**Supplemental Information**

# One Hour Pilot Training to Prevent Workers from Taking Home Workplace Contaminants

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**Table of content:**

**S1. Manual take-home prevention 1-hr training**

[THIS MANUAL IS NOT TO BE DISTRIBUTED TO PARTICIPANTS BUT FOR TRAINERS]

The following training has the overall objective of familiarizing workers on the concepts of take-home prevention, especially geared at teaching prevention tips that can be done after leaving work and before going home or when worker gets home.

**Warm up (10min)**

Objectives:

1) To determine baseline knowledge on "take-home."

2) To familiarize workers with the grave consequences of take-home exposures.

Pre-training exam

A de-identified 10-question exam on take-home prevention will be administered (Appendix S2.1).

Ice Breakers

1) 30-sec individual introductions saying their name and job held now or ever, if any.

2) Trainer tells a real-life story of lead take-home poisoned children from a news outlet.[11]

**Introduction (20min)**

Objective:

To introduce key concepts of take-home: how contaminants can be brought home, how it affects worker's family, and how can it can be prevented.

Trainer will introduce key take-home concepts. A whiteboard and illustrated poster (Appendix S2.2) will be used during the introduction.

Are You Bringing Toxic Chemicals Home from Work?

Some occupations such as automotive repair or lead smelting produce dust that contains lead. Construction workers, for example, may also produce lead dust and other contaminants such as asbestos during their work. Workers that spray pesticides also can get contaminated with chemicals at work. This dust or residue produced at work can easily get in your hands, face, shoes, and clothes; without knowing you can carry these contaminants to your home and family.

How do you bring lead or other contaminants home without knowing it?

1) Worker's face, hands, hair, clothes, shoes, or personal items are dusty or contaminated when leaving work.
2) Worker does not change work clothing into clean clothing, and shoes after work shift.
3) Worker does not properly wash up at work or immediately when arriving home.

4) Worker uses family car wearing contaminated clothes and shoes, or stores contaminated items in car. Contamination then spreads to family members, especially children who are most sensitive to toxic chemicals.

If you think you are exposed to chemicals at work:

1) You should change your work clothes at work before you go home. If possible, leave your work clothes at work or put your work clothing in a plastic bag.
2) If changing your work clothes at work is not possible. Do your best to clean dust and other chemicals from clothing, shoes, and hair before getting into your car or going home.
3) Always wash your hands and face before going home.
4) Take a shower and wash your hair at work if possible, or as soon as you get home.
5) Avoid taking contaminated items from work to your home.
6) Wash your work clothes at work. If not possible, wash work clothes separately from all other clothes.
7) Vacuum your car and home regularly and clean with water and soap.

**Activities (20min)**

Objectives:

1) To reinforce key take-home concepts and prevention tips (Activity 1).

2) To practice hazard identification (Activity 2).

**Activity 1**

Workers will be divided into at least 2 to 3 groups to play Trivia. Trainers will use the trivia questions on a poster (questions listed in Appendix S2.3). Small souvenirs can be given to the winners of the Trivia as prizes.

**Activity 2**

Workers will be divided into groups and a "What's wrong with this picture" activity (Appendix S2.4) will be handed out to all the participants, they will be asked to find out what is wrong with the depicted picture. Trainers will discuss the picture with participants and ask what is wrong with the picture. After giving some time to the participants to go over the picture, trainers will moderate a discussion. With this activity we aim to help participants visualize and identify their own habits, in order for them to understand what they are used to doing when leaving work, and how to improve their practices to prevent take-home exposure. Small souvenirs can be given to the winners of the "What went wrong" activity as prizes.

**Wrap up (5-10min)**

Objectives:

1) To summarize training session.

2) To evaluate effectiveness of the training session.

3) To obtain feedback from the training session for future improvements.

Trainers will summarize what we learn and provide a space for questions.

Post-training exam: Trainers will administer same 10-question exam from warm up to assess learning.

Evaluation survey: Trainers will also administer a voluntary evaluation survey on the training.

