

**COPHES**  
Consortium to Perform  
Human Biomonitoring  
on a European Scale

**DEMOCOPHES**  
Demonstration of a study to  
coordinate and perform  
human biomonitoring  
on a European Scale

# HUMAN BIOMONITORING FOR EUROPE

a harmonised approach



## Needs and potential for HBM as policy tool in Europe



## Key policy requirements and needs related to HBM?

- A) Translation of biomonitoring results into policy recommendations
  - Reliable and scientifically robust results with sufficient quality in relevant policy areas
  - Reduced delay in and improved accessibility of Hbm data
  - Better knowledge about average exposure to environmental chemicals (reference values)
  - bridge the gap between environment and health data (reference and HBM guidance values)
  - Communication of results in an easy and correct way
- B) Accepted chemical parameters and study design  
(international level, national scope, study participants)
- C) Feasible cost – benefit relations  
(sample size, linkage to existing schemes and structures)



## Key challenges for HBM as policy tool?

- Identification of priority substances
- Proper interpretation and use of HBM data for policy making initiatives
  - Need of reference (surveillance) and health based (research studies) values
  - comparable data, necessary level of representativeness and data accessibility
  - Integration of HBM information with
    - information from environmental monitoring
    - information from health surveillance
    - modelling work for external and internal exposure including mixtures
- Sustainable structures for gathering, storing and analyzing biomarker and other data
- Appropriate communication of results



## Potential support of HBM for chemicals management?

1. Supply most relevant exposure data
2. Encourage initiation of further investigations (REACH Art 45, para 5)
3. Identify substances of very high concern (SVHC) or chemicals of equivalent-concern (REACH, Annex XIV)
4. Control efficiency of risk reduction measures or substitution in authorized substances underlying minimization requirements (REACH Art. 60, para 10)



Further needs and  
major priorities from  
point of view of  
participants

?



## Follow-up to (DEMO)COPHES and involved partners?

1. Reduced delay and improved data storage and accessibility (EEA)
2. Make HBM data available in formats suitable for different users (WHO, UNEP)
3. Upscale to an EU HBM survey on a representative sample of the European population (Member States)
4. Cover further chemicals in coordination with EU institutions (ECHA, EFSA)
5. Integrate with socio-economic data (ESTAT)
6. Improve link with spatial data infrastructure development (INSPIRE)
7. Collaborate or integrate with established national survey schemes (EHES)
8. Integrate exposure data and HBM data with pharmacokinetic models, body burden modelling (JRC)



## Steps forward and tools to promote HBM at EU level?

- A transparent process to define EU HBM reference and health based values; this could build on the process defined for exposure limits for chemicals in the workplace (SCOEL)
  - An advisory group of EU experts providing recommendations
- A decision making process on selection of substances and study design
- A dedicated funding for long-lasting programmes &
- Legal instruments or policies that integrate capacities, competences skills, and infrastructures (labs, biobanks).



## HBM as policy tool – the way forward ?

### EU/international:

1. Commitment for harmonised HBM approach
2. Development of E&H indicators
3. Idea on feasibility of comparability of data
4. First set of reference data on environmental chemicals
5. Tested infrastructure in 17 countries
6. Expert network

### National level:

1. Capacity building on practical application of HBM
2. Awareness raising about possibilities of HBM
3. Integration of national policies on food, environment and health
4. Agreements between industry and competent authorities
5. Selection of chemicals of interest ongoing and expanding (>100)



Thank you for your attention

[www.eu-hbm.info](http://www.eu-hbm.info)