

How Well Do Ontario Health Units Promote Environmental Awareness of Lead?

(June 2004 Audit)

Health Unit Audit by Jennifer Nelson *

Introduction by Kelly O'Grady

Introduction

Lead poisoning is a concern for any child living in pre-1960's housing - especially those children who are between the ages of 0 and 6 years when exploratory behavior such as mouthing objects and toys is at its peak. Typically children ingest lead by direct contact with lead contaminated dust and soil (Lanphear, 1998) In Ontario there are 1, 400,000 residential dwellings built prior to 1960. Although lead paint was gradually phased out of popular use beginning in the late 1970's old lead paint that is present in older homes chinks and flakes over time, creating potential health hazards.

In the early 1990's, two comprehensive documents on lead were produced: the Ministry of Environment and Energy "Scientific Criteria Document for Multimedia Environmental Standards Development – Lead" (1994) and the Metropolitan Toronto Teaching Health Unit lead awareness kit, "Why Barns are Red" (1995). Both documents outlined the potential risk of lead exposure for Ontario children from housing sources of lead. A copy of "Why Barns are Red" was distributed to each health unit in Ontario; yet it is questionable if any environmental awareness programming ensued.

L.e.a.d. conducted an internet search of Ontario health unit websites using the search terms: <childhood lead poisoning> <lead poisoning> <lead paint> and <lead in drinking water> to determine what information is being provided to Ontario residents on childhood lead poisoning. Our search revealed that only 17 out of 37 health units had *any* information on lead; only 7 of these sites provided *directly accessible* information; and only 2 health units appear to provide any proactive programming to address this problem. Information from this survey will be used to provide feedback to Ontario Health Units on ways they can improve their health promotion of this issue.

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Method:

There are 37 health units in Ontario; each has its own website. Using the health site's own search engines, where available, we entered the search terms: <childhood lead poisoning> <lead poisoning> <lead paint> and <lead in drinking water>. A point was accorded for each time an item appeared for the search terms and if the words "lead" was used appropriately either in the title, or in the description. Where no search engine was available (n=2), or where the search engine was not functioning (n=4) L.E.A.D. searched headings such as "environmental health" health hazard," or "child health" but only if these headings were readily accessible via the health unit's index page as links, tabs or drop-down menus.

Results:

Our survey found that only 7 (19%) of Ontario health unit sites had *easily accessible* information on lead poisoning using the search terms <childhood lead poisoning> <lead poisoning> <lead paint> and <lead in drinking water>. See

Summary. The City of Ottawa returned the most items under a search for lead poisoning. Seventeen sites had links to information on lead, but this information was not available using the above mentioned search phrases. Search phrases such as <Environmental Health> or <Child Health> or <Healthy Homes/Spaces> turned up more information on lead. Two health units, the Regional Niagara Public Health Department and the Haliburton, Kawartha, Pine Ridge District Health Units returned 0 search items even though these two communities have had past problems with lead contaminated soils and have investigated public exposure.

Of the 7 sites that contained information on lead, lead information often consisted of a one-page overview outlining sources, health effects, and remedies. One site advised home owners with chipping or peeling paint to “remove” it – but no detailed directions were given on how this might be done safely; there was also no link to information on safe removal. Information provided in some sites was contradictory to information provided in others. Special recognition is awarded to the City of Hamilton – whose site featured information on a lead service replacement program and the Grey Bruce Health Unit site which features information on lead under their Health Hazard Investigation tab.

Discussion:

Lead poisoning due to housing sources is 100% preventable. Prevention can be accomplished in large part, through public education (Campbell , Buckeridge, Dwyer et al., 1999). Unfortunately there has been little discourse on this issue in Ontario. Reasons for this are not clear. There is evidence that Ontario houses do contain lead health hazards. A recent study (Rasmussen, 2001) uncovered homes in Ottawa with extremely high lead dust contamination (arithmetic mean 405.56 mg/kg lead, maximum value 3,225.66 mg/kg).

