

REPORT NO. 2 of the
ENVIRONMENT & TRANSPORTATION STANDING COMMITTEE
of its meeting held May 25, 2011

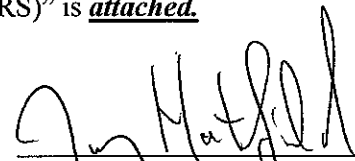
Present: Councillor Halberstadt
Councillor Sleiman
Councillor Valentinis

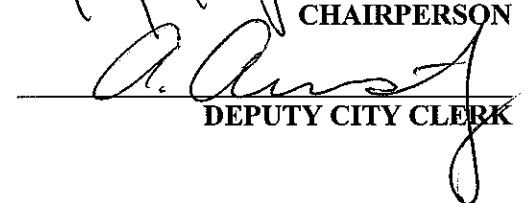
Absent: Councillor Hatfield
Councillor Payne

That the following recommendations of the Environment and Transportation Standing Committee **BE APPROVED:**

Moved by Councillor Valentinis, seconded by Councillor Sleiman,
That the report of the City Engineer dated April, 19, 2011 entitled "Update Pilot Heat Alert and Response System (HARS) **BE RECEIVED FOR INFORMATION.**"
Carried.

NOTE: The report of the Environmental Coordinator dated April 19, 2011 entitled "Update Pilot Heat Alert and Response System (HARS)" is attached.



CHAIRPERSON


DEPUTY CITY CLERK

Notification		
Environmental Coordinator		
City Engineer		

THE CORPORATION OF THE CITY OF WINDSOR
Environment & Transportation Standing Committee - Administrative Report

**MISSION STATEMENT:**

"The City of Windsor, with the involvement of its citizens, will deliver effective and responsive municipal services, and will mobilize innovative community partnerships"

LiveLink REPORT #: 15240 MH2011	Report Date: April 19, 2011 #3066jc-04/19/11:ebr
Author's Name: Karina Richters	Date to Standing Committee: May 25, 2011
Author's Phone: 519 253-7111 ext. 226	Classification #:
Author's E-mail: krichters@city.windsor.on.ca	

To: Environment & Transportation Standing Committee

Subject: Update Pilot Heat Alert and Response System (HARS)

1. RECOMMENDATION: City Wide: _____ Ward(s): _____

That the Stay Cool Windsor-Essex Heat Alert and Response Plan **BE RECEIVED** for information.

EXECUTIVE SUMMARY:

N/A

2. BACKGROUND:

National Resources Canada report "From Impacts to Adaptation: Canada in a Changing Climate" estimated an average number of excess deaths during periods of hot weather amounted to 37 in 1999 for Windsor. Ambulance calls and hospital admissions generally increase in hot weather as well. Between 1961 and 2000 the annual average number of 'hot days', temperatures greater than 30 °C, in Windsor was 15. The number of 'hot days' is expected to more than triple in Windsor by 2080.

As a result of these predictions, Health Canada received funding to implement a multi-year heat initiative to "Develop Heat Resilient Communities and Individuals in Canada", which included developing heat alert and response systems in 4 pilot communities. The City of Windsor was selected as one of the pilot communities and on March 2, 2009, City Council approved LiveLink Report #13929, Health Canada Partnership to develop a Pilot Heat Alert and Response System, through CR63/2009.

3. DISCUSSION:

Heat alert and response systems (HARS) are designed to prevent mortality and morbidity during extreme heat events. Each community has unique vulnerabilities that affect the resiliency of

individuals to adapt to extreme heat events. Community factors that contribute to increased exposure to heat include; access to health services, city design (urban heat island effect), local climate and community outreach. Individual factors that increase heat-health risks include; behaviour during extreme heat, income, access to information, type and location of home and work, social isolation, and health status. A community developed heat alert and response system has the benefit of addressing the vulnerabilities most significant to a community.

