Making Environmental Health Happen in the Community!

The Story of South Riverdale Community Health Centre’s Environmental Health Program

A Resource Manual

Coordinated and Written by: Nita Chaudhuri,
Environmental Health Promoter/Researcher
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Thanks!

Nita
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Purpose of the Manual

SOUTH RIVERDALE IS ONE OF THE RARE COMMUNITY HEALTH centres with a designated position of Environmental Health and an articulated commitment to environmental health issues. The purpose of this manual is to provide a framework to assist community workers in incorporating environmental health practices into their activities based on the experiences of the Environmental Health Program at the South Riverdale Community Health Centre. Many resources are available on the health impacts of environmental contaminants and healthier alternatives. Please refer to the resource list provided at the end of this manual.

PART I. The Determinants of Health

AN ECOLOGICAL ASSESSMENT OF FACTORS RELATED TO health outcomes has contributed to the development of a new framework for understanding health (Boothroyd and Eberle, 1990; Premier’s Council on Health Strategy, 1991, Renaud, 1993). This population health framework was adopted in 1994 by Federal, Provincial and Territorial Ministers of health (Health Canada, 1994). In addition to the importance of genetics and biological factors, evidence consistently shows that there are other factors that impact health. (e.g., Evans and Studdart, 1990; Marmot, Kogevinas, and Elston, 1987; Mustard and Frank, 1991). These factors have been identified as the determinants of health.

Income and social factors have been identified as the most important determinants of health (Health Canada, 1994). These may include job-related factors and unemployment, family and social networks, and prenatal and early childhood conditions. In addition to these social and economic determinants, more attention is being paid to the role of the physical environment as a determinant of health. The intersection of the three, shown as interlocking circles, determines the health outcome of individuals, families, communities, cities and nations.
PART II. The Environment as a Determinant of Health

THE IMPORTANCE OF THE PHYSICAL ENVIRONMENT IN determining health outcome is dependent upon the social and economic conditions that accompany it.

Taking the example of lead, a well known toxic substance, it is possible to illustrate how social, economic and environmental determinants interact to influence the adverse health impacts of lead on individuals or communities. Labonte’s inclusive socio-environmental model of health shown in Figure 1 highlights many of the interactions between environment and other health determinants.

Poor children often live in low-rent housing located very close to industrial areas and high density traffic corridors. Poor housing can often contain peeling paint that contains lead. Industrial sources of lead such as smelters are often sited in these communities (Bullard, R.D. and Wright, B, 1993). High levels of soil contamination from historical use of lead in gasoline may also be found in these communities. Old furnishings, especially carpets, may contain bacteria and other allergens which act as large reservoirs of lead and concentrate, pesticides and other toxic substances tracked in on shoes (Roberts, J.W. and P. Dickey, 1995). In addition, the nutritional status of many children in poverty is such that they may be lacking in the essential nutrients that may have a protective role against exposure to environmental contaminants (Goyer, R.A., 1997, Chaudhuri, 1998).

Poor parents tend to have less political or economic power and therefore are less able to change their environment. Parents may also have less education and therefore reduced access to information on the health impacts of environmental contaminants and ways to prevent
exposure. The environment as a determinant of health is largely ignored in most programming and policy development. The purpose of this manual is to document some aspects of the Environmental Health Program at the South Riverdale Community Health Centre and to help guide others to incorporate environmental health as a determinant in their activities.

**Using a Population Health Promotion Framework to Analyze Environmental Health Problems in the Community**

THE POPULATION HEALTH CUBE ILLUSTRATES HOW THE determinants of health can be addressed at different levels of society using various strategies to improve community environmental health. In environmental health promotion one must keep abreast of scientific advances in the field such as environmental standard setting or health impacts of environmental contaminants, as well as keeping abreast of community issues, policy initiatives and program development strategies.

Working within a health promotion framework, a number of tools are available to realize the strategies shown in the population health cube. These include: education, community development, action research, advocacy and monitoring and evaluation. This manual will outline the development of the SRCHC environmental health program and focus on how it has used these tools to strengthen community, build healthier public policy, create supportive environments, develop personnel services and reorient health services.
PART III. The Riverdale Community

SOUTH RIVERDALE IS A COMMUNITY LOCATED IN SOUTH EAST Toronto, an area characterized by emissions from heavy industry and highly used traffic corridors which contribute to poor air quality and historical soil contamination. Real estate prices are, therefore, low. This has allowed for the development of one of the largest concentrations of low income and subsidized housing in Toronto. South Riverdale has a high incidence of low income families, children under five, more female single-parent households, high infant mortality rates and low literacy rates. Thirty percent of the population is also new to Canada, predominantly Chinese, Vietnamese and Greek. By economic necessity, members of this group often live in crowded housing. A new trend in South Riverdale, however, has been gentrification where some neighbourhoods have become wealthier than others.

South Riverdale has become well known as the site of an extensive soil lead contamination which caused childhood lead poisonings. In the late 1980’s, the South Riverdale Community Health Centre led a major clean-up effort in the neighbourhood.

The South Riverdale Community Health Centre

THE SOUTH RIVERDALE COMMUNITY HEALTH CENTRE (SRCHC), founded in 1976, was born out of South Riverdale's struggle to overcome environmental contamination from lead. The SRCHC is one of 60 centres funded by the Ministry of Health of Ontario. Health care in Canada is publically funded. The strength of the community health centre model is core funding. Having core funding helps the health centre staff to work on emerging and outstanding issues. The Centre has an interdisciplinary health care delivery system based on the determinants of health where social, economic and environmental factors are considered in programming. The SRCHC has a community based board and the services provided include: a primary care, social work and nutrition and health promotion. The Centre continues to make environmental health issues a priority through its environmental health program which is situated within the health promotion team.
PART IV. Getting the Environmental Health Program Started

Getting to Know the Community

BEFORE BEGINNING ANY ACTIVITIES IN THE Environmental Health Program it was essential to get to know the community - people, places and history. Because so much activism had already existed around environmental issues there were plenty of opportunities to talk to people. Landuse issues were still burning in the minds of people as the Environmental Assessment (EA) of the Main Sewage Treatment Plant was taking place. Sewage sludge was being burned and residents were concerned that the emissions from the incinerator were causing higher rates of asthma in the community.

Hitting the Ground Running

THROUGH THE PROCESS OF THE EA I WAS ABLE TO CONTACT key environmental activists in the community. The EA provided an opportunity to learn about the physical geography of Riverdale, soil, water and air contamination issues, local history, the key political players, mechanics of the political process and alternative environmentally healthy technologies.
LEARNING ABOUT THE DETERMINANTS OF HEALTH

REGULAR MEETINGS WITH THE HEALTH PROMOTION TEAM enabled the development of a determinants of health analysis of the environmental issues. Issues such as poverty reduction, food security and seniors issues all enabled a better understanding of the demographics and the key issues that influenced the health status of the community. Neighbourhood profiles had been developed by the Toronto Public Health Department which provided statistics on the health indicators such as morbidity, infant mortality and mortality as well as age structure, percentage of renters and housing stock. The data was presented in a map format which provided a pictorial representation of where priority populations for interventions lay.

CHOOSING A TARGET POPULATION

HAVING STUDIED THE DEMOGRAPHICS AND VITAL STATISTICS of the community and getting to know where other programs were focusing their attention, several vulnerable groups were chosen as target groups in the community. These include low income tenants, high risk asthma patients, new immigrants, young families and the community at large.

BUILDING TRUST

AS A COMMUNITY ENVIRONMENTAL HEALTH PROMOTER I WAS called in to help address issues at Don Mount Court, a social housing project. Community development workers from Catholic Children’s Aid and Woodgreen Community Centre wanted help dealing with an asbestos and sewage back-up problem in one of the units. The sewage back-up issue was an opportunity to begin an apprenticeship in community development in partnership with other front line workers and tenants. Over the years, various activities took place including sustaining and developing a tenant group, conducting community visioning sessions, developing a community garden, advocacy on maintenance and other tenant issues, and organizing Christmas and back to school parties. During this period I followed the direction of other community workers. Using the principles of community development we worked with tenants: We listened to their needs and slowly began to incorporate various workshops such as pest control, healthy cleaning and repairs. This allowed me to develop a reputation in the community as the “environment worker”, allowing me to incorporate the links between
environment and health into the built environment in a more explicit way. In 1997 a more intensive environmental health project was launched in Don Mount Court using an environmental health train the trainer model. See page 41 for more detail.

