Supplementary Materials

Testing a lead take-home intervention in the homes of lead-exposed construction workers

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I. RECLEAN SCREENING SURVEY – IN PERSON RECRUITMENT

*****Start Screening Survey after offering an overview of the study (Brief Screening Agreement) *****

This English survey will be administered by the Boston University SPH research to recruit qualifying participants for the study. The goal is to find workers that:

1. are 18 years of age or older,
2. live in Greater Boston area,
3. live with at least one child household member 1 year of age or older (does not have to be a child of the worker),
4. work full time (35hrs or more per week) in construction with high risk for metal exposures (with preference to those that perform renovations, bridge constructions, welding or metal work, demolitions; screening survey performed during recruiting to select those high risk), and
5. speak English or Spanish.

Investigator Initials: _____

Date: ____/____/_____/

Recruiting Screening Survey (TO BE ADMINISTERED ONLY)

1. Do you live in the Greater Boston Area?
    a. ____Yes ____No (**do not qualify**)
    b. Do you live in Massachusetts?
        i. ____Yes ____No (**do not qualify**)
    c. Do you have any plans to move in the next six months?
        i. ____Yes ____No
        ii. If Yes, please describe: _____
            1. If the interviewee has definite plans to move, collect as much information about the move that is provided.
            2. If the move is out of Massachusetts, they **do not qualify**.
            3. Ask about the timeframe of the move (when it is planned) as this may affect when their first visit is scheduled.
            4. If not clear, collect information and ask PI for final decision.
2. Do you live by yourself or with others?
    ____By myself (**do not qualify**)
    ____With others
    a. If you live with others, how many live with you (not including you)?
        ____1____2 ____3 ____4 ____5 ____6 ____7 ____8____More than 8
    b. If you live with others, how many children 1-17 years of age live with you?
        ____1____2 ____3 ____4 ____5 ____6 ____7 ____8____More than 8
3. Do you work full time (35 hours or more) in construction for at least the last 6 months?
    a. ____Yes. ____No (**do not qualify**)

4. If construction,
    a. Do you belong to a union?
        i. ____Yes ____No

    b. If so, what is your job title?
        i. ____Journeyman
        ii. ____Foreman
        iii. ____General foreman
        iv. ____Apprentice

    c. Do you work in renovation or demolition work?
        i. ____Yes ____No

    d. What is the trade that you perform?
        ____Boilermaker
        ____Construction Equipment Operator
        ____Construction Laborer and Helper
        ____Electrician
        ____Elevator Installer and Repairer
        ____Ironworker
        ____Masonry Worker
        ____Painter, Construction or Maintenance
        ____Plumber, Pipefitter, or Steamfitter
        ____Sheet Metal Worker
        ____Other, specify: _____
        (if "other" and NO was answered in the previous question, they **do not qualify**)
5. What are your main work tasks or activities that you perform on a daily basis?

_____

_____

_____

6. Are you 18 years of age or older?
    a. ____Yes. ____No (**do not qualify**)

7. Are you comfortable communicating in English or Spanish?
    a. ____Yes. ____No (**do not qualify**)

Screening survey ends here – review eligibility

Interviewer: *"Thank you for your answers, let me look over my form to see if you qualify."* *(At this time, interviewer can step away from the participant momentarily to review their eligibility).

Eligibility:

- 18 years of age or older.
- Lives in the Greater Boston Area (in Massachusetts).
- Lives with at least one child household member 1 year of age or older (does not have to be a child of the worker),
- Works full time (35hrs or more per week) in construction with high risk for metal exposures (with preference to those that perform renovations, bridge constructions, welding or metal

work, demolitions; screening survey performed during recruiting to select those high risk), and

- Speaks English or Spanish.

If NOT eligible:
The participant does not qualify if interviewer fills any answer that follows "**do not qualify.**"

Interviewer: "*Unfortunately it doesn't look like you are a good fit for this study at this time, but what we can do is keep your contact information on file and contact you for future research opportunities. Would that be okay*?"

If YES, collect name (first and last), phone number and email address.

"*OK great, we will keep in touch. Thank you for your interest*!"

If NO, *"Thank you for your time."*

If you're not sure if R is Eligible due to:

- Lack of clarity on whether or not their work is high risk for metal exposure
- Potential plans to move within the study area

Take notes on what the potential participant says and consult with the Project Coordinator/PI for final decision on eligibility.

Interviewer: *"Unfortunately at this time we cannot determine if you qualify. Would it be okay if we call you later to let you know if you are eligible?"*

If YES, collect name (first and last), and phone number.

"*OK great, we will let you know whether you are eligible as soon as we ask the principal investigator*

If NO, *"Thank you for your time."*

If eligible:

Interviewer: "*It looks like you are eligible to participate in the study, which is great! We will need to collect some additional information from you to proceed with scheduling your visit."*

If the participant qualifies, then please ask the following information to follow up for enrollment:

1. Name (first and last): _____
2. What is your native language?_____
    a. preferred language? _____
3. What is your phone number? _____
4. What is your email? _____
5. What is your home address? _____
6. How can we contact you? (check all that apply)

_____Phone ____Text Message ____ Email

Interviewer: Thank you so much for your time and for speaking with me. This information is essential to us. Do you have any questions about our research study that I may be able to help you with?

Participant:

**********If eligible, proceed to schedule First Home Visit**********

II. RECLEAN SCREENING SURVEY – BY PHONE RECRUITMENT

Phone script for surveying interested participants

***NOTE-** Have your calendar up while you're doing the interview.

***If call is outgoing:*
Interviewer: *"Hello, my name is ___ (first name) ___, and I am a researcher from the Boston University School of Public Health. Someone from ____ (referral organization) _____ gave me this phone number. Could I please speak to _____?"*

Interviewer: *"How are you doing today?"*
Participant:

Interviewer: *I am calling to ask if you (and your family) are interested in participating in a research study that we are conducting. Is this a good time to talk to you?*

(If 'NO', ask for the participants' availability and reschedule the call)
(If 'YES', proceed with information)

***If call is incoming:*
Interviewer: *"Hello, this is ___ (first name) ___ from the Boston University School of Public Health. How can I help you?"*
Participant:
If caller expresses interest in a research study, attempt to determine which one. If call is about something else, try (within reason) to direct them to what they are looking for. If needed,* ***Interviewer: *"Thank you for calling our office, but it sounds like you have the wrong number."*

***If caller is interested in the RECLEAN Pilot Study, proceed with information below.*

Interviewer: *To start off, I can tell you more about the study and what it would involve and then, if you're still interested, we can then see if you're eligible to participate. Does that sound good?*
Participant: Yes.

So, for this study, we are recruiting construction workers and their families to assess lead in their homes and exposure of residents. We would expect you and others in your family to join. For the study we would visit your home twice and you would attend an additional educational session in person at a union training facility or remotely online.

You and your family members could earn approximately $300 for participating in the study.

Does this sound like something you and your family might be interested in?

(If 'NO', "Ok, thank you for your time.")
(If 'YES', proceed to screening survey)

Before we begin, any personal information, including your name, address, and survey answers that we collect from you will be kept strictly confidential and will not be shared with any person or group that is not associated with this study. Your participation is completely voluntary, and you may refuse to answer any questions you do not wish to answer.

Are you ready to continue?

(If 'NO' → end call)
(If 'YES' → proceed with the screening questions.)

