

# MASTER □ HOME ENVIRONMENTALIST

## Directions for the **Do-it-yourself Home Environmental Assessment List (HEAL)**

This do-it-yourself home environmental assessment will help you identify ways to make your home environment healthy. The Assessment is made up of two parts: the Survey and the Action plan. To perform a **HEAL** on your home, follow the directions below.

Set aside a time when the residents of your home can do the assessment together. Then:

### 1. **Complete the Survey (pp 2-6):**

- Walk through your home and make observations.
- Read the labels on your household products.
- Answer the Survey questions.  
(NOTE: Survey answers are grouped under three categories of concern. While the survey cannot absolutely determine high or low risk, these are what the categories mean:  
“Higher Concern” strongly suggests that action(s) should be taken to lower the home health risk.  
“Medium Concern” suggests a careful look at action(s) that could be helpful to your health.  
“Lower Concern” implies that the need for action is low.)

### 2. **Complete the Action Plan (pp 7-9):**

- Go line by line through the Survey (pp 2-6) and wherever an answer falls in the “higher concern” category, not the numbers listed in the column on the right. Then go to the Action Plan (pp 7-9) and check the boxes that have the corresponding numbers.
- Prioritize each checked item on the Action Plan based on:
  - Your willingness to implement it.
  - Its significance to the residents of your household.
  - Its significance to your overall home issues. If many concerns are in one category, for example “Moisture Problems,” you may wish to focus your efforts there.
  - The advice of experts (if appropriate). For any actions where major home alterations are involved, it’s prudent to consult with professionals before making final decisions.
- Commit to taking three actions within the next six weeks.  
Chose: (1) At least one that requires behavior change (creating a new habit).  
(2) At least one that can be finished quickly and with little expense or effort.

The Clean Air for Kids Program is a partnership comprised of the American Lung Association of Washington, Master Home Environmentalist Program, Tacoma Public Schools, University of Washington - Seattle and Tacoma, Puyallup Tribal Health Authority, Washington State Department of Health, Mary Bridge Children’s Hospital and Mental Health Center and Tacoma-Pierce County Health Department.

# The Survey

## BUILDING

When was the building constructed?

Has there been remodeling or paint removal in the last two years

Are you or your landlord planning to remodel or repaint within the next 12 months?

Has a next door neighbor removed external paint?

What daytime indoor temperature do you maintain during heating season?

## NEARBY ENVIRONMENT

How far is your home from the following:  
- factory, gas station, dry cleaners, auto body shop  
- airport, railway station, bus station

How many blocks is your home from a busy street or highway?

Are there unpaved roads, shoulders, or driveways adjacent to the home?

During the heating season, how often do you smell smoke from neighboring woodstoves or fireplaces?

## DUST AND LEAD CONTROL

Is any paint peeling or flaking inside or outside the home?

If yes, is the paint lead-based?

What percentage of the living space is carpeted?

If any rooms are carpeted (Circle all that apply)

How do you control tack-in of dust or dirt?

Does every door have a doormat?

What types of doormats do you have?

What kind of vacuum cleaner do you use?

How often do you check the belt and/or bag?

<b>Level of Concern:</b>			
Lower	Medium	Higher	Action Steps
After 1978	1978-1951	before 1951	14
no	?	yes	14
no	?	yes	15
no	scraping	sanding	14
60-68	55-60 68-75	below 55 over 75	7 8
<u>none</u>	<u>1 mile</u>	<u>4 blocks</u>	11 14
4+	1-4	less than 1	14
no	yes		14
0-5/yr	1-2/ml	2+/wk	12
no	?	yes	16
no	?	yes	13,17,20,23, 27
0-25%	26-75%	76-100%	18,20
area rugs	level loop	shag/plush	18,19,20
remove shoes	doormat/ hall rug	I don=t	14
yes	no	none do	14
commercial	rubber/ plastic	rope	14
powerhead/ upright	canister	none	20
monthly	1-2/yr	rarely	21

# The Survey

How often do you:

- < vacuum home
- < dust
- < scrub bathrooms
- < shake rugs/doormats
- < wash beddings/sheets with hot water
- < air out home/open windows

How do you clean area rugs

If you work with toxics on the job, do you wash work clothes separately?