**Building Partnerships**

WHILE A RELATIONSHIP WAS BEING built with the Don Mount community and community development workers, other partnerships were developing with environment and health groups. These partnerships would prove valuable in creating the links between the environment, health, social and economic issues. A number of groups came together in 1995 to form an organization called **Greensaver** which was to conduct energy home audits as well as promoting other environmental activities such as organic gardening and water conservation. As the energy efficiency audits were being developed it became apparent that these audits could be used as maintenance audits for Don Mount Court. We convinced the steering group to allow auditors to come into Don Mount where we used the results to identify major building deficiencies that had an impact on health. These included ventilation, heating and pest problems.

The development of the Indoor Air Quality Workgroup is another example of partnership development. It was created by partnering with the **Metropolitan Lung Association.** The association provided added credibility to the group as well as increased access to resources and information.

A longstanding partnership also developed with **Toronto Public Health.** An exchange of ideas, knowledge and resource development has occurred in the areas of lead and its health effects, pest control and children's health and the environment.

As the program matured partnerships were made with the universities where experience in the community provided important insight for researchers and conversely research methods brought by the university provided added rigour to program development.

Building partnerships internally in the Health Centre was also important. These included working with the nutritionist to examine the links between food and the environment; the Chinese outreach worker to reach the Chinese community; the young mother's project to access high risk mothers; and the

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**Checklist**

- Take time to develop partnerships
- Develop partnerships:
  1. internally in your organization
  2. with a diverse number of groups (community, government, business, universities, individuals)
  3. with existing environmental groups
  4. with existing health groups (public health departments, public health associations, Lung Associations)
  5. with newly forming groups on the environment
- Identify high priority issues for community
- Develop terms of agreement for the partnership
- Use various strategies in partnership development
clinical team to link with patients with breathing problems.

Building partnerships with different organizations helped to formulate the process and the content component of the program and increase its credibility.

**Getting the Community Involved**

MANY STRATEGIES HAVE BEEN USED IN THE ENVIRONMENTAL health program to get the community involved. They have included developing skill building workshops with community on various environmental health topics, working with low income tenants to develop a tenant's association; writing articles in local papers on specific topics and advertising events and groups.

Going out into the community and coming back at various stages to assess information, processes and strategies is essential to the development of a relevant program. Pro-active but flexible plans can be developed for organic responses to issues and opportunities that may arise.
PART V. Tools for Change in Environment and Health

A. Educational Strategies

A.I Workshops

Workshops are an excellent way to communicate a lot of information to people, exchange ideas and identify issues of importance to the community. Workshops can have "experts" speak on a particular topic or a more popular education approach can be used where "everybody teaches and everybody learns." This latter approach is one that is often used in the Environmental Health Program to get people involved in information exchange and to encourage action on specific health related issues.

The Environmental Health Program has developed the "Healthy Homes Healthy Environments" Workshop Series in this popular education style:

- Healthy Cleaning
- Healthy Pest Control
- Renovation and Repair Work
- Food and the Environment
- Children's Health and the Environment

The following are examples of different approaches used for workshops. For each workshop, setting up a draft agenda with a selection of topics will help guide the workshop. Choosing the topics and method of conveying the information can be adapted to the various learning styles of the audience. The role of the facilitator is critical when using this popular education approach. It is very important to listen to the community.

The Principles of Popular Education

1. High level of participation and collective effort
2. Everyone teaches, everyone learns
3. Starting point is the concrete experience of the learner
4. Creation of new knowledge
5. Links local experience to historical and global processes
6. Strengthens the ability of people to organize
7. Take into account many ways of learning
i  Healthy Consumer Products Workshop

ONE OF THE EASIEST WAYS TO BEGIN A DISCUSSION ABOUT healthy homes is to introduce the topic of household products, in particular cleaning products, used in the home. People can usually identify at least 3 to 4 products that they use on a daily basis to clean their home. When groups are asked how they feel when using these products, there are always a few who say they have headaches, nausea, itchy or burning eyes or trouble breathing.

The Sensory Product Chart is a good way to have people experience with their senses the real impacts products have on their health. You can use this exercise in any one of the healthy home demonstrations (healthy cleaning, healthy pest control, healthy food, children's health and the environment).

a. Sensory Product Chart

<table>
<thead>
<tr>
<th>Senses/Products</th>
<th>Product 1 (chlorine bleach)</th>
<th>Product 2 (soft plastic toy)</th>
<th>Product 3 (vinegar)</th>
<th>Product 4 (wooden truck)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smell</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How does it make you feel? (Emotions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
i) **Purpose of Activity**

To help people understand the links between the use of consumer products and their health.

ii) **What You Will Need**

Flip chart, markers, tape, chalkboard, chalk, various consumer products.

iii) **Steps to Take**

- Get a few products that you would consider toxic or noxious. For example, chlorine bleach, chemical fabric softener, plastic bib, soft plastic toy, tile cleaner etc.

- Pass the products around in the audience and let them take their time to absorb the products with their senses.

- What do these products smell like, what do they feel like (touch), what do they taste like?

- How does it make you feel? Happy, sad, angry, ambivalent?

- What kind of health effects do you have? (nausea, headaches, itchy eyes)?

- Do you know what the ingredients are in the products?
  
  Chlorine, ammonia ....

- What is on the labels?

  Look at the label.
  What ingredients do you see?
  What are the warning signs?

- Look closely at the warning signs. (corrosive, poison, flammable, explosive). What do they mean?

  Now look at some healthier products? (baking soda, vinegar, wooden toys, cloth diapers etc.). Use the chart again and compare the results.

- Create a sensory product chart to help people compare their experience and knowledge.
iv) Facilitator’s Tips

Let people take their time when answering questions.

Write clearly on the sensory product chart.

If products are not available get people to close their eyes and imagine the products.

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**Teaching and Facilitating Role**

As a teacher / facilitator you can assist the group to:

- Be respectful of people’s opinions
- Act as a resource or guide rather than a teacher
- Admit you don’t have all the answers
- Be flexible and fair
- Encourage debate or disagreement on a topic and handle it with respect, care and attention
- Let the process happen
- Don’t be afraid to state your position
- Gently prod people
- Leave time for silent thinking

Adapted from:

Clover D. Foliens and B. Hail, 2000

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**KEY RESOURCES**


b. **Healthy Cleaning Demonstration**

i) **Purpose of Workshop**

To teach people how to make environmentally healthy less expensive cleaners.

ii) **What You Will Need**

Baking soda, vinegar, borax, soap flakes, washing soda.

Scrub brush, rags, sponge with abrasive side, steel wool, scraper, spray bottle, bottle to mix ingredients.

iii) **Steps to Take**

- Have ingredients for recipe readily visible on a table with labels showing.
- Have a healthy cleaning recipe visible on posters or handouts.
- Ask a volunteer or volunteers to follow a recipe in front of the group.
- Weave in some of the information you might want to tell the group of where the products can be obtained or how much they cost.

iv) **Facilitator’s Tips**

Think of a cooking class when demonstrating the recipes.

For other less toxic cleaning recipes, refer to *Hidden Exposures* page 22-25.

**KEY RESOURCES**


**RECIPE**

**HOME-MADE WINDOW CLEANER**

Mix equal amounts of water and vinegar in a spray bottle.

For tougher jobs:

- 1/2 tsp liquid soap
- 3 tbsp white vinegar
- 2 cups water
c. **Reading “Material Safety Data Sheets”**

In Canada, many of the ingredients that are found in consumer products are not found on the label. Information is available, however, on material safety data sheets which can be obtained from the product manufacturer. The information contained in these sheets will give most of the active ingredients, directions for use, warning and caution messages and potential health effects. For more information on how to use a material safety data sheet, the website from Canadian Centre for Occupational Health and Safety is an excellent resource (www.ccohs.ca).

i) **Purpose of Activity**

To teach people how to get more information on ingredients and health effects of consumer products.

