SUPPORTING INFORMATION

Coordination of chemical analyses under the European Human Biomonitoring Initiative (HBM4EU): Concepts, procedures and lessons learnt

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Price for analyzing phthalate biomarkers in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of phthalate biomarkers in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
Monoethyl phthalate (MEP)	
Monobenzl phthalate (MBzP)	
Monoisobutyl phthalate (MiBP)	
Mono-n-butyl phthalate (MnBP)	
Monocyclohexyl phthalate (MCHP)	
Mono-n-pentyl phthalate (MnPeP)	
Mono(2-ethylhexyl) phthalate (MEHP)	
Mono(2-ethyl-5-hydoxyhexyl) phthalate (5OH-MEHP)	
Mono(2-ethyl-5-oxo-hexyl) phthalate (5oxo-MEHP)	
Mono(2-ethyl-5-oxo-hexyl) phthalate (5cx-MEPP)	
Mono-n-octyl phthalate (MnOP)	
Mono-hydroxy-isononyl phthalate (OH-MiNP)	
Mono-carboxy-isononyl phthalate (cx-MiNP)	
Mono-hydroxyl-isodecyl phthalate (OH-MiDP)	
Mono-carboxy-isodecyl phthalate (cx-MiDP)	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Extraction and clean-up	
Sample pre-treatment, e.g. pH adjustment	
Type of deconjugation	
Enzyme used (ref number)	
SPE offline including type of column	
SPE online including type of column	
Other extraction and clean-up methods	
Instrumental analysis	
LC-MS (model, brand, column, ionisation)	
LC-MS/MS (model, brand, column, ionisation)	
Other (please specify)	
Price	
Price, in Euro, for 300 samples	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination in 300 samples? If possible, please specify PM and direct costs.	
Does the price include the determination of specific gravity?	
If not, what is the price for the determination of specific gravity in 300 samples? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S1: Questionnaire for analyses of phthalate biomarkers in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing DINCH biomarkers in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of DINCH biomarkers in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
OH-MINCH	
cx-MINCH	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Extraction and clean-up	
Sample pre-treatment, e.g. pH adjustment	
Type of deconjugation	
Enzyme used (ref number)	
SPE offline including type of column	
SPE online including type of column	
Other extraction and clean-up methods	
Instrumental analysis	
LC-MS (model, brand, column, ionisation)	
LC-MS/MS (model, brand, column, ionisation)	
Other (please specify)	
Price	
Price, in Euro, for 300 samples	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination in 300 samples? If possible, please specify PM and direct costs.	
Does the price include the determination of specific gravity?	
If not, what is the price for the determination of specific gravity in 300 samples? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S2: Questionnaire for analyses of biomarkers of 1,2-cyclohexane dicarboxylic acid diisononyl ester (DINCH) in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing biomarkers of brominated flame retardants (BFRs) in serum

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of BFR biomarkers in serum samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
Brominated diphenyl ether (BDE)-47	
Brominated diphenyl ether (BDE)-153	
Brominated diphenyl ether (BDE)-209	
α-Hexabromocyclododecane (HBCD)	
γ-Hexabromocyclododecane (HBCD)	
Tetrabromobisphenol A (TBBPA)	
Decabromodiphenyl ethane (DBDPE)	
2,4,6-Tribromophenol	
Syn-dechlorane plus	
Anti-dechlorane plus	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical methods be identical with those used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Method for determination of lipid content	
Extraction and clean-up	
Sample pre-treatment	
Extraction method (SPE, LLE etc.)	
If applicable, type of SPE column	
Solvent used for extraction	
Clean-up method	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
GC-MS (model, brand, column, ionisation)	
GC-MS/MS (model, brand, column, ionisation)	
LC-MS/MS (model, brand, column, ionisation)	
Other (please specify)	
Price	
Price, in Euro, for 300 samples	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of lipid content?	
If not, what is the price for determination of lipid content in 300 samples? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S3: Questionnaire for analyses of halogenated flame retardants in serum, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing biomarkers of phosphorous flame retardants (PFRs) in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of PFR biomarkers in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
Bis-2-chloroethyl phosphate (BCEP)	
Bis-(1-chloro-2-propyl) phosphate (BCIPP)	
Bis(1,3-dichloro-2-propyl) phosphate (BDCIPP)	
Diphenyl phosphate (DPHP)	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Extraction and clean-up	
Sample pre-treatment, e.g. pH adjustment	
Type of deconjugation	
Enzyme used (ref number)	
SPE offline including type of column	
SPE online including type of column	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
GC-MS (model, brand, column, ionisation)	
GC-MS/MS (model, brand, column, ionisation)	
LC-MS (model, brand, column, ionisation)	
LC-MS/MS (model, brand, column, ionisation)	
Other (please specify)	
Price	
Price, in Euro, for 300 samples	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination in 300 samples? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S4: Questionnaire for analyses of biomarkers of organophosphorous flame retardants in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing PFAS biomarkers in serum