The development of the draft Stay Cool Windsor-Essex Heat Alert and Response Plan (attached) has been a work in progress since 2009 with the support of Health Canada and the HARS advisory committee.

The HARS Advisory committee included committed individuals from;

- Windsor Essex County Health Unit
- Canadian Red Cross
- Community Care Access Centre
- County of Essex
- Essex-Windsor EMS
- Windsor Police
- Fire and Rescue Services
- City of Windsor Recreation & Culture
- City of Windsor Operations
- City of Windsor Communications

The HARS advisory committee has used many tools to aid in the development of a local HARS plan including a table top exercise and community vulnerability workshops.

TABLE TOP EXERCISE

The table top exercise took place on February 24, 2010 at the Joint DND Armoury/Police Training Facility. The table top exercise attracted 41 participants from various organizations that may have responsibilities to respond during extreme heat events. This event attracted participation from several US organizations such as US Centers for Disease Control, Detroit Homeland Security, and the City of Detroit.

The exercise began with a briefing of the scenario background; identifying events that have taken place prior to the start of the exercise. Participants were then provided with additional scenarios regarding events taking place over several days that impacted both Windsor and Detroit. The scenarios became increasingly complex, indicating a worsening situation. This exercise served as a learning experience to highlight what is presently in place, and identified gaps where further work would improve planning and response to an extreme heat event. The findings and recommendations from this exercise were considered in the development of the HARS plan.

COMMUNITY VULNERABILITY ASSESSMENTS WORKSHOPS

Three vulnerability assessment workshops were held in May and June 2010. The attendees included possible community partners such as religious organizations, cultural groups, school boards, multicultural agencies, and health care service providers. The intent of the vulnerability workshops was to learn from community leaders of community level and individual vulnerabilities within Windsor-Essex and to engage community involvement in the HARS planning process. The workshops included presentations on heat and health, facilitated discussion sessions and break out working groups that were tasked with trying to solve identified

issues within the community. These workshops proved very useful in determining the best methods of communicating the HARS message and education campaign. The workshops also began the discussion of possible partnerships with community organizations to ensure the long term sustainability of the HARS plan.

Health Canada has used the findings of these workshops in the development of many of their information resources including a detailed vulnerability assessment report for Windsor-Essex. The vulnerability assessment report for Windsor-Essex can be used beyond just the topic of heat and will be a useful resource for overall adaptation planning in the region.

DRAFT STAY COOL WINDSOR-ESSEX HEAT ALERT AND RESPONSE PLAN

Long-term sustainability of the HARS plan was considered paramount throughout development. The HARS advisory committee understands the pressures on financial resources within municipalities and health units. The plan was designed around existing resources such as 211 and existing hours of operation of public facilities.

In 2005, the City of Windsor piloted the opening of community centres for extended hours during extreme heat events without much success. Individuals that are experiencing heat illnesses can feel vulnerable and visiting an unknown location can increase the feeling of vulnerability. Therefore, this plan does not include extending hours of city facilities but provides information on cool places to visit during normal business hours. However, some community organizations are also investigating opening their facilities to individuals within their community that need a cool place to go. Individuals may be much more willing to seek a cool location that is familiar to them and where they know others that may be there.

The funding provided through Health Canada is committed to the development of the public education campaign for the 2011 summer and beyond. The public education campaign is seen as the most proactive and long-term initiative to protect individuals. The additional funds made available will be used to increase the production of print materials available to other local municipalities.

Partnerships are being formed with various community groups to assist in the dissemination of the public education and outreach. Many community organizations have suggested numerous ways that they can be involved in the HARS plan including but not limited to providing links through websites to the Stay Cool Windsor-Essex web pages, posting of posters, including heat health information in community newsletters and checking on vulnerable members of their organizations.