To teach people how to read a material safety data sheet.

ii) **What You Will Need**

Flip chart, markers, chalk board, chalk, tape.
Copies of material safety data sheets.
Various consumer products.

iii) **Steps to Take**

- Have various consumer products available.
- Have people look at the labels for ingredients, warning signs, directions.
- Have people notice the lack of information available.
- Note the manufacturer contact information.
- Have a material safety data sheet available on the consumer product you are discussing.
iv) Facilitator's Tips

Take your time in explaining the material safety data sheet, they are complicated.

Let people choose which part of the material safety data sheet they would like to learn about the most.

KEY RESOURCES

Canadian Centre for Occupational Health and Safety (www.ccohs.ca)


**Sample Page of a Material Safety Data Sheet**

<table>
<thead>
<tr>
<th>PRODUCT IDENTIFICATION AND USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT NAME: TILEX® SCAP SCUM REMOVER</td>
</tr>
<tr>
<td>DESCRIPTION: Pale blue to blue/green liquid with herbal pine odour.</td>
</tr>
<tr>
<td>MANUFACTURER</td>
</tr>
<tr>
<td>The Clorox Company</td>
</tr>
<tr>
<td>1221 Broadway</td>
</tr>
<tr>
<td>Oakland, California 94612</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOXICOLOGICAL PROPERTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route of Entry?</td>
</tr>
<tr>
<td>Skin Contact:</td>
</tr>
<tr>
<td>Effects of Acute Exposure to Material:</td>
</tr>
<tr>
<td>Effects of Chronic Exposure to Material:</td>
</tr>
<tr>
<td>LD90 of Material (specify species and route):</td>
</tr>
<tr>
<td>Exposure Limit of Material:</td>
</tr>
<tr>
<td>Sensitization Property of Material:</td>
</tr>
<tr>
<td>Carcinogenicity of Material:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PREVENTATIVE MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Protective Equipment:</td>
</tr>
<tr>
<td>Gloves (specify): Wear protective gloves</td>
</tr>
<tr>
<td>Respirator (specify):</td>
</tr>
<tr>
<td>Eye (specify): Chemical safety goggles</td>
</tr>
<tr>
<td>Footwear (specify):</td>
</tr>
<tr>
<td>Clothing (specify):</td>
</tr>
<tr>
<td>Other (specify):</td>
</tr>
<tr>
<td>Engineering Controls (specify, eg. ventilation, enclosed process):</td>
</tr>
<tr>
<td>Leak and Spill Procedure:</td>
</tr>
<tr>
<td>Absorb and containerize. Wipe up with an absorbent material or mop and dispose of in accordance with local regulations. Dilute with water to minimize effect on spilled surface.</td>
</tr>
<tr>
<td>Waste Disposal:</td>
</tr>
<tr>
<td>Waste disposal should be in accordance with existing federal, provincial and municipal environmental regulations.</td>
</tr>
<tr>
<td>Handling Procedures &amp; Equipment:</td>
</tr>
<tr>
<td>Do not get in eyes or on skin. Employees should wash their hands and face before eating and drinking</td>
</tr>
</tbody>
</table>
d. **Toxics Collection**

Most cities have toxics collection programs which are not widely advertised. Organizing a regular toxics pick-up is a good way to have people become aware of what products are considered toxic and where they can find hazardous waste facilities and programs.

i) **Purpose of Activity**

To make participants aware of what types of toxic consumer products exist and the location of the nearest hazardous waste depot and toxic collection program.

ii) **What You Will Need**

Posters, flyers.

Leakproof boxes.

Vehicle to transport toxics if needed.

Protective clothing such as safety glasses, gloves, coveralls.

iii) **Steps to Take**

- Contact your local hazardous waste or toxic collection program.
- Obtain information on what products are considered toxic.
- Ask if they would be willing to pick up the toxic products from the community.
- Find a readily visible location to collect toxic products.
- Coordinate the collection with another event such as an Eco-tour or Food bank collection.
- Make clear posters that tell people what they should bring (cut pictures out of magazines or list product categories).
- Have containers available so that any products that are leaking can be contained safely.
- Call the toxics collection program to come and pick up the products, or bring the toxic products to the nearest hazardous waste depot.
- Advertise the existing municipal toxics collection service.

**PRODUCT CATEGORIES FOR TOXICS PICK-UP**

- Paints, solvents and glue products
- Personal care products
- Automotive and garage products
- Pesticides and garden products
- Household cleaning products
iv) Facilitator’s Tips

Make sure you are adequately protected when carrying out this activity (gloves, coveralls).

Have literature available and be available to talk to people about less toxic and healthier alternatives.

**KEY RESOURCES**

Making Workshops Friendly

Often individuals who have newly arrived in the country are overwhelmed by the number of products they find on the shelf. Many of them are not able to read the labels and rely on advertising, product label recognition and word of mouth to select products. To make messages more easily available the use of colours and pictures is helpful. We have developed a stop light system to convey messages around desirable use of products.

- green (happy face) - use it
- red (sad face) - don't use it
- yellow (question mark face) - think about it

These labels help to form the "Healthy Homes Display" which allows people to touch or feel the texture, smell and even taste products. Real products help to illustrate the real health and environmental effects.

It also helps to arrange translation of signs and materials by someone who understands the cultural context of the group.

Using an Interpreter

- Identify language needs in community
- Engage an interpreter from the community
- Interpret the cultural specific experience of the group
- Be sensitive to the cultural aspects of the topic you are discussing
- Make a list of vocabulary relevant to the topic
- Speak slowly
- Use body language
Making Popular Education Materials

When working with a diverse set of groups it is important to use materials that are relevant to that community. Popular education materials that use the principles listed on page 9 are often the best way to develop products that are useful. The following tips can help you develop relevant materials.

Ideas for popular education materials

- Props for skits
- Papier mache
- Healthy cleaning kits (baking soda, borax, vinegar, zeolite, recipes, organic food etc.)
- Old fridge magnets to have messages pasted on with labels (recipes etc.)

Developing Relevant Factsheets

- Ask what is relevant when beginning to develop factsheets.
- Collect group experiences and ideas on the topic (recipes for pest control, dust control).
- For more information on a topic look for existing factsheets to adapt to your group or topic.
- Pick relevant artwork.
- Take your time.
- Have drafts reviewed by many people with different levels of comprehension and no previous experience with the topic.

Checklist

- Take risks and be creative
- Use materials you see around you (old magnets from political campaigns, water bottles to carry samples of vinegar, recycled yogurt containers for samples of baking soda)
- Use lots of colour (aesthetics and to represent messages)
- Use lots of pictures and drawings (cut-outs from magazines, drawings in books, computer etc.)
Healthy Pest Control Workshop

PESTS CAN BE A BIG PROBLEM FOR HEALTH AND THE environment. Cockroaches and mice are often a major problem in apartment or multi-unit buildings. Homeowners or tenants with access to yards or gardens are also concerned with lawn and garden pests. People often resort to using strong pesticides to deal with their pest problems on their own. Introducing the concepts of Integrated Pest Control that uses a step by step method will help people work together and deal with pests in a more healthy and sustainable way.

i) Purpose of Activity

To get people to share ideas of non-toxic pest control and to introduce the concepts of integrated pest management.

ii) What You Will Need

- Flip chart, markers, tape
- Factsheets
- Diagrams of rooms in a home
- Diatomaceous earth
- Boric acid
- Broom
- Dust bin
- Caulking gun
- Snap traps
- Bait stations (Impact)

iii) Steps to Take

- Ask people what the major pest problems are in their home.
- Ask people why they think the pests are still a problem.
- Ask people what they do to get rid of them.
- Record these strategies on a flip chart.
• Show how eliminating the pests’ food, shelter and water is the first step to preventing pest invasions.

• Give examples of where food, shelter and water might be found and how to eliminate them (eg. garbage, behind a fridge, dripping taps).

