

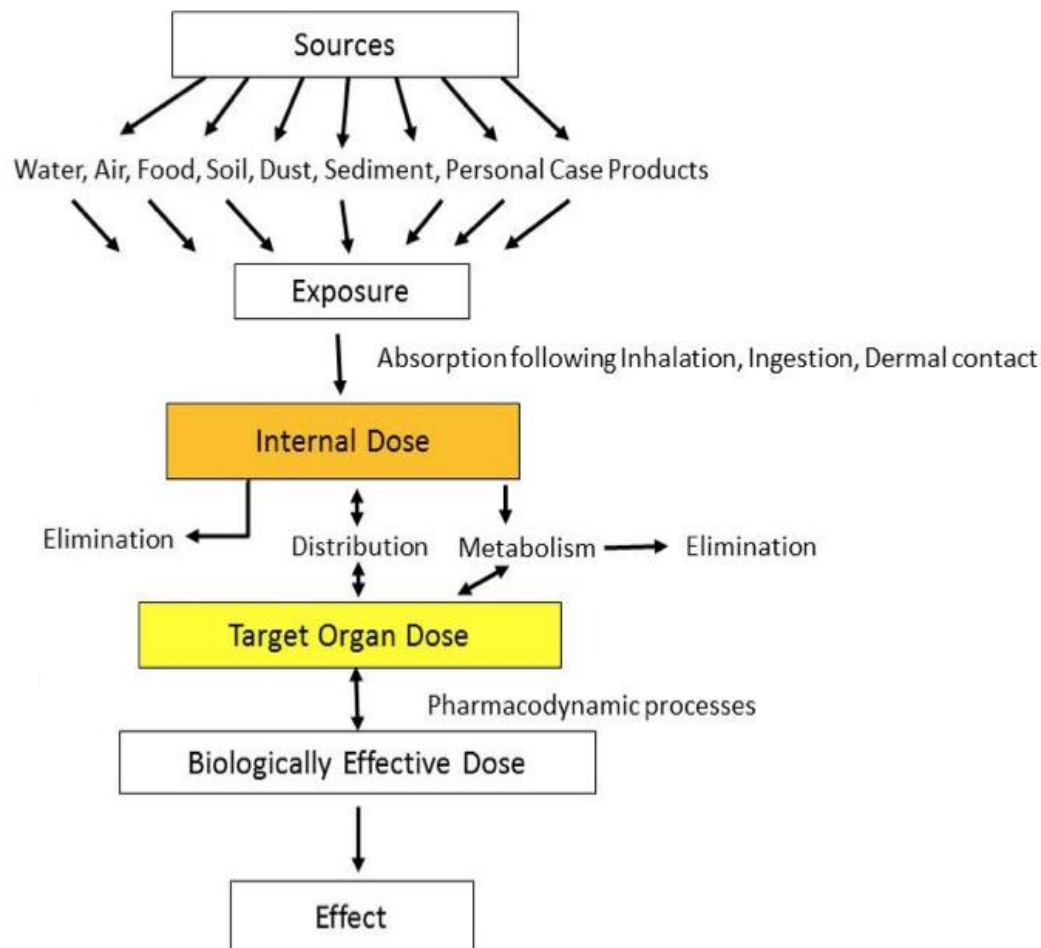


science and policy
for a healthy future

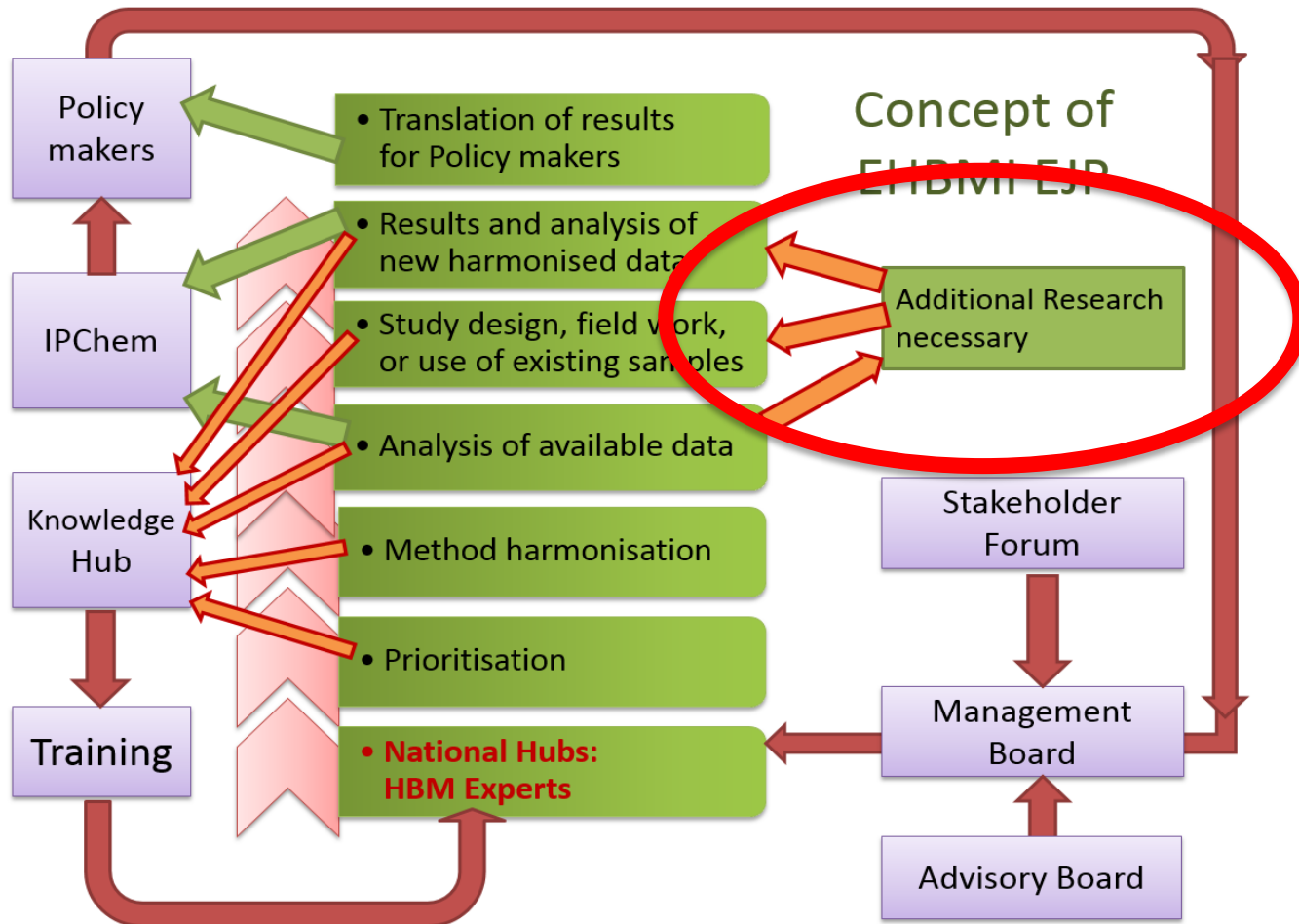
Consultation Group 1 - Stakeholders' research needs linked to prioritised chemicals, mixtures and emerging substances as well as future priorities

Brussels 9/12/2016

HBM4EU: A biomonitoring platform for Europe connected to Exposure and health research



