



science and policy
for a healthy future

HBM4EU Stakeholder Workshop November, 20

Pesticides authorised in the EU & metabolites

Group Members:

- Hans Verhagen, (EFSA)
- Tony Musu (ETUC)
- Jos Bessem, (VITO)

Key messages

- We have to shift paradigm: i.e. from the current regulatory approval model of pesticides (being animal models and extrapolation models) to real life data (i.e. HBM data). For sure when reregistration is requested.
- Clarification needed on whether the current regulation is protective enough for workers and consumers
- Clarity about mixtures. Facts to support or refute suggestions for combination or additivity effects

Pesticides authorised in the EU & metabolites

What is the concern from a stakeholder perspective?

- Occupational exposure, taking into account the real use by workers, farmers, families. So far only models are in use. No case study analysis. Hardly any measured data
- Apparent lack of policy responsibility for occupational and consumer exposure (not ECHA, not EFSA, but who then?)
- Correlation with effects by pesticides is necessary, not only exposure


Which knowledge gaps should be filled?

➤ Real external exposure data

➤ HBM can inform the relationship (or absence thereof) between exposure and health effects (both for occupational exposure and consumer exposure)

Pesticides authorised in the EU & metabolites

How can HBM4EU address the Concern?

 Measuring instead of modelling.

Pesticides authorised in the EU & metabolites

What kind of output/results do you expect from HBM4EU?

➤ Real facts, i.e. support for the hypothesis that there is a human health concern, or the falsification of the same hypothesis

Pesticides authorised in the EU & metabolites

How would you as a stakeholder use the result?

➤ Include workers perspective in the pesticide regulation

➤ Feedback into update of regulation so that for reregistration of pesticide active ingredients the produces shall deliver real measured data on internal exposure of workers and consumers



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Glyphosate

Group Members:

- Natascha Cingotti (HEAL)
- Marko Susnik (UAPME)
- Eva Ougier (ANSES)
- Tuomo Karjalainen (EC)

Key messages

- Standardised, accepted data and results
- Harmonised methods/ analytics
- Use Information for Communication to workers, decision makers, consumers,...
- Link health effects & substances in the body
- Mixtures / real life related to health

What is the concern from a stakeholder perspective?

- Adverse health effects: potential carcinogenicity; toxicity (reproduction; neurotoxicity); potential ED properties; concerns about use of substance in mixtures for pesticides (adjuvants...)
- Small and Medium Enterprises: hard to trust regulatory system. Get discussion out of the political into a science based discussion.
- Get more data, comparable data (not much there – nothing on the European Union)

Which knowledge gaps should be filled?

Workers protection

Several levels: General comparable Data; in depth data of subgroups (farmworkers – how much substances in their bodies, their children),

Mixtures

Glyphosate

How can HBM4EU address the Concern?

➤ See what is available – get what is not there

Glyphosate

What kind of output/results do you expect from HBM4EU?

- Show what data is there.
- Something that is done excepted. Guarantee high quality of data.
- Representativity, harmonised, specific subgroups.

Glyphosate

How would you as a stakeholder use the result?

- Communication, explanation,
Search for substitute
- Specific regulatory measures, around the substance



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Siloxanes

Group Members:

Sarah Peters (WECF), Tatiana Santos (EEB),
Christophe Rousselle (ANSES), Janice Robinson (DUCC),
Pelle Moos (BEUC), Sofie Norager (European Commission)

Key messages

- Exposure level high, heterogeneous group, there is knowledge on few specific substances
- Lack of knowledge regarding uses, exposure, life cycle, human biomonitoring & health
- Time trend, are levels increasing, we don't know about current exposure

What is the concern from a stakeholder perspective?

- Lack of regulatory action, although theoretically regulated, actually not scope of the restriction no narrow (rinse of products- only covering (~25%: in rinse of products which are restricted)
- Very widely used chemicals, high exposure
- Very many applications , inhalatory exposure, workplace exposure
- Bioaccumulation, Is there a bioaccumulation in humans?
Health effect (fertility, damage to unborn child
D4, D5: Concern for endocrine disruption: (scientific opinion decision pending)

Which knowledge gaps should be filled?

- Identity of whole group
- Biomarkers for siloxanes
- D4, D5: Concern for endocrine disruption: (scientific opinion decision pending)
- Bioaccumulation in humans

How can HBM4EU address the Concern?

- Development of biomarker
- Address the question of bioaccumulation in human
- Follow up the regulation

What kind of output/results do you expect from HBM4EU?

- Development of biomarker, -whole group/ family
- Picture of current exposure
- Verification of health effects
- Environmental concern- also human concern?

How would you as a stakeholder use the result?

