CHEAR Project 2017-2121

This file contains general information about the CHEAR project data files you are downloading.

Contents:

1. CITING CHEAR DATA

A. The publication policy, which you agreed to upon registering to the CHEAR data repository, provides guidelines about citations. https://mychear.chearprogram.org/sites/default/files/CHEAR_Pub_Policy_Final.pdf

CHEAR resources are made possible by NIH funding and must be properly acknowledged in manuscripts (per the journal's requirement), abstracts, posters, and presentations, one or more statements should specify financial acknowledgement as follows:

"Research reported in this publication was supported by the National Institute of Environmental Health Sciences of the National Institutes of Health under Award Number [grant(s) (see Table below)]. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health."

Grant numbers:

Institution	Principal Investigator	Title	Grant Number
Icahn School of Medicine at Mount Sinai	Susan L. Teitelbaum	CHEAR Center for Data Science	U2CES026555

Icahn School of Medicine at Mount Sinai	Wright, Robert O.	Mount Sinai CHEAR Network Laboratory Hub	U2CES026561
Emory University	Miller, Gary W.	National Exposure Assessment Laboratory at Emory	U2CES026560

B. Publicly available CHEAR data are those data that have been generated by the CHEAR lab(s) combined with the data submitted by CHEAR project investigators. External research investigators who are using *any* publicly available CHEAR data should cite the original paper(s) associated with each CHEAR project as well as the DOIs (Digital Object Identifier) associated with the data files used in your publication, both of which are located on the study-specific Public Page. This will ensure that the original generators of the data sets will get credit and allow readers to locate and evaluate the provenance of the data.

Questions about this policy should be directed to: HHEAR_CC@westat.com.

2. CHEAR GLOSSARY

Participant ID Format

The format of the CHEAR Participant ID is as follows:

Participant ID (PID) = CHEAR assigned participant ID with the structure XXXXXXX. It is a 7-digit numeric code that will uniquely identify a CHEAR participant

Sample ID Format

The format of the CHEAR Sample ID is as follows:

Sample ID (SID) = CHEAR assigned sample ID with the structure **C-XXXXX-SP** (example: C-3XA5P-U)

- C = CHEAR (fixed character prefix)
- Core ID is a 5-digit alpha-numeric code **XXXXX** that will uniquely identify a CHEAR biological sample

- SP=specimen type (relevant specimen code below):

  U = Urine

Targeted Analyte Codes

Chemical Group Code	*Full Chemical Group Name*	*Code*	*Full Chemical Name*	
UDILUTE	Urinary Dilution Factor	CRE	Creatinine	60-27-5
UPHTH	Phthalates	MCPP	mono (3-carboxypropyl) phthalate	66851-46-5
UPHTH	Phthalates	MEP	monoethyl phthalate	2306-33-4
UPHTH	Phthalates	MIBP	mono-isobutyl phthalate	30833-53-5
UPHTH	Phthalates	MNBP	mono-n-butylphthalate	34-74-2
UPHTH	Phthalates	MECPP	mono-(2-ethyl-5-carboxypentyl) phthalate	40809-41-4
UPHTH	Phthalates	MEHHP	mono (2-ethyl-5-hydroxyhexyl) phthalate	40321-99-1
UPHTH	Phthalates	MEOHP	mono (2-ethyl-5-oxohexyl) phthalate	40321-98-0
UPHTH	Phthalates	MBZP	mono-benzyl phthalate	2528-16-7
UPHTH	Phthalates	MEHP	mono ethyl hexyl phthalate	4376-20-9
UPHTH	Phthalates	MCIOP	mono-carboxy isooctyl phthalate	898544-09-7
UPHTH	Phthalates	MCINP	mono-carboxy isononyl phthalate	
UPHENOL	Phenols	BP3	Benzophenone-3	131-57-7
UPHENOL	Phenols	BPA	Bisphenol A	80-05-7
UPHENOL	Phenols	BPF	Bisphenol F	620-92-8
UPHENOL	Phenols	BPS	Bisphenol S	80-09-1
UPHENOL	Phenols	TCC	Triclocarban	101-20-2
UPHENOL	Phenols	TCS	Triclosan	3380-34-5
UPB	Parabens	BUPB	Butyl paraben	94-26-8
UPB	Parabens	ETPB	Ethyl paraben	120-47-8
UPB	Parabens	MEPB	Methyl Paraben	99-76-3
UPB	Parabens	PRPB	Propyl paraben	94-13-3
UPAH	PAHs	NAP1	1-hydroxynaphthalene	90-15-3
UPAH	PAHs	NAP2	2-hydroxynaphthalene	135-19-3
UPAH	PAHs	PYR1	1-hydroxypyrene	5315-79-7
UPEST	Alkyl phosphate pesticide metabolites	TCP	3,5,6-trichloro-2-pyridinol	6515-38-4
UPEST	Alkyl phosphate pesticide metabolites	PBA	3-phenoxybenzoic acid	3739-38-6
UPEST	Alkyl phosphate pesticide metabolites	DMP	dimethylphosphate	813-78-5
UPEST	Alkyl phosphate pesticide metabolites	DMTP	dimethylthiophosphate	59401-04-6
UPEST	Alkyl phosphate pesticide metabolites	DEP	diethylphosphate	598-02-7
UPEST	Alkyl phosphate pesticide metabolites	DETP	diethylthiophosphate	5871-17-0