How many times per day do you wash hands with soap & warm water?

If anyone in the home has allergies, do you have plastic covers on their pillows and/or mattresses?

Are bedroom windows open at night when sleeping?

What is your major heat source?

If you have a furnace, when was the ductwork last cleaned?

How often do you change the furnace filters?

Does furnace have an outside combustion air supply?

## **MOISTURE PROBLEMS**

Do you clean the refrigerator coils and/or drip pan?

Are there any water leaks or damp areas in kitchen or bath?

Is there carpeting in the kitchen or bathroom?

Do you use fan or open bathroom window during and after showering or bathing?

Is fan vented to the outside?

Are there signs of mold growth in corners/windows?

Has there been any sewage backup into the building or the surface of the ground in the last 5 years?

Was the material removed and the area disinfected?

Is the basement damp (musty odor; water or mildew;

	Level of Concern:			Action Steps
	Lower	Medium	Higher	
	4+/mo	1-3/mo	<1/mo	23
				23
				23
				23
				23
				29
	send out	vacuum surface	vacuum w/ canister	24
	N/A	yes	no	26
	>6	4-5	0-3	27
	yes		no	28
	yes	no		29
	electric	gas/oil	woodstove	
	0-1/yr	1-4/yr	4+yrs	32
	once/yr	1-2/yr	2/yr+	33
	yes-N/A	?	no	34
	often	sometimes	rarely	35,36
	no		yes	37
	no		yes	39
	yes	sometimes	no	40
	yes		no-N/A	41
	rarely	sometimes	often	9,38,40,43,54
	no	?	yes	
	yes	?	no	45
	no	some	yes	46,44,48,51

# The Survey

discolored walls, damp carpets or furniture?)  
 If there is a crawl space, is it ventilated?  
 If there is a crawl space, is soil covered with plastic?  
 If you have a dryer, is it vented to the outside?  
 Is your home well insulated and without drafts (weather-stripped doors and windows, double paned windows)?  
 Do windows fog up during the heating season?  
 Can you open a window in each room?  
 Does the home have a musty odor or is there visible mildew?  
 Does the home have any drainage problems?  
 Has there been any water damage to the building or contents in the last 5 years?  
 If yes, was the damaged material removed?

## INDOOR AIR

Is this a mobile home or trailer?  
 Is there any known particleboard in the floor, built-in cabinets or furniture?  
 Does your building have asbestos (furnace insulation, Apopcorn≅ ceiling, siding, sheet vinyl flooring)?  
 If yes, is the asbestos in good condition (i.e., not damaged, loose, or flaking)?  
 Is this home in an area where radon is common?  
 If yes or ?, has radon level been measured?  
 If yes, was the level above 4 pico Curies/liter air?  
 If you have a garage, is it attached to the home?  
 How long do you let car idle in garage before driving off?  
 What kind of kitchen stove do you use?  
 Do you sometimes smell fuel from furnace of stove?  
 Do you use a stove fan when cooking?  
 Is fan vented to the outside?  
 Is there an unvented kerosene or gas heater?  
 Do you use a wood stove during cold weather?

	Level of Concern:			Action Steps
	Lower	Medium	Higher	
yes			no	50
yes		?	no	49
N/A-yes		?	no	52
no		somewhat	yes	53,54
rarely		sometimes	often	9,53,54
yes			no	53
no			yes	7,9,54,44,56
no		?	yes	55
no		?	yes	
yes		?	no	56
no		yes		
no		minimal	yes	57,58,59
no		?	yes	60 if?
yes		?	no	63 if no 61 or 62 if yes
no		?	yes	64
yes			no	64
no			yes	65
N/A-no		yes		66,68
0-15 sec		15-30 sec	>30 sec	67
electric		gas/propane		
no		?	yes	69
yes		sometimes	no	71
yes			no-N/A	72
no		?	yes	73
rarely		1/wk	daily	

# The Survey

Do you smell smoke indoors when the stove/fireplace insert is in use?