RECLEAN Recruiting screening survey:
This English survey will be administered by the Boston University SPH research team to recruit qualifying participants for the study. The goal is to find workers that:

6. are 18 years of age or older,
7. live in Greater Boston area,
8. live with at least one child household member 1 year of age or older (does not have to be a child of the worker),
9. work full time (35hrs or more per week) in construction with high risk for metal exposures (with preference to those that perform renovations, bridge constructions, welding or metal work, demolitions; screening survey performed during recruiting to select those high risk), and
10. speak English or Spanish.

Investigator Initials: _____
Date: ____/____/_____/

Recruiting Screening Survey (TO BE ADMINISTERED ONLY)

8. Do you live in the Greater Boston Area?
    a. ____Yes ____No (**do not qualify**)
    b. Do you live in Massachusetts?
        i. ____Yes ____No (**do not qualify**)
    c. Do you have any plans to move in the next six months?
        i. ____Yes ____No
        ii. If Yes, please describe: _____
            1. If the interviewee has definite plans to move, collect as much information about the move that is provided.
            2. If the move is out of Massachusetts, they **do not qualify**.
            3. Ask about the timeframe of the move (when it is planned) as this may affect when their first visit is scheduled.

4. If not clear, collect information and ask PI for final decision.

9. Do you live by yourself or with others?
   ____By myself (**do not qualify**)
   ____With others
   a. If you live with others, how many live with you (not including you)?
      ____1____2 ____3 ____4 ____5 ____6 ____7 ____8____More than 8
   b. If you live with others, how many children 1-17 years of age live with you?
      ____1____2 ____3 ____4 ____5 ____6 ____7 ____8____More than 8
10. Do you work full time (35 hours or more) in construction for at least the last 6 months?
   a. ____Yes. ____No (**do not qualify**)

   If construction,
   b. Do you belong to a union?
      i. ____Yes ____No
   c. If so, what is your job title?
      i. ____Journeyman
      ii. ____Foreman
      iii. ____General foreman
      iv. ____Apprentice
   d. Do you work in renovation or demolition work?
      i. ____Yes ____No

   e. What is the trade that you perform?
      ____Boilermaker
      ____Construction Equipment Operator
      ____Construction Laborer and Helper
      ____Electrician
      ____Elevator Installer and Repairer
      ____Ironworker
      ____Masonry Worker
      ____Painter, Construction or Maintenance
      ____Plumber, Pipefitter, or Steamfitter
      ____Sheet Metal Worker
      ____Other, specify: _____
      (if "other" and NO was answered in the previous question, they **do not qualify**)

11. What are your main work tasks or activities that you perform on a daily basis?

_____

_____

12. Are you 18 years of age or older?
   a. ____Yes. ____No (**do not qualify**)

13. Are you comfortable communicating in English or Spanish?
   a. ____Yes. ____No (**do not qualify**)

Screening survey ends here – review eligibility

Interviewer: *"Thank you for your answers, let me look over my form to see if you qualify."* *(At this time, interviewer can put the participant on hold to quickly review their eligibility).

Eligibility:

- 18 years of age or older.
- Lives in the Greater Boston Area (in Massachusetts).
- Lives with at least one child household member 1 year of age or older (does not have to be a child of the worker),
- Works full time (35hrs or more per week) in construction with high risk for metal exposures (with preference to those that perform renovations, bridge constructions, welding or metal work, demolitions; screening survey performed during recruiting to select those high risk), and
- Speaks English or Spanish.

If NOT eligible:
The participant does not qualify if interviewer fills any answer that follows "**do not qualify.**"

Interviewer: "*Unfortunately it doesn't look like you are a good fit for this study at this time, but what we can do is keep your contact information on file and contact you for future research opportunities. Would that be okay*?"

If YES, collect name (first and last), phone number and email address.

"*OK great, we will keep in touch. Thank you for your interest*!"

If you're not sure if R is Eligible due to:

- Lack of clarity on whether or not their work is high risk for metal exposure
- Potential plans to move within the study area

Take notes on what the potential participant says and consult with the Project Coordinator/PI for final decision on eligibility.

Interviewer: *"Unfortunately at this time we cannot determine if you qualify. Would it be okay if we called you back to let you know if you are eligible?"*

If YES, ask for the participants' availability to call them back at a later time.

If eligible:

Interviewer: "*It looks like you are eligible to participate in the study, which is great! We will need to collect some additional information from you to proceed with scheduling your visit."*

If the participant qualifies, then please ask the following information to follow up for enrollment:

7. Name (first and last): _____
8. What is your native language? _____
    a. preferred language? _____
9. What is your phone number? _____

10. What is your email? _____
11. What is your home address? _____
12. How can we contact you? (check all that apply)

_____Phone ____Text Message ____ Email

Interviewer: Thank you so much for your time and for speaking with me. This information is essential to us. Do you have any questions about our research study that I may be able to help you with?

Participant:

**********If eligible, proceed to schedule First Home Visit**********

III. METHODOLOGY

Lead Assessment

Worker Survey: A 30-40 minute survey was adapted from the survey by Ceballos et al. (2021) and HUD (2026) to ask questions about demographics, socioeconomic status, characteristics of the home (e.g., year built, water and energy sources), renting/ownership status, health status and habits, worker practices and conditions, diet, and hobbies. Work conditions in the survey referred to how precarious their jobs are, if they belong to a union, and how long their work contracts are, along with pay and benefits arrangements. A work practices section included questions about lead-safe work practices at work, specifically asking if they have taken training to prevent lead exposures at work and what controls are in place in their workplace. A hobbies section included questions about hobbies, including home renovations and whether they followed lead-safe work practices during renovation. The survey included questions related to take-home to identify potential work-, automobile-, and home-related behaviors and conditions that have the potential for take-home, as described by Ceballos et al. (2021, 202). Examples include if a worker comes home dirty or dusty from work, if a worker washes work clothes at home, if a worker washes up before going home, if a worker commutes using the family automobile, and the number of household members employed.

Household Member Surveys**:** A 5-10 minute version of the worker survey was tailored to different ages and was administered to adults and children depending on their age. The survey included questions about potential lead sources and sociodemographic information.

Home and Automobile Inspection: A lead inspection in each home and automobile where children were transported (if any) were performed. This portion included a visual inspection, a home observation checklist, and dust sampling. Information about home characteristics and conditions, such as peeling paint, maintenance issues, and cleanliness of the home, will be documented with the help of an observation checklist using Qualtrics on an iPad. The items for observation in the checklist have been refined for this study to make sure findings from the Harvard Take Home Study are included, such as checking entrance mats, use of shoes in the home, crowdedness in sleeping areas, and automobiles where children are transported (if any). In addition, the checklist includes select items regularly checked during home inspections conducted by HUD.

Dust and Soil Sampling: We surveyed the home and automobile to identify potential surfaces to sample for lead problems. We then collect dust samples in the home following two methods targeting the most concerning areas. The first method wiped up to ten 1 ft by 1 ft surfaces in the home and automobile following methods described in Ceballos et al. (2025). The surfaces that were targeted were chosen using HUD methods that put a higher priority on smooth surfaces that the worker was likely to contaminate and that could expose other family members. These surfaces included the laundry area, entryway, and living room, as well as windowsills, which are at risk for lead. We used an SKC 550-002 colorimetric wipe kit for lead to obtain an immediate color response for the presence of lead (a reddish color suggests lead).