The Stay Cool Windsor-Essex HARS plan includes three heat alert triggers representing increasing risk to the community. The Cities of Hamilton and Kingston as well as the three other pilot communities (Fredericton, Winnipeg and Assiniboine Region) also have selected three alert triggers. Each community's triggers differ and are representative of their own unique community vulnerabilities and past climate. The following are the selected triggers for Windsor-Essex:

HEAT ADVISORY (LEVEL 1)

A heat advisory is intended to signal an impending heat event of particular concern for vulnerable populations, such as the elderly and children, as well as anyone who is physically

active or outdoors for a prolonged period of time. It is also meant as a signal to various agencies that they should be in a state of readiness for a possible escalation in the severity of weather conditions.

The Medical Officer of Health of the Windsor-Essex County Health Unit is responsible for activating a Heat Advisory Level 1.

A Heat Advisory Level 1 is called when the forecasted humidex is 40

HEAT WARNING (LEVEL 2)

A heat warning is designed to signal impending health risks to the public-at-large due to a prolonged extreme heat wave. Specific actions are advised for vulnerable population, such as visits and phone calls by community organizations. EMS and area hospitals should anticipate increased admissions and make preparations to cope.

The Medical Officer of Health of the Windsor-Essex County Health Unit is responsible for activating a Heat Warning Level 2.

A Heat Warning Level 2 is called when one of the following conditions is met:

- 4 consecutive days with humidex forecasted above 40
- 1 day with a humidex forecasted above 45
- 4 days with a minimum night time humidex forecasted of 28
- Escalation of heat-health impacts

HEAT EMERGENCY (LEVEL 3)

A Heat Emergency is the highest stage of the HARS plan and denotes a state of emergency. This would occur when a heat wave is so severe and/or prolonged that its effects extend outside the health and social care, such as power or water shortages, and/or where the capacity of the health and social care systems to respond is threatened.

The Head of the City of Windsor City Council (Mayor or designate), in consultation with members of the Community Control Group (CCG), which includes: Chief Administrative Officer (CAO), Community Emergency Management Coordinator (CEMC), the Medical Officer of Health will be responsible for activating a Heat Emergency (Level 3). A decision would be reached based on circumstances prevailing at the time and through consultation with the CCG as described in the City of Windsor Emergency Response Plan.

According to Environment Canada the summer of 2010 tied as the hottest year on record with 2005. While most summers have 19 days of above 30 °C temperatures, this summer had 41 days above 30 °C.

During the summer of 2010 the Medical Officer of Health for Windsor-Essex declared three heat alerts, including a heat warning (level 2) on July 6, 2010.

PREPARING FOR THE HEAT

The plan is focused around proactive measures to build a more resilient community through preparing for heat each spring. Actions to be completed before the summer heat begins include

outreach to community partners, updating a list of places to cool down, updating the Stay Cool Windsor-Essex website, preparing 211 Call Centre to receive heat inquires and public education.

To launch the public education campaign and build community partnerships, several train the trainer sessions will be hosted in May and June 2011. These sessions will provide an overview of the history and future of excessive heat in Windsor/Essex, heat-related illness, and how the community partners can support the HARS.

The City of Windsor has been extremely fortunate to be offered the opportunity by Health Canada to be a pilot community. The support from Health Canada has allowed this region to develop a local HARS plan that reflects the vulnerabilities of this community. The vulnerability assessment report developed by Health Canada for this region will be a useful tool for municipalities looking to build a more heat resilient community.

The pilot communities, including Windsor, have assisted Health Canada in developing several resources aimed to building more heat resilient Canadians and communities. The information resources include:

- Guidelines for Assessing Health Vulnerability and Adaptation to Extreme Heat Events
- Communicating the Health Risks of Extreme Heat Events: Toolkit for Public Health and Emergency Management Officials
- Audience Specific Public Heat-Health Fact Sheets
- Best Practices for Developing Heat Alert and Response Systems to Protect Canadians
- Guidelines for Health Care Workers Regarding Extreme Heat Events
- Fact Sheets for Health Care Workers

Evaluation of the HARS plan

The summer of 2011 will be the first summer of implementation of the HARS plan including the public education campaign. In the fall of 2011 an evaluation of the plan will be completed. Any issues arising from the first year of implementation will be investigate and when possible used to refine the plan. Appendices A and C of the plan will continue to change as new community partners offer support.