Conclusion: Hand certificate.

**Appendix S1.1 - Pre-post assessment to evaluate training**

**1. Could you bring lead or other contaminants home from work without knowing?**

a. Yes

b. No

c. Sometimes

d. Do not know

**2. Should you use same shoes at work and at home?**

a. Yes.

b. No

c. Sometimes

d. Do not know

**3. If at work there is no shower, should you shower at home when you come back from work?**

a. Yes

b. No

c. Sometimes

d. Do not know

**4. If you shower at home should you shower as soon as you get home?**

a. Yes

b. No

c. Sometimes

d. Do not know

**5. Should you wear work clothes at home?**

a. Yes

b. No

c. Sometimes

d. Do not know

**6. Should I wash my work clothes with all my family's clothes?**

a. Yes

b. No

c. Sometimes

d. Do not know

**7. When at work, should you separate work and personal Items in separate bags or lockers?**

a. Yes

b. No

c. Sometimes

d. Do not know

**8. Should you wash your hands and face after leaving work, if no shower at work?**

a. Yes

b. No

c. Sometimes

d. Do not know

**9. Are my children at risk of contaminants that come from my work?**

a. Yes

b. No

c. Sometimes

d. Do not know

**10. Should I clean my car and house with vacuum and wet methods?**

a. Yes

b. No

c. Sometimes

d. Do not know

**Appendix S1.2 – Take-home prevention illustrated poster**

# Are you bringing home toxic chemicals?

**Sometimes you can bring home toxic chemicals from work without knowing it, making your family sick.**
**If you work in a factory, a small business, or even outdoors, you can follow this guide to help protect your family.**

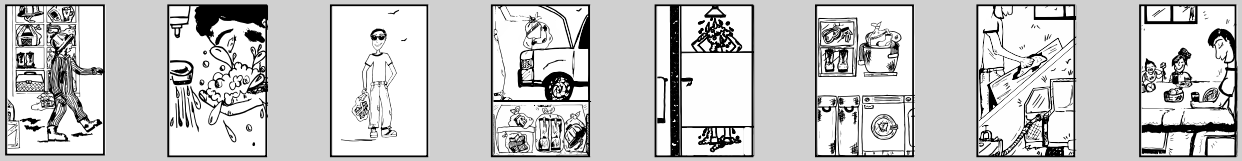
## FACTORIES

1. Store work items and boots in work locker
2. Wash work clothes at work
3. Shower at work including washing your hair
4. Change into clean clothes, taken from your clean locker
5. Separate work underwear from personal items
6. Store and wash your work underwear separately from your family's
7. Clean home and car often with vacuum and wet methods
8. Now that you are clean, family time can begin!

- **Contamination prevention at factories:** One locker for work items, one locker for personal items, showers, laundry services, Personal protective equipment (PPE)
- **Examples of factories:** Lead smelter, manufacturer or recycler of lead-acid batteries or radiators

## SMALL BUSINESSES & SERVICES

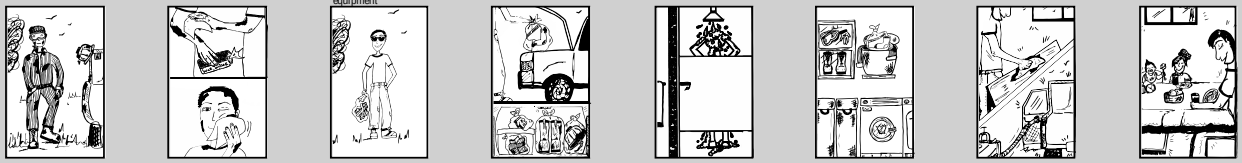
1. Store work items and boots at work, if possible
2. Wash face, hands, and arms at the end of the shift
3. Change into clean clothes at the end of the shift
4. Store work clothing, boots, and items in bag, separate from personal items
5. Shower first thing after getting home, including washing your hair
6. Store and wash your work clothes separately from your family's
7. Clean home and car often with vacuum and wet methods
8. Now that you are clean, family time can begin!



