Request to Speak to a Committee of Council

Standing Committee Requested

Kindly indicate which Standing Committee: *

Board of Health

Requestor Information

Name of Individual: * Lynn Aquin
Name of Organization: * Campaign for Adequate Welfare and Disability Benefits
Do you or your organization represent a lobbyist (voluntary) ☐ Yes ☐ No
Contact Number: *
Email Address: *
Mailing Address: *
Reason(s) for delegation request: * Present information on the trigger points for a heat alert.
Will you be submitting a formal presentation? * ☐ Yes ☐ No
☐ Overhead projector required for the presentation
☐ Power Point required for the presentation

Requests to speak to Council are forwarded to the Standing Committee for consideration. Once considered by Committee, and approved, you will be notified of the date for your presentation. Personal information collected on this form is authorized under Section 5.10(2) of the City’s Procedural By-law No. 03-301 for the purpose of contacting individuals and/or organizations requesting an opportunity to appear as a delegation before a Standing Committee and will be published with the Committee Agenda. The Voluntary Lobbyist Registry is a public document and will be available for viewing in the City Clerk’s office. The Procedural By-law is a requirement of Section 238(2) of the Municipal Act. Questions about its collection can be directed to the Manager of Legislative Services, 77 James St N., Suite 220, Hamilton, ON L8R 2K3 (905) 546-2424 ext. 5409
Finally, Environment Canada issues two types of Advisories to tell you that the air pollution or the combination of the heat and humidity may affect your well-being.

- Air Quality Advisory is issued when air quality is expected to be poor. An Advisory is issued when the Air Quality Index is expected to reach or exceed 50. These Advisories are issued in co-operation with the Ontario Ministry of Environment, the operator of the Air Quality Index Program.
- Humidex Advisory is issued when temperatures are expected to reach or exceed 30°C and the humidex values are expected to reach or exceed 40. Humidex values represent the effect which high humidity and high temperatures have on the human body. The higher the humidex, the harder it is for perspiration to evaporate and cool the body.

Humidex and your comfort level

- 20 - 29 Comfortable
- 30 - 39 Varying degrees of discomfort
- 40 - 45 Almost everyone is uncomfortable
- 45+ Many types of work and exercise should be restricted.

A heat wave is defined as three or more consecutive days of temperatures of 32°C or more.

What is a Heat Alert?

- A Heat Alert is issued when the combination of high heat, high humidity and other weather conditions can be hazardous to your health.
- Environment Canada issues humidex advisories when the maximum daily humidex is expected to:
  - exceed 40°Celsius (104°F) and/or
  - exceed 36 degrees Celsius for an extended period (3 or more days)
- If a humidex advisory is issued, then Halton Region Health Department will issue a Heat Alert.
- Smog can often accompany extreme heat.
- High smog and high heat levels can increase health risks by adding more stress to the body.
- A Smog Alert is called when smog conditions reach dangerous levels (Air Quality Index reaches or exceeds 50).

A heat warning is automatically declared when Environment Canada forecasts a humidex of 40 or more for at least two consecutive days. Extreme heat can cause dehydration, heat exhaustion, heat stroke and even death.
How is heat stress measured?

The Ministry of Labour uses "wet bulb globe temperature" (WBGT) to measure heat stress. This calculation, based mostly on humidity (70%), also includes radiant heat (20% if outdoors, or 30% if indoors). WBGT includes the air temperature (10%) when outdoors. Its exposure standards are divided into categories based on physical activity and workers' acclimatization. Adjustments are made for wearing types of clothing and personal protective equipment. Taking WBGT measurements properly requires specialized equipment and expertise. Workplaces with significant radiant-heat load from process-related heat or where workers have experienced heat-related illnesses should measure the WBGT.

Most workplaces don't have "hot processes" but hot weather can pose health risks to their workers. For these hot work environments, a Hot weather plan is appropriate. This is a simplified heat stress prevention program and should establish implementation criteria, or "triggers," to put the plan into effect. Criteria may include:

- Humidex reaching or exceeding 35°C
- Environment Canada Humidex advisory (air temperature exceeding 30°C and Humidex exceeding 40) or Ontario Ministry of the Environment smog alert
- Heat waves (three or more days of temperatures of 32°C or more)

Generally, Hot weather plans should be in place between May 1 and September 30.