• Illustrate the ideas by using a diagram of a room, or by pointing them out in the room where you’re holding the workshop or by demonstrating them through a tour of the workshop site.

• Give examples of less toxic chemical methods (bait stations, snap traps, diatomaceous earth or boric acid).

iv) Facilitator’s Tips

Try to record as many ideas as possible of creative ways to get rid of pests. Give people a copy of this list of ideas.

KEY RESOURCES


HAVE PEOPLE UNDERSTAND THE PRINCIPLES OF STEP BY STEP PEST CONTROL

INSPECTION:
... see what problem you have

MONITORING:
... use traps to see where the problem is

DECIDING HOW MUCH CONTROL:
... aim for total elimination

CONTROLLING COCKROACHES
☞ making structural improvements such as caulking
☞ improve housekeeping
☞ use less toxic pest control products

EVALUATING
☞ use traps to count pests

Adapted from:
Farewell from Cockroaches, CMHC, 1998.
iii Renovation and Repair Workshop

i) Purpose of Activity

To have people share their knowledge and expertise on repairs and renovations and to ensure that health and the environment are incorporated.

ii) What You Will Need

- Video
- Flip chart
- Markers
- Tools
- Sample Materials to Bring to the Workshop
- Adhesives - low volatile
- Barriers; air, vapour, weather, and moisture
- Building structure
- Caulking and fillers - low volatile
- Doors and windows
- Electrical
- Roof
- Safety gear materials
- Poster and diagram of a house or building
- Factsheets
- Sign up sheet

Sample Materials to Bring to the Workshop

- Exterior wall materials
- Flooring
- Foundation materials
- Gaskets and weather strips
- Insulation
- Interior wall and ceiling materials
- Paints, sealers and coatings
- Plumbing items

iii) Steps to Take

- Gather together two or three key community individuals who have some knowledge of repairs and renovations.
- Discuss each other’s strengths in this area and decide what topic each person may discuss at a workshop (fixing a toilet, replacing a furnace filter etc.).
- Develop a loose agenda starting with the principles of healthy repairs and renovations.
- Have a few “expert” presenters discuss specific renovations and repairs, building materials and processes.
- Open the floor for free flowing discussion.
- Have the audience ask questions and have everyone in the group share their knowledge.
• Decide on a topic for the next workshop.

• Ask people to bring repair and renovation materials and issues to the next workshop.

iv) Facilitator’s Tips

Ask people the following questions:

What questions do you have on home repairs?
What health effects have you felt while doing home repairs?
What issues do people want to talk about?

Let everyone share their knowledge, keeping in mind healthy renovation and repairs to guide the facilitation.

Tips for Healthy Repairs and Renovations

To develop a healthy repair and renovation activity a set of principles need to be put in place in order to guide decision making, information delivery and action.

 Eliminate... or reduce hazardous pollutants by using low offgassing products.
 Separate... toxic materials from living spaces by installing a plastic sheet barrier or an acceptable sealer applied as a coating.
 Ventilate... by opening windows to provide fresh air flow or install mechanical ventilation to remove contaminants.

KEY RESOURCES


How to Hire a Contractor. Canada Mortgage and Housing Corporation.

This Clean House - Video. Canada Mortgage and Housing Corporation.


iv Healthy Food Workshop

THE FOOD WE EAT CAN BE A BIG CONCERN FOR ENVIRONMENT and health. Fruits and vegetables are often sprayed with pesticides during growth or before shipping. Meat and poultry may contain toxic chemicals that are fed to animals to speed up growth, and fish can absorb toxins from polluted water. However, it is important to eat a variety of fruits and vegetables each day. Proper washing and/or peeling of fruits and vegetables is an effective and inexpensive way of eliminating or reducing pesticides. Informing the community about these issues and how to find healthier alternatives is an important part of an environmental health program.

i) Purpose of Activity

To facilitate a discussion on environmentally healthy food.

ii) What You Will Need

Samples of organic and non-organic produce.
Labels of processed foods (processed cheese, snack food, meats etc.).
Food wash (Nature Clean).
Food preparation tools (preparing lake fish to remove contaminants).
Factsheets on nutrient and contaminant testing.
Factsheets on organic gardening.
Factsheets on organic pest control.
List of places that sell organic produce.
List of community shared agriculture programs.

iii) Steps to Take

- Outline the major topics relating to food and the environment: pesticides, fertilizers, food additives, preservatives, genetically modified foods, organic food.

- Let people taste, smell, feel the difference between organically and non-organically grown produce. Use the sensory product chart to examine the differences.

- Have people examine the labels of processed foods and get them to discuss what they see. Work with a nutritionist to discuss what they see on the labels. Discuss healthier alternatives to processed foods.

- Read labels of 2 or more products to a group and have them guess what the food is.
• Ask people about their concerns and facilitate a discussion on alternative ways to obtain environmentally healthy food such as: food buying clubs, community gardens, food co-ops, community shared agriculture and farmer’s markets.

iv) Facilitator’s Tips

Don't push organic food if people do not have the resources to buy it.

KEY RESOURCES


a. Community Garden

A community garden is an excellent way to bring a community together around a productive activity that is fun, healthy and fruitful!

i) Purpose of Activity

To start a community garden.

ii) What You Will Need

<table>
<thead>
<tr>
<th>Gardeners</th>
<th>Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden site</td>
<td>Gardening tools</td>
</tr>
<tr>
<td>Water</td>
<td>Compost</td>
</tr>
</tbody>
</table>

iii) Steps to Take

• Find a core group of gardeners who are interested in starting a community garden (2 or 3 are all you need). Find someone who likes administration.
• Identify a piece of land to plant on.
• Find out who owns the land and see if they will allow you to plant
on it.

- Municipal Parks and Recreation often own land that is perfect for community gardens. They are also often willing to lend resources such as tools, compost and personnel.
- Have soil tested for nutrient and soil contamination. (eg. lead, hydrocarbons).
- Make sure there is adequate water and sun, good soil quality, drainage and no existing pollution sources.
- Make sure there is adequate security to prevent vandalism.
- Choose your site.
- Draw up a plan for how the garden will look (size of plots, compost, waste containers, water access etc.).
- Seek donations of plants, tools etc. from garden centres.
- Start digging!
- Follow the principles of organic gardening.
- Create a garden club (to administer the garden, finances, recruitment, donations; to share garden tips, ways to get rid of pests; to organize canning and preserving workshops).

iv) Facilitator’s Tips

Make sure you make the right connections to municipal agencies.

Make sure you find gardeners willing to take leadership in the administration of the garden and daily upkeep.

Asks gardeners how they are doing on a regular basis and if they are following through with the necessary steps to start and maintain the garden.

KEY RESOURCES


Healthy Children’s Products and the Environment Workshop

NEW MOTHERS OR FULL TIME CAREGIVERS ARE A PERFECT group of people to talk about health and the environment. Both are keenly interested in providing the healthiest environment for their children and are open to information and suggestions. In addition, children's products such as those used to clean up diaper rash or children's toys also have environment and health implications.

i) Purpose of Activity

To introduce caregivers to environmentally healthy children's products.

ii) What You Will Need

Flip chart, markers, chalk, chalk board.

Sample Materials

- Baby wash cloths
- Corn starch
- Olive oil
- Vinegar
- Unscented soaps
- Cotton clothing
- Wooden toys
- Washable stuffed animals
- Non-toxic, unscented craft materials
- Cloth bibs
- Cloth diapers
- Factsheets on where you can obtain cloth diapers
- Factsheet on a disposable diaper recycling program
- Factsheet on second hand clothing stores or clothing exchanges

iii) Steps to Take

- Get involved with a mother's group, child parent drop-in or daycare or parent-teacher association.
- Engage a mother or caregiver to facilitate the workshop.
- Purchase products that are considered more toxic and less toxic (e.g. soft plastic vinyl bib versus cloth bib).
- Consider providing childcare or welcoming children to the workshop - give them activities to do related to topic.

- Discourage the use of chemical or synthetic products on children (unnecessary creams, baby wipes, scented products).