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of PFAS biomarkers in serum samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
Perfluoropentanoic acid (PFPeA)	
Perfluorohexanoic acid (PFHxA)	
Perfluoroheptanoic acid (PFHpA)	
Perfluorooctanoic acid (PFOA)	
Perfluorononanoic acid (PFNA)	
Perfluorodecanoic acid (PFDA)	
Perfluoroundecanoic acid (PFUnDA)	
Perfluorododecanoic acid (PFDoDA)	
Perfluorobutane sulfonate (PFBS)	
Perfluorohexane sulfonate (PFHxS)	
Perfluoroheptane sulfonate (PFHpS)	
Perfluorooctane sulfonate (PFOS) (sum of all isomers)	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Extraction and clean-up	
Sample pre-treatment, e.g. pH adjustment	
Extraction method (SPE, LLE etc.)	
If applicable, type of SPE column	
Solvent used for extraction	
Clean-up method	
Other extraction and clean-up methods	
Instrumental analysis	
LC-MS (model, brand, column, ionisation)	
LC-MS/MS (model, brand, column, ionisation)	
Other (please specify)	
Price	
Price, in Euro, for 300 samples	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of lipid content?	
If not, what is the price for determination of lipid content	
Can the price for 300 samples be used to calculate a price for 25 samples (occupational health study)? If not, please specify the price for 25 samples.	
Capacity and timeframe for analysis	
Time frame for 300 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S5: Questionnaire for analyses of per- and polyfluoroalkyl substances (PFAS) in serum, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing cadmium in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of cadmium in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Digestion method	
Other sample preparation methods	
Instrumental analysis	
AAS (model and brand)	
ICP-OES (model and brand)	
ICP-MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, for 300 samples	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination in 300 samples? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S6: Questionnaire for analysis of cadmium in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing PAH biomarkers in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of PAH biomarkers in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
1-hydroxynaphthalene	
2-hydroxynaphthalene	
1,2-dihydroxynaphthalene	
2-hydroxyfluorene (2-FLUO)	
3-hydroxyfluorene (3-FLUO)	
9-hydroxyfluorene (9-FLUO)	
1-hydroxyphenanthrene	
2-hydroxyphenanthrene	
3-hydroxyphenanthrene	
4-hydroxyphenanthrene	
9-hydroxyphenanthrene	
1-hydroxypyrene (1-PYR)	
3-hydroxybenzo(a)pyrene	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Extraction and clean-up	
Sample pre-treatment, e.g. pH adjustment	
Type of deconjugation	
Enzyme used (ref number)	
SPE offline including type of column	
SPE online including type of column	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
GC-MS (model, brand, column, ionisation)	
GC-MS/MS (model, brand, column, ionisation)	
LC-MS (model, brand, column, ionisation)	
LC-MS/MS (model, brand, column, ionisation)	
HPLC-fluorescence detector (model, brand, column)	
Other (please specify)	
Price	
Price, in Euro, for 300 samples	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination in 300 samples? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S7: Questionnaire for analyses of biomarkers of polycyclic aromatic hydrocarbons (PAHs) in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing chromium in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of chromium in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Digestion method	
Other sample preparation methods	
Instrumental analysis	
AAS (model and brand)	
ICP-OES (model and brand)	
ICP-MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample. The final number of samples will be between 40 and 140.	
Please specify person months (PM) for the analysis, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination per sample? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 40-140 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 40-140 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
What is the maximum capacity of the laboratory, considering sets of 40-140 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Price for analyzing chromium in whole blood and red blood cells

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of chromium in whole blood samples and samples of red blood cells, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk.