OXID	Oxidative Stress Markers	F2A8IP	8-iso Prostaglandin F2α	27415-26-5
OXID	Oxidative Stress Markers	OH8DG	8-Hydroxy-2'-deoxyguanosine	
INFLAM	Cytokines and Other Inflammatory Markers	LTE4	Leukotriene E4	75715-89-8

Targeted Comment Codes

Code	*Definition*
0	Valid Measurement
15	Interfering substances present
17	Quantity of sample insufficient for analysis
37	Value less than LOD
130	Value above LOD but below LLOQ
203	Data outside 20-80% B/Bo; out of the linear range of the standard curve.
204	Analyzed in duplicate

3. DESCRIPTION OF PUBLIC FILES

File Name	*Source*	*File Description*	*DOI**
2121_TARGETED_DATA.csv	CHEAR	Urinary phenol/paraben, phthalate, polycyclic aromatic hydrocarbon (UPAH), pesticide, and creatinine concentrations from children at up to 4 clinic visits, pre- and post-intervention	10.36043/2121_263
2121_UPHENOL_UPB_UPAH_METHODS.docx	CHEAR	Laboratory methods for measurement of urinary phenol, paraben, and UPAH concentrations	NA
2121_UPEST_UPMs_METHODS.docx	CHEAR	Laboratory methods for measurement of urinary universal pesticide metabolites (UPMs)	NA
2121_UPEST_DAPs_METHODS.docx	CHEAR	Laboratory methods for measurement of urinary dialkylphosphate (DAP) metabolites	NA
2121_CRE_METHODS.docx	CHEAR	Laboratory methods for measurement of urinary creatinine	NA
2121_META_LINK	CHEAR	Hyperlink to Metabolomics Workbench for raw annotated and full feature metabolomic data	NA
2121_META_MAP.csv	CHEAR	Mapping file for metabolomics samples to participant IDs and sample collection year	NA
2121_OXID_INFLAM_DATA.csv	CHEAR	Oxidative stress and inflammatory markers data	10.36043/2121_264
2121_OXID_INFLAM_METHODS.docx	CHEAR	Laboratory methods for measurement of oxidative stress and inflammatory markers	NA
2121_EPI_DATA.csv	Parent Study	Epidemiological data	10.36043/2121_260
2121_EPI_DDCB.csv	Parent Study	Epidemiological data dictionary and codebook	NA
SDD-2017-2121-PD.xlsx		A Semantic Data Dictionary (SDD) aims to describe datasets through the use of tables that identify information about data variables' content, description, and format. An SDD uses best practice ontologies to annotate datasets to ensure the document is machine readable and conforms to a standard model for scientific studies, in order to maximize	10.36043/2121_635_2022.2
SDD-2017-2121-Void.xlsx			10.36043/2121_636_2022.2

		opportunities for data harmonization and knowledge sharing [1,2].	

*These DOIs do not function as journal article DOIs, which are direct links to an article. Instead, go to https://www.doi.org/ and paste in the HHEAR dataset DOI to access the data. You must have a HHEAR Data Submission and Review Portal (DSRP) Account to access the data.

1. https://tw.rpi.edu/project/SDD

2. The Semantic Data Dictionary - An Approach for Describing and Annotating Data. Rashid S, McCusker J, Pinheiro P, Bax M, Santos H, Das A, Stingone J, McGuinness D. The Semantic Data Dictionary - An Approach for Describing and Annotating Data.Data Intell. Fall 2020;2(4):443-486.

4. ANALYTIC NOTES

- Please contact the Principal Investigator of the CHEAR study for questions related to datasets indicated with source "Parent study" in the table above and contact HHEARsupport@mssm.edu for all other questions.
    - The Principal Investigator's name and contact information at the time of this publication is: Dr. Karr at ckarr@uw.edu.
- Merge datasets on SID or PID and timepoint.
- In this study, subjects had 6 visits, but only at 4 visits were urinary samples taken. Therefore, subjects have up to 4 urinary samples. The timepoints represented at each urinary sample represent the study visit (out of 6) and the timing in relation to the intervention. The timepoints and descriptions are as follows:
    - "1-pre" corresponds with the time point at enrollment (first urine sample collected), pre-intervention.
    - "3-pre" corresponds with the time point approximately 6 weeks post-enrollment (second urine sample collected), pre-intervention.
    - "4-post" corresponds with the time point approximately 4-6 months post-enrollment (third urine sample collected), post-intervention.
    - "6-post" corresponds with the time point approximately 12 months post-enrollment (fourth urine sample collected), post-intervention.
- Intervention status refers to the placement of air cleaners in the subject's home. Not all subjects had this intervention. Intervention status can be found in the epidemiological data and data dictionary as "intervention (0/1)".
- Visit our Resources page to download and view helpful tools. (https://hheardatacenter.mssm.edu/resources.asp)
- The HHEAR dataset DOIs do not function as journal article DOIs, which are direct links to an article. Instead, go to https://www.doi.org/ and paste in the HHEAR dataset DOI to access the data. You must have a HHEAR Data Submission and Review Portal (DSRP) Account to access the data.
    - Request an account at https://hheardatacenter.mssm.edu/.