WATER ON THE RISE: PROTECTING CANADIAN HOMES FROM THE GROWING THREAT OF FLOODING

Why is basement flooding on the rise?
A combination of:
- Extreme rainfall events
- Aging municipal infrastructure
- Lack of flood protection measures at the household level
- More hard surfaces and less green space as urban areas develop

What is the average cost of a basement flood?
$43,000
(Insurance Bureau of Canada, 2018)

What is the Home Flood Protection Program?
- Residential flood risk reduction education program
- Launched by the Intact Centre on Climate Adaptation at the University of Waterloo in 2016
- Completed over 500 Home Flood Protection Assessments in Ontario and Saskatoon from 2017–2018

How is the program helping Canadians?
- Providing free online flood protection resources for residents and flood protection educators
- Providing training programs for flood protection educators
- Providing nationally applicable flood risk assessment tool to successful course graduates

What were the top flood risks identified at homes?

**Inside the Home**
- 85% Had no backup sump pump or power source
- 71% Had furniture and electronics at risk of water damage
- 53% Never maintained their backwater valve
- 40% Never maintained their sump pump

**Outside the Home**
- 82% Had window wells <10-15cm above the ground
- 78% Had downspouts that deposited water <2m from the foundation
- 69% Had grading around their home that did not direct water away from the foundation
- 63% Had cracks or gaps in basement windows and frames

What percentage of participants took action to reduce their risk after having a Home Flood Protection Assessment?

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<th>3 Months After Participation</th>
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How complex and expensive was it to complete actions to reduce flood risk?

| <$500, simple, mostly completed by residents |
| >$500, more complex, mostly contractor completed |
| Tested sump pump, extended downspouts, installed window well covers |
| Installed sump pump, backwater valve, replaced eaves troughs and basement windows |

*Data based on 285 Ontario Home Flood Protection Assessments*

How can flood protection educators help residents reduce basement flood risk?

- **Clear Communication**
  - Share clear and consistent flood protection messaging with residents through many trusted agencies (e.g., municipalities, insurers, emergency services, not-for-profits)

- **Subsidies**
  - Provide flood protection subsidies or incentives for residents, and a clear and simple application process

- **Broad-based Marketing**
  - Promote flood risk reduction and subsidy information to the entire community using social and traditional media, and community newsletters

- **Targeted Promotions**
  - Promote flood risk reduction and subsidy information to areas at higher risk of flooding by engaging residents in direct problem-solving conversations using door-to-door campaigns, and community events

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