

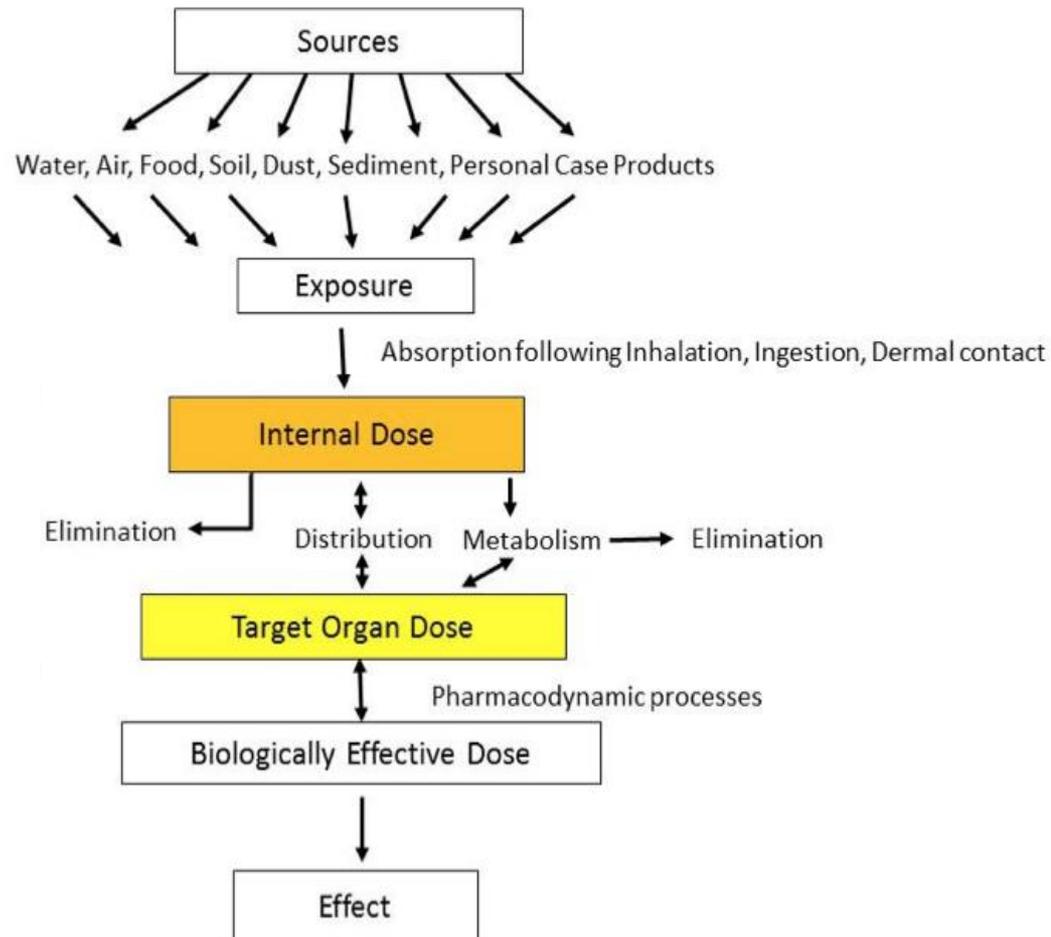


science and policy
for a healthy future

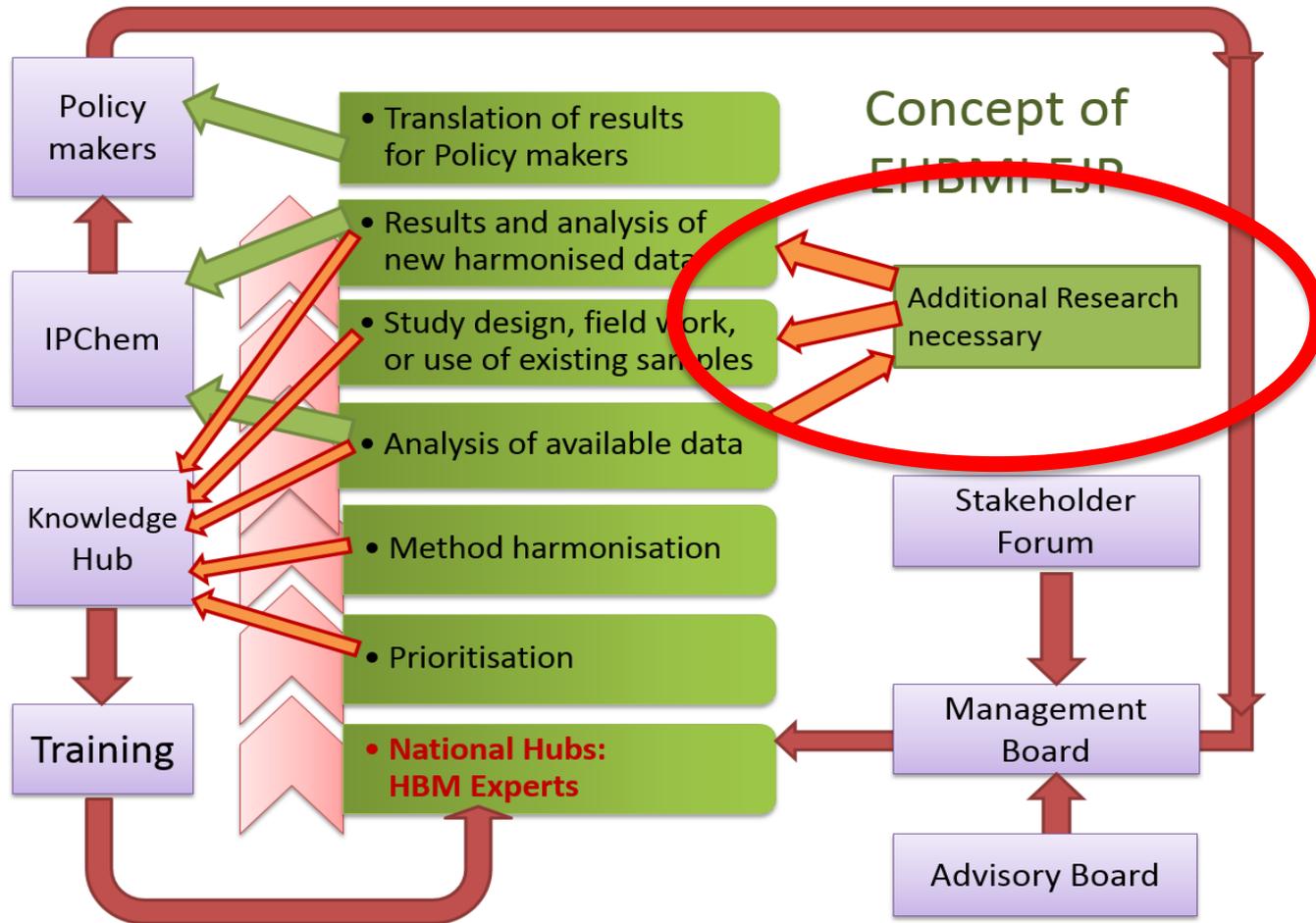
**Consultation Group 1 - Stakeholders'
research needs linked to prioritised
chemicals, mixtures and emerging
substances as well as future priorities**

