win') and work together across sectors (transport, urban planning, social inclusion, education, environment, and health) to deliver these. Encourage cities for example to implement Sustainable Urban Mobility Plans and the Pan European Plan for Cycling Promotion;
- (g) Long-term cross-sector commitments to create an environment that makes active mobility easy and convenient:
 - Adequate spatial planning makes it easy and safe for people to engage in active transport (e.g. separate cycling and walking lanes, facilitating active transport to schools and work).
 - Developing bicycle highways enables fast and safe cycling for longer distances.
 - Ensuring public transport is more interconnected, especially for low-income neighbourhoods, makes public transport accessible for all.

² WHO, available for 28 EU countries

³ According to ECF, passenger cars emit about 271 grams of CO_{2e} per km.³ Doubling the current rate of cycling will reduce GHG emissions by 8 million tons of CO₂, yielding €1.1 billion in indirect economic benefits per year.

⁴ Using OECD car fatalities, European Union injury estimates⁴ and casualty-related costs from HEAT, the indirect economic benefit of avoiding car accidents (reduced fatalities and serious or slight injuries) by doubling the current level of cycling is estimated at €3.0 billion per year. Based on a German cost-benefit study, the indirect economic benefit of avoiding material damage from car accidents after doubling the current level of cycling in the region will amount to €4.9 billion per year (refs in comment bureau).