TRANSPORTATION, AIR POLLUTION AND PHYSICAL ACTIVITIES (TAPAS): GENERAL DESCRIPTION OF THE 6-CITY ACTIVE TRAVEL POLICY INTEGRATED HEALTH RISK ASSESSMENT PROGRAM

Audrey de Nazelle, Center for Research in Environmental Epidemiology (CREAL), Barcelona, Spain. anazelle@creal.cat
Zorana Jovanovic Andersen, Institute of Cancer Epidemiology, Danish Cancer Society, Strandboulevarden 49, 2100 Copenhagen, Denmark.
Ari Rabl, CEP, ARMINES/Ecole des Mines de Paris, 6 av. Faidherbe, 91440 Bures sur Yvette, France
Hana Brůňová-Foltýnová, Kolin Institute of Technology, U Borku 607, 28002 Kolin, Czech Republic
Martina Ragettli, Institute of Social and Preventive Medicine, Basel University, Basel, Switzerland.
Hélène Desqueyroux, Agence de l’Environnement et de la Maîtrise de l’Energie (ADEME), Paris, France.
Marko Tainio, Systems Research Institute, Polish Academy of Sciences, Warsaw, Poland; Department of Environmental Health, National Institute for Health and Welfare (THL), Kuopio, Finland
Jean-François Toussaint, Institut de Recherche bioMédicale et d’Épidémiologie du Sport (IRMES), Paris, France.
Mark Nieuwenhuijsen, Center for Research in Environmental Epidemiology (CREAL), Barcelona, Spain. on behalf of the TAPAS consortium*

Background: Active travel policies can address some of the greatest global public health challenges - physical inactivity and urban air pollution - while generating multiple co-benefits. Risks may also arise for some who shift to active travel and increase air pollution inhalation and traffic hazard exposure. TAPAS aims at assessing health impacts of such policies in an integrated framework in 6 case-study cities: Barcelona, Basel, Copenhagen, Paris, Prague, and Warsaw.

Methods: TAPAS operates at the interface of policy and scientific research. Program steps include: 1) development of a conceptual framework linking active travel policies to health, 2) expert international workshop assessing conceptual framework and state-of-the-art knowledge on relevant exposure-response functions; 3) criteria development for identifying policies of interest in case-study cities; 4) local stakeholder involvement to confront potential choice of policies with local needs and interest; 5) identification of commonalities across case study policies for comparable assessments; 6) identification of local data sources for model inputs; 7) quantitative model development. Also, TAPAS case-study city partners develop specific research projects to provide new knowledge filling research gaps in the current framework.

Results: Steps 1-2 have been reported (de Nazelle et al. 2011). Candidate policies were classified in terms of a) known or quantifiable effectiveness, b) local and international interest, and transferability to other cities; c) time and scale of implementation. TAPAS partners identified policies of greatest interest (see accompanying posters), from which the most common themes were selected for preliminary assessments: Bike -lane network; Bike parking; inter-modality; traffic-calming; pricing (parking/congestion); bike sharing systems. A preliminary quantitative model was built and will be populated with local data.

Conclusion: TAPAS is viewed as a useful framework by stakeholders. It will provide an evidence-base for designing policies that encourage a shift to active transportation providing physical activity and other health benefits and mitigate risks.

*Others include: Hala Nassif, David Rojas-Rueda, Charlotte Braun-Fahrlander, Jaume Matamala, Geoffroy Berthelot, Corinne Praznoczy, Michelle Mendez, Josep Maria Anto.