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
Phone	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Analytical method	
Sample volume required (ml)	
LOQ (ng/ml)	
Will the analytical method be identical with that used in the HBM4EU ICI/EQUAS?	
If not, please specify any deviations, subject to evaluation by the HBM4EU Quality Assurance Unit. Please note that inconsistencies with the HBM4EU ICI/EQUAS might affect the eligibility of the laboratory for analyses in HBM4EU.	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Digestion method	
Other sample preparation methods	
Instrumental analysis	
AAS (model and brand)	
ICP-OES (model and brand)	
ICP-MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample. The final number of samples will be between 40 and 80 (for whole blood and red blood cells, respectively).	
Please specify person months (PM) for the analysis, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of lipid content?	
If not, what is the price for lipid determination per sample? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 40-80 samples (assuming that they will be available in approximately one month).	
How much time does the laboratory need in advance to plan and prepare the analysis of 40-80 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
What is the maximum capacity of the laboratory, considering sets of 40-80 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S8: Questionnaires for analyses of chromium in urine and blood, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing acrylamides in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of acrylamides in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
N-Acetyl-S-(2-carbamoyl-ethyl)cysteine (AAMA)	
N-Acetyl-S-(2-carbamoyl-2-hydroxyethyl)cysteine (GAMA)	
Analytical method	
Total sample volume required (ml)	
LOQ (ng/ml)	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Extraction method (SPE, LLE etc.)	
If applicable, type of SPE column	
Solvent used for extraction	
Clean-up method	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
LC-MS (model and brand)	
LC-MS/MS (model and brand)	
GC-MS (model and brand)	
GC-MS/MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample	
Price, in Euro, for 300 samples	
Price, in Euro, for analyzing more than 300 samples. Please specify price, and corresponding number of samples.	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination per samples (300 samples)? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S9: Questionnaire for analysis of acrylamide biomarkers in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing arsenic in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of arsenic in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
Arsenic (total)	
As (III)	
As (V)	
Monomethylarsonic acid (MMA)	
Dimethylarsinic acid (DMA)	
Arsenobetaine	
Analytical method	
Total sample volume required (ml)	
LOQ (ng/ml)	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Digestion method	
Other sample preparation methods	
Instrumental analysis	
AAS (model and brand)	
ICP-OES (model and brand)	
ICP-MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample	
Price, in Euro, for 300 samples	
Price, in Euro, for analyzing more than 300 samples. Please specify price, and corresponding number of samples.	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination per samples (300 samples)? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S10: Questionnaire for analysis of arsenic biomarkers in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing pesticides in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of glyphosate and AMPA in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
Glyphosate	
Aminomethylphosphonic acid (AMPA)	
Analytical method	
Total sample volume required (ml)	
LOQ (ng/ml)	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Extraction method (SPE, LLE etc.)	
If applicable, type of SPE column	
Solvent used for extraction	
Clean-up method	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
LC-MS (model and brand)	
LC-MS/MS (model and brand)	
GC-MS (model and brand)	
GC-MS/MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample	
Price, in Euro, for 300 samples	
Price, in Euro, for analyzing more than 300 samples. Please specify price, and corresponding number of samples.	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination per samples (300 samples)? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Price for analyzing pesticides in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of certain pesticide biomarkers in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
3,5,6-trichloro-2-pyridinol (TCPy)	
cis-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylic acid (cis-DBCA)	
cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylic acid (cis-DCCA)	
trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylic acid (trans-DCCA)	
3-Phenoxybenzoic acid (3-PBA)	
4-fluoro-3-phenoxybenzoic acid (4-F-3-PBA)	
cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylic acid (CIF3CA)	
Analytical method	
Total sample volume required (ml)	
LOQ (ng/ml)	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Extraction method (SPE, LLE etc.)	
If applicable, type of SPE column	
Solvent used for extraction	
Clean-up method	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
LC-MS (model and brand)	
LC-MS/MS (model and brand)	
GC-MS (model and brand)	
GC-MS/MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample	
Price, in Euro, for 300 samples	
Price, in Euro, for analyzing more than 300 samples. Please specify price, and corresponding number of samples.	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination per samples (300 samples)? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S11: Questionnaires for analysis of pesticide biomarkers in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing mycotoxins in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of mycotoxins in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
Deoxynivalenol (total)	
Analytical method	
Total sample volume required (ml)	
LOQ (ng/ml)	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Extraction method (SPE, LLE etc.)	
If applicable, type of SPE column	
Solvent used for extraction	
Clean-up method	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
LC-MS (model and brand)	
LC-MS/MS (model and brand)	
GC-MS (model and brand)	
GC-MS/MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample	
Price, in Euro, for 300 samples	
Price, in Euro, for analyzing more than 300 samples. Please specify price, and corresponding number of samples.	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination per samples (300 samples)? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S12: Questionnaire for analysis of mycotoxin biomarkers in urine, sent to qualified laboratories to collect information of relevance to sample owners

