



# MONTREAL

Adapting communications to best  
inform vulnerable groups

*By Sophie Guilbault*

## THE SCIENCE

Extreme heat events can significantly affect the health of a population. Mitigating the adverse effects of these events requires a strong level of preparedness. This can be achieved through close collaboration between public health and emergency management officials, local authorities, social service providers and individuals. Such collaboration is crucial to developing a heat response plan and to properly communicating heat risks to more vulnerable groups that can be difficult to reach through the use of traditional media. Within a population, groups such as older adults, the chronically ill, and infants and young children are particularly vulnerable to extreme heat events. Maintaining relationships with stakeholders that work closely with these groups is essential to a good risk communication strategy and to the implementation of a successful heat response plan.

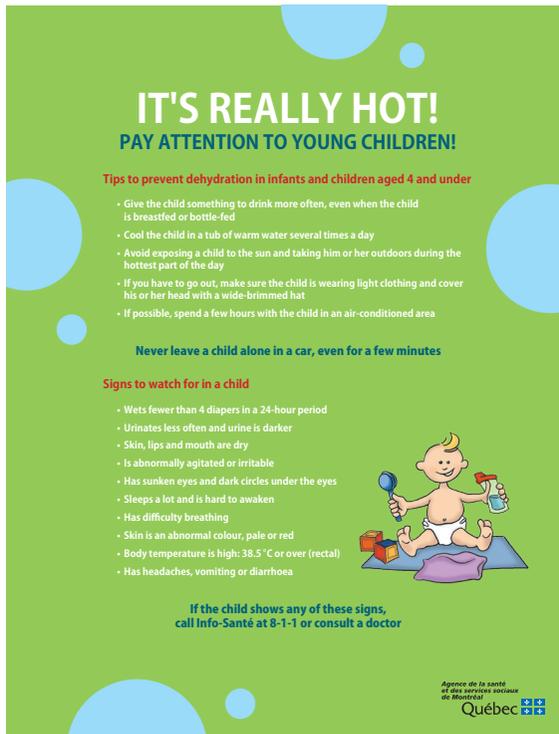
## THE TRIGGER

Several events motivated Montreal's Regional Public Health Department to develop a heat response plan. Following the death by heat stroke of a forestry worker in 1994, the coroner's report mentioned the importance of raising awareness about the effects of heat on the population. Following this recommendation, Environment Canada started to issue heat alerts for the population. Around the same time, the Montreal Public Health Department started raising awareness of the health effects of heat and published simple brochures with preventive measures that could be implemented. In 2002, the Montreal Public Health Department developed its first structured heat-risk awareness campaign with the help of a comprehensive information brochure distributed to the public. A year later, in 2003, an historic heat wave affected 12 European countries, resulting in 39,000 excess deaths over a two-week period. Following this event, the Montreal Public Health Department collaborated with its local public health units as well as municipal partners to develop its first official Heat Response Plan. The plan's objective was to reduce heat-related mortality and morbidity by "identifying and coordinating actions to be undertaken under different alert levels by partners at the regional and local public health levels as well as municipal partners."

## THE APPROACH

Montreal's initial heat response plan has evolved over the years following several internal evaluations. In 2007, the Montreal Public Health Department reviewed its communication strategy to ensure that their heat-risk message was being properly conveyed to the public. Through surveys and focus groups, Montreal Public Health was able to adapt its communication tools and make them more specific to its target recipients. The department developed communication materials specially designed for older adults and for professional workers with infants and young children.

While these different materials were essentially conveying the same message, the use of different illustrations contributed to personalizing the tool and adapting it to the needs of specific groups. The evaluation conducted by the Montreal Public Health Department contributed to simplifying the information presented on the information



**Figure 13:** Montreal Public Health Department now uses brochures directed at specific vulnerable groups of the population to inform them of heat-health risk during extreme heat events. (Source: © Gouvernement du Québec, 2014)

cards and to prioritizing three main messages: seek out air-conditioned spaces, drink a lot of water, and reduce physical activity levels. In addition, Montreal Public Health Department made two additional recommendations: 'Let someone know how you are on a regular basis' and 'Take cool showers or baths as often as needed or cool off using a damp facecloth.'"These last recommendations were perceived as being particularly helpful for individuals with mobility issues who might find it challenging to get to air-conditioned spaces.

## THE OUTCOME

Following the 2007 evaluation of the heat response plan, the City of Montreal experienced a five-day heat wave in July 2010, during which the plan was activated to the intervention level, which included supplying air-conditioned shelters for vulnerable populations not otherwise having access to air conditioning. Throughout the event, both temperature and health indicators were closely monitored by the Montreal Public Health Department's surveillance team. It appears that two specific groups were particularly affected by this heat wave: individuals over 70 years of age and suffering from cardiovascular disease and individuals suffering from mental illnesses or having drug or alcohol dependence. According to the Montreal Public Health Department, family, friends and professionals associated with mentally ill individuals

might have not been fully aware of the increased risk this population faces during extreme heat events.

Following the July 2010 heat wave, it was decided that a specific communication campaign targeted at individuals living with mental illnesses would be implemented during heat waves. The evaluation of the 2010 heat plan activation also led the public health department to plan for additional preparedness work in collaboration with local health and social services centres, community organizations, and psychiatric hospitals. This decision was made to ensure that vulnerable groups are closely monitored during future extreme heat events.

## A WORD FROM MONTREAL

When asked what advice he would give to other cities that would like to implement a similar heat response plan, Norman King, coordinator of the urban environment and health sector of the Montreal Public Health Department, highlighted the importance of developing partnerships with various stakeholders as early as possible in the process. “You can’t do it alone. Collaborating with the different municipal departments, regional stakeholders and neighbouring municipalities is essential to this process,” said Mr. King. He also recommended “re-evaluating and adapting a heat response plan on multiple occasions over time as public health and municipal authorities can adapt their approach according to the results of research and previous activation experiences.” According to Mr. King, it is also important to view public health departments as leaders in the heat response process. While several stakeholders need to be involved to implement a successful plan, it appears that most partners and local authorities tend to expect a clear and structured response from public health authorities. Finally, the department of public health highlighted the importance of knowing a city’s demographic and territorial characteristics when implementing a heat response plan. “Being able to respond properly to extreme heat events is extremely important but that should be done in parallel with other activities. For instance, if certain neighbourhoods have a long-term greening plan, or a plan to increase air-conditioned spaces, the impacts of extreme heat events could be mitigated over time,” said Mr. King.