## HAZARDOUS HOUSEHOLD PRODUCTS

How often do you use the following products?

Oil -based paint, stain, varnish, thinner, stripper

Spray-on adhesives, paints or lubricants

Rubber or contact cement, plastic glue, or epoxy

Permanent markers or whiteboard markers

Ammonia or chlorine-based cleaners

Auto products (degreaser, carburetor cleaner)

Solder (for electrical or stained glass work)

Photo chemicals

If yes, what precautions do you usually take to avoid inhaling these products?

Nothing special

Use them outside or wear a respirator

Open a window

Open at least 2 windows or use fan

How often do you use any of the following products?

Drain cleaner, oven cleaner or toilet cleaner with the work DANGER on the label?

Do you wear gloves when using them?

Do you wear goggles or glasses?

Are any flammable products stored near fire or heat?

Are any hazardous products within reach of children?

Are there any damaged, rusting or open containers?

Are there any banned or restricted products?

(Banned products include DDT, penta, chlordane, carbon tetrachloride. Call \_\_\_\_\_ for a more complete list if you are unsure.)

How often do you or a commercial service apply pesticides (insecticides, weed killers, rat poison) inside or outside the home? (Traps do not count.)

	Level of Concern:			Action Steps
	Lower	Medium	Higher	
Do you smell smoke indoors when the stove/fireplace insert is in use?	never	sometimes	usually	74
<b><u>HAZARDOUS HOUSEHOLD PRODUCTS</u></b>				
How often do you use the following products?	never	1/mo-1yr	1/d-1/w	
Oil -based paint, stain, varnish, thinner, stripper				75
Spray-on adhesives, paints or lubricants				75
Rubber or contact cement, plastic glue, or epoxy				75
Permanent markers or whiteboard markers				75
Ammonia or chlorine-based cleaners				75
Auto products (degreaser, carburetor cleaner)				85
Solder (for electrical or stained glass work)				88,89
Photo chemicals				88,89
If yes, what precautions do you usually take to avoid inhaling these products?				76
Nothing special			<input type="checkbox"/>	76
Use them outside or wear a respirator		<input type="checkbox"/>		76
Open a window			<input type="checkbox"/>	76
Open at least 2 windows or use fan		<input type="checkbox"/>		76
How often do you use any of the following products?	never	1/mo-1yr	1/d-1/wk	75
Drain cleaner, oven cleaner or toilet cleaner with the work DANGER on the label?	<u>never</u> <input type="checkbox"/>	<u>1/mo-1/yr</u> <input type="checkbox"/>	<u>1/d-1/w</u> <input type="checkbox"/>	75
	<u>always</u>	<u>sometimes</u>	<u>never</u>	
Do you wear gloves when using them?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	77
Do you wear goggles or glasses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	77
	<u>no</u>		<u>yes</u>	
Are any flammable products stored near fire or heat?	<input type="checkbox"/>		<input type="checkbox"/>	79
Are any hazardous products within reach of children?	<input type="checkbox"/>		<input type="checkbox"/>	80
Are there any damaged, rusting or open containers?	<input type="checkbox"/>		<input type="checkbox"/>	81
Are there any banned or restricted products?	<input type="checkbox"/>		<input type="checkbox"/>	82
(Banned products include DDT, penta, chlordane, carbon tetrachloride. Call _____ for a more complete list if you are unsure.)				
How often do you or a commercial service apply pesticides (insecticides, weed killers, rat poison) inside or outside the home? (Traps do not count.)	never	<1/yr	1+/yr	83,84

## The Survey

If you use pesticides, which of the following safety precautions do you wear?

gloves

long sleeved shirt and pants

hat

goggles or glasses

dust mask (powders) or respirator (SOLVENTS)

How do you dispose of leftover pesticides?

Use up or take to a household hazardous waste collection site

Put them in the trash?

