**Factsheet**[1]

**COPHES**

A harmonised approach to Human Biomonitoring in Europe

**DEMOCOPHES**

Measuring environmental exposure of children and their mothers in a European human biomonitoring survey: a feasibility study

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| Background | The European Environment and Health Action Plan 2004-2010 calls in its Action 3 for the development of a coherent approach to human biomonitoring (HBM) in Europe. To meet this request the European Commission funded recently two projects:<br>• COPHES with 35 partners from 27 European countries works on harmonised processes for a sustainable HBM framework in Europe (2009-2012) and support DEMOCOPHES for the implementation of the feasibility study.<br>• DEMOCOPHES will test out these processes in 16 EU participating countries (2010 -2012) |
| Slovakia Study leaders | Ing. Katarína Halzlová, MPH., Mgr. Milada Eštoková, PhD. And Mgr. Milan Kališ, PhD. from Public Health Authority of the Slovak Republic<br>MUDr. Eleonóra Fabiánová, PhD. and MUDr. Katarína Slotová, PhD. from Regional Public Health Authority, Banska Bystrica. |
| COPHES Project Leaders<br><br>DEMOCOPHES Project Leaders | Dr. Sc. Reinhard Joas, Dr. Sc. Alexandra Polcher, Dr. Med. Anke Joas, BiPRO, Germany<br>Dr. Med. Ludwine Casteleyn, Katholieke Universiteit Leuven, Belgium<br>Ir. Pierre Biot and Ir. Dominique Aerts, FPS Health, Food chain safety and Environment, Belgium |
| Project Funders | • COPHES: Grant agreement no. 244237 funded within the 7th Framework Programme of the European Community.<br>• DEMOCOPHES: Grant agreement LIFE09/ENV/BE/000410 funded by the LIFE+ "Policy and governance" instrument of the European Community.<br>• With additional financial support from the Public Health Authority of the Slovak Republic. |
| Objectives of both projects | • To demonstrate the feasibility of a EU harmonised approach to HBM by implementing a pilot study in 16 EU countries (Belgium, Cyprus, Germany, Denmark, Poland, Romania, Slovenia, Spain, Hungary, Sweden, United Kingdom, Portugal, Czech Republic, Slovakia, Luxembourg and Ireland). 5 additional countries are ad-hoc members of this project (Austria, France, Switzerland, Norway and Croatia).<br>• To test the harmonised protocols by determining levels of cadmium, mercury, phthalates and cotinine in the European population using human biomarker and questionnaire data.<br>• A well targeted training and capacity building program will be available for all involved countries. |

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| Themes | Human biomonitoring; Environment; Health; Pollutants; Exposure |
| Relevance for the Slovak Republic | The Slovak Republic at present does not have a National human biomonitoring programme addressing the general population. This project will develop and test a framework for the assessment of population exposure to environmental chemical pollutants using key model compounds. The framework can then in the future be used to determine population exposures to other compounds and will be enhanced by the ability to make international comparisons across Europe. The intention is to integrate human biomonitoring data with data collected in health examination surveys for Slovak Republic.<br>The results from this project and subsequent use of the framework will support evidence based policy development for Public Health protection. |
| Sampling | Potential participants will be obtained from population registries or via schools. |
| Study population | Children aged 6 to 11 years old and their mothers or foster mothers<br>A minimum of 120 child mother pairs will be recruited from around Banská Bystrica (Slovenská Ľupča) and Brusno) and Bratislava.<br>Both the child and mother must be living in the same residence and having been living in the city or village for five or more years.<br>Only one child per mother will take part. |
| Study methods – investigation | The study involves a home visit to:<br>• Interview the mother by questionnaire concerning personal data and living conditions.<br>• The collection of small samples of urine and hair from mother and child. Visit duration: 90 minutes<br>The study also involves the measurement of urinary cadmium, phthalates and cotinine as well as mercury in the hair of the children and their mothers. |
| Sampling phase | September to December 2011 |
| Results | Participants will be sent their individual results, if they wish to receive them.<br>Policy leads will be presented with the results for their member state and later European comparisons will be made.<br>Collated results will also be sent to participants and interested parties.<br>The collated results will be published on the project website. |
| Privacy policy | Information that is likely to identify participants will be removed from the study data and samples as soon as possible after collection. Data will be coded to link participant identifiers with their personal data in order to enable participants to be contacted about their results.<br>Data or samples provided to researchers will not include personal identifying details.<br>Staff involved will sign confidentiality agreements and are trained in the handling of personal data. |
| Ethics | The study proposal will be approved by the Research ethics commission under Public Healt Authority of the Slovak Republic and notified to the privacy authorities.<br>Participation in the study or part of the study is voluntary and a participant can withdraw at any time. Informed consent from the participants will be required. |

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| Information sources | Further details on the study and its progress can be found on the national website www.uvzsr.sk or can be requested vie eu-hbm@bipro.de. |