The HBM4EU concept



**Ambitious and up to date research on exposure and health
in order to support public decisions making**

HBM4EU pillars and WPs

Pillar 1: Science to Policy

WP4: Prioritization and
annual work plan
development

WP5: Translation of
Results into Policy

WP6: Sustainability and
capacity building

Pillar 2: European HBM Platform

WP7: Survey Design and
preparatory fieldwork

WP8: Fieldwork

WP9: Laboratory analysis and
quality assurances

WP10: Data Management

Pillar 3: Exposure and Health

WP11: Linking HBM to health surveys
and registers

WP12: From HBM to exposure

WP13: Establishing Exposure Health
relationships

WP14: Effect Biomarkers

WP15: Mixtures, HBM and human
health risk

WP16: Emerging Chemicals

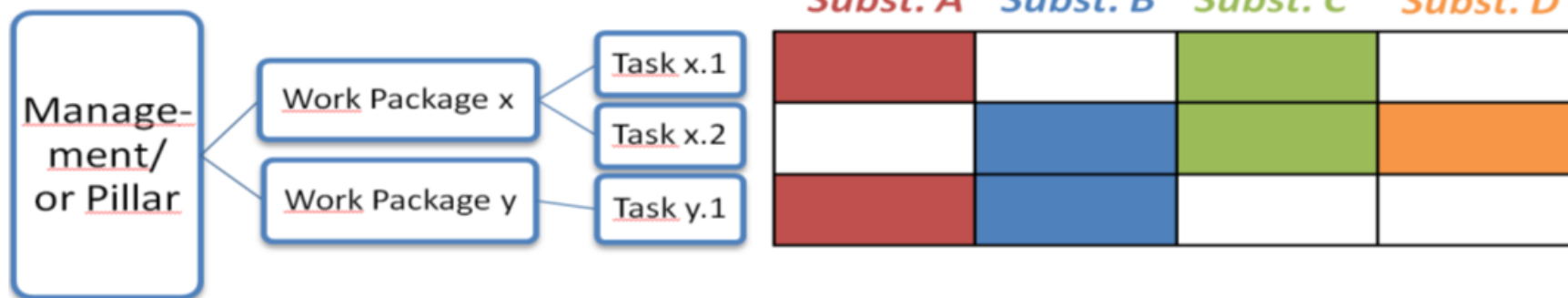
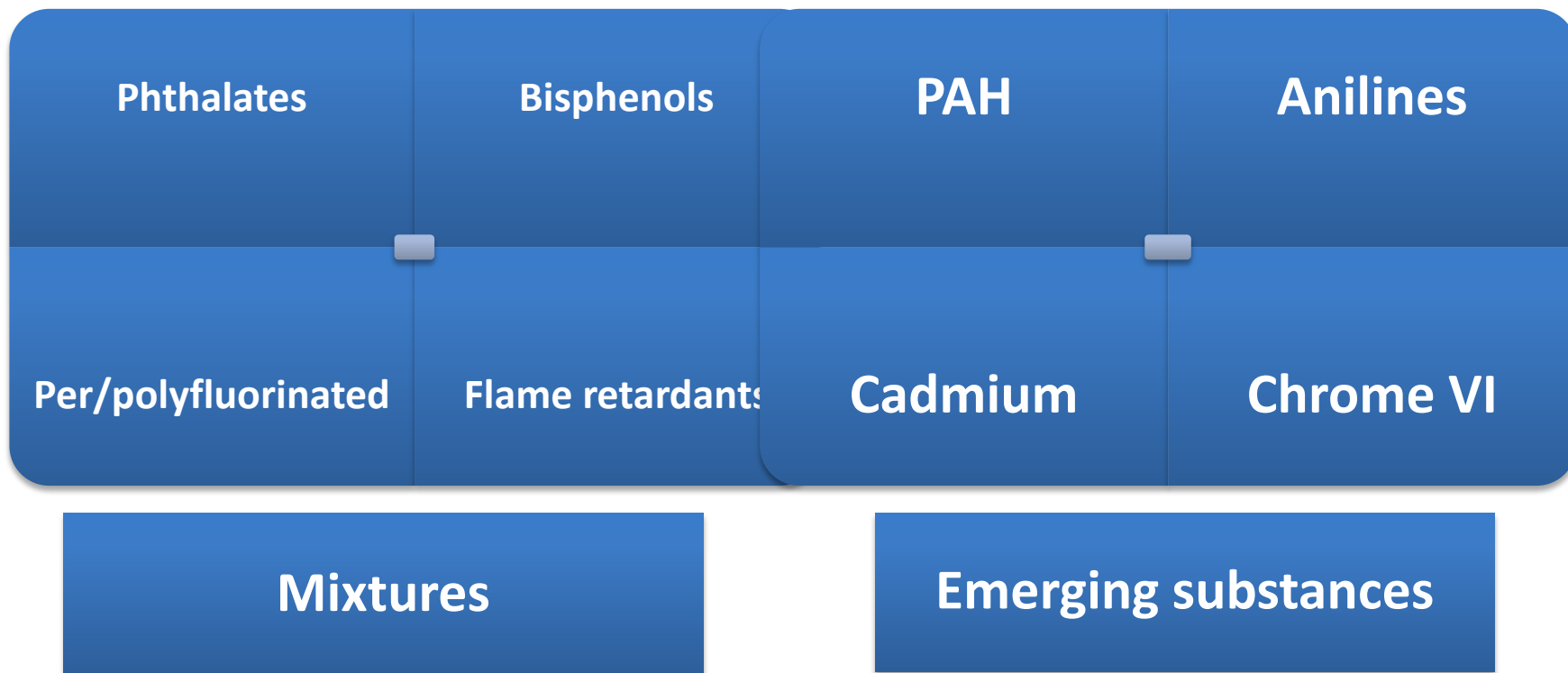
WP3: Internal Call Management