We also collected a dust sample by vacuuming all home floors and surfaces into clean sampling thimbles as described by Ceballos et al. (2021). When scheduling the visit, we asked participants to avoid vacuuming the house, if possible, for at least one week prior to the scheduled home visit to allow for ample dust for our tests. Finally, an outdoor dust or soil sample was collected from the exterior of the home to better characterize additional sources of potential lead exposure in the home according to methods adapted from Penn State University (2024).

At least a 10% of field blanks and media blanks were collected for each type of sample, as well as replicate samples, and laboratory blanks.

Dust and Soil Analysis:
Dust and soil samples were shipped at room temperature to Ohio State University (OSU) Laboratory, Columbus, Ohio, for analysis.

Total elemental content in dust samples was determined using microwave assisted acid digestion according U.S. EPA Method 3051a (U.S. EPA 2007) in which 0.5g of sample is digested in 50mL of nitric and hydrochloric acid in a CEM microwave (CEM Corporation). Digestion solutions were analyzed by inductively coupled plasma optical emission spectroscopy (ICP-OES) according to U.S. EPA Method 6010D (U.S. EPA 2014) with an Agilent 720 ICP-OES (Agilent Technologies). Quality control measures included soil reference material CRM 059-050G (Honeywell Fluka International), reagent blanks, media blanks, and spikes. All blanks

were less than the instrument reporting limits of 10 mg/kg, CRM and spike recoveries were within 85-115%.

Total elemental content in soil samples was determined by X-ray fluorescence (XRF) according to U.S. EPA Method 6200. (U.S. EPA 2007) with a Niton FXL FM-XRF analyzer (Thermo Fisher Scientific). Quality control measures included silica blanks, soil reference materials 2711a (National institute of Standards and Technology), RICRA1, and USGS SdAR-M2, reference materials (Thermo Fisher Scientific). Silica blanks resulted in target analyte concentrations below the instrument detection limit of 10 mg/kg, reference material recoveries were within 85-115%

Blood Specimen Sampling and Analysis: A mobile phlebotomist collected whole venous blood from each household member during the home visit using a CDC-provided metal-free vacutainer tube. Samples were transported and shipped frozen to the CDC metals laboratory. Blood samples were analyzed using the CDC method for blood multi-element panel, which includes lead (Pb) with a limit of detection of 0.045 µg/dL (CDC, 2026b).

Lead Take Home Prevention Intervention

The educational intervention entailed two trainings geared toward different audiences: households and workers detailed by Grant et al. (2024), and a summary as follows.

In-Home Family Lead Take-Home Prevention Educational Session (Home Session): The in-home educational session was conducted in person by a trained session facilitator with everyone in the household, as described in detail in Tore et al. (2024) but shorter (up to 30 min given the time constraints of the study). During the educational sessions, using a motivational interview style, we introduced the concept of take-home lead exposure to the participants which addressed various take-home exposure-related behaviors in different domains such as laundry, shower, children, storage, cleaning, and vehicle. Families rated their satisfaction with their current practices, reviewed practical exposure prevention strategies tailored to their specific circumstances, and worked collaboratively to develop a home specific action plan, poster, and interactive calendar prioritizing areas for improvement.

Construction Worker Lead Take-Home Prevention Educational Session (Worker Session): The training was administered in person by a trained session facilitator to the worker as described by Grant et al. (2024) but shorter (up to 20 min given the constraints of the study). We used a plain language visual booklet with interactive activities to encourage workers to reflect on their circumstances, identify situations that could potentially increase lead risk, and find possible solutions. The training guide included information on lead in construction, a take-home wheel for preventing exposure that covered different areas (i.e., clothing, storage, personal protective equipment (PPE), shower, laundry, and vehicle practical recommendations tailored to the worker), and an action plan activity. By the end of their session, each worker prioritized at least one exposure prevention strategy, creating a worker specific action plan.

References Methodology

US Environmental Protection Agency (EPA). 2007. Method 3051a. Microwave assisted acid digestion of sediments, sludges, soils, and oils. In SW-846. U.S. Environmental Protection Agency, Washington, DC.

US EPA. 2007. Method 6200. Field Portable X-Ray Fluorescence Spectrometry For The Determination Of Elemental Concentrations In Soil And Sediment. In SW-846. U.S. Environmental Protection Agency, Washington, DC, USA.

US EPA. 2014. Method 6010D. Inductively coupled plasma-atomic emission spectrometry. In SW-846. U.S. Environmental Protection Agency, Washington, DC, USA.

IV. SCRIPT FOR ONE-MONTH FOLLOW UP CALL

Interviewer: *"Hi, this is ___(first name)___ calling from the RECLEAN Pilot Study at the Boston University School of Public Health. Could I please speak to__(name of participant)_____?*
Participant:
Confirm you are speaking with the worker or adult household member

Interviewer**:** "*Thank you again for participating in the RECLEAN Pilot Study. Part of the study involves this follow up phone call after your first home visit. We would like to ask you a few questions about some of the tools that you have been using. Is now a good time to ask you those questions?"*
Participant:
(If 'NO') Ask for a better time to call back.
(If 'YES') Proceed.

Interviewer**:** "Perfect! *Just so you know, this is meant to be an informal conversation. We would like to know what went well, or did not go well with carrying out the plan, so there are no "right" or "wrong" answers. We appreciate your honesty so that we can better understand your experience."*

You should feel free to interrupt me at any time if you have a question or a comment. You are free to stop the conversation at any time, or say "pass" on a question if you do not wish to answer it. This conversation should only take about 10 minutes of your time."
Participant:

Interviewer*: "During the first home visit, we gave your family some tools to use as reminders and to help track your progress with the goals that you set. If I name the tool, can you please can tell me who in your family used it and how many times per week? If no one used it, that is absolutely fine. This information is also helpful for us to know."*

Tool/Material	Family Member	# Times/Week
Family Behavior Wheel		
Family Calendar		
Family Action Plan		

Interviewer: *"On a scale of 1-5 (with 1 being very easy and 5 being extremely hard), how would you rate how easy or hard the* ***Family Behavior Wheel*** *was to use?"*

1 2 3 4 5

NOTES:

Interviewer: *"On a scale of 1-5 (with 1 being very easy and 5 being extremely hard), how would you rate how easy or hard the* ***Family Calendar*** *was to use?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"On a scale of 1-5 (with 1 being very easy and 5 being extremely hard), how would you rate how easy or hard the* ***Action Plan*** *was to use?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"On a scale of 1-5 (with 1 being very helpful and 5 not being helpful at all), how helpful was the* ***Family Behavior Wheel*** *in helping your family achieve its take-home lead prevention goals?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"On a scale of 1-5 (with 1 very helpful and 5 not being helpful at all), how helpful was the* ***Family Calendar*** *in helping your family achieve its take-home lead prevention goals?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"On a scale of 1-5 (with 1 very helpful and 5 not being helpful at all), how helpful was the* ***Action Plan*** *in helping your family achieve its take-home lead prevention goals?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer*: "Thinking about the tools we gave you since we last spoke, what was the most helpful and why?"*
Participant:

Interviewer: *"Thinking about the tools we gave you since we last spoke, what was the least helpful and why?"*
Participant:

Interviewer**:** *"Was there anything that made it challenging to use the materials? This might be something about the tools themselves or about your daily life."*
Participant:

