Healthy Home Environmental Assessment Principles

Practical Knowledge and Assessment Limitations

Sharing Client Information

Understanding HIPAA Issues (What's HIPAA?)

Health Information Portability & Accountability Act, 1996

- Most, but not all, government agencies are HIPAA covered entities.
- Clients should sign a HIPAA Permission form for sharing information.
- If your organization is a "HIPAA-covered entity" and uses contractors or sub-grantees, you should require a written HIPAA agreement with them to view/access health and personal information.
 - If they don't, they can freely share any information you provided and you are liable.
- You can not publish health or personal data on-line for all to see.

When You Arrive at a Home

- Visit with the Homeowner
 - Consider a walk-through as part of the interview or afterwards to promote discussion
- Discuss the purpose of the Home assessment
- · Discuss the scope of what will take place
 - Walk-through and what areas of the home will be observed
 - What kind of information will be collected
 - Use of photos and videos
 - Collect environmental measurements
 - Collect environmental samples
 - Keeping notes of assessment issues
- Document permission to assess and collect information

What do you do when you see these?





Photos courtesy of the Center for Environmental Health, Children's Mercy Hospital, © 2010.

Should you leave these conditions when you leave the home?





Photos courtesy of the Center for Environmental Health, Children's Mercy Hospital, © 2010.

Notice of Hazardous Condition

Date: HHP/EHA ID#:						
Dear Environmental Health Assessment Par	rticipant,					
This letter is to notify you that during this the following hazardous condition(s):	Environmental Health Assessment we have identified					
In the following location(s) within your home	e:					
	that you have been notified of the potentially hazardo					
We ask that you sign below to acknowledge condition that exists. Signature of Responsible Party	that you have been notified of the potentially hazarda					
condition that exists.	Date					
condition that exists. Signature of Responsible Party Signature of Environmental Health Speciali:	Date					

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What is Your Liability?

- During the Assessment
 - What are you responsible for?
- When you Draft a Report
 - What if you leave something out?
- · If You Share Information
 - With another organization
 - With a landlord
 - With a former spouse

Consider a Consent Form

Agreement for Assessment of Environmental Contaminants and Respiratory irritants (Fig. 2 of X). This agreement for an environmental broadth assessment of freigratary stakes and environmental contaminants and Respiratory irritants (Fig. 2 of X). Assessment of the provision is broadth assessment of freigratary stakes and environmental or broadth assessment and the provision of the provision and the provision and the provision of the provision of the provision and the provision of the provision and the provision of the provisio

Consent

Agreement for Assessment of Environmental Contaminants and Respiratory Irritants (Page 1 of 2) 8071-153 MR 06/07

This agreement for an environmental health assessment of respiratory irritants and contaminants is between The Children's Mercy Hospital (CMH) and the person responsible for the premises to be evaluated.

The routine environmental health assessment process includes three main areas of investigation:

- Visual walk-through and assessment of building and mechanical components;
- 2. Evaluation of indoor air quality through on-site measurements;
- Environmental sampling and laboratory analyses of air, bulk, surface, and/or vacuum samples for environmental allergens, irritant particles, and/or chemical compounds.
 The assessment will include a site visit by one or more members of an Environmental Health (EH) team. The EH team

The assessment will include a site visit by one or more members of an Environmental Health (EH) team. The EH team will look for specific evidence of environmental factors that may have led to the flare-up of health symptoms in the occupants of the home. Assessment methods include visual survey of physical conditions; limited visual review of mechanical systems found in the home (heating, air conditioning, ventilation, and plumbing equipment); measurement of air and surfaces by use of non-invasive, non-destructive devices, and sample collection of accumulated dust for laboratory analysis.

The EH team will do some or all of the following:

- Visually survey for potential sources of allergenic triggers.
 Visually review mechanical systems for proper function/ventilation and absence of leaks or damage.
- Measure comfort indicators (temperature, relative humidity, air movement, carbon dioxide).
- Measure indoor air contaminants (volatile organic compounds, ozone, fine and ultra-fine particles).
- Measure combustion gas byproducts (methane LEL, carbon monoxide, sulfur dioxide, and nitrogen dioxide).
- Sample the air to assess potential human exposure to environmental allergens and fungal spores.
- Collect vacuum and/or bulk samples for allergen and/or chemical testing.
- Evaluate and sample for suspect chemicals to assess potential human exposure to suspect chemicals.

In order to resolve indoor environmental health issues, additional tests may be required. The EH team may do the following:

- Sample for a specific suspected chemical irritants.
- Use a moisture meter to detect leaks.
- Use a chemical smoke tube to evaluate air circulation patterns and exhause ventilation adequacy.

