

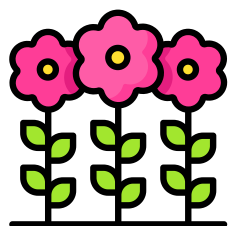
MADRES Newsletter



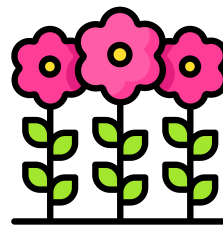
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Mission Statement

To learn about how the environment affects a woman's pregnancy and her child's health. To understand more about the effects of air pollutants, chemicals and stress on a mother's weight during and after pregnancy, and on her baby's birth weight, growth and early life health.



Happy Mother's Day!



Dear MADRES Community,

We want to take this opportunity to express our heartfelt appreciation for all that you do as a mother.

We're honored to have you as part of our research community. Thank you for your time and commitment to our studies. We wish you a day filled with joy, laughter, and all the things that make you feel special. You deserve it!

Sincerely,
The MADRES Team



MADRES Timeline

• 1st Trimester

Visit @ USC:
Questionnaires,
measurements, samples



• 2nd Trimester

Questionnaire by phone

• 3rd Trimester

Visit @ USC:
Questionnaires,
measurements, samples



• 7-14 days

Questionnaire by phone

• 1 Month

Visit @ USC:
Questionnaires,
measurements, samples



• 3, 6, & 9 Months

Questionnaire by phone


• 12 Months


Visit @ USC:
Questionnaires,
(mom&baby)
measurements, samples




Celebrating National Women's Health Week : May 12-18,2024

Women's health week encourages women and girls to make their health a priority!

Talk with your Health Providers 

Prioritize Mental Health 

Get Active 

Enjoy a Healthy, and Balanced Diet 



MADRES follow up

MADRES has launched a follow up study for families who previously participated. We will be contacting you this year to ask you to participate.

Participation involves completing in person visits...

• Around your child's birthday

and questionnaires...

• Six months in between your child's birthday



Community Resources



Weekly food distributions, Free Diapers Mondays, and much more. Call 323-754-3191 for more information. <https://www.ymcala.org>



HeadSpace is a mindfulness and wellbeing smartphone application that is currently free for all LA County residents. Visit headspace.com/lacounty

MADRES Research Findings

The Impacts of Prenatal Organophosphate Ester (OPE) Chemicals on Early Childhood Development

What are OPEs?



A type of chemical that can be found in things like flame retardants and plasticizers.

OPEs can be found in household objects:



Electronics
Personal Care Products
Carpets
Baby Products

OPEs disproportionately affect children from...

Hispanic families

Low-income communities

Communities of color

What were the results from the study?

In-utero exposure to OPEs was associated with:



Early birth



Higher risk of fine motor delay and lower fine motor skills
Such as picking up a block



More attention problems and aggressive behavior
AND
Higher symptoms of sadness and worry

Tips to healthy development and ways to reduce OPE exposures:



Be careful when removing or replacing old carpet

Isolate the area and avoid bringing dust into other spaces



Buy products made with natural fibers (like cotton and wool)

These products are naturally fire resistant and contain fewer chemicals



Use a HEPA filter vacuum cleaner

HEPA filters capture particles and reduce lead or allergens in house dust

Resources

HHEAR Human Health Exposure Analysis Resource


<https://hhearprogram.org/exposure-organophosphate-ester-ope-flame-retardants-plasticizers>

Hernandez-Castro I, Eckel SP, Chen X, Yang T, Vigil MJ, Foley HB, Kannan K, Robinson M, Grubbs B, Lerner D, Lurvey N, Al-Marayati L, Habre R, Dunton GF, Farzan SF, Aung MT, Breton CV, Bastain TM. Prenatal exposures to organophosphate ester metabolites and early motor development in the MADRES cohort. *Environ Pollut*. 2024 Feb 1;342:123131. doi: 10.1016/j.envpol.2023.123131. Epub 2023 Dec 11. PMID: 38092343; PMCID: PMC10872268.

Hernandez-Castro I, Eckel SP, Howe CG, Niu Z, Kannan K, Robinson M, Foley HB, Yang T, Vigil MJ, Chen X, Grubbs B, Lerner D, Lurvey N, Al-Marayati L, Habre R, Dunton GF, Farzan SF, Aung MT, Breton CV, Bastain TM. Prenatal exposures to organophosphate ester metabolite mixtures and children's neurobehavioral outcomes in the MADRES pregnancy cohort. *Environ Health*. 2023 Sep 22;22(1):66. doi: 10.1186/s12940-023-01017-3. PMID: 37737180; PMCID: PMC10515433.

Hernandez-Castro I, Eckel SP, Howe CG, Niu Z, Kannan K, Robinson M, Foley HB, Grubbs B, Al-Marayati L, Lerner D, Lurvey N, Aung MT, Habre R, Dunton GF, Farzan SF, Breton CV, Bastain TM. Sex-specific effects of prenatal organophosphate ester (OPE) metabolite mixtures and adverse infant birth outcomes in the maternal and developmental risks from environmental and social stressors (MADRES) pregnancy cohort. *Environ Res*. 2023 Jun 1;226:115703. doi: 10.1016/j.envres.2023.115703. Epub 2023 Mar 17. PMID: 36934865; PMCID: PMC10101931.

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