Interviewer: *"On a scale of 1-5 (with 1 being the most likely and 5 not being not likely at all), how likely is your family to stick with your* ***Action Plan****?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"Now that you have been using the tool(s) for a while, on a scale of 1-5 (with 1 being very satisfied and 5 being not satisfied at all), how would you rate your family's progress in achieving your take-home prevention goals?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer**:** "*Apart from the tools, is there anything else that your family has done differently to prevent take-home lead since we last spoke?"*
Participant:

*****For families in the Advanced Intervention Group, ask the following questions about the cleaning products provided during the first home visit.****

Interviewer**:** "*As you remember, we also provided your household with a few cleaning products during the first home visit that are specifically created for the removal of lead and other metals. If I name the product, can you please can tell me who in your family used it and how many times per week? If no one used it, that is absolutely fine. This information is also helpful for us to know."*

Tool/Material	Family Member	# Times/Week
Skin Wipes		
Laundry Detergent		
All-Purpose Cleaner		

Interviewer: *"On a scale of 1-5 (with 1 being very helpful and 5 not being helpful at all), how helpful was the* ***skin wipes*** *in helping your family achieve its take-home lead prevention goals?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"On a scale of 1-5 (with 1 being very helpful and 5 not being helpful at all), how helpful was the* ***laundry detergent*** *in helping your family achieve its take-home lead prevention goals?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"On a scale of 1-5 (with 1 being very helpful and 5 not being helpful at all), how helpful was the* ***all-purpose cleaner*** *in helping your family achieve its take-home lead prevention goals?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer*: "Thinking about the cleaning products we gave you, what was the most helpful and why?"*
Participant:

Interviewer: *"Thinking about the cleaning products we gave you, what was the least helpful and why?"*
Participant:

Interviewer**:** *"Was there anything that made it challenging to use the cleaning products? This might be something about the products themselves or about your daily life."*
Participant:

Interviewer: *"On a scale of 1-5 (with 1 being the most likely and 5 not being not likely at all), how likely is your family to keep using any of the cleaning products after the study ends?"*

1 **2** **3** **4** **5**

NOTES:

Interviewer: *"Is there any other feedback that you would like to share or questions that you have"*
Participant:

Interviewer: *"That's all the questions I have, thank you so much for your time."*

Supplementary Table 1. Blood lead levels of all participants, workers only and children only on selected work-related variables that may affect take-home exposures

Variable	All		Worker		Children	
	*n**	*Median (Range)*	*n**	*Medium (Range)*	*n**	*Medium (Range)*
Overall	30	0.92 (0.23, 27.11)	9	1.38 (0.50, 22.07)	11	0.92 (0.36, 27.11)
Received training on working with lead						
Yes	11	0.58 (0.23 - 14.51)	4	1.12 (0.54 - 14.51)	4	0.66 (0.50 - 2.57)
No	19	0.98 (0.24 - 27.11)	5	3.12 (0.50 - 22.07)	7	0.98 (0.36 - 27.11)
Storage at work accessibility						
Good	5	1.20 (0.96 – 22.07)	2	11.52 (0.96 - 22.07)	1	5.22 (5.22 - 5.22)
Moderate	16	0.54 (0.23 - 27.11)	4	1.12 (0.50 - 3.12)	7	0.58 (0.36 - 27.11)
Poor	9	0.92 (0.45 - 14.51)	3	5.77 (0.54 - 14.51)	3	0.92 (0.74 - 0.98)
Cleaning facilities accessibility						
Adequate	12	0.94 (0.40 - 22.07)	5	0.87 (0.50 - 22.07)	3	2.57 (0.74 - 5.22)
Inadequate	18	0.92 (0.23 - 27.11)	4	2.25 (0.96 - 5.77)	8	0.75 (0.36 - 27.11)
Performs renovation/demolition at work						
Yes	16	0.99 (0.23 - 27.11)	4	2.25 (0.96 - 22.07)	7	0.58 (0.36 - 27.11)
No	14	0.89 (0.40 - 14.51)	5	0.87 (0.50 - 14.51)	4	0.95 (0.74 - 2.57)
Has location to change clothes						
Rarely/Sometimes	27	0.87 (0.23 - 27.11)	8	1.17 (0.50 - 14.51)	10	0.83 (0.36 - 27.11)
Almost always	3	5.22 (1.02 - 22.07)	1	22.07 (22.07 - 22.07)	1	5.22 (5.22 - 5.22)
Performs construction work with high lead risk						
Rarely/Sometimes	20	0.89 (0.23 - 14.51)	7	0.96 (0.50 - 14.51)	6	0.83 (0.50 - 2.57)
Almost always	10	1.79 (0.24 - 27.11)	2	12.60 (3.12 - 22.07)	5	2.56 (0.36 - 27.11)
Work personal hygiene level						
Good	28	0.89 (0.23 - 27.11)	8	2.25 (0.50 - 22.07)	11	0.92 (0.36 - 27.11)
Poor	2	1.08 (0.96 - 1.20)	1	0.96 (0.96 - 0.96)	-	-

*Note comparisons in groups with categories with n<5 may be misleading.

Supplementary Table 2. Blood lead levels of all participants, workers only and children only on selected home-related variables that may affect take-home exposures

Variable	All		Worker		Children	
	*n***	*Median (Range)*	*n**	*Medium (Range)*	*n***	*Medium (Range)*
Overall	30	0.92 (0.23, 27.11)	9	1.38 (0.50, 22.07)	11	0.92 (0.36, 27.11)
Home built before 1978						
Yes	27	0.92 (0.23 - 27.11)	8	2.25 (0.50 - 22.07)	10	0.83 (0.36 - 27.11)
No	3	0.87 (0.40 - 2.57)	1	0.87 (0.87 - 0.87)	1	2.57 (2.57 - 2.57)
Home has a fireplace ‡						
No	28	0.89 (0.23 - 27.11)	8	2.25 (0.50 - 22.07)	11	0.92 (0.36 - 27.11)
Any recent renovation at home						
Yes	6	3.21 (0.96 - 22.07) *	3	14.51 (0.96 - 22.07)	1	5.22 (5.22 - 5.22)
No	24	0.74 (0.23 - 27.11) *	6	1.12 (0.50 - 5.77)	10	0.83 (0.36 - 27.11)
Other construction worker(s) at home						
Yes	6	0.64 (0.40 - 2.57)	2	0.70 (0.54 - 0.87)	2	1.65 (0.74 - 2.57)
No	24	0.97 (0.23 - 27.11)	7	3.12 (0.50 - 22.07)	9	0.92 (0.36 - 27.11)
Has children less than 6 years old						
Yes	22	0.92 (0.24 - 27.11)	6	4.44 (0.54 - 22.07)	9	0.98 (0.36 - 27.11)
No	8	0.77 (0.23 - 1.38)	3	0.96 (0.50 - 1.38)	2	0.54 (0.50 - 0.58)
Has lead-poisoned children in the home						
Yes	16	0.80 (0.24 - 27.11)	4	1.99 (0.54 - 22.07)	7	2.56 (0.36 - 27.11)
No	14	0.94 (0.23 - 14.51)	5	1.38 (0.50 - 14.51)	4	0.75 (0.50 - 0.98)
Family member gets dirty at work						
Yes/sometimes	17	0.74 (0.24 - 27.11)	5	0.87 (0.50 - 3.12) †	6	1.65 (0.36 - 27.11)
No	13	0.98 (0.23 - 22.07)	4	10.14 (1.38 - 22.07) †	5	0.92 (0.50 - 5.22)
Family member smokes §						
Yes	4	0.54 (0.23 - 1.38)	1	1.38 (1.38 - 1.38)	2	0.54 (0.50 - 0.58)
No	19	0.96 (0.40 - 22.07)	7	0.96 (0.50 - 22.07)	5	0.98 (0.74 - 5.22)
Home heating fuel						