This tool kit provides a simplified version of the WBGT by converting it into Humidex values. It allows workplaces to measure heat stress using only workplace temperature and humidity. (See Appendix B on page 12 for more details.) The following five steps help determine actions to reduce heat stress.

5 Steps to

Step 1
Training

- Measurements by themselves cannot guarantee worker protection from heat stress. It is essential that workers learn to recognize the early signs and symptoms of heat stress and know how to prevent them! (See Appendix E on page 18 for training resources.)

- If it's possible, workers need to be able to alter their pace of work, take rest breaks, and drink in response to early symptoms (a cup of water every 20 minutes). The ideal heat stress response plan would let workers regulate their own pace by "listening" to their bodies.

Step 2
Clothing

- The Heat stress action chart on the awareness tool (page 7) assumes workers are wearing regular summer clothes (light shirt and pants, underwear, and, socks and shoes)

- If workers wear a double layer of woven clothing (e.g., cotton overalls on top of summer clothes), add 5° of Humidex to the workplace measurement (using the Heat stress reference chart in Appendix B, on page 12).

- Estimate the correction factor for other kinds of clothing/protective equipment by comparing them with cotton overalls (e.g., gloves, hard hat, apron, and protective sleeves might be equivalent to a little less than half the evaporation resistance of overalls, so add 1° or 2° of Humidex)

- If completely encapsulating suits are worn, heat stress should be managed by monitoring vital signs, as recommended by the ACGIH TLV

Step 3
Select a measurement location

- Divide the workplace into zones that have similar heat exposures.

- Select a representative location in each zone where you can take measurements
I would say that walking qualifies as exercise so we do recommend free bus transportation to and from cooling centres/places so that the benefits of cooling will last as long as possible.

We urge Public Health to set Hamilton’s heat triggers to an Advisory when there is an expected humidex of 35°C for one day, a Warning when there is an expected humidex of 35°C for two days, and an Alert when a humidex of 35°C or more is expected for three or more days. The triggers in use in Hamilton’s current Heat Response Plan were developed for a very different population than the majority of Hamiltonians and are no longer supported by Environment Canada guidelines.

We recommend that cooling places be open at the Warning stage and cooling centres additionally be opened at the Alert stage. We also recommend that cooling centres be opened in more locations around the city and allow the maximum number of hours to stay including overnight if the night-time humidex is still high. The Toronto bulletin to landlords recommends that the inside temperatures be kept lower than 32°C. So if your residence is more than 32°C at night you should not go back to them, you should stay in a cool place.

As you can see in today’s other Public Health report (5.5), last year, an average of 365 persons visited the five cooling centres in Toronto each time they were opened; the year before Toronto had only four centres open; this year Toronto has seven. When few people visited the cooling centres, Toronto didn’t close them, they opened more in wider locations around the city and increased public knowledge about their value. The public has to know about the centres, be able to get to them and realize the value of visiting them; seniors especially do not like to leave their homes and the sick are not able to without help. No one likes to admit they need help. And some people do not realize the danger.

Do you allow a child to stay in a hot car even if they want to? Of course not. It’s a bit trickier with your grandmother in that hot car. She can be stubborn, but let her stay, of course not; unless you are in there with her, assisting with cooling baths and making sure she stays hydrated.

As the World Health Organization says, “The overriding goal, especially during a heat-health crisis, is to communicate with the public in ways that build, maintain or restore trust. This is true across cultures (and) political systems... Evidence shows that public panic is rare, especially when people have been candidly informed. Often, the parameters of trust are established in the first official announcement. This message’s timing, candour and comprehensiveness may make it the most important of all communications.”

We urge Public Health to take the lead in setting up a Heat Response Plan tailored to Hamilton’s unique population and weather; a plan that is timely and comprehensive involving the municipal government as well as community agencies and the citizens themselves.
Works Cited

1. Environment Canada
2. WSIG, Heat Stress Awareness Guide
3. U.S. Department of Labour
5. Body cooling and response to heat, Arnold G Nelson, PHD, Dept. of Kinesiology, Louisiana State University
6. WHO Heat Response in Europe
7. Hamilton Community Health Status Report, 2005
11. MMWR pg.628, July 2005