- Use the sensory product matrix to get participants to touch, feel and smell products.

iv) Facilitator’s Tips

Have mothers and caregivers share information.

Write down tips that have been passed around and try to photocopy and distribute them back to the workshop participants the day of the workshop.

KEY RESOURCES


A.2 Tours

Retail outlet Tour

TOURING RETAIL OUTLETS IS A GOOD WAY TO MAKE THE health and the environment connection, and to get people to see things differently when they go shopping. You may choose a couple of different kinds of stores to compare and contrast the types of products you find. Three stores that have been used in the past include: a grocery store, department store, and environmental/health food store.

i) Purpose of Activity

To help people understand the links between the use of consumer products and their health.

ii) What you Will Need

Retail outlet sites.
Transportation.

iii) Steps to Take

• Have people gather around a shopping aisle.
• Pick out a product.

iv) Facilitator’s Tips

Ask people the following questions:

Grocery Store/Department Store

How does the cleaning aisle smell, what do the products feel like, how do they make you feel?

What items do you buy? How many items do you buy? What purposes do they serve?

How much do the items cost?

Pick one or two products that you use, look at the labels, what do you see? What are the ingredients? The warning signs? The directions?
Discuss alternatives (eg. baking soda, vinegar, etc.).

**Environment or Health Food Store**

How does it smell in this store? How do you feel in here?

How much do the items cost?

What do you see on the labels? What are the directions and ingredients? Are there warning signs on the containers?

Discuss the healthy alternatives as compared to their traditional commercial products.
Eco-tour - Linking Community Health and the Environment

Community Planning and Monitoring Industrial Development

Creating an Eco-tour is a perfect way to become familiar with the broad social, economic and environmental issues of your community. Many different forces are at play, for example, when decisions are being made to develop or re-develop land. In areas where there has been historical soil contamination due to heavy industry, the expense associated with soil remediation may prevent re-development. In addition, ensuring compatible land uses such as the location, type and relationship of business, industry and residential space is essential to building a healthy community. At the community level this can be achieved in many ways such as:

i) facilitating community planning sessions where the community puts together a set of principles and design ideas to ensure a healthy community.

ii) monitoring ongoing land-use development and re-development by regular contact with municipal planning departments.

iii) monitoring the health and environmental impact of proposed development through its impact on soil, water and air.

ECO-TOURS CAN ALSO SHOW PEOPLE HOW THEIR ACTIONS AT home affect the larger environment. Riverdale is a perfect community to show these links as industry and people’s homes are side by side.

Much of the activity in the industrial port land area in Riverdale occurs from Metro Toronto wide sources. Every time a toilet is flushed or paint spills down the drain it ends up at the sewage treatment plant. Ultimately this waste goes out the stack or into Lake Ontario, Toronto’s drinking water source. The bottles we put into the blue box find their way to the Commissioner Street transfer station, while paper is recycled at Canada's largest paper recycling company "Paper board Industries". Much of the traffic from Metro converges here with the Don Valley Parkway and Gardiner Expressway being major traffic corridors contributing to air pollution.
**Riverdale Eco-Tour**

Here are some sample sites that have been included in Riverdale Eco-Tours.

1. **The Canada Metal Company:**
   This is a lead based products manufacturer that was partially responsible for the increased blood lead in children in South Riverdale. A large soil replacement, house dust cleaning program and pollution control on the plant reduced blood lead in children significantly. Lead is a toxic substance that lowers children’s IQ and is still found in many children's products as well as old lead paint.

2. **Lever Ponds:**
   This is a soap and detergent manufacturing plant. Vim, Snuggle and Sunlight detergent are a few examples of Lever products that are considered hazardous waste and that may have health effects such as skin, eye or throat irritation.

3. **The Don Valley Parkway / Gardiner Expressway:**
   These are major expressways that contribute to air pollution in the area. Cars give off nitrous oxides, carbon monoxide, particulates, and sulphur dioxides which can affect breathing problems.

4. **The Healthy Home:**
   The Canadian Mortgage and Housing Corporation constructed this home which has won an award for healthy design. It promotes the health of people living in it while protecting the environment and preserving natural resources. Health is improved through good ventilation, low emissions construction materials, air tight walls which reduces outdoor pollutants. It needs no electricity, sewer or water hook-up and uses passive solar energy.

5. **R.C. Harris Filtration Plant:**
   Water is taken from the lake and treated to remove physical, chemical and biological impurities. Municipal water is considered to be safer than bottled water although chlorine, organochlorines and fluoride as well as trace quantities of 800-1000 chemicals are still an issue. Main water lines and household plumbing installed before 1989 may contain lead. Water filters are available at hardware, department and health food stores.

6. **Lake Ontario:**
   Toronto's source of drinking water contains several pollutants. Hazardous waste from households and industries, for example are discharged as liquid waste directly into the lake or find their way to the lake via the sewer system.

7. **The Main Sewage Treatment Plant (MSTP):**
   Wastewater and storm water are collected from homes and industries and sent to the MSTP. The sludge may contain pollutants from hazardous waste such as paints and solvents thrown down drains. This sludge is incinerated with contaminants going into the air. Incineration will be phased out soon and residues will be applied to land as fertilizer instead.

8. **Allotment Gardens:**
   Toronto Parks and Recreation rent out plots every year. By not using pesticides or fertilizer you can be assured of the quality of your food. There is some concern about contaminants from the MSTP incinerator.

9. **Leslie Street Spit:**
   The Spit is a green space produced by landfill material and a home to birds and wildlife.

10. **Commissioner Street Transfer Station:**
    This is a compost site for leaves and garden waste. It is also a household hazardous waste depot, collecting leftover household cleaners, paints, pesticides, batteries, prescription medicine; and a recycling depot for cans and plastic bottles.

11. **Greening of the Industrial Portlands:**
    Historically poor environmental practices has created a lot of contaminated land areas in the portland. Efforts are underway, however, to clean this land and attract “clean industry” including the film industry.
Riverdale Eco-Tour Map
Purpose of Activity

To help people understand the links between community health and the environment by organizing an Eco-tour.

What you Will Need

Map of stops on the tour.
Transport: renting a bus, bicycle, walking.
Microphone if large audience on bus.

Steps to Take

- Do research on your area and find out if there is existing information on sites that you think might be included in the tour.
- Interview community people and professionals to find out what they think would be relevant sites and their understanding of the connections to health and the environment.
- Write out a description of each site taking into consideration the link between environment and health.
- Invite different experts on the tour to talk about specific topics.
- Encourage discussion among members of the tour.
- Encourage discussion about the history and existing environment, health, social and economic issues in the community among members of the tour.

Facilitator’s Tips

Encourage people on the tour to share their experience and knowledge of the community.

Take a nutrition and washroom break.
Checklist for organizing an Eco-tour in your Neighbourhood

1. Healthy building ----- Healthy building practices
2. Waterfront ----- water pollution and alternatives ----- drinking water safely
3. Community garden (existing or potential site) ------ organic gardening - soil testing
4. Industry ------ (where air pollution, soil or water pollution may be an issue and remediation activities) - advocacy
5. Clean industry ---- alternative ways looking at job creation
6. Sewage treatment plant ---- links between home and the environment - source control, beneficial use of sewage
7. Water filtration plant--- process and chlorination and fluoridation issues
8. Parks - importance of green space, integrated pest management
9. Hazardous waste depot
10. Recycling depot
11. Check for washrooms and for a place to eat lunch

KEY RESOURCES


A.3 Theatre

Popular Theatre

THERE ARE MANY TECHNIQUES THAT EMPLOY A POPULAR education framework. Popular theatre is one of them. Forum theatre was used in the Environmental Health Program to convey the links between the environment and health. Forum theatre uses dramatic techniques to activate passive spectators to become spect-actors. This engages participants to rehearse strategies for personal and social change. These techniques include a system of physical exercises, aesthetic games, image techniques and special improvisations used as tools for the comprehension of social and personal problems and a search for solutions.