Natural gas	11	0.92 (0.23 - 5.77)	3	1.38 (0.50 - 5.77)	4	0.75 (0.50 - 0.98)
Electric	19	0.96 (0.24 - 27.11)	6	2.04 (0.54 - 22.07)	7	2.56 (0.36 - 27.11)
Home cooking fuel §						
Natural gas	14	0.95 (0.23 - 22.07)	4	3.57 (0.50 - 22.07)	5	0.92 (0.50 - 5.22)
Electric	9	0.87 (0.40 - 14.51)	4	0.91 (0.54 - 14.51)	2	1.65 (0.74 - 2.57)
Home risk assessment						
Low risk	14	0.92 (0.23 - 5.77)	4	1.17 (0.87 - 5.77)	5	0.92 (0.50 - 2.57)
Medium/high risk	16	0.88 (0.24 - 27.11)	5	3.12 (0.50 - 22.07)	6	1.65 (0.36 - 27.11)
Home hygiene level ‡						
Good	19	0.73 (0.23 - 27.11)	4	2.25 (0.54 - 5.77)	9	0.74 (0.36 - 27.11)
Poor	9	1.20 (0.40 - 22.07)	4	7.73 (0.87 - 22.07)	2	3.89 (2.57 - 5.22)

* Significant differences of all participants' blood lead levels between those who had recent renovation at home vs. not (Mann Whitney U test p value = 0.018)
† Significant differences of workers' blood lead levels between those who had family members get dirty at work vs. not (Mann Whitney U test p value = 0.037)
‡ Information was missing for 2 participants overall, including 1 worker
§ Information was missing for 7 participants overall, including 1 worker and 4 children.
**Note comparisons in groups with categories with n<5 may be misleading.

Supplementary Table 3. Blood lead levels of all participants, workers only and children only on selected workers' demographics that may affect take-home exposures

Variable	All		Worker		Children	
	n**	***Median (Range)***	***n*****	***Median (Range)***	***n*****	***Median (Range)***
Overall	30	0.92 (0.23, 27.11)	9	1.38 (0.50, 22.07)	11	0.92 (0.36, 27.11)
Education						
High school diploma or GED or less	18	1.00 (0.24 - 27.11)	5	5.77 (0.50 - 22.07)	7	0.98 (0.36 - 27.11)
Some college but no degree	12	0.66 (0.23 - 2.57)	4	0.91 (0.54 - 1.38)	4	0.66 (0.50 - 2.57)
Monthly salary						
Less than 3000	18	0.92 (0.23 - 22.07)	6	1.38 (0.50 - 22.10)	7	0.75 (0.50 - 5.22)
3000 or above	12	0.91 (0.24 - 27.11)	3	0.96 (0.87 - 3.12)	5	2.56 (0.36 - 27.10)
Ethnicity						
Hispanic	28	0.89 (0.23 - 27.11)	8	2.25 (0.50 - 22.07)	11	0.92 (0.36 - 27.11)
Non-Hispanic	2	1.08 (0.96 - 1.20)	1	0.96 (0.96 - 0.96)	-	-
Born in the U.S.						
Yes	2	1.08 (0.96 - 1.20)	1	0.96 (0.96 - 0.96)	-	-
No	28	0.89 (0.23 - 27.11)	8	2.25 (0.50 - 22.07)	11	0.92 (0.36 - 27.11)
Age *						
Less than 30	15	0.92 (0.24 - 27.11)	3	3.12 (0.87 - 5.77)	7	0.98 (0.36 - 27.11)
30 or older	12	0.66 (0.23 - 14.51)	5	0.96 (0.50 - 14.51)	3	0.58 (0.50 - 0.74)
Sex *						
Male	25	0.87 (0.23 - 27.11)	7	1.38 (0.54 - 14.51)	10	0.83 (0.36 - 27.11)
Female	2	0.88 (0.50 - 1.26)	1	0.50 (0.50 - 0.50)	-	-
Household income *						
Less than $50,000	12	0.92 (0.23 - 14.51)	4	3.57 (0.50 - 14.51)	4	0.75 (0.50 - 0.98)
More than $50,000	15	0.74 (0.24 - 27.11)	4	0.91 (0.54 - 3.12)	6	1.65 (0.36 - 27.11)

*Information was missing for 3 participants overall, including 1 worker and 1 child
**Note comparisons in groups with categories with n<5 may be misleading.

Supplementary Table 4. Indoor and outdoor dust lead levels on selected work-related variables that may affect take-home exposures

Variable	Indoor		Outdoor	
	*n**	*Median (Range)*	*n**	*Medium (Range)*
Overall	9	339.8 (91.8 - 1336.0)	9	1712.6 (54.2 - 7668.0)
Received training on working with lead				
Yes	4	697.0 (108.0 - 1336.0)	4	1973.0 (54.2 - 7668.0)
No	5	180.0 (91.8 - 784.0)	5	722.0 (76.1 - 4108.0)
Storage at work accessibility				
Good	2	437.0 (91.8 - 782.0)	2	399.0 (76.1 - 722.0)
Moderate	4	159.0 (108.0 - 340.0)	4	1178.0 (54.2 - 2957.0)
Poor	3	1055.0 (784.0 - 1336.0)	3	4108.0 (1713.0 - 7668.0)
Cleaning facilities accessibility				
Adequate	5	782.0 (138.0 - 1336.0)	5	1713.0 (76.1 - 7668.0)
Inadequate	4	144.0 (91.8 - 784.0)	4	1840.0 (54.2 - 4108.0)
Performs renovation/demolition at work				
Yes	4	144.0 (91.8 - 782.0)	4	399.0 (54.2 - 2957.0)
No	5	784.0 (138.0 - 1336.0)	5	2233.0 (123.0 - 7668.0)
Has location to change clothes				
Rarely/Sometimes	8	260.0 (91.8 - 1336.0)	8	1973.0 (54.2 - 7668.0)
Almost always	1	782.0 (782.0 - 782.0)	1	76.1 (76.1 - 76.1)
Performs construction work with high lead risk				
Rarely/Sometimes	7	340.0 (91.8 - 1336.0)	7	1713.0 (54.2 - 7668.0)
Almost always	2	481.0 (180.0 - 782.0)	2	1517.0 (76.1 - 2957.0)
Work personal hygiene level				
Good	8	561.0 (108.0 - 1336.0)	8	1973.0 (54.2 - 7668.0)
Poor	1	91.8 (91.8 - 91.8)	1	722.0 (722.0 - 722.0)

*Note comparisons in groups with categories with n<5 may be misleading.