The HARS plan was presented to the Regional Community Planning Committee on April 6, 2011. A recommendation was made that each municipality adapt the plan and include it as an annex in their existing emergency plans. These changes are reported annually to City Council as prescribed in the Emergency Management and Civil Protection Act and City of Windsor By-law 98-2005.

4. FINANCIAL MATTERS:

Through CR 63/2009, Health Canada committed to providing grant funding of \$150,000 to the City of Windsor and the Windsor Essex County Health Unit in order to develop the HARS plan and associated education campaign material. In 2010 and 2011, Health Canada provided an additional \$5,000 and \$10,000 respectively towards this initiative.

These funds are directed to a specific project managed by the Environmental Coordinator, so that all expenditures related to this funded initiative can be tracked accurately. All costs for this initiative have been funded from the grant money provided.

As of April 28, 2011, a total of \$53,428 has been expended.

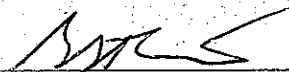
5. CONSULTATIONS:

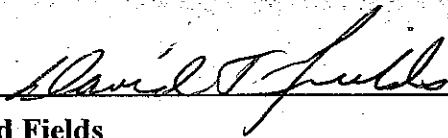
Dr. Alan Heimann - Medical Officer of Health, Windsor-Essex County Health Unit

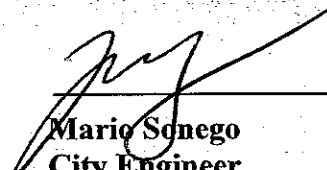
6. CONCLUSION:


The research shows that the City of Windsor and many regions of Canada will likely face extreme heat events of increasing intensity, duration and frequency as a result of climate change. The City of Windsor has been extremely fortunate to have been selected as one of the four pilot communities to develop a heat alert and response system with the aid and financial support of Health Canada