Price for analyzing UV-filters in urine

HBM4EU will investigate the human exposure to a list of prioritized substances in the European population. We kindly request your offer for analyses of UV-filters in urine samples, to be performed in the HBM4EU project. The information in this form will be used in subsequent deliberations and negotiations between sample owners and laboratories.

Please fill in the requested information, sign the form and return it to hbm4eu@envs.au.dk

Laboratory information	
Laboratory name	
Head of the laboratory	
Number of staff and qualifications	
Address	
Contact person	
E-mail	
Is the laboratory member of the HBM4EU consortium?	
Is the laboratory ISO/IEC 17025 accredited?	
If not, does it work under a quality management system?	
Biomarkers	
Please indicate which biomarkers are included in the analytical method	
2,4-Dihydroxybenzophenone (BP1)	
2,2',4,4'-Tetrahydroxybenzophenone (BP2)	
2-Hydroxy-4-methoxybenzophenone (BP3)	
5-Chloro-2-hydroxybenzophenone (BP7)	
Analytical method	
Total sample volume required (ml)	
LOQ (ng/ml)	
In-house quality assurance/quality control	
Internal standards used for analysis	
Calibration method	
Sample preparation	
Sample pre-treatment, e.g. dilution	
Extraction method (SPE, LLE etc.)	
If applicable, type of SPE column	
Solvent used for extraction	
Clean-up method	
Other extraction and clean-up methods	
Derivatization (reagent)	
Instrumental analysis	
LC-MS (model and brand)	
LC-MS/MS (model and brand)	
GC-MS (model and brand)	
GC-MS/MS (model and brand)	
Other (please specify)	
Price	
Price, in Euro, per sample	
Price, in Euro, for 300 samples	
Price, in Euro, for analyzing more than 300 samples. Please specify price, and corresponding number of samples.	
Please specify person months (PM) for the analysis of 300 samples, costs of PM for different categories of staff involved in the analyses, and direct costs (consumables).	
Does the price include the determination of creatinine?	
If not, what is the price for creatinine determination per samples (300 samples)? If possible, please specify PM and direct costs.	
Capacity and timeframe for analysis	
Time frame for 300 samples	
How much time does the laboratory need in advance to plan and prepare the analysis of 300 samples?	
Are there variations in the laboratory's capacity (due to holidays etc.)? If so, please specify.	
Does the laboratory have the capacity to analyse several sets of 300 samples in parallel?	
If yes, what is the maximum capacity?	
If no, what would be the time frame for several sets of 300 samples?	
Information required from the sample owners	
What information does the laboratory need from the sample owner for a potential contract for analyses?	
Other comments	
Validity of this document until	
Please note any additional comments.	

