ECHO
Environmental influences on Child Health Outcomes
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Study Summary

How Can ECHO Research Help Pregnant Mothers Reduce Chemical Exposures?

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Who sponsored this study?

This research was supported by the Environmental influences on Child Health Outcomes (ECHO) program, the Office of the Director, and the National Institutes of Health.

Why was this study needed?

Participants in chemical exposure studies who receive reports on their personal exposures often look for information to reduce those exposures. Many chemical exposures are the result of policies, regulations, and practices, not individual behaviors and lifestyles. Individuals can address those policies and regulations through collective action, which is working with others to reach a common goal. Researchers wanted to understand the role of personal exposure reports in a participant's interest in engagement in collective action.

Who was involved?

In summer 2020, the researchers held three online focus groups in English and Spanish with a diverse group of 18 participants from pregnancy cohorts in Illinois and California.

What happened during the study?

This study aimed to understand how much participants know about sources of potentially harmful chemical exposures and their experience and interest in participating in collective action. Focus group participants talked about some of the barriers and strategies to participating in collective action, and their preferences for receiving and using their personalized reports about environmental chemical exposures. Input from these focus groups can be used to help design tools and content to report results of exposure research to ECHO participants.

What were the study results?

This study found that participants knew about the dangers of chemical exposures and were motivated to act to protect the health of their families and communities, although they have busy family lives, and the pandemic has further prevented them from participating in collective action. Participants requested strategies that were time-efficient and included straightforward, accessible information on how to reduce exposures at the personal and community level.

Footnote: Results reported here are for a single study. Other or future studies may provide new information or different results. You should not make changes to your health without first consulting your healthcare professional.

Impact

Researchers have an opportunity to directly learn from participants about how to improve the way in which chemical exposure results are reported in future studies. Report-back systems, or ways that study results are returned to participants, can present valuable information for participants about environmental health and how to lower chemical exposures in their homes and communities, and hold policy makers responsible for protecting parents and children from harmful chemical exposures. Researchers can use tools like the Digital Exposure Report Back Interface (DERBI) to give their participants access to individualized chemical results with information about how to take individual and collective action to reduce exposures.

What happens next?

The researchers are currently studying participant surveys from before and after participants received their chemical exposure reports to learn more about how participants use DERBI. These surveys may also reveal how DERBI reports may influence participant efforts to reduce exposure in their homes and communities through collective action.

Where can I learn more?

More information about the Digital Exposure Report Back Interface (DERBI) can be found on the Silent Spring Institute website.

Access the full journal article, titled "Perspectives of peripartum people on opportunities for personal and collective action to reduce exposure to everyday chemicals: Focus groups to inform exposure report-back" in *Environmental Research*.