

Health economic assessment tool (HEAT) for cycling and walking

HEAT is an online resource to estimate the economic savings resulting from reductions in mortality as a consequence of regular cycling and/or walking. It is based on best available evidence, with parameters that can be adapted to fit specific situations. Default parameters are valid for the European context.

HEAT calculates the answer to the following question: if x people cycle or walk y distance on most days, what is the economic value of mortality rate improvements?

Application of HEAT for cycling in the former Yugoslav Republic of Macedonia

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The Institute of Public Health of the former Yugoslav Republic of Macedonia (IPHMK) conducted the initial assessment of the economic savings as a consequence of cycling among persons who regularly cycle in the capital city of Skopje in 2011. The sample of cyclists was very small and certainly not representative (n=24), but still sufficient to promote the HEAT for cycling as a valuable tool in the hands of public health professionals.

The average age of the cyclists was 38.3 years with predominantly male participants. Since data on most of the cycling indicators in Macedonia is lacking, we only entered the minimum needed data on the number of trips per day and the average length of the trips. The default values given in the HEAT were employed for all the other parameters.

The average trips per day were 3. The present value of the mean annual benefit resulting from reduced mortality, for the examined population, resulted in EUR 33.000. For the rather small number of participants and keeping in mind the size of the Macedonian economy, this value should not be underestimated and should be seen as valuable initial indicator and strong encouragement for further research. That research should comprise larger samples of regular cyclists, particularly targeting the “commuting population”.

IPHMK has contacted and in the near future is planning to present the findings of the study to the authorities of the Skopje City administration in order to stimulate them to take additional action related to the promotion of cycling and relevant infrastructure development. It will also be a good opportunity to present to these authorities this valuable tool for economic assessment of health benefits.

IPHMK is also planning to conduct a health economic assessment of working by using HEAT for walking.