Date and signature

Figure S13: Questionnaire for analysis of biomarkers of UV filters in urine, sent to qualified laboratories to collect information of relevance to sample owners

Table S1: Details of the different studies under HBM4EU

Study name	Description
HBM4EU Aligned Studies: Alignment of national and regional HBM studies	This survey builds on existing HBM capacity in Europe by aligning national or regional HBM studies. 3 age groups: children 6-11 years, teenagers 12-19 years, young adults, 20-39 years 10097 participants: 3431 children, 2950 teenagers, 3716 young adults Recruitment between 2014 and 2021 Up to 300 samples per study and substance group, urine, blood plasma or serum. Urine samples were collected in all age groups, blood samples were collected in children and teenagers. 23 countries in total, representing North, South, West and East Auxiliary information: socio-demographics, lifestyle, health status, environment and diet.
Comparisons of different time points, including DEMOCOPHES samples	Three time points (2006-2010 published data; 2011-2013 DEMOCOPHES samples; 2014-2021 HBM4EU Aligned Studies) Urine samples Children (6-12 years): Phthalates, DINCH, OPFRs Adults (20-39 years): Bisphenols, PAHs, cadmium Ten partners, representing North, South, West and East
Occupational exposure studies	First occupational study: Exposure to chromium Chromate in urine, plasma, red blood cells, exhaled breath condensate (EBC), air and hand wipes; additional analyses of PFASs in plasma Eight partners from different countries Second occupational studies: 1) Exposure to diisocyanates Workers in manufacturing and repair of large vehicles Analysis of urine, blood, buccal cell Five European countries Exposure biomarkers and effect biomarkers 2) Exposures in e-waste management Metals (lead , inorganic mercury, cadmium, chromium), phthalates, DINCH, and flame retardants, samples of blood, urine, buccal cell, hair Eight European countries
HBM4EU-MOM: Intervention study on mercury	Intervention study in countries with a seafood-based diet, two sampling phases Total mercury in hair Pregnant women Five coastal European countries: Cyprus, Greece, Iceland, Portugal, Spain

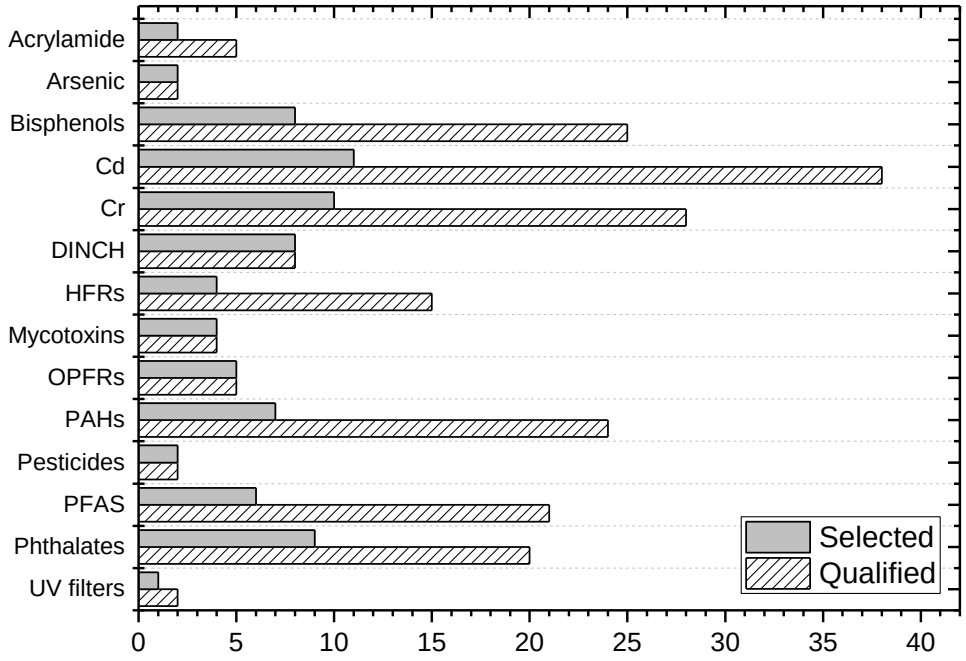

Figure S14: Number of laboratories qualified and selected for the priority groups in HBM4EU. HFRs: Halogenated flame retardants. OPFRs: Organophosphorous flame retardants. PAH: Polycyclic aromatic hydrocarbons. PFAS: Per- and polyfluoroalkyl substances.