➤ Feed into/promote process of restriction and authorization

➤ Raise awareness/ e.g. labelling of e.g. cosmetics

➤ ???



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Group Members:

- Van Kalmthout Danielle, (Genzinsbond)
- Joana Lobo Vicente (EEA)
- Tine Cattor (CEFIC)
- Isabel Maya Rubio (Business Europe)
- Daniela Mihats (AGES)

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Mercury and mercury compounds

Key messages

- Interpretation of the results for the public in an understandable manner
- Coordination, alignment and integration of data and policy

Mercury and mercury compounds

What is the concern from a stakeholder perspective?

- Fish consumption: pregnant women adopt their diet, fish is highly contaminated
- Traceability, take into account multiple exposure pathways throughout life

Mercury and mercury compounds

Which knowledge gaps should be filled?

➤ (Highly regulated)

➤ Information on exposure levels should be made available, comparison on exposure of total population and specific exposure groups

➤ Alignment between legislation

Mercury and mercury compounds

How can HBM4EU address the Concern?

➤ Collecting information, make it available in one single database

➤ Results should be presented for lay people

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Mercury and mercury compounds

What kind of output/results do you expect from HBM4EU?

- Better and coordinated policies
- Consumer fact sheets for nominated substances with an interpretation of the results

Mercury and mercury compounds

How would you as a stakeholder use the result?

- Reference values for the general population to compare to exposure of workers
- Communication to citizens



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Group Members:

- Dries Coertjens (University of Antwerp)
- Ninja Reineke (Chemtrust)
- Alick Morris (EC: DG Empl)
- Greet Schoeters (Vito)
- Elke Rauscher-Gabernig (facilitator: AGES)

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Name of
Substance /Group
**Arsenic acid and its
inorganic compounds**

Arsenic acid and its inorganic compounds

Key messages

- Neurotoxicity
- Multisource exposure: vulnerable groups (infants, workers)
- Added value: Policy evaluation, consumer advice

Arsenic acid and its inorganic compounds

What is the concern from a stakeholder perspective?

➤ Neurotoxicity

➤ Occupational exposure: limit value will be proposed

➤ General exposure: Belgium exceeding limit values

➤ Exposure of vulnerable groups: EFSA opinion

Arsenic acid and its inorganic compounds

Which knowledge gaps should be filled?

- Baseline exposure in the EU and trends (geographical, time, sectors of use, age groups)
- Sources of exposure (diet, water, occupational)

Arsenic acid and its inorganic compounds

How can HBM4EU address the Concern?

- Confirm biomarkers
- Do analysis and get results on exposure
- Collect data that are already available

Arsenic acid and its inorganic compounds

What kind of output/results do you expect from HBM4EU?

- Collection of data: IPCHEM
- Identify the sources of arsenic species
- Added value: Policy evaluation, consumer advice

Arsenic acid and its inorganic compounds

How would you as a stakeholder use the result?

➤ Consumer advice

➤ Information on occupational exposure in different sectors



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Nanomaterials

Group Members:

- Tine Cattoor (CEFIC)
- Dries Coertjens (University of Antwerp)
- Tatiana Santos (EEB)
- Markus Susnik (UAPME)

Key messages

- Important emerging topic.
- Applications are increasing. Perceived knowledge gap.
- Prioritisation, where do we need to focus on.
- Develop methods

What is the concern from a stakeholder perspective?

- You can not group nanomaterials with one Biomarker
- First see a problem – than start regulatory activities.
- Clear definition – narrow down to substances
- Identify hotspots
- Exposure is becoming higher. Not regulated. General lack of knowledge.
- Lack of regulatory action. There is regulation – in practice it is not happening.
- Reach – not covered

Which knowledge gaps should be filled?

- Develop methods for measuring nanomaterials in the body.
- Is there a biomarker available. Which method do you measure?
- Priorization of Nanomaterials: Exposure
Behaviour of Nanomaterials in the body

How can HBM4EU address the Concern?

➤ Develop accepted methods – substances.

➤ Measure

Nanomaterials

What kind of output/results do you expect from HBM4EU?

➤ Something new

➤ Starting with single materials, are there specific Nano-effects?

How would you as a stakeholder use the result?

➤ Worker protection

➤ Risk assessment

➤ Awareness raising, Communication: public

➤ Higher quality of regulatory action (more targeted)



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Group Members:

- Isabel Maya Rubio (Business Europe)
- Daniela Mihats (AGES)

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Lead and its compounds

Key messages

- Study the possibility to deal with the proposed metals (arsenic, mercury, lead) together
- Interpretation of the results for the public in an understandable manner
- Coordination, alignment and integration of data and policy

Lead and its compounds

What is the concern from a stakeholder perspective?