Supplementary Table 5. Indoor and outdoor dust lead levels on selected home-related variables that may affect take-home exposures

Variable	Indoor (n = 9)		Outdoor (n = 9)	
	*n***	*Median (Range)*	*n***	*Median (Range)*
Overall	9	339.8 (91.8 - 1336.0)	9	1712.6 (54.2 - 7668.0)
Home built before 1978				
Yes	8	481.0 (91.8 - 1336.0)	8	1218.0 (54.2 - 7668.0)
No	1	340.0 (340.0 - 340.0)	1	2233.0 (2233.0 - 2233.0)
Home has a fireplace				
No	8	561.0 (108.0 - 1336.0)	8	1973.0 (54.2 - 7668.0)
Any recent renovation at home				
Yes	3	782.0 (91.8 - 1336.0)	3	722.0 (76.1 - 1713.0)
No	6	260.0 (108.0 - 1055.0)	6	2595.0 (54.2 - 7668.0)
Other construction worker(s) at home				
Yes	2	697.0 (340.0 - 1055.0)	2	4950.0 (2233.0 - 7668.0)
No	7	180.0 (91.8 - 1336.0)	7	722.0 (54.2 - 4108.0)
Has children less than 6 years old				
Yes	6	783.0 (180.0 - 1336.0) *	6	2595.0 (76.1 - 7668.0)
No	3	108.0 (91.8 - 138.0) *	3	123.0 (54.2 - 722.0)
Has lead-poison children				
Yes	4	561.0 (180.0 - 1055.0)	4	2595.0 (76.1 - 7668.0)
No	5	138.0 (91.8 - 1336.0)	5	722.0 (54.2 - 4108.0)
Family member gets dirty at work				
Yes/sometimes	5	180.0 (91.8 - 1055.0)	5	2233.0 (123.0 -7668.0)
No	4	783.0 (108.0 - 1336.0)	4	894.0 (54.2 - 4108.0)
Family member smokes				
Yes	1	108.0 (108.0 - 108.0)	1	54.2 (54.2 - 54.2)
No	7	782.0 (91.8 - 1336.0)	7	1713.0 (76.1 - 7668.0)
Home heating fuel				
Natural gas	3	138.0 (108.0 - 784.0)	3	123.0 (54.2 - 4108.0)
Electric	6	561.0 (91.8 - 1336.0)	6	1973.0 (76.1 - 7668.0)
Home cooking fuel				
Natural gas	4	460.0 (108.0 - 784.0)	4	99.6 (54.2 - 4108.0)

Electric	4	697.0 (91.8 - 1336.0)	4	1973.0 (722.0 - 7668.0)
Home risk assessment				
Low risk	4	224.0 (91.8 - 784.0)	4	1477.0 (54.2 - 4108.0)
Medium/high risk	5	782.0 (138.0 - 1336.0)	5	1713.0 (76.1 - 7668.0)
Home hygiene level				
Good	4	482.0 (108.0 - 1055.0)	4	3533.0 (54.2 - 7668.0)
Poor	4	561.0 (91.8 - 1336.0)	4	1218.0 (76.1 - 2233.0)

* Significant differences of indoor dust lead levels between families having children less than 6 years old vs. not (Mann Whitney U test p value = 0.02)
**Note comparisons in groups with categories with n<5 may be misleading.

Supplementary Table 6. Indoor and outdoor dust lead levels on selected workers' demographics that may affect take-home exposures

Variable	Indoor (n = 9)		Outdoor (n = 9)	
	*n**	*Median (Range)*	*n**	*Median (Range)*
Overall	9	339.8 (91.8 - 1336.0)	9	1712.6 (54.2 - 7668.0)
Education				
High school diploma or GED or less	5	782.0 (138.0 - 1336.0)	5	1713.0 (76.1 - 4108.0)
Some college but no degree	4	224.0 (91.8 - 1055.0)	4	1477.0 (54.2 - 7668.0)
Monthly salary				
Less than 3000	6	783.0 (108.0 - 1336.0)	6	918.0 (54.2 - 7668.0)
3000 or above	3	180.0 (91.8 - 340.0)	3	2233.0 (722.0 - 2957.0)
Ethnicity				
Hispanic	8	561.0 (108.0 - 1336.0)	8	1973.0 (54.2 - 7668.0)
Non-Hispanic	1	91.8 (91.8 - 91.8)	1	722.0 (722.0 - 722.0)
Born in the U.S.				
Yes	1	91.8 (91.8 - 91.8)	1	722.0 (722.0 - 722.0)
No	8	561.0 (108.0 - 1336.0)	8	1973.0 (54.2 - 7668.0)
Age				
Less than 30	3	340.0 (180.0 - 784.0)	3	2957.0 (2233.0 - 4108.0)
30 or older	5	138.0 (91.8 - 1336.0)	5	722.0 (54.2 - 7668.0)
Sex				
Male	7	340.0 (91.8 - 1336.0)	7	2233.0 (54.2 - 7668.0)
Female	1	138.0 (138.0 - 138.0)	1	123.0 (123.0 - 123.0)
Household income				
Less than $50,000	4	461.0 (108.0 - 1336.0)	4	918.0 (54.2 - 4108.0)
More than $50,000	4	260.0 (91.8 - 1055.0)	4	2595.0 (722.0 - 7668.0)

*Note comparisons in groups with categories with n<5 may be misleading.

Supplementary Table 7A. Exploratory multivariable analysis of log-transformed baseline blood lead levels (µg/dL) among participants (n = 30)

Model	Outcome	N (households)	Predictor	β [95% CI]	% difference in blood lead levels	p-value
1	Blood lead levels‡	30 (9)	Indoor vacuum dust lead (n = 30)*	0.17 [0.03, 0.31]	+19%	0.016**
			Outdoor soil dust lead (n = 30)*	-0.02 [-0.05, -0.002]	-2%	0.037**
2	Blood lead levels‡	30 (9)	Recent home renovation (Ref = No, n = 24, Yes n = 6)	1.22 [0.12, 2.32]	+239%	0.032**
			Indoor vacuum dust lead (n = 30)	0.06 [-0.06, 0.18]	+6%	0.312

*Effect estimate is reported per 100 ppm increase.
**p-value<0.05 was significant.
†Two samples were missing information on home hygiene level
‡Blood lead levels were log-transformed in the fitted models.

Supplementary Table 7B. Exploratory multivariable analysis of log-transformed baseline blood lead levels (µg/dL) among participants (n = 30) using household cluster-adjusted methods

Model	Outcome	N (households)	Predictor	β [95% CI]	% difference in blood lead levels	Cluster-adjusted p-value
1	Blood lead levels‡	30 (9)	Indoor vacuum dust lead (n = 30)*	0.17 [-0.11, 0.46]	+19%	0.14
			Outdoor soil dust lead (n = 30)*	-0.02 [-0.07, -0.02]	-2%	0.16
2	Blood lead levels‡	30 (9)	Recent home renovation (Ref = No, n = 24, Yes n = 6)	1.22 [-1.07, 3.51]	+239%	0.16
			Indoor vacuum dust lead (n = 30)	0.06 [-0.15, 0.26]	+6%	0.46

*Effect estimate is reported per 100 ppm increase.
†Two samples were missing information on home hygiene level
‡Blood lead levels were log-transformed in the fitted models.