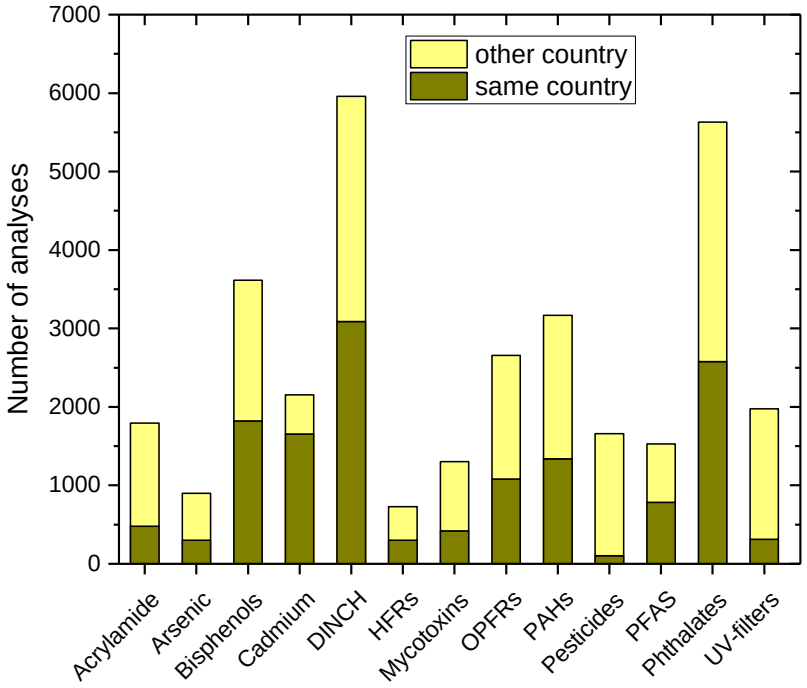

Figure S15: Number of samples analysed in their country of origin or by a selected laboratory from another country. HFRs: Halogenated flame retardants. OPFRs: Organophosphorous flame retardants. PAHs: Polycyclic aromatic hydrocarbons. PFAS: Per- and polyfluoroalkyl substances

HBM4EU science and policy for a healthy future	Form: **HBM4EU Material and associated Data Transfer Record Form (HBM4EU MDTRF)**	Attachment A
	Valid since: January 2020	Version: V 2.0

Material and associated Data Transfer Record Form

Provider

Name of the institution:			HBM4EU WP	
Country:				
Partner acronym in HBM4EU: (if available)				
Person in charge	Name:			
	e-mail:			
	phone:			

Recipient

Name of the institution:			HBM4EU WP	
Country:				
Partner acronym in HBM4EU: (if available)				
Person in charge	Name:			
	e-mail:			
	phone:			

The MATERIAL(S) and associated DATA described below are supplied by PROVIDER to the RECIPIENT subject to the terms and conditions of the HBM4EU MDTA, and the HBM4EU Data Policy, which control in the event of any discrepancy between the languages here and there.

Description of the MATERIAL(S):

Briefly describe the MATERIAL(S) being transferred (quantity, type of materials) under the HBM4EU MDTA. Detailed information including the unique identifier of each sample will be provided by the Provider with each shipment as Material associated Data in the HBM4EU WP7.4 Data Transfer Template Form. Add additional pages if required.

Description of the AGREED USE of the MATERIAL(S) including the termination of this agreement:

Briefly describe how the material will be used (e.g., analysis plan). Add additional pages if required.