WP2: Knowledge Hub

WP1: Programme management

Scientific and Administrative Management

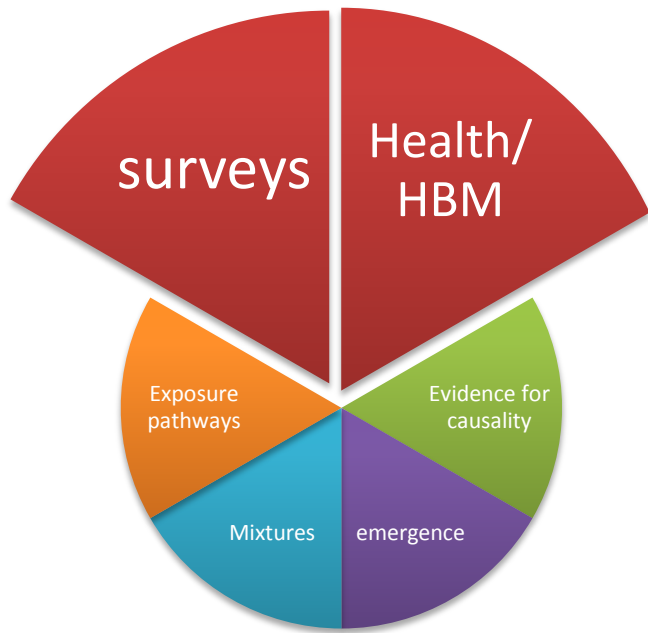
National and EU Stakeholders; Advisory Board



Identifying and filling knowledge gaps

Research issues

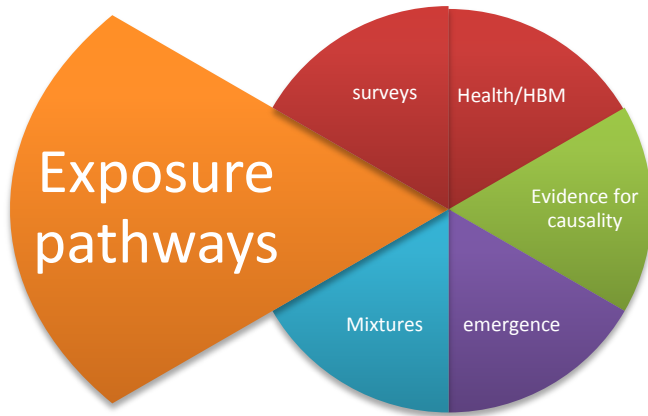




Cross sectional/birth cohorts/occupational
Time trends
Regional differences
Occupational exposures
Vulnerable population
Integrating HBM/Health surveys

Questions:

- **What do to first? What is lacking for the moment?**
- **What is highest priority??**
- **How to best integrate HBM and health surveys**



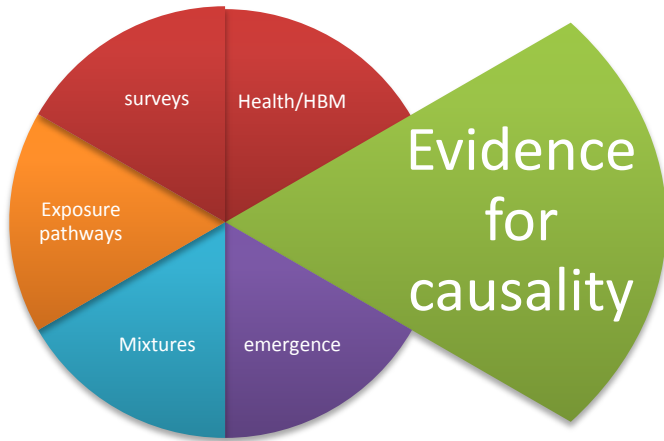
Exposure sources

Questionnaires: *local environment; demographics; socio-economic status; habits; lifestyle; diet; health*