After completing this research we do not feel that information is readily available to individuals looking for information regarding lead poisoning and/or lead hazards. Clearly there is a need to increase the amount of information available to Ontario residents via health unit websites, and there is a need to develop standardized information that is protective of the consumer.

References:

Campbell M, Buckeridge D, Dwyer J, Fong S, Mann V, Sanchez-Sweatman O, Stevens A, Fung L. *Effectiveness of Environmental Awareness Interventions: Health Hazard Investigation*. March 1999

Canada Mortgage and Housing Corporation (CMHC). *Lead in Your Home*. CMHC: 2003

Fleming S and Ursitti F, (1994) *Scientific Criteria Document for Multimedia Environmental Standards Development – Lead*. Standards Development Branch, (MOEE) Ontario Ministry of the Environment and Energy, Toronto: Queen’s Printer for Ontario, 1994.

Lanphear BP, Matte TD, Rogers J, Clickner RP, Dietz B, Bornschein RL, Succop P, Mahaffey KR, Dixon S, Galke W, Rabinowitz M, Farfel M, Rhode C, Schwartz J, Ashley P, Jacobs DE. The contribution of lead-contaminated house dust and residential soil to children's blood lead levels. *Environmental Research* 1998; 79:51-68. [Abstract](#)

Metropolitan Toronto Teaching Health Units and the South Riverdale Community Health Centre. *Why Barns are Red: Health Risks from Lead and Their Prevention. A Resource Manual to Promote Public Awareness*. Metropolitan Toronto, Ontario. 1995.

Rasmussen PE, Subramanian KS, Jessiman BJ. A multi-level profile of housedust in relation to exterior dust and soils in the city of Ottawa, Canada. *The Science of the Total Environment* 2001; 267: 125-140

Suggested Reading

Rosner D & Markowitz G "Cater to the children": The role of the lead industry in a public health tragedy, 1900-1955. *Am J Public Health*. 2000 Jan;90(1):36-46. [Abstract](#)

Jennifer Nelson is a new member of [I.e.a.d](#) and the mother of Eden (8 year old girl), Sidney (6 year old boy), Cedar (4 year old boy) and Aryauna (2 month old girl). Jennifer recently had her 70 year old home assessed for lead paint hazards and was shocked by the findings of high lead contamination

ONTARIO HEALTH UNIT SURVEY SUMMARY BY REGION

Health Region (# of health units in region)	Total # of Health Units Per Region Providing		Health Units Providing PROACTIVE Lead Programming
	<u>EASILY ACCESSIBLE</u> Lead Information	Lead Information Available but NOT Easily Accessible	
<u>Central East Region</u> (5)	1	2	
<u>Central South Region</u> (4)	0	2	1 <u>Lead Pipe Service Replacement Program</u>
<u>Central West Region</u> (4)	1	3	
<u>East Region</u> (6)	2	4	
<u>North Region</u> (8)	1	1	
<u>South West Region</u> (9)	2	4	1 <u>Health Hazard Investigations</u>
<u>Toronto Region</u> (1)	0	1	
Total for All Ontario Health Units	7	17	2

CENTRAL EAST REGION

PUBLIC HEALTH UNIT	LEAD INFORMATION FOUND THROUGH		COMMENTS
	DIRECT SEARCH	INDIRECT SEARCH	
			*=Easily Accessible Information
Simcoe County District Health Unit www.haldimand-norfolk.org	Yes. Search for "lead paint" - ABC's of indoor air	Yes. Health & Your Environment See ABC's of indoor air	Note: No lead information or services found under search titles "lead poisoning", "childhood, lead, poisoning" or "lead in drinking water"
York Region Health Services Department www.region.york.on.ca/Services	No	No	No lead information or services provided
Peterborough County-City Health Unit www.pcchu.peterborough.on.ca	No	No	No lead information or services provided
Haliburton, Kawartha, Pine Ridge District Health Unit www.hkpr.on.ca	No	No	No lead information or services provided
Regional Municipality of Durham Health Department * www.region.durham.on.ca	Region of Durham - Health - Facts About Lead	No	Note: "Health Facts About Lead" provided under all four lead search titles "lead poisoning", "childhood, lead, poisoning" & "lead in drinking water"