State the estimated end date for using the biological materials according to this agreement:

State when the analysis is planned to be finished (year, month):

Samples will be (*please tick box*):

☐ Completely consumed during analysis

☐ Destroyed after analysis. Estimate date for destruction of samples (year, month):

☐ Returned after analysis. Estimate date for return of samples (year, month):

Other:

HBM4EU science and policy for a healthy future	Form: HBM4EU Material and associated Data Transfer Record Form (HBM4EU MDTRF)	Attachment A
	Valid since: January 2020	Version: V 2.0

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Description of the PERSONAL DATA, instructions regarding the processing by the data processor, adherence to data minimization principle, and the termination of this agreement:

This agreement only concerns the variables and subset of the personal data that is needed to perform the processing by the data processor. The data controller is responsible for providing no other information than the variables and subset of the data mentioned below.

Briefly describe the personal data and provide instructions regarding the processing by the data processor.

Estimated end date for data processing according to this agreement (year, month):

The use, transfer, allocation of ownership/licensing of Materials, its associated Data and HBM4EU results that arise from use of the Materials and its associated data shall be consistent with the HBM4EU objectives and intentions. Specific terms and conditions are set forth below:

MATERIAL(S) and its associated Data are to be used for the Agreed Use as stated above only. MATERIAL(S) and its associated Data shall not be transferred by the RECIPIENT to any other party either within or outside HBM4EU without written permission of the PROVIDER. The PROVIDER retains ownership of the MATERIAL(S) and its associated Data. A license to the MATERIAL(S) and its associated Data is granted to the RECIPIENT for the purpose of carrying out the Agreed Use for the period required to complete the Agreed Use or until termination of the HBM4EU MDTA, whichever is earlier. No other licence to the Materials and its associated Data, implied or otherwise, is granted.

The PROVIDER and RECIPIENT, by their duly authorized representatives, hereby accept all terms and conditions expressly stated in the HBM4EU MDTA including its attachment.

Provider	Recipient
Date: _____	Date: _____
Signature: _____	Signature: _____

Duplicate originals of this HBMEU MDTRF shall be fully completed and executed and exchanged, with digital copies sent jointly with the filled in Excel Template for Reporting Ethics (Annex 1 to D1.5; https://www.hbm4eu.eu/deliverables/) and digital copies of all legal and ethical documents listed in point 2 of the Terms and Conditions of the HBM4EU MDTA to task leader 1.5 (E-mail: liek@sund.ku.dk) and to the HBM4EU Coordinator UBA (HBM4EU@uba.de) or to such other e-mail addresses as may be provided by the management board of HBM4EU in the future. Documents in National language have to be explained in English in the Excel Template. Send digital copies not later than 6 weeks before shipment and before the analyses of data/samples is planned to start.

Figure S16: Form about material and data transfer to be completed by providers (sample owners) and recipients (qualified laboratories), for notification of the ethics coordinator and the HBM4EU coordinator. Details are given by Knudsen et al. (2023).

HBM4EU science and policy for a healthy future

12.11.2019

Guidance document on budgets for chemical analysis in HBM4EU

This document is an internal guidance to the consortium. The Commission has reviewed the document **but this does not entail any pre-approval of the Commission with reference for instance to the eligibility of the subcontracting costs**; if for instance the subcontract is awarded not respecting the sample owner's internal/national rules and/or the best-value-for-money principle and this is discovered during the audit, the related costs will be declared ineligible. Subcontracting between beneficiaries is not allowed (p. 149 GA).

This document is created in collaboration with WP lead of WP8, WP9 and the HBM4EU coordinator.

In this document a step-by-step guidance is provided on how to organize your budget for chemical analysis in studies co-funded by HBM4EU incl. aligned studies (T8.1), occupational studies (T8.5), time trends (T8.2), SPECIMEn survey (T8.3).

