

WORKSHOP 1

**BIOMONITORING EXPOSURE
TO OCCUPATIONAL CARCINOGENS
AT WORKPLACES (TOGETHER WITH
HBM4EU)**



HBM IN OCCUPATIONAL SETTING – CURRENT SITUATION

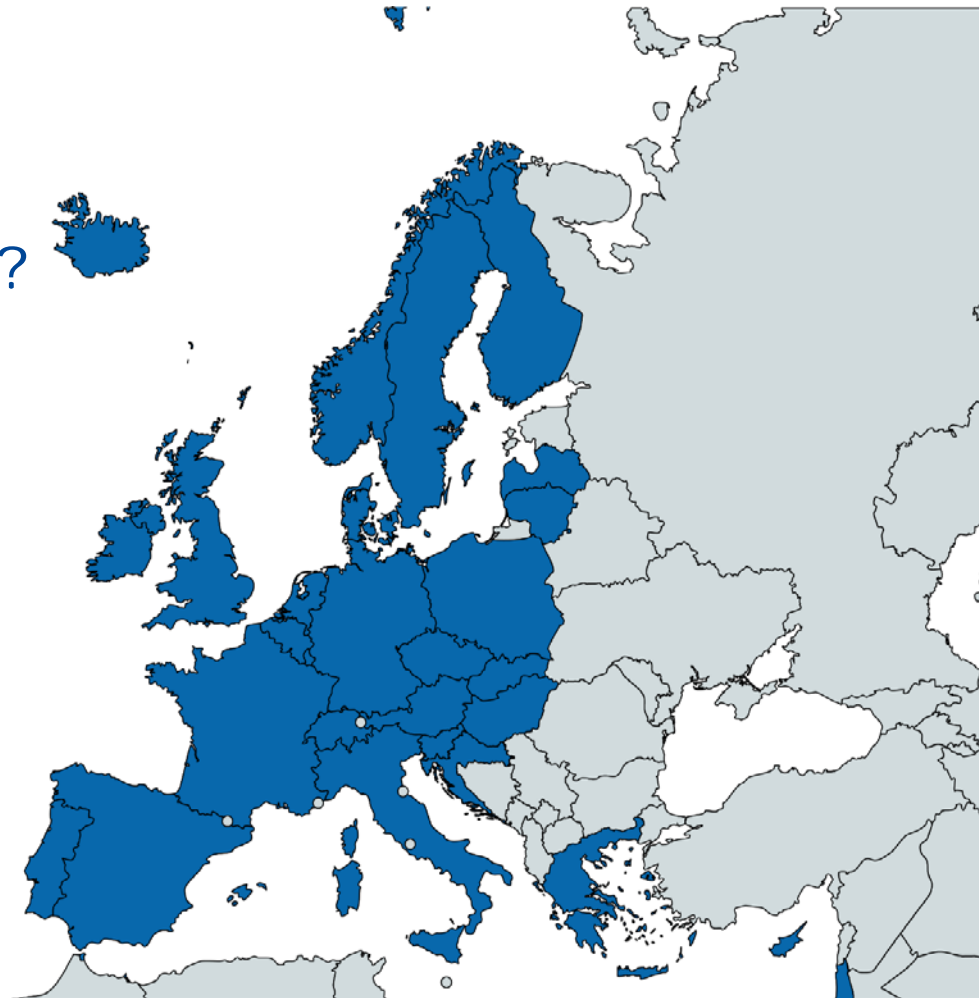
- Concern that from same biological samples where HBM analysis are done, many other markers could be measured, e.g. drugs, alcohol use.
- Considered as a tool for health surveillance and not an exposure assessment tool
- Allows to identify sources which cannot be identified by e.g. air measurements.
 - In metals, hands-to-mouth is an important exposure source and HBM is the only way to measure it

HBM4EU – EUROPEAN LEVEL HBM COLLABORATION



Aims to respond following questions:

- Exposure of the general population – and of workers?
- What is the exposure of sensitive sub-groups?
- Exposure differences in Europe?
- Is exposure driven by diet, consumer habits, occupation or environmental contamination?
- Health impact?
- Drivers of mixture risks/substances contributing to certain types of cancer?



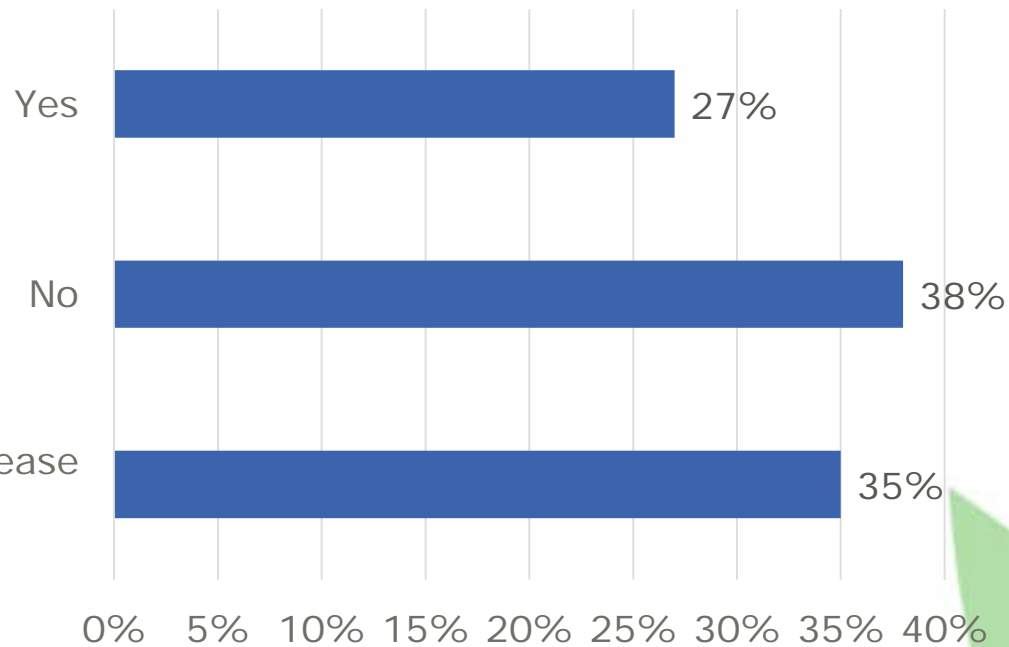
CONTRIBUTION OF HBM4EU TO PROTECT WORKERS HEALTH

HBM4EU

- **collects internal exposure data** on European level from various health-relevant chemicals **of the general EU population and workers.**
- allows better **comparisons of background exposure data with occupational exposures.**
- creates **practical guidance for the use of HBM in workplaces.**
- investigates **links of chemical exposures and mixtures to health effects** such as cancer and **derivation of HBM-GV.**
- supports the **knowledge on exposure routes** which may help **to improve protective measures** for workplaces.

BIOMONITORING IS NOT REGULARLY APPLIED IN THE RISK ASSESSMENT IN GENERAL

Considering the regulatory field you are working, is human biomonitoring regularly applied in your country?



In occupational health 60% considered that it is regularly applied – however in some countries it is only limited to P-Pb

Only in limited extent, please explain below

TO ENHANCE THE USE OF HBM IN RISK ASSESSMENT

- Need for better regulatory recognition of HBM
 - Inclusion of HBM and HBM limit values in legislation
- Need for supporting guidance for HBM use
- Need for guidance how to deal with ethical issues (including data protection)
- Need to clarify the role of HBM as a tool supporting workplace exposure assessment and risk management versus HBM as worker's health surveillance tool