Pour them down the drain

Keep them

	Level of Concern:			Action Steps
	Lower	Medium	Higher	
	<u>always</u>	<u>sometimes</u>	<u>never</u>	
gloves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	77
long sleeved shirt and pants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	78
hat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	78
goggles or glasses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	77
dust mask (powders) or respirator (SOLVENTS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	82
How do you dispose of leftover pesticides?				
Use up or take to a household hazardous waste collection site	<input type="checkbox"/>			
Put them in the trash?			<input type="checkbox"/>	81
Pour them down the drain			<input type="checkbox"/>	81
Keep them			<input type="checkbox"/>	81

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# **YOUR HOME ACTION PLAN**

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(Check the boxes below corresponding to the numbers listed under Action Steps in the Survey.)

## **A RESIDENTS**

- 1  Pay special attention to managing dust and other indoor pollutants if you have a large household, small children, pregnant women, older people present or if there is chronic illness.
- 2  Smoking is inconsistent with clean air and good health. Top smoking or restrict it to outside the home.
  - Seek medical advise regarding chronic or frequent illnesses. Identify specific allergies.
- 4  Keep pets, pet beds, and associated spaces clean. Flea comb cats or dogs.
- 5  Vacuum areas frequented by pets, reduce pet access to some parts of home.
- 6  Seek additional information on least-toxic control of fleas. Call Washington Toxics Coalition \_\_\_\_\_

## **B BUILDING**

- 7  Raise indoor temperatures to 60-68 F to reduce moisture.
- 8  Lower indoor temperatures to 60-68 F to save energy.
- 9  Lower humidity levels to 50-60%.
- 10  Raise humidity levels to 50-60%.

## **C NEARBY ENVIRONMENT**

- 11  Identify potential source of pollution and ensure that it is in full compliance with air pollution laws.
- 12  Identify source of smoke and ask for correction. Help neighbors learn about health risks from wood smoke, and persuade them to control it.

## **D DUST AND LEAD CONTROL**

- 13  Seek expert advise on reducing lead levels in the home.
- 14  Reduce track-in of dust and lead. Take off shoes or install high quality door mats at all entrances.
- 15  Before remodeling, learn safety procedures for limiting exposure to lead and dust.
- 16  Have paint tested for lead if home is pre-1978, and especially if there are children present.
- 17  Repair or remove damaged lead-based paint. Call the Health Department at 800-287-6429.
- 18  If anyone in household has allergies or asthma, consider removing carpeting.
- 19  When choosing new carpeting, select level loop carpets (tight weave) rather than plush or shag. Consider not gluing carpet down. Choose carpet with cloth backing rather than rubber.
  
- 20  Vacuum with an upright or powerhead vacuum.
- 21  Check bag and/or belt more often to help make sure vacuum cleaner is working properly.
- 22  Consider wearing a dust mask when vacuuming.
- 23  Increase frequency of vacuuming or cleaning.
- 24  Vacuum area rugs with a power head vacuum or send out for cleaning.
- 25  Pay special attention to vacuuming upholstered furniture and consider removing very old coth covered furniture.
  
- 26  Wash work clothes separately.
- 27  Wash hands more frequently.
- 28  Consider covering pillows and/or mattresses with plastic.
- 29  Open windows more frequently and keep bedroom window open at night whenever possible, provided it is safe to do so.

# **YOUR HOME ACTION PLAN**

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- 30  Have furnace checked for proper operation.
- 31  Call the gas company immediately to check possible leak.
- 32  Have furnace ductwork cleaned regularly (about every 5 years).
- 33  Change furnace filters at least twice a year.
- 34  Have an outside combustion air supply installed for furnace.

## **E     MOISTURE PROBLEMS**

- 35  Clean drip pan at least every three months.
- 36  Clean refrigerator coils at least every six months.
- 37  Repair water leaks and remove or repair any damaged material.
- 38  Reduce kitchen humidity by covering pots, running ventilating fan, or opening windows.
- 39  Consider removing kitchen or bathroom carpeting.
  