Karina Richters
Environmental Coordinator


Greg St. Louis
Senior Manager of Pollution Control


David Fields
Fire Chief


Mario Sonogo
City Engineer

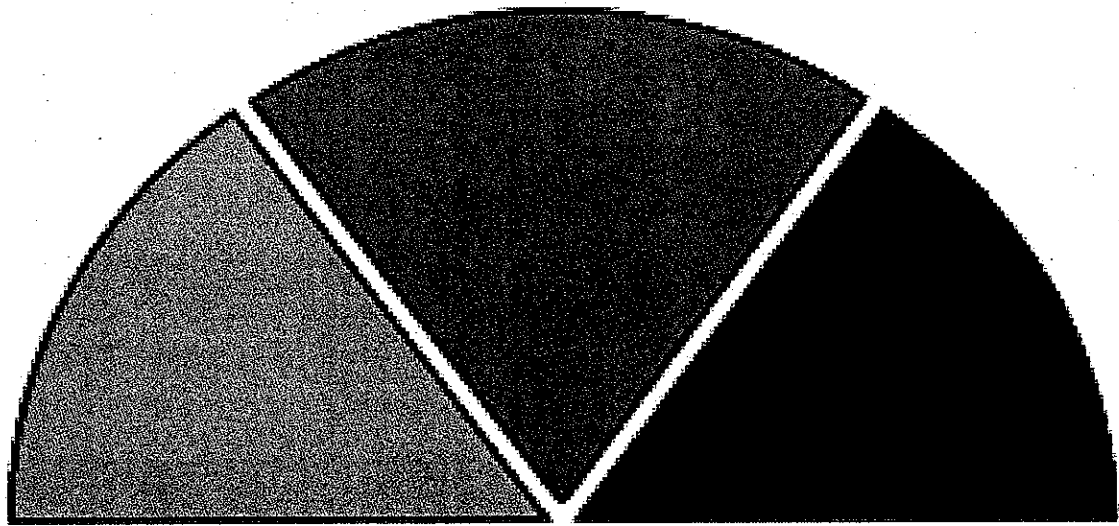

Onorio Colucci
Chief Financial Officer and
City Treasurer

/jc

APPENDICES:
Draft Stay Cool Windsor-Essex Heat Alert and Response Plan

DEPARTMENTS/OTHERS CONSULTED:
Name:
Phone #: 519 ext.

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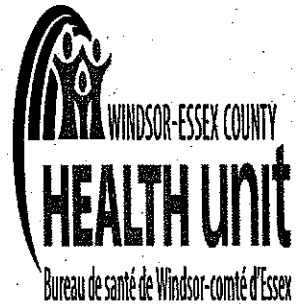


STAY COOL

WINDSOR-ESSEX

DRAFT

HEAT ALERT AND RESPONSE PLAN



1.0 Introduction

Climate projections by Environment Canada indicate that the region of south-western Ontario can expect extreme heat events of increasing intensity, duration and frequency. This plan is intended to define what constitute a heat event for the City of Windsor and County of Essex that would warrant a response by public authorities. It describes a three-tier alert structure for such events and the appropriate communications and other response protocols. It also outlines how to involve non-government organizations and community groups to improve the resiliency of specific vulnerable populations and the public-at-large to heat health impacts.

This draft document is part of a pilot project supported by Health Canada to develop a heat alert and response system for the City of Windsor and County of Essex. This draft version of the Heat Alert and Response Plan (HARP) is dated January 2011.

2.0 Objectives

The goal of the HARP is to improve the resiliency among residents of the Windsor Essex region to extreme heat. In order to achieve this goal, the overarching objectives of this plan are to:

- Provide direction to decision makers on taking action during an extreme heat event based on the outline alert protocol.
- Educate the public about the heat health risks, notification and appropriate protective measures.
- Identify ways and means of reaching vulnerable populations concerning appropriate protective measures.
- Engage non-government organizations and community groups to support the communication and outreach strategy of the HARP.

3.0 Roles and Responsibilities

The following core organizations were all active participants on the Heat Alert and Response System Advisory Committee (HARSAC)

3.1 Windsor-Essex County Health Unit (Lead)

Contact: Medical Officer of Health

Roles and Responsibilities:

- Monitor Environment Canada's Humidex forecast, April thru October
- Contact Environment Canada regarding special weather statements and forecasts
- Determine the appropriate heat notification level

- Contact City of Detroit to exchange information prior to and during extreme heat events
- Notify media and community partners of change in level
- Conduct debriefings after extreme heat events
- Undertake annual evaluations of the HARP in the fall
- Add web-cross link button to the WECHU's website
- Coordinate with Detroit to develop heat-health messaging
- Execute education campaign and training

3.2 Canadian Red Cross

Contact: Disaster Management Coordinator

Roles and Responsibilities:

- Maintain network of (respite) community partner organizations
- Conduct annual workshop to train the leadership of the community partner organizations
- Provide volunteers, including member of the First Aid Service (FAS) team to provide support

3.3 City of Windsor and County Municipalities

3.3.1 Corporate Communications

Contact: Municipal Marketing & Communications Officer

Roles and Responsibilities:

- Assist with the dissemination of information regarding extreme heat events
- Provide web cross link to Stay Cool Windsor Essex webpage between April and October

3.3.2 Environmental Master Plan Office

Contact: Municipal Environmental Coordinator

Roles and Responsibilities:

- Assist with the dissemination of information regarding extreme heat events
- Continue to coordinate efforts with Health Canada on heat health and other associated health issues (i.e. air quality)
- Continue to support the Heat Alert and Response Plan
- Explore adaptation strategies to build a more heat resilient community