The forum scene (the last scene) in forum theatre gives the spectators the opportunity to discover their own solutions to their collective problems. Through storytelling techniques, an animator works with community groups to create a scene in which the protagonist is not getting what s/he needs or desires. Audience members stop the dramatic action at any moment they feel, they physically replace the protagonist in the scene and improvise alternative action. The five elements that are important to the educational process of popular theatre are i) recognition, ii) concretization, iii) identification, iv) objectification, v) experience practice and feedback. Audience members can give advice to the characters, practice their solutions and get additional feedback from the audience. The theatre allows the audience to rehearse for what they see as social change.

Purpose of Activity

To develop a popular theatre piece linking health and the environment.

What You Will Need

Space to practice
Prop materials
Theatre facilitator
Flip chart
Markers

Indoor Exposue

The Indoor Air Quality Workgroup has used this popular theatre technique to bring to life the links between the environment and health. Mixed Company, a Toronto theatre company specializing in community theatre was approached to work with the group. Rehearsals for the play began in early 1996 with six members of the Indoor Air Quality Workgroup. The group was led through a series of games, exercises and improvisations examining power relations between and within themselves. Through the use of mime, humour and drama, group members used their own experiences to develop scenes that critically addressed indoor environmental health problems. The play presents the various sources, health impacts of poor air quality and social and political barriers to improving air quality and health. The power to change indoor environments, decision making, access to alternative health care choices and the general lack of awareness regarding chemically related illness were also explored.
Steps To Take

• Find a theme (one that the group is passionate about).

• Work with people’s stories.

• Find at least 3 to 4 community members who want to take the risk of being a performer and/or link with a local theatre group.

• Find a popular theatre facilitator or obtain resources that have theatre exercises and ways to develop a play.

• Apply for funding for props, theatre facilitator, food, rehearsal space.

• Set aside practice times.

• Look for interesting venues - park, tenant groups, conferences, child parent drop-ins, festivals.

Scene #2. The setting is cleaning day at Stuart’s place and each actor plays a piece of furniture. Anjali speaks as the table while Stuart does the weekly dusting:

_Oie yoi yoi! Here we go again. Got to be able to see your face in my legs, don’t you. Yeah, that’s right, bring on the Pledge!.... You know I used to be the envy of all the other tables - wooden legs, glass top - what’s not to love. All the other chairs wanted to be around me. Now he cleans me with dettol and windex.... Buddy, you told me I should be clean enough to eat of of but really would you put that in your mouth. Feh!

Each piece of furniture expresses their disgust at many of the toxic cleaning products that Stuart is using, many of them suggesting safer alternatives. In the end they all shout in unison to “open the window”.

(Cast members - Jean-Paul Alcasid, Anjali Joshi, Maria Miller, Stu Vickars, Lisa Tolentino, Shelley Petrie, Nita Chaudhuri)
Creating A Play - Introducing Popular Theatre

PART A: Choosing and Researching a Topic

Step 1: Sharing Ideas and Experiences
Find out what issues and topics are important to people. Choose two or three topics to focus on.

Step 2: Research
Have the group do research on the topics chosen over a three to five day period.

Step 3: Group Discussion
Have the group discuss the topics and share what came up during the research and what might be relevant for the play.

PART B: Progressing from Ideas to Acting

Step 4: Time to Brainstorm
Choose a topic and have the group sit in a circle. Each person states a word related to the topic and this is recorded.

Step 5: Developing Visual Images
Using some of the theatre exercises, create a visual image of the words recorded.

Step 6: The Play Framework
Begin developing a plot by discussing the causes and effects of the issues of concern.

PART C: Towards a Finished Product

Step 7: Developing Ideas
Continue to develop ideas of how to demonstrate certain images. Repeat steps 4, 5 and 6 several times.

Step 8: Things to Think About
Think about whether somebody will be narrating the story. Will the audience participate? Will there be props? How much dialogue will there be?

KEY RESOURCES


The Indoor Air Quality Workgroup

The SRCHC Indoor Air Quality Workgroup not only represents a good example of partnership building but is also an example of community development with all its positive benefits. Over the eight years of the existence of the group many different projects have evolved that include education and advocacy. It has acted as a referral group for the Environmental Health Program by identifying issues and developing resources that could be taken into other communities. Throughout this manual, many of the projects that have sprung out of the work of this group are discussed.

The following order of events illustrates the process and principles of community development that have been followed.

- Proposal writing for seed funding to develop and support the group by SRCHC and Lung Association. (Funding from Ministry of Health - Health Promotion Branch).

- Recruiting members for the group through newspaper articles, referral, meeting people at events, workshops, word of mouth (moms in the neighbourhood, worker's compensation legal workers, industrial hygienists, researchers, artisans, students).

The Principles of Community Development

- Community ownership and control are nurtured in all phases of the process.
- The issues/problems chosen for attention must be those decided upon by the community.
- The process is focused on increasing the community's ability to organize so that it can deal with issues which promote its health.
- Partnership with the community is the basis for involvement of agencies and outside individuals including department staff.
- Knowledge of and sensitivity to the community is essential.
- Most projects of this nature will require significant time commitments (i.e. both the number of hours per week/month and the length of the time period, perhaps up to five years).
- Community development processes may challenge and attempt to transform the status quo, particularly with respect to power relationships between the community and the structures with which it interacts.
- Community development activities are preferentially focused on communities which lack the basic pre-requisites to health or who face other barriers to equity in health. These barriers may be socio-economic, educational, racial, or cultural in nature.
The Community Development Process

The members come together or are brought together in order to know each other and to acknowledge that they are a community. This may involve the establishment of groups when none exist.

The community identifies issues and problems affecting community life by cooperatively defining community needs.

The community develops plans to address these concerns through such activities as making a resource inventory, prioritizing activities, and developing objectives, indicators and timelines.

The community implements plans for change by acquiring needed resources, skills and knowledge and acting on its own behalf.

The community reviews the process and evaluates the progress towards achieving its goals.

- Brainstorming and visioning sessions on topics to address, mission statement, goals, objectives, strategies, and tools.
- Development of mission statement (to educate the South Riverdale community on hazards of the indoor environment and how they affect health).
- Development of Goals and Objectives (educate through written materials, local forums, multi-media networks increase access to current and accurate information).
- Working on specific projects, for example:
  Educational Strategies
  Indoor air quality forum with "expert speakers"
  Popular Theatre "Indoor Exposure"
  Hidden Exposures - A Practical Guide to Creating a Healthy Environment for You and Your Children"
  How Safe is Your Homes Quiz
  Advocacy Strategies
  Healthy SRCHC building design
  Development of Toronto Board of Education Safe-Caretaking Products Screening Matrix.
- Re-visiting mission statements, objectives, goals and strategies.

Making it fun and lasting!

The development of the play which was fun and informative provided a more relaxing environment to tackle difficult issues. The development of the book "Hidden Exposures..." was a long process that evolved as a result of the combined experiences, knowledge and commitment of the group and other community members. The food and social component were essential to making it a true community process. Through the various processes and projects that have evolved in the group the Indoor Air Quality Workgroup has become a tight-knit group of people who have continued to be committed to the issues.

KEY RESOURCES


In 1992 the Environmental Health Program began its work in Don Mount Court - an Ontario social housing community when it was called in by workers from Catholic Children’s Aid and WoodGreen Community Centre to deal with sewage back-up and asbestos issues. The Environmental Health Program began an apprenticeship in community development. Over the years many events have been organized in collaboration with other agencies and community development workers which have included: community visioning sessions, building a tenant group, maintenance advocacy, workshops on pest control, and less toxic cleaning and repair and maintenance. In addition, a community garden, composting and a recycling program were started.

In 1997 the "Don Mount Court Healthy Homes Team" was created to train community members to bring environmental health messages to fellow tenants. This project was a smaller component of a larger community capacity building initiative entitled "Hidden Household Hazards" which brought together several of the tools and strategies that had been developed previously in the Environmental Health Program and other parts of the community.

Community Facilitators Healthy Home Training

Through a participatory and evolving method tenants were trained as community facilitators on various aspects of health and the environment and more specifically on indoor air quality and health. The training program included healthy cleaning, pest control, topics on indoor air quality and health and basic interview and communication techniques.

