November 13, 2007

To Brian McHattie

The Campaign for Adequate Welfare and Disability Benefits would like to send a delegation to speak to the Board of Health meeting in January. Would you please put this request as an agenda item at the council meeting on Monday, November 26th?

Given the well-documented links between conditions of poverty, aging, physical and mental handicaps, and chronic conditions related to thermoregulation, we can expect that the periods of heat, humidity and smog next summer and in the summers to come will put a great strain on a large population of our city.

One of the least recognized phenomenon related to heat distress, is the rapidity and relatively low temperatures at which dangerous symptoms may appear. Quoting from the Heat Wave Plan for England, “In contrast to deaths associated with cold snaps in winter, the rise in mortality as a result of very warm weather follows very sharply—within one or two days of the temperature rising. This means that: by the time a heat wave starts, the window of opportunity for effective action is very short indeed and, therefore; proper preparedness is of the essence.” They found that in the summer of 2006, there were an estimated 75 extra deaths per week for each degree of increase in temperature above the average.

Cities in southern Ontario have more likelihood of persons not dealing well with heat-related problems because there are wider swings in temperature so that the population does not have a chance to become acclimated to the heat. According to Joseph Rampulla, MS, APRN, BC, in speaking about healthy persons, “After seven to fourteen days of persistent heat exposure, the body becomes acclimated and adjusts to the heat through increased sweating, avid retention of salt by the kidneys and an increase in cardiac stroke volume.” (bold emphases are mine)

The same acclimation process does not take place in those most at risk from heat-related symptoms. Those risk factors include: skin conditions such as sunburn that interfere with sweating; dehydration; alcoholism; mental illness; cardiopulmonary disease; and age greater that 65. Children absorb more heat relative to their body mass and do not sweat as much as adults. Many medications affect heat dissipation such as beta-blockers, antipsychotics, tricyclic antidepressants, lithium, ethanol and diuretics.

People are generally very informed about the dangers of cold-related illnesses and there are numerous programs to help the homeless in the winter. However, the dangers of heat-related illnesses, which can become life-threatening in a very short time, are not well-known.
Our recommendation to the Board of Health is three-fold:

1. Very early in the spring begin to remind the public about the symptoms of heat disorders and the Heat Response Plan for the city. Ensure that the Heat Response Plan has built in features that will allow it to be implemented even when the Humidex is lower than specified if needed. In the summer of 1995, in Chicago, hundreds of bodies had already been brought to the morgue by the third day of extreme heat that triggered that city’s heat emergency plan.

2. Encourage people to become proactive about their safety in heat which might not trigger an alert but which can be dangerous to those at high-risk. Buses and bus shelters, newspapers, TV and radio can show that the key message for preventing heat-related illness and death is to **keep cool**.

Some of the best ways to do this are:

- Keep out of the sun between 11:00am and 3:00pm.
- If you have to go out in the heat, walk in the shade, apply sunscreen and wear a hat and light scarf.
- Avoid extreme physical exertion.
- Wear light, loose-fitting cotton clothes.
- Have plenty of cold drinks, but avoid caffeine and alcohol.
- Eat cold foods, particularly salads and fruit with a high water content.
- Take a cool shower, bath or body wash.
- Sprinkle water over the skin or clothing, or keep a damp cloth on the back of your neck.
- Keep windows and curtains that are exposed to the sun closed during the day, and open windows at night when the temperature has dropped.
- Consider putting up external shading outside windows.
- Turn off non-essential lights and electrical equipment—they generate heat.
- Grow trees and leafy plants near windows to act as natural air-conditioners.
- Keep indoor plants and bowls of water in the house as evaporation helps cool the air.
- If possible, move into a cooler room, especially for sleeping.

3. High-risk individuals should be contacted twice daily by family, friends or volunteer agencies. Temperatures inside buildings are often much higher than the published Humidex. A thermal hygrometer is a simple way to measure the temperature and relative humidity in an apartment or workplace. These should be widely available and encouraged. Landlords should be discouraged from charging extra for tenants use of air conditioners and those on OW or ODSP should be given funds to buy air conditioners and fans.

As citizens of Southern Ontario, and especially of Hamilton, with its large population of high risk individuals, we must become aware of the very real dangers of heat, humidity and smog. We need to become more educated and proactive about protecting ourselves and our neighbours.
We urge you and the members of the City Council to take these dangers very seriously by enacting emergency heat response measures in graded steps that react to even the small temperature changes that affect the most vulnerable of our citizens.

Yours truly,

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on behalf of the
Campaign for Adequate Welfare and Disability Benefits
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