- **Contamination prevention at small businesses & services:** General storage area or one locker for all items, sinks, and personal protective equipment
- **Examples of small businesses & services:** Construction contractor doing demolition or renovation, autobody shop, recycler of electronics

## OUTDOOR WORK

1. Wear a protective outer layer of clothing
2. No sink? Use wet wipes instead of sanitizer to effectively remove any contaminants
3. Remove protective outer layer of clothing, boots, and any personal protective equipment
4. Store work clothing and items in bags, separate from personal items
5. Shower first thing after getting home, including washing your hair
6. Store and wash your work clothes separately from your family's
7. Clean home and car often with vacuum and wet methods
8. Now that you are clean, family time can begin!



- **Contamination prevention controls at outdoor work:** Personal protective equipment
- **Examples of outdoor work:** Agriculture, landscaping, and laborer

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**Keep your family safe and healthy!**

MassCOSH

## Appendix S1.3 - Trivia game activity

**Trivia Instructions:** Participants will be divided into groups depending on how many participants there are. The number of groups will vary, as well as the number of participants on each group. There will be a chart set with four different columns. Each column will have four different questions, each question will have a determined set of points depending on its level of difficulty. Each team will have a chance, in order, to choose a question and answer it. If not answered correctly, the other teams will have a chance to answer and take the points for that question. The team that accumulates the most points will be the trivia winner. There is a bonus question on each column.

**Column A: Prevent it**

100 pts. What is one way you can prevent contaminants from being carried home?

a. Never wearing dirty work clothes, shoes or boots at home, or in car
b. Making sure I use deodorant everyday
c. Exercising every day

200 pts. What is one way you can prevent contaminants from being carried home?

a. Separating my work and personal items in plastic bags or containers
b. Always wearing black clothes

c. Spraying fabric freshener to my clothes

300 pts. What is one way you can prevent contaminants from being carried home?

a. Taking a shower at work when you finish your shift, if not possible, washing face, hands, and arms, and showering once getting home
b. Going to a dance party and shaking off contaminants
c. Setting up a security system at home

400 pts. What is one way you can reduce contaminants at home?

a. Vacuuming and cleaning surfaces
b. Running every day
c. Putting incense outside the front door of my house

Bonus

500 pts. How many times a week I should wash my hair considering I may be exposed to contaminants at work?

a. You should wash your hair twice a week
b. One day a week is totally fine
c. You should wash your hair including shampooing after finishing with your work shift
d. Washing your hair is a personal decision, contaminants do not adhere to your hair

**Column B: Manage it**

100 pts. When it comes to my personal items (wallet, phone, mug) at work, what should I do with them to keep them away from contaminants?

a. Keep them on you in case you want to buy ice cream or listen to music
b. Keep personal items stored in plastic bags, and not have them on you while working
c. Personal items do not get contaminated.

200 pts. What is the best method you should use to keep your house and car clean from contaminants?

a. Having air fresheners
b. Vacuuming and washing surfaces with soap and water
c. Leaving windows closed all day long

300 pts. If I do not have a place to store my things at work, can I use my car to store work and personal things together?

a. Yes. Storing everything together is not a problem
b. No, if you have to store work items in your car make sure you store them in a separate container or plastic bags. Also make sure you vacuum and wash the inside of car often
c. None of the above

400 pts. How should I wash my work clothes?

a. I should wash my work clothes by separating them by colors
b. I should wash by mixing my work clothes with my family's clothes
c. I should wash my work clothes completely separate than my personal clothes, as well as my family's, especially my children's. If possible, with work clothes run the washer for two cycles

Bonus

500 pts. Is it safe for me to bring home my tools?

a. Unfortunately, is not safe. Tools and work items are contaminated, they need to be kept separate from any contact with home and family members
b. Yes. It is better to bring my tools home rather than leaving them at work, they can get stolen and that is not safe

**Column C: Understand it**

100 pts. Why am I taking home contaminants from work?

a. Because when working I am exposed to contaminants
b. Because I am a rebel
c. Because I only shower once a week