We have identified the 3 following situations and provide guidance for each of the situations:

1. The sample owner will analyse the samples at their own institute. -- *Sample owner and the qualified laboratory are identical.*

2. The sample owner will send their samples to an external qualified laboratory which is another different HBM4EU grant signatory or LTP. -- *The laboratory is not the sample owner, but another different partner in HBM4EU.*

3. The sample owner will send their samples to an external qualified laboratory which is NEITHER an HBM4EU beneficiary or LTP, NOR an affiliate to an HBM4EU beneficiary or LTP -- *The laboratory is outside of HBM4EU but participated successfully in the WP9 quality assurance program for the analytes that will be measured.*

Introductory remarks:

The reported resources (person months and respective direct personnel costs; as well as direct costs for travel/subsistence, consumables/equipment, audits and subcontracts) *must* correspond with the task descriptions and with the budget allocated to the partner in the respective AWP (maximum 100kEuro). Costs can only be declared for those analyses for which the laboratory is HBM4EU qualified. Furthermore, the resources claimed in the Financial Statements *should explicitly* reflect the contribution to the annual technical report from each partner, be it a sample owner in case 1 and 3 or a laboratory in case 2.

In the Financial Statement each project partner has to report all - eligible and demonstrable - direct costs incurred within the respective reporting period. **Following the assessment and approval from the European Commission of the costs claimed in the respective reporting period, the Coordinator will reimburse 50% of the direct costs reported for task 9.5A according to the HBM4EU Consortium Agreement (Section 7: Financial provisions, 7.4 Internal Funding Rules).**

HBM4EU science and policy for a healthy future

1. The sample owner will analyse the samples at their own institute.

1. The sample owner reports all direct cost (PMs and ODC) in the periodical financial reporting.

2. The sample owner will send their samples to an external qualified laboratory which is another different HBM4EU grant signatory or LTP.

1. The budget for chemical analysis currently allocated to the sample owner in WP9 should be transferred to the laboratory. For this purpose the sample owner will, together with the respective laboratory, agree on necessary resources (PM and respective personnel costs as well as ODC; in Euro) to be transferred. In a second step, the consolidated proposal for the budget transfer will be submitted as common request by the sample owner on behalf of both parties to WP9 lead (ISCIII, isciii_hbm4eu@isciii.es), with TL9.5 (AU; hbm4eu@envs.au.dk) and TL8.1 (VITO, liese.gilles@vito.be) in CC. WPL9 and TL9.5 will review the request and give feedback to the sample owner if necessary. After WPL9 and TL9.5 approve the proposal, WPL9 informs the Financial Officer (Birgit Puppe) with the request to transfer the necessary resources from the sample owner's budget (in WP9/task 9.5A) to the budget of the responsible laboratory (in WP9/task 9.5A).

2. Within the Periodic Reporting the sample owner reports all direct costs (PMs and ODC) for fieldwork, sample transport, data management etc., EXCLUDING chemical analysis as this budget will be transferred to the laboratory as per step 1. The laboratory reports all direct costs (PMs and ODC) for chemical analysis in the periodical financial reporting.

3. After the assessment and approval from the European Commission of the costs claimed in the respective reporting period, both partners will get a reimbursement of 50% of the direct costs they have reported from the Coordinator. Based on the documents for the respective Periodic Report, and pursuant to the relevant provisions of the HBM4EU Consortium Agreement, the laboratory is able to invoice the other 50% of direct costs for chemical analysis to the sample owner. (This invoice is considered outside the HBM4EU project.)
!The laboratories cannot make profit as stipulated in the GA.

ATTENTION: The Grant Agreement allows transfers of budget, NOT of tasks. If the budget transfer is due to a significant change in Annex 1, an amendment to the Grant Agreement is needed. A significant change is a change that affects the technical work ('action tasks') of Annex 1.

3. The sample owner will send their samples to an external qualified laboratory which is NEITHER an HBM4EU beneficiary or LTP, NOR an affiliate to an HBM4EU beneficiary or LTP.

The sample owner subcontracts the laboratory.

1. As a first step, the sample owner has to include the subcontract within the Grant Agreement via an amendment. As the necessary administrative processes to approve an amendment take time, the sample owner should contact the Coordinator as soon as the decision to subcontract a laboratory is taken.

Figure S17: Guidance document on invoicing chemical analyses in HBM4EU

References:

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