CENTRAL SOUTH REGION

PUBLIC HEALTH UNIT	LEAD INFORMATION FOUND THROUGH		COMMENTS
	DIRECT SEARCH	INDIRECT SEARCH	
			* = Easily Accessible Information
Brant County Health Unit www.bchu.org	No	Yes. Click on Environmental Health then click on Indoor Air Quality	Click on Child Health then click on Home Safety (PDF 85kb) – Is Your Home a Safe Home (A Home Safety Checklist) – No Reference to the Dangers of Lead in the Home.

City of Hamilton Social and Public Health Services Division www.hamilton.ca/phcs	Yes. Lead Pipe Service Replacement Program	No	<p>Note: While we like to acknowledge the value of the City of Hamilton's lead pipe service replacement program, we also point out that replacing service lines is prohibitive for low-income families, costing upwards of \$1000.00. There is no mention, at this site, of funding to assist families with their financial responsibility – which may prevent low-income families from using this program.</p> <p>No lead information or services found under search titles “childhood lead poisoning” or “lead paint”</p>
Regional Municipality of Haldimand Norfolk Health Department www.haldimand-norfolk.org	Search engine not working (June 17, 2004)	No	Click on Programs & Services A – Z then click on Environmental Health - No lead information or services provided.
Regional Niagara Public Health Department www.regional.niagara.on.ca	No	No	Click on Programs & Services A – Z then click on Environmental Health - No lead information or services provided.

<h2 style="text-align: center;">CENTRAL WEST REGION</h2>			
PUBLIC HEALTH UNIT	LEAD INFORMATION FOUND THROUGH		COMMENTS * =Easily Accessible Information
	DIRECT SEARCH	INDIRECT SEARCH	
Peel Regional Health Unit www.region.peel.on.ca/health	No	No	Note: Click on Health Services then click on Environmental Health - No lead information or services provided.
Wellington-Dufferin-Guelph Health Unit * www.wdghu.org	Yes. Common Sources of Indoor Air Pollutants and Associated Health Impacts, U:\OFFICE\odwo\Pibs4065-revjmay23.PDF, Microsoft Word - HPDSW ~2.DOC 	Yes. Click on Health Topics Index then click on Air Quality then click on Home then click on CMHC About Your House See Lead in Your Home	No lead information or services found under search titles “childhood lead poisoning” or “lead paint”
Halton Regional Health Department www.region.halton.on.ca/health	No	No	Note: Click on A – Z Index - No lead information or services provided.

Regional Municipality of Waterloo, Community Health Department www.chd.region.waterloo.on.ca	No	Yes. Click on Services then click on Environmental Health See Air Quality (Indoor)
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EAST REGION			
PUBLIC HEALTH UNIT	LEAD INFORMATION FOUND THROUGH		COMMENTS * =Easily Accessible Information
	DIRECT SEARCH	INDIRECT SEARCH	
Hastings and Prince Edward Counties Health Unit** www.hpechu.on.ca	No	**Yes. Click on Environmental Issues See Indoor Air Quality & Lead Poisoning	
*Leeds, Grenville and Lanark District Health Unit www.healthunit.org	Yes. Health Hazards	Yes. Under SAFE WATER on the home page of this site, lead is listed & there is a direct link to lead information Under search for « lead paint » click on Pregnancy See Avoiding Environmental Hazards, Health Hazards	Note: No lead information or services found under search titles “lead poisoning” or “childhood lead poisoning”
Eastern Ontario Health Unit www.eohu.on.ca	No Search Engine	No	Note: Click on Health Topics – No lead information or services provided.