3.3.3 Fire and Rescue Services

Contact: Municipal Fire Chief or Community Emergency Management Coordinator (CEMC)

Roles and Responsibilities:

- Assist with the dissemination of information regarding extreme heat events
- Prepare first responders with heat-health messaging
- Provide web cross link to Stay Cool Windsor Essex webpage between April and October

3.3.4 Parks & Facility Operations and Recreation

Contact: Municipal Parks Marketing & Communications Officer

Roles and Responsibilities:

- Assist with the dissemination of information regarding extreme heat event
- Provide annual list of public facilities with air conditioning (and generators) with normal hours of operation that the general public can access if required
- Monitor the use of pools and explore options to extend hours during extreme heat events

3.3.5 Police Services

Contact: Municipal Police Chief

Roles and Responsibilities:

- Assist with the dissemination of information regarding extreme heat event
- Prepare first responders with heat-health messaging

3.3.6 211/311 Call Centre

Contact: Manager of 211/311 Call Centre

Roles and Responsibilities:

- Assist with the dissemination of information regarding extreme heat event

3.4 City of Detroit

Contact: Emergency Preparedness Coordinator (Department of Health & Wellness Promotion – Office of Emergency & Public Health Preparedness)

Roles and Responsibilities:

- Exchange information with the Windsor Essex County Health Unit prior to and during extreme heat events
- Coordinate with Windsor Essex County Health Unit to develop heat-health messaging

3.5 Community Care Access Centre

Contact: Accreditation Manager

Roles and Responsibilities:

- Maintain network of (respite) community partner organizations
- Assist with the dissemination of information regarding extreme heat event

3.6 County of Essex

Contact: Emergency Management Coordinator

Roles and Responsibilities:

- Support preparedness among County municipalities and local organizations through ongoing exchange of information about heat-health and emergency response best practices
- Prepare first responders with heat-health messaging
- Provide web cross link to Stay Cool Windsor Essex webpage between April and October
- Develop and organize extreme table-top simulations for local emergency response agencies, taking place as needed

3.7 Essex-Windsor EMS

Contact: Deputy Chief, Planning & Physical Resources

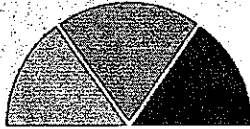
Roles and Responsibilities:

- Prepare first responders with heat-health messaging
- Provide emergency medical response to the public during extreme heat events
- Report to the Medical Officer of Health the prevalence of heat-related illnesses

The sustainability and success of the HARP will be in part due to the large number of organizations that have committed to the development and implementation of this plan. A list of all community partners is listed in Appendix A.

4.0 Heat Alert Triggers

4.1 Monitoring (April thru October)

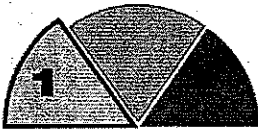


MONITORING

Starting in April of each year, the Windsor-Essex County Health Unit (WECHU) will begin monitoring the Environment Canada forecast for extreme heat events.

Environment Canada monitors both temperature and humidity. The combination of temperature and humidity reflects the perceived temperature and is reported as the Humidex reading. Environment Canada defines an extremely high humidex reading as over 40. In such conditions, all unnecessary activity should be curtailed.

4.2 Heat Advisory (Level 1)



A heat advisory is intended to signal an impending heat event of particular concern for vulnerable populations, such as the elderly and children, as well as anyone who is physically active or outdoors for a prolonged period of time. It is also meant to signal to various agencies that they should be in a state of readiness for a possible escalation in the severity of weather conditions.

At this stage, EMS (Emergency Medical Services), hospitals, and selected health professionals are expected to begin regular reporting to the Medical Officer of Health on specific data for heat-related illness.

4.2.1 Who activates/deactivates

The Medical Officer of Health (MOH) of the WECHU is responsible for activating a heat advisory Level 1.