- Contamination of soils, drinking water and food
- Traceability, take into account multiple exposure pathways throughout life

Lead and its compounds

Which knowledge gaps should be filled?

- Information on exposure levels should be made available, comparison on exposure of total population and specific exposure groups
- Alignment between legislation
- Increase the knowledge on the influence of exposure to lead on children's health
- Study if the reference levels, which are applied to protect people, are still adequate

Lead and its compounds

How can HBM4EU address the Concern?

- Collecting information, make it available in one single database
- Understandable information for consumers
- Make updated epidemiological information available

Lead and its compounds

What kind of output/results do you expect from HBM4EU?

- Better and coordinated policies
- Consumer fact sheets for nominated substances with an interpretation of the results
- More scientific information

Lead and its compounds

How would you as a stakeholder use the result?

- Reference values for the general population to compare to exposure of workers
- Communication to citizens



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UV absorbers and filters

Group Members:

Danielle Van Kalmthout (Genzinsbond)

Ninja Reineke (Chemtrust)

Natacha Cingotti (HEAL)

Pelle Moos (BEUC)

Key messages

- Wide use, gaps in regulation (textiles and food contact materials,....)
- Concern of endocrine disrupting properties
- Occurrence in Danish children calls for further investigation

What is the concern from a stakeholder perspective?

- Suspected endocrine disruptors (CoRAP) and wide dispersive use
Listed on SIN-list
- Wide use in consumer products, (textiles, printing inks,....)
High exposure of children (sun cream: contradictory messages: protect children from sun but is that dangerous?)
- Detection in Danish children (majority),
- Different products: different regulatory frameworks,

Which knowledge gaps should be filled?

- Danish data are cause of concern: European picture?
- Data on benzophenone, what about the other substances?
- What are the most important exposure routes?

How can HBM4EU address the Concern?

- European data for benzophenones
- Which ones are Endocrine disrupters?
- Clarification of most important exposure routes

UV absorbers and filters

What kind of output/results do you expect from HBM4EU?

- European HBM study on benzophenone
- Exposure of young children, prenatal exposure and exposure via breastmilk
- More knowledge on endocrine disrupting mode of action

UV absorbers and filters

How would you as a stakeholder use the result?

- Use it to improve regulation and protect health
- Raise awareness, Information of the public
- Encourage companies to substitute



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Group Members:

- Janice Robinson, DUCC
- Alick Morris, EC
- Tony Musu, ETUC

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Diisocyanates

Key messages

- Real risk, not a theoretical. It is important to prevent the onset
- It manageable (everything is exists), key occupational sensitizers, life cycle of companies is too short (mistakes are repeated with new companies).
- So far no substitutes or substitutes are less toxic, but frequently more used and therefore in the long run equally dangerous.

Diisocyanates

What is the concern from a stakeholder perspective?

➤ Occupational concern – sensitization, respiratory sensitizer

➤ In several sectors there is less control, SMEs,

➤ Consumer concerns

Which knowledge gaps should be filled?


- Lack of knowledge of consumer use
- Occupation setting: knowledge gaps on the implementation and effectiveness of risk management measure, e.g. ventilation controls
- Sustained maintaining measure are necessary. New companies start from the beginning, don't take up already gained knowledge

How can HBM4EU address the Concern?

- Giving the information to raise awareness of workers.
- Use agreed bio markers, get some result, trends, success.

Diisocyanates

What kind of output/results do you expect from HBM4EU?

 See above

How would you as a stakeholder use the result?

- Show measurements, better implement regulations , close gaps in legislation
- Communication to customers, information to the supply chain
- Industry guidance



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Group Members:

- Hans Verhagen (EFSA)
- Sophie Norager (EC)
- Elke Rauscher-Gabernig (facilitator- AGES)

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Name of
Substance /Group
Mycotoxins

Key messages

- Risk ranking for public health of all the hazards
- Potential public health concern:
DON very high levels in food, immunosuppressive
- Everyone is exposed to them

Mycotoxins

What is the concern from a stakeholder perspective?

- Potential public health concern:
DON very high levels in food, immunosuppressive
- Everyone is exposed to them
- No regulation for masked mycotoxins
- Public authority is responsible, consumers cannot choose

Which knowledge gaps should be filled?

- Risk ranking for public health of all the hazards
- Masked mycotoxins
- Appropriate biomarkers

How can HBM4EU address the Concern?

- Relate exposure to adverse health effects or to the absence thereof

Mycotoxins

What kind of output/results do you expect from HBM4EU?

➤ Good database, biobank

➤ Clear correlation between compounds and adverse effects in different population groups

How would you as a stakeholder use the result?

➤ Information of the European Commission

➤ Code of practice for agriculture

➤ Revision of maximum levels in food