



THE RAIN HOME VISIT:

A PRACTICAL APPROACH TO MANAGING RAIN WHERE IT FALLS

What is the RAIN Home Visit?

The RAIN Home Visit is an innovative approach to engaging homeowners in managing rainwater on their property to reduce runoff and protect basements from infiltration. We use community-based social marketing principles to motivate customized actions that benefit the homeowner and build community resilience.



The RAIN Home Visit is a professional advice service provided by certified RAIN Guides. The Guides have advanced technical knowledge, but come across as a **friendly, encouraging neighbour that engages peers in understanding the path of run-off on their property and finding best solutions to address trouble spots.**

What are the goals of the RAIN Home Visit?

Help homeowners to:

- Keep basements dry
- Minimize flood damage
- Soak up rain on site
- Prevent incidence of sewer backup

Help municipalities to:

- Meet stormwater volume reduction targets
- Reduce risk of flooding
- Reduce incidence of combined sewer overflow
- Improve water quality and keep beaches open
- Conserve treated water
- Replenish groundwater aquifers

Help insurance companies to:

- Reduce incidence of sewer backup
- Reduce water damage claims



How does the RAIN Home Visit work?

The visit is a comprehensive one hour one-on-one site visit to help homeowners understand rainwater issues on their property and assist them in prioritizing action to eliminate the incidence and impact of runoff. The RAIN Guide initially asks the homeowner to identify areas of concern such as water coming into the basement, areas of ponding and icing hazards. Then together they walk around the yard and the basement while going through a detailed checklist to assess issues and identify priorities for action. They follow the path of rain from where it falls until it infiltrates the ground or runs into the storm sewer.



The checklist prompts attention to:

- understand and monitor the path of runoff
- condition of eaves, downspouts
- grading and landscaping
- slope and condition of paved areas
- clearing storm sewer grills
- rain barrel installation, overflow, management and winterization
- potential for increasing permeability in desirable areas
- tree canopy and leaf management
- condition of or need for window wells
- condition of foundation and basement
- risk of sewer backflow
- sump holes and pumps
- pollution prevention

Based on the results of the checklist assessment, the RAIN Guide creates a set of recommendations and discusses them with the homeowner. A printed report complete with recommendations and best practices and supporting information (links for DIY and contractor list) is provided for future reference and assists the homeowner when talking to contractors.



RAIN Home Visit results

In a follow up survey filled out by RAIN home visit clients we found that:

- 91% would recommend the service to others.
- 86% could recall (without prompting) steps to protect their basements from water infiltration.
- 59% had taken one or more actions as a result of the visit at 3-month follow-up and 64% uptake at 6-12 month.
- 60% homeowners said that they were able to complete recommended actions without hiring contractors.
- Homeowners indicated that, on average, 90% of the recommended actions were completed by themselves and 10% were completed by hiring contractors.
- 77% had passed on knowledge from the visit to others – an average of 5 people each.

Data collected from 630 RAIN Home Visits in Ontario and Alberta 2012-16.

The two most important recommendations to address basement infiltration are:

- Regrade all areas (paved and landscaped) to ensure water runs away from the foundation.
- Redirect downspouts to empty onto a permeable area 2.4m (8') away and downslope from foundation.

Other interesting findings include:

- Every home is at risk of basement infiltration regardless of age and type of foundation.
- Newer homes tend to be more resistant to basement infiltration than older homes.
- Poured concrete foundations are found to be more resistant to water infiltration.
- Homes built between 1910 and 1960 experience greater incidence of mould than homes built before or since.