200 pts. How do you bring contaminants home from work without knowing?

a. You hide them in your bag and pretend you don't know
b. Your coworkers put the contaminants in your bag without you realizing
c. When working contaminated dust attaches to your clothes, shoes, and body

300 pts. How does lead (contaminants) get into your body?

a. By breathing (Inhalation)
b. By swallowing (Ingestion)
c. Through your skin
d. All of the above

400 pts. What can get contaminated at work with chemicals and metals?

a. My soul
b. Face, body, hair, clothes, shoes, personal items (wallet, phone, mug etc.)
c. None of the above

Bonus

500 pts. Can you contaminate your family passing dangerous contaminants by hands?

a. Yes, if your hands are contaminated with dangerous materials and you have direct contact with family members you could be passing the contaminants to them without knowing, or noticing
b. No, you are not a bad person, you would never pass along any dangers to your family
c. No, contaminants do not get in your body and hands, they only get in your clothes and personal items

**Column D: Know it**

100 pts. Bonus! You just won 500 points

200 pts. Why is it important how work boots or shows are stored?

a. Because work shoes and work boots are very expensive and I should be careful with their storage
b. Because work shoes and work boots are very sensitive to light
c. Work boots and shoes can carry dust and contaminants

300 pts. Do I have to always make sure that after work I am washing up, and being very careful with my contaminated items to prevent my family from danger?

a. No, they can take care of themselves
b. No, they need to learn how to shower with soap
c. Yes, you need to do as much as you can to prevent bringing contaminants home and exposing your family

400 pts. What are some conditions your children can develop when lead-poisoned?

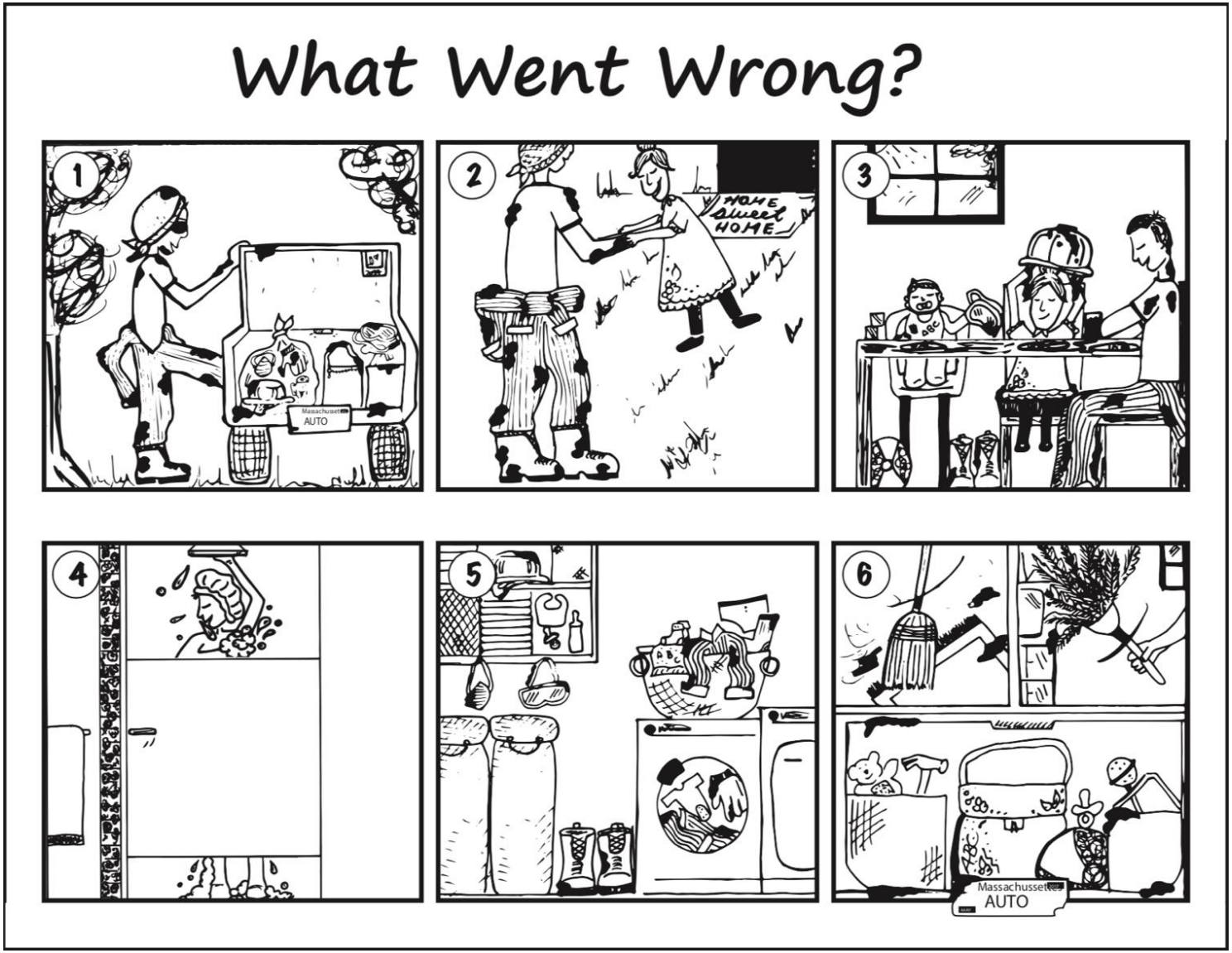
a. Hyperactivity
b. Attention deficit
c. Behavioral problems
d. All of the above