- 40  Use fan or open windows to reduce bathroom moisture.
- 41  Bathroom fan should be vented to the outside and preferably have a timer.
- 42  Repair water leaks in bathroom.
- 43  Clean up mold with chlorine bleach solution (1 cup per gallon of water)>
- 44  Remove carpeting if possible.
  
- 45  Clean and disinfect areas contaminated by sewage backup.
- 46  Check drainage, downspouts, and foundation dampproofing.
- 47  Remove basement carpeting .
- 48  Use a dehumidifier in basement.
- 49  Cover crawlspace floor with 6 mil polyethylene, anchor with sand, gravel or bricks.
- 50  Ventilate crawlspace.
- 51  Consult with a specialist on correcting a basement moisture problem.
- 52  Vent clothes dryer to outside.
- 53  Ventilate home by opening windows whenever weather permits. Repair or Replace windows that cannot be opened.
- 54  Minimize water producing activities: take shorter showers, keep lids on pots, use exhaust fans.
- 55  Correct specific drainage problems. Check downspouts, foundation, slope, etc.
- 56  Remove water damaged materials.

## **F     INDOOR AIR**

- 57  Have air tested for formaldehyde levels. Call 253-798-7674.
- 58  Seal sources of formaldehyde that cannot be removed. Use a polyurethane or acrylic sealer.
- 59  Remove sources of formaldehyde if levels are very high and/or sources cannot be sealed.
  
- 60  Test material for asbestos.
- 61  Leave asbestos in place.
- 62  Cover/isolate asbestos
- 63  Inquire about asbestos removal. Go to: [pscaa.org](http://pscaa.org) or call 800 552-3565
- 64  Have home tested for radon.
- 65  Consult Radon Hotline (800-323-9727) for information on reducing radon levels.
- 66  Clean garage floor, remove hazardous products to shed.

# YOUR HOME ACTION PLAN

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- 67  avoid idling car in garage. Drive off immediately after starting.
- 68  Install door mat between garage and home.
- 69  Call the gas company about possible gas leak in stove.
- 70  Install stove fan.
- 71  Use stove fan when cooking.
- 72  Vent stove fan to outside.
- 73  Avoid using unvented kerosene or gas heater inside the home.
- 74  Have fireplace/stove checked.

## **G HAZARDOUS HOUSEHOLD PRODUCTS**

- 75  Use less hazardous products if possible. Call Washington Toxics Coalition (206-632-1545) for suggestions.
- 76  Use hazardous solvent-based products outdoors or open two windows and use a fan.
- 77  Wear gloves and goggles when using corrosive products or pesticides.
- 78  Wear appropriate protective gear when applying pesticides: long sleeved shirt and long pants, a non-permeable hat, and a dust mask for powders or a respirator for solvents.
- 79  Move flammable materials away from source of ignition.
- 80  Move hazardous products to area protected from children.
- 81  Call Health Department at 800-287-6429 about removal of hazardous products.
- 82  Call Health Department 800-287-6429 about removal of banned products.  
Pesticides that are still legal to use may be used up as directed. If you do not want to use these products, take them to a household hazardous waste collection site. Call the Hazards Line \_\_\_\_\_ for more information.
- 83  Reduce or eliminate use of indoor pesticides by employing non-chemical controls or using less-hazardous products. Call Washington Toxics Coalition
- 84  Avoid calendar applications of pesticides. Treat specific problems only when necessary and use non-chemical controls or less-hazardous chemicals if possible.
- 85  Consider performing activity outdoors.
- 86  Consider performing activity in garage.
- 87  Consider performing activity in room separate from home.
- 88  Consider installing ventilation system in room where activity is done.
- 89  Learn more about the risks and investigate safety equipment for engaging in this activity.
- 90  Do not put pesticides down the drain or in the trash. Call 800-287-6429.

## **HOME ACTION PLAN SUMMARY:**

To improve the health of my/our home, I/we will take these actions in the next six weeks:

- 1.
- 2.
- 3.

Signed: \_\_\_\_\_

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