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

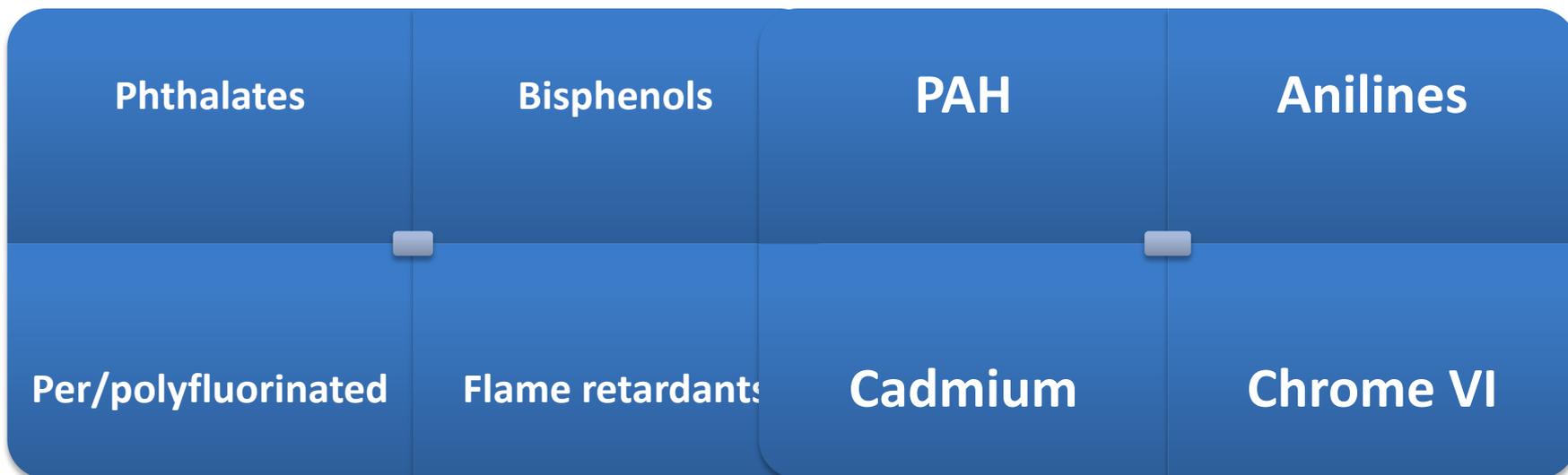
WP3: Internal Call Management

WP2: Knowledge Hub

WP1: Programme management

Scientific and Administrative Management

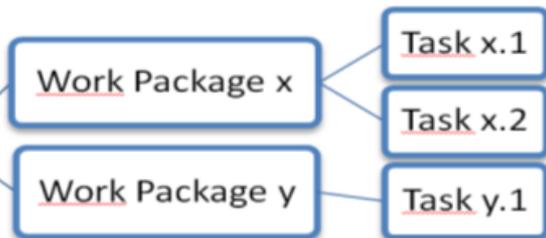
National and EU Stakeholders; Advisory Board



