

## About Urban Gardening

Urban gardening, both in community gardens and backyard plots, has seen a resurgence in popularity over the last two decades. Given that many urban centres were once the hub of industrial activity, it can be expected that soils have potentially been impacted by a variety of contaminants. Older homes would have used lead based paints for trim and siding and have had cars, using leaded gas, parked on the properties as well. Does this mean gardening should be prohibited in older urban centres or brownfields?

Gardening is safe in most situations. "Produce itself tends to be relatively safe provided it wasn't grown in heavily contaminated soil and is washed before eating. Most food crops tend not to absorb contaminants and what little they do absorb generally stays in the roots." <sup>1</sup>

**There are a number of measures that can be taken to minimize the risk from gardening in unknown or impacted soils:**

## Preparing the garden area

The areas around the garden plots need to be prepared as the plots themselves are readied for planting. All walkways should be covered with landscape fabric, stones or mulch to reduce dust and limit the amount of dirt that will be tracked on shoes, pets etc.

## Using raised garden beds

Raised garden beds are usually in built boxes or containers. Suitable materials for creating a raised garden include untreated wood or naturally rot-resistant woods such as cedar; bricks; or concrete. Once the container is built, fill with topsoil\* or clean fill\*.

## Preparing the soil

If you are unsure of the quality of your soil or have very low levels of chemicals present, adding compost\* to your soil, on an annual basis, can help improve your soil. Compost can dilute contaminants while adding valuable nutrients to the soil. <sup>2</sup>

## What to grow

Most vegetables can be grown. Some vegetables may not thrive depending on the quality of the soil.

## Getting ready to garden

There are some simple precautions to take for personal protection before you start gardening.

- It is recommended that you use gardening gloves and long sleeved shirts/pants when gardening to protect your skin.
- You should always wear shoes. Avoid sandals or other open weave shoes that would allow contact between the soil and your skin.
- Keep soil moist when gardening to avoid inhaling dust.
- Keep small children and pets away from the garden area. Small children often put their fingers in their mouths when their hands are dirty and pets can track dirt into your home in their fur.
- Remove shoes, gloves and if necessary clothing outside before entering your home to minimize the amount of dust tracked inside. Heavily soiled items should be cleaned outdoors, if possible. And, all clothing should be washed between uses.

## Preparing the food to eat

Food grown in backyard or community gardens should always be washed before being eaten. Produce grown in areas where the soil quality is impacted or unknown should be washed outside to remove as much soil as possible and may be further washed with an edible soap or detergent. Vegetables such as lettuce should be washed by individual leaf to remove as much dust and soil as possible. Root vegetables such as potatoes and carrots should be peeled after they are washed. Do not compost peel as any contaminants may impact the quality of the compost.

*\*Topsoil, clean fill, and compost should all be obtained from a trusted source to ensure it is free from harmful contaminants.*

<sup>1</sup> Kessler, Rebecca. "Urban Gardening. Managing the Risks of Contaminated Soil." *Environmental Health Perspectives* Vol. 121, Number 11-12, November-December 2013.

<sup>2</sup> *Gardening on Lead and Arsenic Contaminated Soils*  
<http://1.usa.gov/1cyPabx>

## Development of this fact sheet was informed by the following:

From the Ground Up: Guide for Soil Testing in Urban Gardens  
<http://bit.ly/1c9dVaL>

Gardening on Lead and Arsenic Contaminated Soils  
<http://1.usa.gov/1cyPabx>

Urban Gardening. Managing the Risks of Contaminated Soil  
<http://1.usa.gov/1fnJJNv>

## Region of Waterloo Public Health

*Healthy Living*  
519-575-4400

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