

DATA OVERVIEW GUIDE

WHAT KEY TERMS SHOULD I BE FAMILIAR WITH BEFORE WORKING WITH THE HHEAR DATA REPOSITORY?

The following table includes key basic terms to help the user familiarize themselves with essential components that make up the data in the HHEAR Repository. Below it, you will find an additional list of study-specific terms intended to help users unfamiliar with common environmental exposure terms; while not exhaustive, this is a basic foundation to help navigate the contents of the data available within the HHEAR Repository.

Key Terms and Definitions

ENTITY	ATTRIBUTE	STUDY VISIT	UNIT	MATRIX	MEASUREMENT	ANALYTE
A person, place, or object that exists; the person, place, or object that the variable describes	A characteristic of an entity; the variable that is being described	Timing when a study event or measurement occurred	A standardized quantity of a physical quality	Components of a sample other than the analyte of interest; type of biospecimen or environmental sample	A type of measure of the amount of analyte in the matrix	A chemical or a biological entity; substance or sample being analyzed
Example	Example	Example	Example	Example	Example	Example
Adult-Human ChildAnatomy Pregnancy Sample Adolescent Sample	Height Biological Sex Smoking Status Gestational Age	Birth First Trimester Childhood Period Adolescent Baseline	Kilogram Centimeter Microgram Per Liter Milligram Per Deciliter	Urine Saliva Plasma Water Sample	Concentration Specific Gravity Limit of Detection Mean Concentration	Lead Leptin Cotinine Bisphenol A

Flame retardants: diverse group of chemicals applied to materials to prevent or slow the burning of the fire.²

Parabens: a class of 4-hydroxybenzoic acid esters commonly used as preservatives to prevent the growth of microbial pathogens in cosmetics, pharmaceuticals, and food.¹

Pesticides: any chemical compound used to kill, prevent, reduce, destroy or repel a pest and/or promote plant growth, act as a desiccant or nitrogen stabilizer.¹

Per- and polyfluoroalkyl substances (PFAS): a group of synthetic chemicals containing a chain of linked carbons and fluorine atoms; used to keep food from sticking to surfaces, make items stain resistant, and create firefighting foam. They break down very slowly and can build up inside the human body, animals, and the environment.¹

Phenols: an acidic compound with a hydroxyl group linked to a benzene ring; used to make plastics, nylon and other synthetic fibers, epoxy, as an antiseptic and disinfectant, and in other medicines.¹

Phthalates: salts or esters of phthalic acid; frequently used to make plastics flexible and durable, retain scents in fragrances, and help topical products stick to skin.¹

Trace Elements (or trace metals): chemical elements present in minute amounts in the environment, such as metals (e.g. lead and iron), metalloids (e.g. arsenic), and other chemicals (e.g. Selenium). They are essential for life in small quantities, but can be toxic or cause cancer in larger quantities.³

Volatile organic compounds (VOCs): compounds with high vapor pressure and low water solubility, emitted as gases from certain solids or liquids. Many are human-made chemicals used in the manufacture of paints, pharmaceuticals, and refrigerants.¹

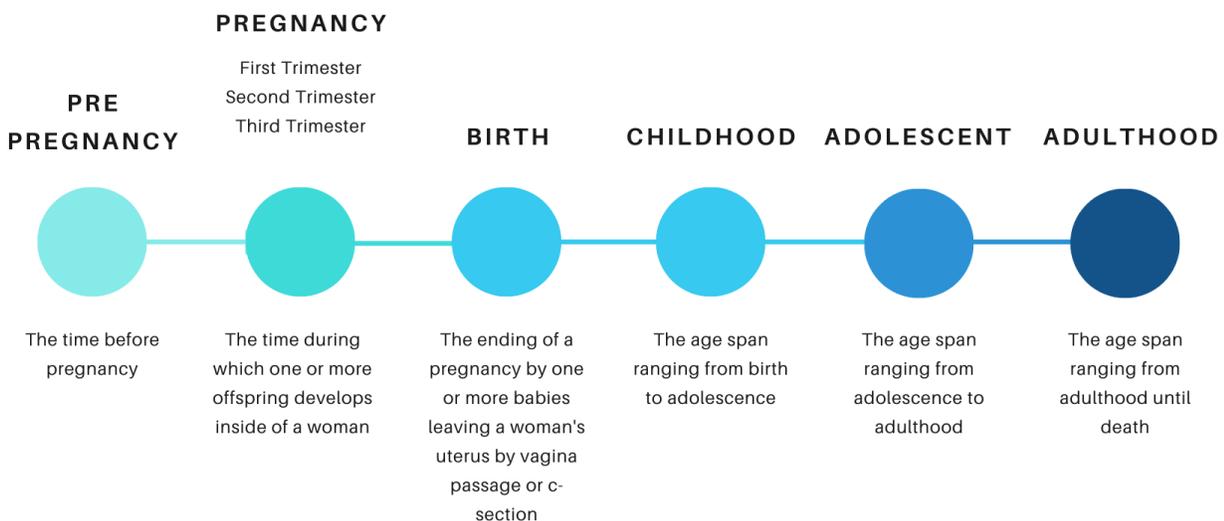
¹ U.S. Environmental Protection Agency. <https://www.epa.gov/>.

² National Institute of Environmental Health Sciences. <https://www.niehs.nih.gov/>.

³ United States Geological Survey. <https://www.usgs.gov/>.

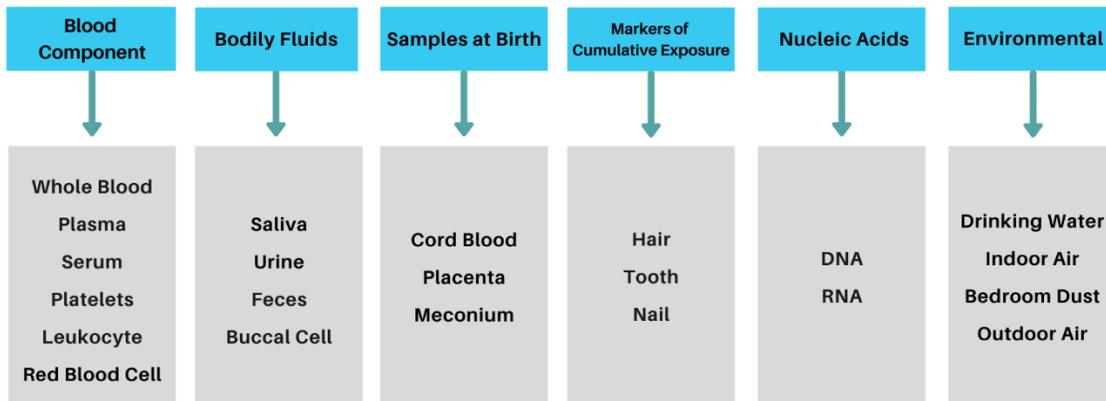
WHAT TIME PERIODS ARE INCLUDED IN THE HHEAR DATA REPOSITORY?

Time Periods of HHEAR Study Visits



WHAT SAMPLE TYPES ARE AVAILABLE IN THE HHEAR DATA REPOSITORY?

Sample Types



WHAT IS THE GEOGRAPHICAL DISTRIBUTION OF STUDIES?

