



THE UNIVERSITY
OF THE
WEST INDIES

POLICY BRIEF

Reducing Water-related Risk through Household Strategies

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EXECUTIVE SUMMARY

Major Hurricane Melissa made landfall in Jamaica as a category 5 hurricane on October 28, 2025, causing unprecedented destruction. After a disaster, water supply may be disrupted due to damage and power outages, so communities should adopt household level strategies to reduce risks. It is important to protect household health through simple, everyday water safety considerations and practices.

INTRODUCTION

- Hurricane Melissa made landfall in Jamaica as a catastrophic Category 5 storm on October 28, 2025, causing unprecedented destruction.
- Post extreme heavy rain events, water challenges may emerge including contamination, disruption of supply; low pressure; saltwater intrusion in coastal reservoirs; and stagnant floodwaters.
- Effective post-storm recovery requires clear strategies to protect water quality and secure reliable supplies, ensuring communities can safely access, distribute, and use water even when infrastructure is damaged or disrupted.

MAKING THE CASE

Hurricane Melissa impacted access to reliable supply of water. Since the hurricane some communities are at increased risk of:

- **Intermittent Supply.** Water is accessible at certain times of the day.
- **Inaccessibility of regular supply.** Some households may need to travel long distances to access water, facing:
 - o Long queues;
 - o Unsafe terrain;
 - o high transport costs;
 - o Increased physical strain, especially on women, elderly, children.

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- **Outbreak of water borne diseases.** Water-washed diseases such as skin infections and eye infections can increase when there is not enough water available for proper hygiene. Water-borne diseases such as diarrhoea and cholera can occur from drinking or cooking with contaminated water.
- **Extended periods of disruptions.** Households often rely on rivers, springs, or informal water vendors when piped water is disrupted for an extended period. These sources may become contaminated. Additionally, water quality often deteriorates from the source to the point of use, especially when carried over long distances in reused containers. Water-borne diseases, such as diarrhoea and cholera, can result from using unsafe water.
- **Cost inequalities.** Some households may struggle to afford bottled water or filtration supplies when public systems fail.

RECOMMENDATIONS

The following are some short-term recommendations emerging from the experience with Hurricane Melissa and other weather extremes that have impacted Jamaica:

- **Track times water is available.** If your water supply is intermittent, keep a record of when water is available and plan household use and storage carefully.
- **Plan ahead for water collection:** Be aware of these challenges and plan water collection carefully, as they can impact health, safety, and livelihoods. Whenever possible, rely on emergency water points or community water shops set up in your area to reduce these risks.
- **Treat or boil** all water from questionable sources.
- **Practice proper hygiene** even when water is limited.
- **Use small containers** for hand-washing stations.
- **Prioritize clean water** for cooking, drinking, washing hands, brushing teeth and washing dishes.
- **Use clean containers for storage**, keep them covered, elevated and sanitized, even inside the house.
- **Label containers for drinking** versus household use to keep drinking water safe. Also, take care to avoid contaminating drinking water when retrieving it from its storage container.
- **Share information about safe water vendors** with neighbours and coordinate group purchases or community distribution points where possible.

CONCLUSIONS

Households need clear guidance on maintaining safe water practices after a storm to reduce health risks and manage limited supplies. Recommendations should emphasize proper storage, disinfection, and adherence to local boil-water advisories. Policies must also support equitable access to emergency water resources, especially for vulnerable populations. Strengthening communication channels ensures families receive timely, actionable instructions during recovery.