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	 All observations, measurements, and results of samples collected for laboratory analysis; An outline of environmental factors in the home that may be contributing to ill health;
	Actions recommended to improve the indoor environmental health of the home;
9	 Referrals to community agencies that may be able to make recommended improvements.
	The report may include photographs and/or video.
1	Limitations
* '	I understands that only the conditions that exist at the time of the assessment are reported. There is no warranty or guarantee of the health or safety conditions in the home based on this assessment. Only readily accessible parts of the home will be tested. Only random samples will be taken. Maintenance and repair issues may be discussed, but are not a
	required part of the report. The report may not be considered a compliance inspection or certification for past or present codes or regulations of any kind.
	The assessment will address only potential allergy and/or asthma provoking substances, and other respiratory irritants. The assessment does not address potentially dangerous substances such as lead paint or asbestos, or other hazards specifically regulated by federal, state, and municipal statutes. This is not an assessment of the presence of ro
74.6	termite, insect, or other infestations, although they may be discussed. It is not an assessment of fire or safety hazards in the home, although these issues may be discussed.
	Release The undersigned hereby releases and holds harmless The Children's Mercy Hospital, its employees, officers, and agents, from any and all liability and claims for damage, including attorney fees, that arise from any reported or unreported defects or deficiencies of the home that may result in property damage, personal injury, or any other damage.
E .	Authorization to Provide Copies of Report to Requesting Parties I hereby authorize The Children's Mercy Hospital to provide photocopies of the appropriate portions of the report from my home assessment to the individuals named below.
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	3.
	Signature of Authorizing Individual I have read this agreement or have had it read to me. The procedures, fees, and responsibilities have been explained. Any questions I had were answered to my satisfaction. Therefore, I have requested this assessment and agreed to all terms and conditions.
	Printed Name of Person Responsible for Premises to be Evaluated
	Signature of Person Responsible for Premises to be Evaluated
	Address
2012	City State Zip Code Phone Number Children's Mercy Hospital. May be reproduced without permission
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Safety During Home Assessments

Personal Protective Equipment to consider:

- Tyvek Coveralls
- Respirator
- Booties
- Gloves
- Safety Glasses
- Hard Hat

Can you add to this list?

Note- this discussion is about professionals who go into people's homes. Occupation-related personal protective equipment (PPE) is covered by OSHA with specific regulations regarding medical monitoring and guidance on worker protection.

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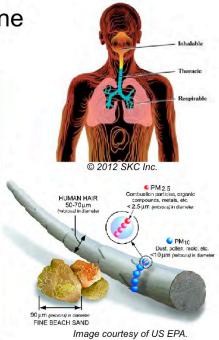
The Health Risk of Fine Particles

Respirable particles are less than 10 microns in size

The human eye can not see particles smaller than about 20 microns in size.

The most common airborne particle size is 2.4 microns.

The most harmful particle size is less than about 1 micron.



Air Quality Index (AQI) for PM-2.5

Color	Air Quality Rating	1-Hr. Avg. (ug/m³)	24-Hr. Avg. (ug/m³)	Action to take
Green	Good	0 - 19.9	0 – 15.4	No health impacts expected.
Yellow	Moderate	20 – 59.9	15.5 – 40.4	Unusually sensitive (e.g., asthma) should limit prolonged outdoor activity.
Orange	Unhealthy for sensitive	60 – 99.9	40.5 – 65.4	People with respiratory disease along with active children and adults should limit prolonged outdoor exertion.
Red	Unhealthy	100 – 249.9	65.5 – 150.4	Everyone should limit prolonged outdoor exertion.
Purple	Very Unhealthy	250 – 499.9	150.5 – 250.4	People with respiratory disease should avoid all outdoor exertion and limit exposure by staying indoors.
Maroon	Hazardous	500+	250.5+	Everyone should avoid any outdoor exertion.

EPA 2012: http://www.airnow.gov/index.cfm?action=aqibasics.aqi

N-95 Respirator-

Minimum protection if high concentrations of unknown particles are observed

Dust, mold, or smoke – each is made up of particles. The first line of defense for protection from particles is a NIOSH approved N-95 rated respirator.

• Particle respirators do not provide any protection from carbon monoxide or other toxic gases!

Note- this discussion is about professionals who go into people's homes. Occupation-related personal protective equipment (PPE) is covered by OSHA with specific regulations regarding

 Respirators are only a part of personal protective equipment (PPE).

medical monitoring and guidance on worker protection.

All Masks are Not the Same

Nuisance dust masks do not provide the necessary minimum level of protection.

- They do not fit tightly enough (usually just a single strap)
- and lack sufficient particle capture efficiency.

Surgical masks (unless at least N-95) also are not appropriate.

• They are designed to prevent the spread of particles from the wearer, not to protect the wearer from particles in the air.

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Respirators must be worn properly!

- •Top strap goes high on the back of the head. Bottom strap around back of neck.
- Using **two hands**, mold the nose piece to the shape of your nose. Pinching with one hand usually will not work well enough to make a good seal.
- Positive pressure <u>fit check</u>. Cover the respirator with both hands and exhale. If air leaks around nose, adjust nose piece. If air leaks around edge, adjust straps by pulling back along head.
- Negative pressure <u>fit check</u>. Cover the respirator with both hands and inhale sharply. If necessary, adjust fit as described above.







Photos courtesy of Curtis Reddington, © 2012.

Assessor Hazards & Precautions

- · Be aware of
 - Significant structural defects and physical hazards
 - Improperly stored and uncharacterized chemicals and pesticides
 - Visible and significant biological Contamination
 - Fire and improperly stored combustible materials

Can you ask for a hazard to be removed?

Home-Related "Confined Spaces"

 Areas of homes that have limited or restricted means for entry or exit, and are not designed for continuous occupancy.

Confined spaces in homes might include:

- Small outside storage buildings, old cisterns, small crawlspaces,
- · Small unvented basement rooms
- Storm Shelters
- Attic spaces
- · Small rooms with no ventilation
- Closets

	
	
 	
 	
 	
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What If?

- You're in a home and the parents start to have an argument that becomes very heated.
- You're in a home and a client asks you for money.

What Issues Have You Seen?