Popular Education and Data Collection Tool Development

A preliminary questionnaire was developed with tenants to establish a baseline for the level of consumer product use including strong cleansers, window cleaners and detergents and associated health effects. A large portion of the questionnaire was devoted to obtaining information on the level of pest infestation in units and ways in which pests were controlled (eg.
use of pesticides). Pest control issues were emphasized because of previous experience with large infestations. The use of pictures and diagrams in the questionnaire enabled tenants to use it as a tool to facilitate discussion around use of products, healthy alternatives and links between health and the environment.

Sample Questionnaire

<table>
<thead>
<tr>
<th>I PEST CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you had any of the following pests in your home in the past year?</td>
</tr>
<tr>
<td>Cockroaches</td>
</tr>
<tr>
<td>Mice</td>
</tr>
<tr>
<td>Other Pests (please list)</td>
</tr>
</tbody>
</table>

2. Do you have a pest problem right now? YES √ NO □

If NO, go to next underlined question.
If YES: What pests are causing the problem? cockroaches □ mice □ other □

How would you describe your pest problem? very few pests □ more than a few □ many □

Other tools that were developed included:
Healthy Home Sample packages containing:
  - Baking soda, borax, vinegar
  - Healthy cleaning recipe booklet
  - Commercial environmental product samples (Nature Clean)
  - Tenant developed pest control factsheet

Door to Door Outreach

After substantial training and discussion, community facilitators went door to door to deliver the "Healthy Homes Messages". The key message was the things in the home that could be a potential problem for your family's health. These include: mould, dust, pets, pests and certain toxic pest control methods, carpets, paint, renovations/repairs, cleaning products, poor ventilation, plastic products, furniture, tobacco smoke, heating, humidity and dryness. Suggestions were made on healthy ways to deal with these indoor air quality problems.
The Pest Situation at Don Mount

One hundred and forty questionnaires were administered revealing that 49% units had mice and roach infestations. The reasons cited by tenants as to why roaches and mice continued to be a problem included pests traveling from unit to unit, neighbours not keeping their units clean and units not being treated at the same time. Traditionally units were only treated on request.

Negotiating a Tenant - Property Management Contract

Armed with their own pest control statistics tenants wrote letters to property management asking for changes to the existing pest control program. A pest control program “letter of understanding” was established between tenants and property management. The agreement established the implementation of a block by block less toxic pesticide gel program by property management; the routine inspection of points of entry of rodents and roaches (eg. pipe penetrations), rodent proofing and repairing holes; joint block meetings between tenants and property management; and tenants agreeing to maintain good housekeeping standards.

Healthy Pest Control and Cleaning Workshops

Workshops were also organized where tenants and property management educated other tenants about preventative pest control which included the use of less toxic cleaning methods. (See pages 10-21 for healthy pest control and cleaning modules).

Pest Control Block Representatives

In order for the community to access the impact of the new pest reduction program, representatives from each block were asked to gather and provide information to the healthy homes team and property management. This system remained in place in order to ensure continual monitoring of the pest control situation.
Analyzing the Health Effects Information - Making the Link between Environment and Health

Fifty percent of the tenants interviewed said they felt sick from using commercial household products. The symptoms from their use included: breathing problems, itchy eyes, nausea and headache. Other things affecting health in the unit included dust, lack of ventilation and tobacco smoke (over 58% of the units had one or more smokers). This information was reproduced on flyers and circulated back into the community with information on less toxic household products and quit smoking programs.

Sustaining the Healthy Homes Concept in Don Mount Court and the Rest of the Community

To create sustainability for the processes and tools developed during the "Healthy Homes Project", skill building and further collaboration with agencies was necessary. A similar initiative was developed for Blake Boultbee, another Ontario social housing project. Train the trainer workshops continue to be a priority for service providers as well as community members throughout Riverdale.
ADVOCACY IS AN IMPORTANT AND EFFECTIVE STRATEGY IN environmental health promotion. At the SRCHC, this strategy was used in several initiatives. These included:

- SRCHC - Environmentally healthy building design (see page 46 for more details).
- Toronto Board of Education Screening Matrix for safe caretaking products.
- Improving environmental health conditions in low income and subsidized housing (eg. Don Mount Court).
- Monitoring land-use development (encouraging healthy industrial, business and residential development).

In all cases the following steps were taken to advocate for change:

**Steps for Environmental Health Advocacy**

1. Identifying Issues
2. Identifying gaps in knowledge on the issue
3. Becoming informed on the gaps in knowledge
4. Seeking expert advice
5. Influencing decision makers
6. Monitoring progress of change

The development of an environmentally healthy building will be used as an example of how to advocate for change using this process.
Advocating and Developing an Environmentally Healthy Building

Purpose of Activity

To influence the building or renovation of a healthy building.

What You Will need

Literature on healthy buildings and renovation.

Sample building materials (to be acquired during the planning and implementation process).

Steps to Take

- Help create a committee of interested community people who will monitor the building or renovation process from start to finish.
- If necessary, help create a sub-committee that is specifically focused on the environment and health component of the building.
- Help create a process to communicate with decision-makers on the new building.
- Hire a building consultant to coordinate the process.
- During the planning of a building or large renovation, organize a meeting with the building committee, architect, and engineers and invite an environmental design expert.
- Present the group with environment and health concepts relevant to the design process (consult Canada Mortgage and Housing Corporation documentation).
- Put aside enough money to hire an environmental design consultant to be part of building design team.
- Have the environmental design consultant go through specifications to ensure the incorporation of environmental and health considerations in the planning stage.
- Keep in close contact with the environmental design consultant and building committee to monitor progress of decision making.
- Bring sample materials to environmental health sub-committee to screen undesirable materials. Having a particularly sensitive person on the committee may ensure that the least toxic materials are used.
Visit the building on a regular basis while it is being built or renovated.

Ensure proper signage is used throughout the building to show people why this is a healthy building.

Ensure that the least toxic processes are used to maintain the building when it is built (least toxic cleaning and maintenance products).

Keep in contact with property management.

Design renovation and repair workshops using your healthy building as a demonstration site.

**Healthy Environmental Design for the South Riverdale Community Health Centre**

Renovations or repairs taking place at work, school or home are a perfect opportunity to influence healthy environmental design. The SRCHC took that opportunity when building its brand new building. The Indoor Air Quality Workgroup, a community based group that has been meeting since 1994 on issues related to indoor air quality, successfully lobbied to have the new SRCHC building incorporate environmentally healthy design features with the help of an environmental design consultant. Environmentally healthy design features included: the use of low offgassing adhesives and paints, high recycled content in partition walls, high energy efficient lighting and large windows to maximize daylight.

**Criteria used for selecting building materials included:**

<table>
<thead>
<tr>
<th>Low emissions</th>
<th>Low toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>No perfumes</td>
<td>Low unnecessary colourants</td>
</tr>
<tr>
<td>No listed chemicals of concern</td>
<td>Recycled materials where possible</td>
</tr>
<tr>
<td>High energy efficiency</td>
<td>Superior indoor air quality</td>
</tr>
</tbody>
</table>

**Special attention was paid to:**

<table>
<thead>
<tr>
<th>Building materials</th>
<th>Cleaning and maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooring</td>
<td>Windows and doors</td>
</tr>
<tr>
<td>Lighting</td>
<td>Cabinetry</td>
</tr>
<tr>
<td>Ceiling</td>
<td>Ducting and air handling</td>
</tr>
<tr>
<td>Partition walls</td>
<td>Electrical system</td>
</tr>
<tr>
<td>Appliances and furniture</td>
<td>Medical and office equipment</td>
</tr>
</tbody>
</table>

The goal was to plan the building as a demonstration for healthy building practices. Tours of the building are given on a regular basis and are especially used during healthy repair and renovation workshops.

Reference: Ed Lowans, Lowans and Stephen Environmental Design Consultants
Facilitator’s Tips

Keep in constant communication with building decision makers, environmental designer and community to ensure continuing diligence in process.

Make it a contract requirement for all specifications to be passed by the environmental design consultant.