<p>Kingston, Frontenac and Lennox and Addington Health Unit www.healthunit.on.ca</p>	<p>No</p>	<p>No</p>	<p>Note: Click on Health Info then click on Environmental Health Department – No lead information or services provided.</p> <p>Click on Environmental Health - No lead information or services provided.</p> <p>Click on Family Health - No lead information or services provided.</p>
<p>*City of Ottawa – Health** www.city.ottawa.on.ca</p>	<p>**Yes. Health - Environmental Health - Lead and Human Health, City of Ottawa - Drinking Water - Lead in Drinking Water, Health - Women's Health - Pregnancy - Environmental Hazards, City of Ottawa - Drinking Water - About Water Quality - Water Purification and Drinking Water Quality</p>	<p>Yes. Click on Environmental Health – See Lead & Human Health</p>	<p>Note: No lead information or services found under search title “lead poisoning”</p> <p>Click on Child & Infant Health then click on Keeping Children Safe – No lead information or services provided.</p>
<p>Renfrew County and District Health Unit www.rcdhu.com</p>	<p>No Search Engine</p>	<p>Yes. Click on Safe Water See Lead in drinking water</p>	<p>Note: Click on Child Health – No lead information or services provided.</p>

<h2 style="text-align: center;">NORTH REGION</h2>			
PUBLIC HEALTH UNIT	LEAD INFORMATION FOUND THROUGH		COMMENTS
	DIRECT SEARCH	INDIRECT SEARCH	
<p>Muskoka-Parry Sound Health Unit www.mpshu.on.ca</p>	<p>No Search Engine</p>	<p>No</p>	<p>Note: Click on Index then click on Safety Issues - No lead information or services provided.</p>

<p>Northwestern Health Unit *</p> <p>www.nwhu.on.ca</p>	<p>Yes. Lead Poisoning, Child Health</p> <p>Search “childhood poisoning” then click on Child Health See Lead Poisoning in Children Information</p>	<p>Yes. Click on Fact Sheets See Lead Poisoning In Children</p>	<p>**Note: Lead Information provided under all four search titles “lead poisoning” “childhood lead poisoning” “lead paint” & “lead in drinking water”</p>
<p>Timiskaming Health Unit</p> <p>www.timiskaminghu.com</p>	<p>Search Engine Not Working (June 15, 2004)</p>	<p>No</p>	<p>Note: Click on Public Health then click on Child Health - No lead information or services provided.</p>
<p>North Bay and District Health Unit</p> <p>www.nbdhu.on.ca</p>	<p>No Search Engine</p>	<p>No</p>	<p>Note: Click on Select A Topic then click on Environment & Health - No lead information or services provided.</p>
<p>Algoma Health Unit</p> <p>www.ahu.on.ca</p>	<p>No</p>	<p>No</p> <p>Note : Link to lead information has “moved or no longer exists”.</p>	<p>Note: Under Title Quick Links click on Your Environment Under Title Health Topics click on Environmental and Health Hazards – (See Lead) – Link to lead information has “moved or no longer exists”.</p>
<p>Sudbury and District Health Unit</p> <p>www.sdhu.com</p>	<p>Yes</p> <p>(updated Nov. 10, 2005)</p>	<p>Yes</p>	<p>Lead and Human Health</p> <p>Sudbury Soils Study - Toxicological Profiles on Health Issues.</p>
<p>Thunder Bay District Health Unit</p> <p>www.tbdhu.com</p>	<p>No</p>	<p>No</p>	<p>Note: Only reference to lead is in “Harmful Chemicals found in Smokeless Tobacco - Lead (the poisonous kind – banned form paint products)”</p>
<p>Porcupine Health Unit</p> <p>www.porcupinehu.on.ca</p>	<p>Search engine not working</p> <p>(June 15, 2004</p>	<p>No</p>	<p>Note: Click on Site Map Under title Community Services - Family Health click on Child Health – External links provided that contain lead information – NO direct link to lead information.</p>