Bonus

500 pts. When I go to work I never bring my children with me. Why are they at risk when I am the one exposed to contaminants at work?

a. Because they play with you or on the floor most of the time. The contaminated dust brought by you without knowing, stays on the floor, your body, your clothes, and personal items. This contact can be very dangerous to them
b. Because they follow you to work without you realizing it
c. My children are never at risk because they are very smart

**Appendix S1.4 – What went wrong? activity**



**Appendix S1.5 – Surveys to evaluate training**

Date: _____/_____/_____
(day) (month) (year)

**Trainers: How are we doing?**

Thank you trainers for participating today! We are still in the process of improving the curriculum for the training session, so please take a moment to let us know about your experience instructing this course.

Thanks!

**The curriculum and activities as a whole were...**

- ▢ Excellent
- ▢ Very Good
- ▢ Good
- ▢ Fair
- ▢ Poor
- ▢ Very Poor

**Why did you select this answer?**

Was the material easy to comprehend and communicate to others? *Why or why not?*

Were the activities well suited to this audience? Which? Did they create meaningful participation and engagement with the materials?.*Why or why not?*

How well did the training materials leave you well prepared to handle student questions? *Why?*

How well did the materials, subject matter, or activities help you hold the workers' attention?

Was the session the right length? Why?

Do you have any other suggestions, comments, or concerns? If so, write them in below:

**Thanks for your time!**

Date: _____/_____/_____
(day) (month) (year)

## EVALUATION OF TRAINING SESSION

Thank you for participating today! We are in the process of making this training session better for the community. Please take a moment and help us by telling us about your experience in the training today. Your responses will be kept completely anonymous. Your feedback is very important to us!

**Please answer the following questions.**

**1. The training session today was?**

▢ Excellent ▢ Good ▢ Average ▢ Fair ▢ Poor

**2. The material presented was?**

▢ Excellent ▢ Good ▢ Average ▢ Fair ▢ Poor

**3. The group's participation was?**

▢ Excellent ▢ Good ▢ Average ▢ Fair ▢ Poor

4. **The instructor's answers to our questions were?**

▢ Excellent ▢ Good ▢ Average ▢ Fair ▢ Poor

**5. After this training session, I understand and feel confident about preventing exposure to contaminants?**

▢Yes

▢Somewhat

▢No

**If you have any suggestions, comments, or concerns please write them below**

_____

_____

_____

_____

**Thank you for your time!**

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