KEY RESOURCES


Lowans, E. Lowans and Stephens Environmental Design Consultants.

FORMAL MONITORING AND EVALUATION CAN BE IMPORTANT during the development of your program to help determine whether the methods you are using are effective, and to find out how many people you are reaching. Quantitative and qualitative evaluation tools are often useful to get the whole picture. Many tools can be used to obtain information during the implementation of the project and after the completion. This can include questionnaires developed collectively with program participants and health professionals, flow chart, focus groups, and observational field notes. Using the matrix shown below can help to organize information gathered from this process to encourage for continual improvement.

**Program Evaluation Flow Chart**
An example of an evaluation framework that can be set out at the beginning of a project or in the proposal writing stage may look like this.

<table>
<thead>
<tr>
<th>Results Expected</th>
<th>Performance Indicators</th>
<th>Measurement Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>To have 1000 households receive information on safe use, disposal and alternatives to toxic household consumer products</td>
<td># of households</td>
<td>written field notes on how this information has been received (receptivity)</td>
</tr>
<tr>
<td>To have 5% of these 1000 households (50) use the Metro Toronto Toxics taxi.</td>
<td># of households using the toxics taxi</td>
<td>Metro Work’s Toxic Taxi data. Utilization of this to determine if there has been an increase in the designated area.</td>
</tr>
<tr>
<td>To have 20% of these 1000 (200) households switch to non-toxic household cleaners and pest control methods</td>
<td>Number of households that have switched product use.</td>
<td>Baseline and follow-up survey. Document the number of non-toxic products that are going to these households through the alternative distribution channels</td>
</tr>
<tr>
<td>To have 30 Chinese ESL students reduce use of household hazardous waste by 80%</td>
<td>Number of students in class. Percentage reduction in use of HHW.</td>
<td>Baseline and follow-up survey. Focus group discussions. Field notes document access to alternative distribution channels</td>
</tr>
<tr>
<td>To have 25 low income tenants in Don Mount Court reduce the use of household hazardous waste by 80%</td>
<td>Number of tenants involved in the program. Percentage reduction in use of HHW</td>
<td>Baseline and follow-up survey. Focus group discussions. Field notes document access to alternative distribution channels</td>
</tr>
<tr>
<td>To have 160 pregnant women reduce the use of household hazardous waste by 80%</td>
<td>Number of women involved in the program. Percentage reduction in use of HHW</td>
<td>Baseline and follow-up survey. Focus group discussions. Field notes document access to alternative distribution channels</td>
</tr>
<tr>
<td>To provide five new non-toxic products (vinegar, borax, baking soda, insecticidal soap, diatomaceous earth, liquid soap and soap flakes) to existing distribution channels. Increase the purchase of these products by 50%.</td>
<td>Number of products being distributed Number of distribution channels being set up Number of users</td>
<td>Inventory of products Locations documented Ongoing list of customers with addresses Field notes</td>
</tr>
<tr>
<td>To create one new distribution channel for these five non-toxic products</td>
<td>1 new distribution channel</td>
<td>Location Field notes</td>
</tr>
</tbody>
</table>

**KEY RESOURCES**

PART VI. Conclusion

INTEGRATING ENVIRONMENTAL HEALTH INTO THE NEEDS OF the community is an important activity, requiring not only a commitment to the community process but a need to keep up to date with the advances in scientific knowledge on environmental health and environmentally healthy alternatives. By respecting everyone's knowledge, your community can become a healthier place to live.

Good Luck!


10. CMHC. Changing Values, Changing Communities: A Guide to the Development of Healthy, Sustainable Communities. PE0230

11. CMHC. 1991. Avoiding Renovation Hazards. LNH6559


13. CMHC. This Clean House. (video) VE057.

14. CMHC Clean-Up Procedures for Mold in Houses. 6753E

15. CMHC Cleaning Up Your House After a Flood. 6789E.

16. CMHC Healthy Housing Renovation Planner. 2172E

17. CMHC. Home Care: A Guide to Repair and Maintenance. 5624E


## PART VIII. List of Agencies that can Help

### Health Care Providers
- Sunnybrook and Women’s College Health Sciences Centre Environmental Health Clinic: (416) 351-3764
- Hospital For Sick Children, Poison Information: Motherisk: (416) 813-1500, (416) 813-5900, (416) 813-6780
- LAMP Occupational Health Centre: (416) 252-6471
- Occupational Health Clinic for Ontario Workers
- South Riverdale Community Health Centre: (416) 461-1925

### Ontario Public Interest Research Group
- University of Toronto: (416) 978-7770
- York University: (416) 736-5724
- Pollution Probe: (416) 926-1907
- Toronto Environmental Alliance: (416) 596-0660
- World Wildlife Fund: (416) 489-8800

### Government Organizations
- Canada Mortgage and Housing Corporation (CMHC): (613) 748-2367
- Environment Canada: (416) 739-4826
- Health Canada: (416) 973-4389, (416) 973-4705
- Ontario Ministry of the Environment: (416) 325-4000
  - Spills and Odour Complaints: (416) 326-3381
- Ontario Ministry of Health: (416) 327-4327
- Ontario Ministry of Labour: (416) 314-5421
- Toronto Public Health: (416) 392-6788
  - Health Promotion and Environmental Protection
    - East Region: (416) 396-7431
    - North Region: (416) 395-7755
    - South Region: (416) 392-7685
    - West Region: (416) 394-8272
- Toronto Works: (416) 392-5890
  - Hazardous Waste Disposal

### Non-Government Organizations
- Allergy and Environmental Health Association: (416) 439-5939
- Allergy/Asthma Information Association: (416) 783-8944
- Asthma Society of Canada: (416) 787-4050
- Canadian Centre for Occupational Health and Safety: 1-800 263-8466
- Canadian Environmental Law Association: (416) 960-2284
- Canadian Institute of Child Health: (613) 230-8388
- Canadian Organic Agriculture Directory: (613) 346-3973
- Environmental Hypersensitivity Association of Ontario: (613) 728-9493
- Environmental Illness Society of Canada: (613) 728-9493
- Food Share: (416) 392-6653
- Greenest City: organic food, gardening (416) 977-7626
- Lung Association Asthma Action Healthline: (416) 864-9911
PART IX. Useful Websites

Agency for Toxic Substances and Disease Registry
Chemicals and their health effects

ASHRAE
Guidelines for indoor air quality standards

Canada Mortgage and Housing
Housing and health information

Canadian Centre for Occupational Health and Safety
Chemical Index for Material Safety Data Sheets (MSDS)

Canadian Environmental Law Association

Canadian Children's Environmental Health

Canadian Institute of Child Health
Many issues of child health including air pollution and environmental pollutants

The Canadian Lung Association

Children's Environmental Health Network
Children’s health and the environmental hazards

Cosmetic Index
Cosmetic resources on the web

Environment Canada

Environmental Health Perspectives
Publications on the topics of chemical sensitivity, the health effects of many chemicals and air pollution

Health Canada

The Healthy House Institute
Information on indoor air quality

International Association for Great Lakes Research

National Institute of Occupational Safety and Health
Health hazards in the workplace and safety training

Pollution Probe
Promotes clean air and water, and defines environmental problems through research

United States Environmental Protection Agency

World Wildlife Fund

atdr1.atsdr.cdc.gov:8080
www.ashrae.org
www.cmhc-schl.gc.ca/cmhc.html
www.ccohs.ca
www.cela.ca
www.healthychildren.ca
www.cich.ca
www.web.apc.org/cando
www.cehn.org
www.cosmeticindex.com/ci/html/resources.html
www.ec.gc.ca
ehpnet1.niehs.nih.gov/docs
www.hc-sc.gc.ca
www.hhinst.com
www.great-lakes.net/envt/wildlife/fishadvis.html
www.cdc.gov/niosh/homepage.html
www.pollutionprobe.org
www.epa.gov/iedweb00/index.html
www.wwfcanada.org

* Addresses and websites lists have been taken from "Hidden Exposures - A Practical Guide to Creating a Healthy Environment for You and Your Children"