Mixtures

Emerging substances

Management/
or Pillar

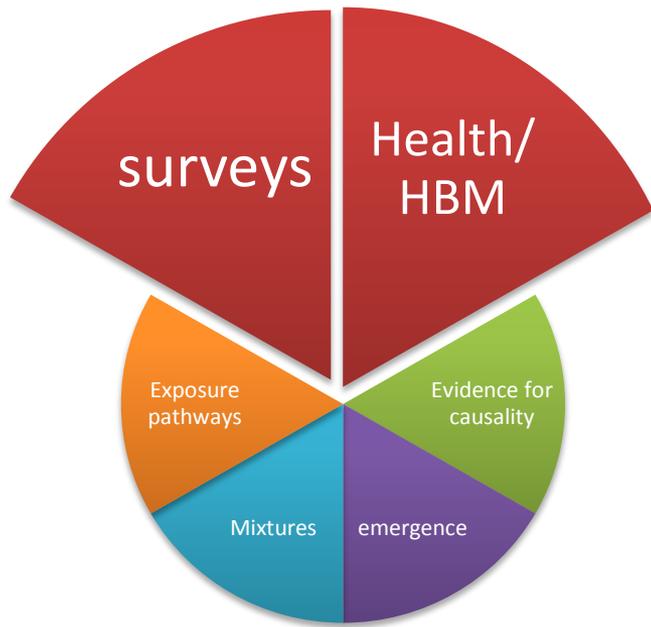


	<i>Subst. A</i>	<i>Subst. B</i>	<i>Subst. C</i>	<i>Subst. D</i>
	Red	White	Green	White
	White	Blue	Green	Orange
	Red	Blue	White	White

Identifying and filling knowledge gaps

Research issues

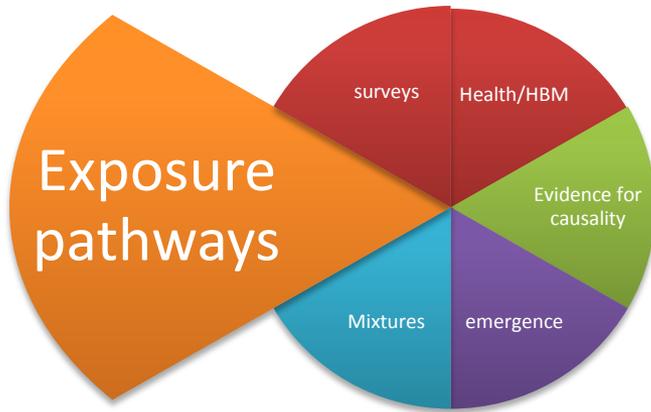




Cross sectional/birth cohorts/occupational
Time trends
Regional differences
Occupational exposures
Vulnerable population
Integrating HBM/Health surveys

Questions:

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



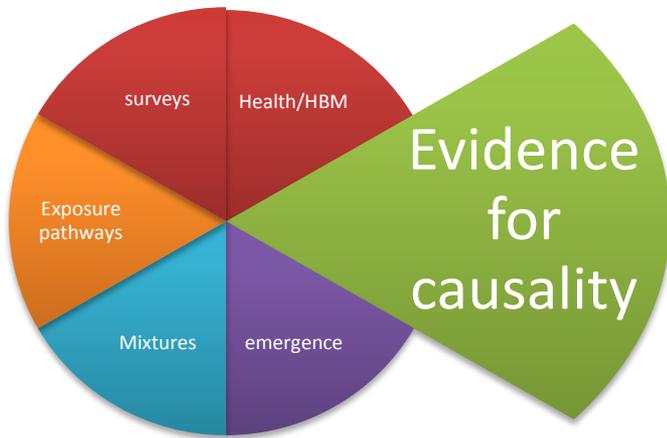
Exposure sources

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:

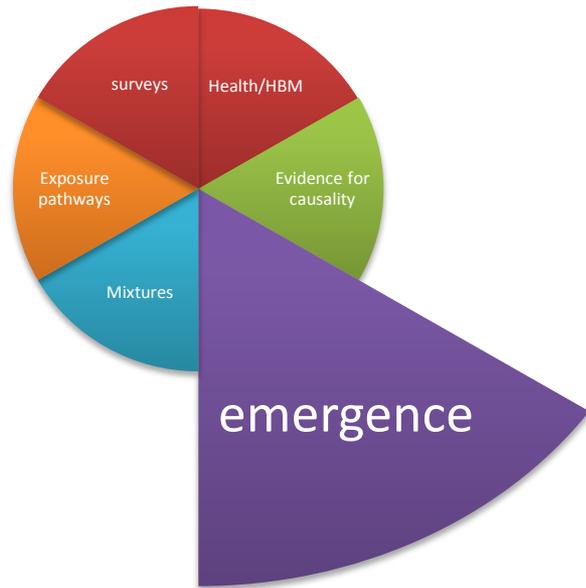
- **How to integrate HBM in a systems medicine approach?**
- **How to take into account mechanistic studies, effect biomarkers?**
- **First steps in the initiative?**



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?