Supplementary Table 8. Review of studies related to take-home lead exposure assessments in various U.S. industries

Industry	Type of samples	Participants/Sample size	Main findings		References
Secondary lead smelter	☑Blood ☑Dust ☐Soil ☐Wipe ☐Other:	☐Workers ☑Children: 108 ☐Homes ☑Other: 12 wives	*Environmental* *Blood* *Factors explored*	GM for dust lead: 2,687ppm (control: 404ppm) 41.8% children ≥ 30μg/dL; 11.0% children ≥ 80μg/dL Pica history of children	Baker et al. (1977) †
	☐Blood ☑Dust ☐Soil ☑Wipe ☐Other:	☐Workers ☐Children ☑Homes: 52 ☐Other	*Environmental*	GM for surface lead in Area I: 79.3μg/towel (control: 28.8μg/towel); GM for surface lead in Area II: 112.0μg/towel (control: 9.7μg/towel); GM for dust lead: 3300 ppm (control: 1200 ppm)	Rice et al. (1978)
Battery factory	☑Blood ☑Dust ☐Soil ☐Wipe ☑Other: Water supply, Paint	☐Workers ☑Children: 58 ☑Homes[1]: 6 ☐Other	*Environmental* *Blood* *Factors explored*	Range for dust lead: 1,700-84,050ppm Range for children: 22-90μg/dL; 69% children ≥ 30μg/dL; 17.2% children ≥ 40μg/dL Children's age	Dolcourt et al. (1978)
Battery manufacturing plant	☑Blood ☐Dust ☐Soil ☐Wipe ☐Other:	☐Workers ☑Children: 68 ☐Homes ☐Other	*Blood* *Factors explored*	Median for children: 34.0μg/dL (control: 16.0μg/dL); Mean for children: 31.8μg/dL (control: 15.9μg/dL); 53.0% children ≥ 30μg/dL; 23.5% children ≥ 40μg/dL; 5.9% children ≥ 60μg/dL; None children (control) ≥ 30μg/dL Mean for workers: 49.2μg/dL Worker's hygiene practices; Worker's job functions; Lead-related hobbies	Morton et al. (1982)
Electrical components plant	☑Blood ☑Dust ☐Soil ☐Wipe ☐Other:	☐Workers ☐Children ☑Homes: 71 ☑Other: 151 family members	*Environmental* *Blood* *Factors explored*	Range for dust lead: < LOD - 3,400ppm (control: < LOD - 320ppm) Mean: 10.2μg/dL (control: 6.2μg/dL) Education, income, age; Age of home; Lead-related hobbies;	Kaye et al. (1987)
Automotive radiator repair shops	☑Blood ☐Dust ☐Soil ☐Wipe ☐Other:	☑Workers: 93 ☑Children: 32 ☐Homes ☐Other	*Blood* *Factors explored*	Mean for workers: 30μg/dL; Range for workers: 6-85μg/dL; 66.7% workers ≥ 25μg/dL; 25.8% workers ≥ 40μg/dL; 11.8% workers ≥ 50μg/dL Mean for children: 10μg/dL; Range for children: 4-21μg/dL Worker's job functions; Average number of radiators repaired per week; Number of years employed; Worker's age; Eating and smoking habits	Nunez et al. (1993)
Lead-exposed industry	☑Blood ☐Dust ☐Soil ☐Wipe ☐Other:	☐Workers ☑Children: 28 ☑Homes: 15 ☐Other	*Blood* *Factors explored*	Mean for children: 8μg/dL; Range for children: 0-26μg/dL; 32.1% children ≥ 10μg/dL Children's gender, age, race/ethnicity; Parent's working industry; Parent's hygiene practices; Age of home	Czachur et al. (1995) †
Construction	☐Blood ☑Dust ☐Soil	☐Workers ☐Children ☑Homes: 59	*Environmental*	GM for automobiles surface lead: Driver's floor: 102.2μg/ft^2 (control: 23.2μg/ft^2); Driver's seat: 14.9μg/ft^2 (control: 3.8μg/ft^2); Driver's armrest: 185.5μg/ft^2 (control: 17.7μg/ft^2); Passenger's	Piacitelli et al. (1997) †

	☑Wipe ☑Other: Paint chip	☐Other		floor: 42.7μg/ft^2 (control: 5.3μg/ft^2); Passenger's seat: 12.1μg/ft^2 (control: 3.5μg/ft^2); Passenger's armrest: 111.5μg/ft^2 (control: 11.1μg/ft^2); Steering wheel: 22.3μg/ft^2 (control: 3.8μg/ft^2) GM for in-home surface lead: Exterior entrance floor: 10.2μg/ft^2 (control: 6.8μg/ft^2); Interior entrance: 2.1μg/ft^2 (control:0.8μg/ft^2); Changing area floor: 1.5μg/ft^2 (control: 0.6μg/ft^2); Laundry room floor: 3.3μg/ft^2 (control: 3.6μg/ft^2); Laundry washing machine: 6.7μg/ft^2 (control: 3.5μg/ft^2); Family room floor: 0.6μg/ft^2(control: 0.7μg/ft^2); Family room windowsill: 33.4μg/ft^2 (control: 42.7μg/ft^2); Family room sofa: 0.9μg/ft^2 (control:0.7μg/ft^2); Children's bedroom floor: : 0.6μg/ft^2 (control: 0.3μg/ft^2); Children's bedroom windowsill: 41.8μg/ft^2 (control: 34.4μg/ft^2)	
				GM for automobiles dust lead: Driver's floor: 990ppm (control: 250ppm); Driver's seat: 2000ppm (control: 450ppm); Passenger's floor: 900ppm (control: 260ppm); Passenger's seat: 1700ppm (control: 220ppm)	
				GM for in-home dust lead: Exterior entrance floor: 640ppm (control: 330ppm); Interior entrance: 350ppm (control: 470ppm); Changing area floor: 370ppm (control: 120ppm); Laundry room floor: 530ppm(control: 290ppm); Family room floor: 250ppm (control: 150ppm); Family room sofa: 340ppm(control: 172ppm); Children's bedroom floor: 220ppm (control: 110ppm)	
			Factors explored	Age of home; Recent remodeling at home; Have indoor/outdoor pet; Lead-related hobbies;	
High-risk lead-related occupation	☑Blood ☐Dust ☐Soil ☑Wipe ☐Other:	☐Workers ☑Children: 6 ☑Homes: 5 ☐Other	*Environmental*	Vehicles (n=5): Median for driver/passenger seats surface lead: 550μg/ft^2 (range: 49-2,100μg/ft^2); Median for driver/passenger floors surface lead: 1,570μg/ft^2 (range: 240-2,900μg/ft^2); Median for automobile seats surface lead: 98μg/ft^2 (range: 43-420μg/ft^2)	CDC (2009) *
			Blood	Median for children: 21μg/dL (range: 15-32μg/dL)	
Construction	☐Blood ☑Dust ☐Soil ☐Wipe ☐Other:	☐Workers ☐Children ☑Homes[2]: 30 ☐Other	*Environmental*	Range for dust lead: 20-8,300ppm (For construction workers only: Median: 264ppm, mean: 775ppm)	Ceballos et al. (2021)
			Factors explored	Job precariousness scale; Occupation; Work conditions variables; Home conditions variables; Sociodemographic variables	

[1] For children with BLL ≥ 40μg/dL
[2] 23 homes of construction workers, 2 homes of autobody workers and 5 homes of janitorial workers
* This study was done because of lead-poison children's cases
† These studies were done because of reported elevated blood lead levels in workers

References Supplementary Table 8

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Supplementary Table 9. Pre- and post-test scores as well as feedback scores for home sessions

Homes	Pre-session Score*	Post-Session Score*	Feedback Score†
1	10	10	5.0
2	10	10	4.6
3	9	10	5.0
4	10	10	5.0
5	10	10	4.4
6	10	10	5.0
7	9	10	5.0
8	10	10	4.6
9	10	10	4.4

* Pre- and post-assessments included ten questions each. Pre-Session scores and post-session score were calculated using 1-10 basis

