VERMONT
DEPARTMENT OF HEALTH

Gardening After Tropical Storm Irene

My garden was flooded during Irene. What should I do before I plant this spring?

Tropical Storm Irene flooded some home gardens with river water. Floodwaters left behind debris, silt and sediment. Chemicals and disease-causing germs may have been left too.

Before planting this spring, gardeners can take several steps to protect health:

- Understand the contaminants of concern
- Test the soil for changes in nutrient, pH, and metals
- Take extra safety precautions when working in the soil for the first few times

What is in floodwater that could cause health problems?

Disease-causing germs like bacteria, viruses and protozoa that were in floodwaters may be deposited on fruits and vegetables. Chemicals, like home heating fuels from tanks that were carried away by flood water, may be deposited on soil. Nutrient and metal composition may have changed as a result of new soil in garden areas.

Why are these of concern?

Bacteria, viruses and protozoa, when eaten, can make people sick. Any time an edible portion of a plant comes into contact with floodwaters, it should be thrown away.

Chemicals can be taken up by the plant roots and get into the edible portion of a plant. Skin can come into contact with chemicals when digging in the soil.

Should I test for contaminants?

Testing for bacteria and other disease-causing germs is not needed. Weathering by rain, sunlight and freezing over time has significantly reduced these in the soil.

Soil that has been contaminated with fuel can generally be seen or smelled. Look closely for dark staining or oily sheen. Smell for gas-like odors. This soil should be removed from the garden. Chemicals like these will also have been reduced by weathering over the winter.

Testing for nutrients, organic matter, pH and metals is recommended. If the garden area had a significant amount of new soil added or changed, test for pH, nutrient and metal levels. Before growing food, these tests are recommended for gardens. These tests are available through UVM Soil Testing Laboratory.

Any other safety precautions?

Yes. When you work in the garden for the first few times be sure to wear sturdy boots and gloves. Flood waters may have left pieces of glass or nails.

Always wash your hands thoroughly with soap and water after working in the garden.

Other resources:

Vermont Agency of Agriculture, Food and Markets:
http://www.vermontagriculture.com

UVM Soil Testing Laboratory (802-656-3030)
http://www.uvm.edu/pss/ag_testing/

University of Vermont Extension:
http://www.uvm.edu/extension/food/?Page=food_preservation.html

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