SOUTH WEST REGION

PUBLIC HEALTH UNIT	LEAD INFORMATION FOUND THROUGH		COMMENTS * =Easily Accessible Information
	DIRECT SEARCH	INDIRECT SEARCH	
Chatham-Kent Health Unit www.chatham-kent.ca	Search engine not working (June 15, 2004)	No	Note: Click on Site Map Under title Drinking Water - No lead information or services provided. Click on Site Map Under title Community Services – House & Home - No lead information or services provided.
Huron County Health Unit www.huroncounty.ca/healthunit	No	No	Note: Click on Site Index - No lead information or services provided.
Middlesex-London Health Unit * www.healthunit.com	Yes. Lead	Yes. Click on Your Environment then click on Home & School See then click on Article - Lead	Note: No lead information or services found under search titles “childhood, lead poisoning” “lead paint” or “lead in drinking, water”
Grey Bruce Health Unit www.publichealthgreybruce.on.ca	No	Yes. Click on Health Hazard See <i>Health Hazard Investigations/Housing Inquiries</i>	**Note: Health Hazard Investigations Housing Inquiries ·investigate and resolve potential health hazards in or around rental or private housing properties ·Provision of information on the reduction or elimination of possible health hazards ·Consultation on such issues as potable water; air quality; heating; sanitation; maintenance; insect/rodent infestations; and renovation risks (<u>lead paint/solder, asbestos</u>)

<p>County of Lambton * www.lambtonhealth.on.ca</p>	<p>Yes. Community Health Services ::Lead in Drinking Water::</p>	<p>Yes. Click on Health Information then click on Environmental Health See Indoor Air Quality & Lead and Human Health</p>	<p>No lead information or services found under search titles “childhood, lead poisoning” or “lead paint”</p>
<p>Elgin-St. Thomas Health Unit www.elginhealth.on.ca</p>	<p>No</p>	<p>No</p>	<p>Note: Click on Health Information - No lead information or services provided.</p>
<p>Perth District Health Unit www.pdhu.on.ca</p>	<p>No</p>	<p>No</p>	<p>Note: Under tab Health Information/Environment, there are CMHC fact sheets, but “Lead” is not listed.</p> <p>Under Family Safety/Poisoning, paint is listed but no reference to lead paint.</p> <p>Under Other Helpful Resources/Safe Kids Canada, “Lead” is not listed on the Safe Kids Canada Home Safety Checklist.</p>
<p>Windsor-Essex County Health Unit www.wechealthunit.org</p>	<p>No</p>	<p>No</p>	<p>Note: Under Topics click on Healthy Families then click on Babies - No lead information or services provided.</p> <p>Under Topics click on Healthy Families then click on Toddlers - No lead information or services provided.</p>
<p>Oxford County Board of Health** www.county.oxford.on.ca/healthservices/ocbh</p>	<p>No</p>	<p>**Yes. External Link to Lead Prevention Information - Site contains search button for Province of Ontario and Government of Canada resources. Search for “Lead poisoning” returns many links.</p>	<p>Note: First Quarterly Report on Drinking Water Quality – Mentions lead found in drinking water</p>

TORONTO REGION

PUBLIC HEALTH UNIT	LEAD INFORMATION FOUND THROUGH		COMMENTS * =Easily Accessible Information
	DIRECT SEARCH	INDIRECT SEARCH	
Toronto Public Health www.toronto.ca/health/index.htm	No	Yes. Click on A – Z Index then click on <u>Environment</u> then click on <u>Healthy People Healthy Environment</u> then click on <u>Children's Health</u> then click on <u>Toronto Public Health's Reports on Children's Health & the Environment</u> then click on Children's Environmental Issues (April 2000)	No