* Feedback scores were calculated by taking the average of five Likert-scale questions (1: poor, 2: fair, 3: average, 4: good, 5: excellent)

Supplementary Table 10. Pre- and post-test scores as well as feedback scores for worker sessions

Homes	Pre-Session Score*	Post-Session Score*	Feedback Score†
1	6	7	4.8
2	‡	‡	‡
3	8	9	5.0
4	10	10	5.0
5	8	8	4.5
6	10	10	5.0
7	9	9	4.3
8	7	9	4.5
9	9	8	4.8

* Pre- and post-assessments included ten questions each. Pre-Session scores and post-session score were calculated using 1-10 basis

† Feedback scores were calculated by taking the average of six Likert-scale questions (1: poor, 2: fair, 3: average, 4: good, 5: excellent)

‡ No worker training was given to RC-02

Supplementary Table 11. Quantitative assessment results from the two take-home prevention educational sessions

	Mean Score[a] (SD)		Mean Difference (95% CI)	p-value[b]	Mean % Change
	Pre-Test	Post-Test			
Total	91% (12)	94% (9)	0.29 (-0.06, 0.65)	0.10	+3%
Home Session (N = 9)	98% (4)	100% (0)	0.22 (-0.12, 0.56)	0.17	+2%
Worker Session (N = 8*)	84% (14)	88% (10)	0.38 (-0.39, 1.14)	0.28	+4%

Abbreviations: SD = standard deviation, 95% CI = 95% confidence interval.
[a] Pre- and post-assessments included ten questions each. Reported scores are out of 100%.
[b] Differences between pre- and post-assessments were tested using paired T tests.
*One worker had data missing for this analysis.

Supplementary Table 12. Demographic worker participant characteristics by baseline knowledge of take-home lead prevention behaviors worker educational session

	Overall (N=8*)
Age (years)	
Mean (SD)	33.0 (9.83)
Median [Min, Max]	31.0 [24.0, 54.0]
Missing	1 (12.5%)
Age Group	
20-29	3 (37.5%)
30-39	3 (37.5%)
40+	1 (12.5%)
Missing	1 (12.5%)
Sex	
Female	1 (12.5%)
Male	7 (87.5%)
Ethnicity	
Hispanic	8 (100%)
Education	
< high school diploma or GED	2 (25.0%)
High school diploma or GED	3 (37.5%)
Some college but no degree	3 (37.5%)
Marital Status	
Married	3 (37.5%)
Separated	1 (12.5%)
Unmarried	2 (25.0%)
Not reported	2 (25.0%)
Monthly Salary	
2,100 to 3,000	5 (62.5%)
3,000 or above	2 (25.0%)
Less than 2,100	1 (12.5%)
Born in the U.S.	
No	8 (100%)
Household Size	
Mean (SD)	5 (2)
Median [Min, Max]	5 [3, 9]
Family Income	
< 35k	3 (37.5%)
35k to 75k	3 (37.5%)
75k or above	1 (12.5%)
Not reported	1 (12.5%)

*One worker had data missing for this analysis.

Supplementary Table 13. Reported frequency of use of intervention tools and cleaning products at the one-month follow up

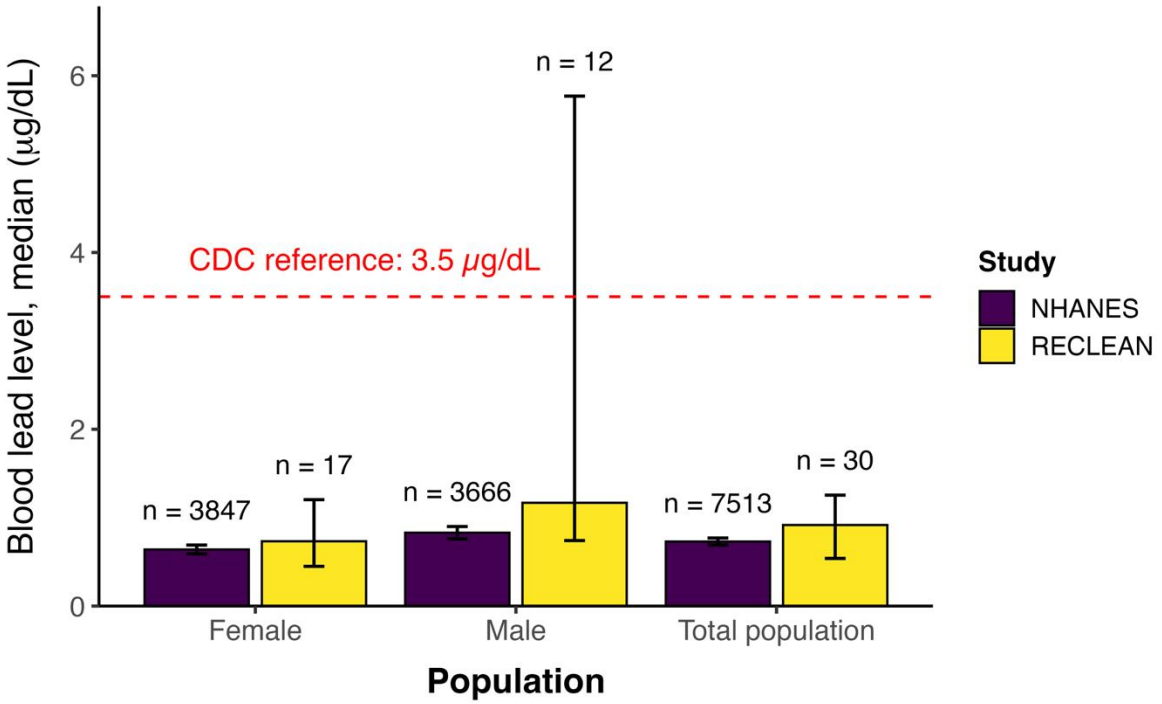
	Never	<1/week	1-2/week	≥3/week or daily	Unspecified*	Missing†
Family intervention tools						
Family behavior wheel	0	2	4	1	0	2
Family calendar	1	0	0	1	2	5
Family action plan	0	2	3	2	0	2
Cleaning products						
Skin wipes	0	0	3	2	0	4
Laundry detergent	0	0	5	0	0	4
All-purpose cleaner	1	0	4	0	0	4

Frequency-of-use data are presented as the number of households reporting use in each category.
* Unspecified frequency includes responses indicating use more than once per week without an exact frequency, which could not be assigned to the other categories.
† Missing includes households with no recorded frequency-of-use response for the corresponding tool/product.

Supplementary Table 14. Perceived usefulness ratings of intervention tools and cleaning products at the one-month follow-up

	Usefulness rating, median (range) *	Rating n
Family intervention tools		
Family behavior wheel	1 (1-2)	8
Family calendar	1.5 (1-2)	4
Family action plan	1 (1-2)	8
Cleaning products		
Skin wipes	1 (1-3)	5
Laundry detergent	1 (1-4)	5
All-purpose cleaner	1 (1-4)	5

* Usefulness was assessed on a five-point scale (1 = very helpful; 5 = not helpful at all). Median ratings and ranges were calculated using available responses only.



Supplementary Figure 1. Median baseline blood lead levels (with 95% CIs) of RECLEAN participants (Female n = 17, Male n = 12, Total population n = 30) compared with NHANES by sex categories (Note: sex-specific summaries exclude participants with missing sex information).