

Bringing health into transport planning:

**the new Health Economic
Assessment Tool for Walking
and Cycling**

Informal Document No 7

**Walking and cycling: the potential for better
health**

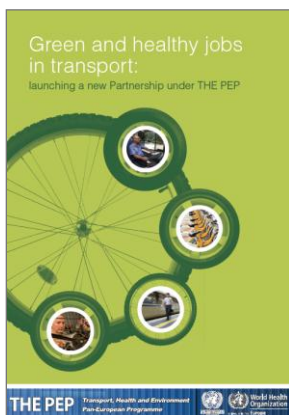
- **Physical activity plays an important role in health:**
 - CVD, Cancers, diabetes type 2, depression, functional limitations, obesity, ...
- **For example, regular walking and cycling can reduce all-cause mortality by up to 30%**
 - Benefits of w/c outweigh the risks (injuries, air pollution etc) by far

The benefits of walking and cycling: helping other sectors achieve their own goals

- **It's easy and equitable**
 - Avoids dependence on facilities for physical activity
 - Most people can do it: equitable and easily accessible
 - Does not require much extra time
 - Minimal investment of household income
- **It can have a big impact**
 - In Europe, many car trips are short
 - Shifting some of these trips to walking and cycling can help to
 - Improve road safety, air quality and noise
 - Reduce need for more infrastructure for cars
 - Improved accessibility and quality of urban life
 - Reduce congestion, energy consumption and CO2 emissions
 - Complement technological improvements to vehicles and fuels



...and there can also be benefits for job creation



- **Active travel, bike share schemes**
- **Improved public transport and increased attractiveness**
- **Technology to reduce emissions per mode**
- **Encouraging behavior change**
- **Mobility management**
- **Freight (e.g. cargo bikes)**
- **Tourism**
- ...

Health Dividends from Green Growth

- Much greater health gains from shifting to rapid transit/public transport and walking and cycling than from improving fuel and vehicle efficiency



The question

- If x people walk/cycle a distance of y kilometers on most days, what is the economic value of the health benefits that occur as a result of the reduction in mortality due to their physical activity?

Collaborative project

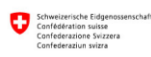
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Financially supported by the European Union in the framework of the Health Programme 2008-2013 (see agreement 2008/12/07). The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

The answer

<http://www.euro.who.int/HEAT>



HEAT
Health economic assessment tool

- Introduction
- HEAT for cycling
- HEAT for walking
- Current Assessment
- Previous Assessments
- Acknowledgements

HEAT > Introduction

Welcome to the WHO/Europe Health Economic Assessment Tools (HEAT) for walking and for cycling.

This tool is designed to help you conduct an economic assessment of the health benefits of walking or cycling by estimating the value of reduced mortality that results from specified amounts of walking or cycling.

The tool can be used in a number of different situations, for example:

- When planning a new piece of cycling or walking infrastructure.

HEAT attaches a value to the estimated level of cycling or walking when the new infrastructure is in place. This can be compared to the costs of implementing different interventions to produce a benefit:cost

More information

What data do I need?

To produce an assessment, you need to provide data on the number of people walking or cycling, and the amount of walking they are doing (or are projected to do).

[more...](#)

The features

- **Step-by-step online tool to calculate the economic value of the health benefits of regular walking and cycling**
- **Recognises importance of economic analysis in transport: benefit-cost ratio is king**
- **Evidence-based, transparent and adaptable**
- **Various data entry options**
- **Explanations, tips and hints on every step**
- **Print and save results**

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Example: Moscow

Reduced mortality as a result of changes in walking behaviour

The walking data you have entered corresponds to an average of 30 minutes per person per day.

This level of walking provides an **estimated** protective benefit of 23 % (compared to persons not walking regularly)

From the data you have entered, the number of individuals who benefit from this level of walking is: **115,000**

Out of this many individuals, the number who would be expected to die if they ~~were not~~ walking regularly would be: **1,351**

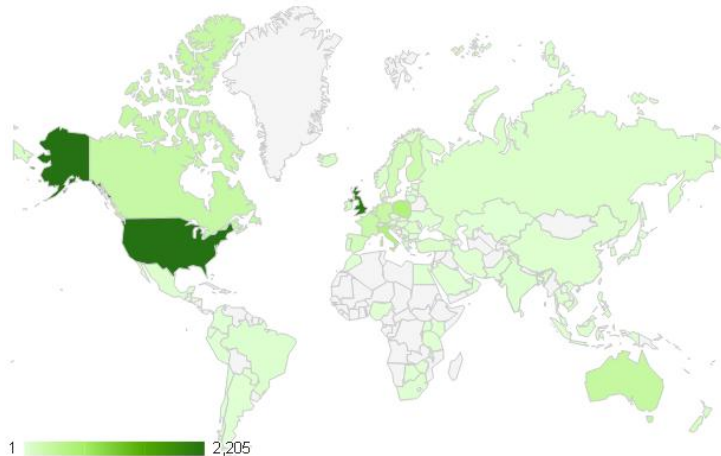
The number of deaths per year that are prevented by this level of walking is: 306.27

Financial savings as a result of walking

Currency: EUR, rounded to 1000

The value of statistical life in your population is:	1,574,000 EUR
The annual benefit of this level of walking, per year, is:	482,063,000 EUR
The total benefits accumulated over 10 years are:	4,820,635,000 EUR
When future benefits are discounted by 5 % per year:	
the current value of the average annual benefit, averaged across 10 years is:	372,237,000 EUR
the current value of the total benefits accumulated over 10 years is:	3,722,366,000 EUR

HEAT use worldwide



HEAT user guide launched in spring 2012



- Complete *HEAT for walking and cycling website and guide to be available in English, French, German, Finnish, Spanish and Russian by February 2013*

Dissemination events

- **THE PEP side event at ITF Forum (May 2011)**
- **POLIS conference (November 2011)**
- **THE PEP side event in Astana (September 2011)**
- **THE PEP workshops Kyiv (2011) and Moscow (2012)**
- **Direct mailings**
- **Through European Commission (DG SANCO, DG MOVE, DG EAC)**
- **WHO Healthy Cities Conference, St Petersburg (June 2012)**
- **PHAN project city dissemination events (2012)**

Next steps

- **Translations (winter 2012/13)**
- **Offline mode (fall 2012)**
- **Trainings (starting 29 November)**
- **Documentation of successful applications**
- **Expert meeting on updating and expanding the functionality and scope of HEAT (December 2012):**
 - **air pollution, injuries, CO₂, morbidity**
- **Further PHAN city dissemination (September 2012), e.g. HEPA Europe meeting**