Exposure and distribution models

Questions:

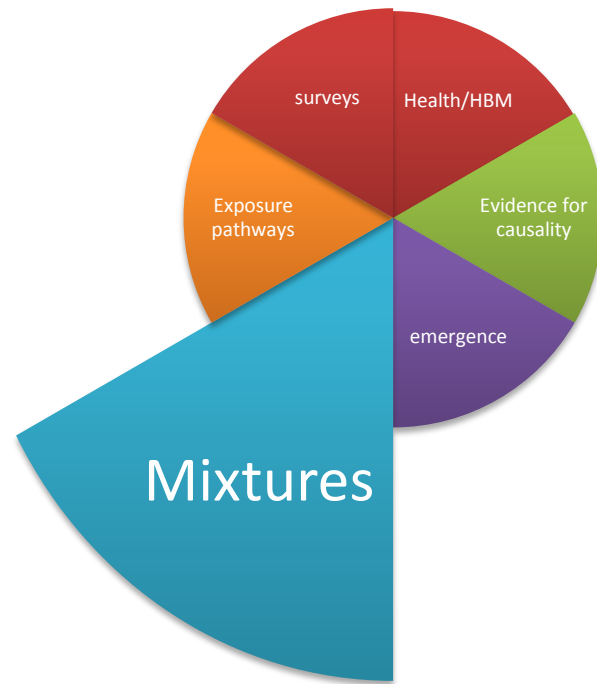
- **How to integrate best environmental/HBM/health studies**



**Evidence from available cohort biosamples:
developmental stages, adults, workers
Identifying AOP, mechanisms of action
Relevant effect biomarkers
PBTK, target tissue dose**

Questions:

- **How to integrate HBM in a systems medicine approach?**
- **How to take into account mechanistic studies, effect biomarkers?**
- **First steps in the initiative?**



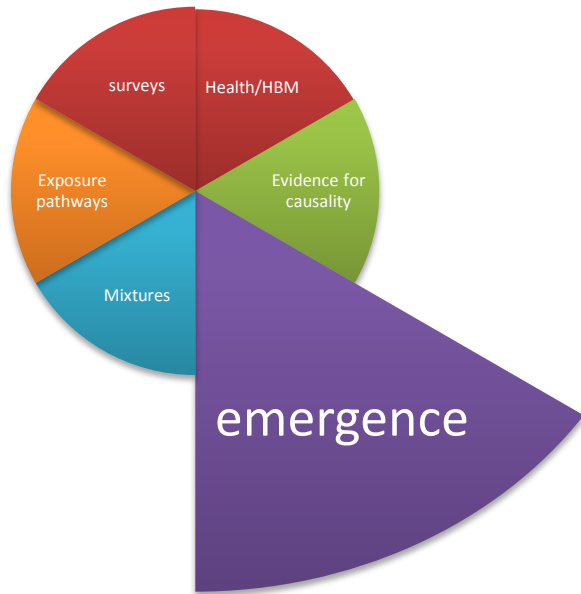
**Identifying the most relevant mixtures from
HBM studies**

Evidence for health effects

Targeted multi-country studies

Questions:

- **Prioritizing mixtures: chemical groups, products, exposure, populations, mode of action?**
- **How could HBM support the integration of mixtures in a regulatory framework?**



Seeking hidden chemicals
Using non targeted approaches
Considering new products, environmental studies, etc.
Feeding future priorities

Questions:

- **Relevance of using HBM to identify emerging substances and early signals ?**
- **Integrating data from ecosystems and consumer products?**

Perspectives



science and policy
for a healthy future

Discussion:

- Does the research programme fulfil the objective of bridging human biomonitoring and health effects?
- Does it support the sustainability of the initiative?
- Further suggestions?