4.2.2 When

A Heat Advisory Level 1 is called when one of the following conditions are met:

- 1 day with a humidex forecasted above 40

4.2.3 What happens

- 1) A media release along with an email blast will be sent to all community partners and any member of the public that has signed up to be notified.
- 2) For information purposes, the MOH will notify the Emergency Preparedness Coordinator from the City of Detroit Department of Health & Wellness Promotion.
- 3) EMS and area hospitals will be reminded that they are expected to report back to the WECHU regarding possible heat-related illnesses, for the duration of the heat advisory. These illnesses are summarized in Appendix B.

- 4) Selected pharmacists, as identified by the Essex County Pharmacists Association, will submit a brief summary of their observations by email to the MOH, at the end of each day for the duration of the heat advisory.
- 5) Information from EMS, hospitals and pharmacists will be considered by the MOH in determining if and when to activate the Level 2 (Heat Warning) protocol.
- 6) The MOH will notify EMS, hospitals, and the selected pharmacists, once reporting is no longer required, based on return to normal weather conditions satisfactory to the MOH.

4.3 Heat Warning (Level 2)



A heat warning is designed to signal impending health risks to the public-at-large due to a prolonged extreme heat wave. Specific actions are advised for vulnerable populations, such as visits and phone calls by community organizations. EMS and area hospitals should anticipate increased admissions and make preparations to cope. A number of other agencies

such as Canadian Red Cross, Salvation Army and Fire & Rescue, are expected to be in a state of readiness for possible impacts affecting the public-at-large.

4.3.1 Who activates/deactivates

The Medical Officer of Health (MOH) of the WECHU (back-up: Director of Health Protection, WECHU) is responsible for activating a heat warning Level 2.

4.3.2 When

A Heat Warning Level 2 is called when one of the following conditions is met:

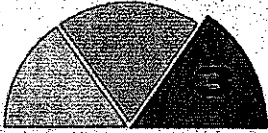
- 4 consecutive days with humidex forecasted above 40
- 1 day with a humidex forecasted above 45
- 4 days with a minimum night time humidex forecasted of 28
- Escalation of heat-health impacts

4.3.3 What happens

- 1) A media release along with an email blast will be sent to all community partners and any members of the public that have signed up to be notified.
- 2) For information purposes, the MOH will notify the Emergency Preparedness Coordinator from the City of Detroit Department of Health & Wellness Promotion.
- 3) The MOH will request the Canadian Red Cross to contact community partners to confirm their continued cooperation and make any revisions to the public directory of Community Partners, as necessary.
- 4) The MOH will advise the Canadian Red Cross of the potential for a change in the alert level from Level 2 to Level 3, thereby allowing the Red Cross an opportunity to prepare for deployment of mobile cooling stations in the event of a Heat Emergency (Level 3).

- 5) The Community Emergency Management Coordinator (CEMC) will consult with Enwin Utilities and other area utilities to briefly review their disaster planning for a potential widespread power outage.

4.4 Heat Emergency (Level 3)



A Heat Emergency is the highest stage in the Heat wave Plan and denotes a state of emergency. This would occur when a heat wave is so severe and/or prolonged that its effects extend outside health and social care, such as power or water shortages, and/or where the capacity of health and social care systems to respond is threatened.

4.4.1 Who activates/deactivates

The Head of the respective municipal Council (Mayor or alternate), in consultation with members of the Community Control Group (CCG), which includes: Chief Administrative Officer (CAO), Community Emergency Management Coordinator (CEMC), Medical Officer of Health (MOH), etc will be responsible for activating a Heat Emergency (Level 3).

4.4.2 When

A Heat Emergency will be called at the discretion of the Head of Council (Mayor or alternate). A decision would be reached based on circumstances prevailing at the time and through consultation with the Community Control Group (CCG) as described in the respective municipal Emergency Response Plan.

4.4.3 What happens

- 1) Activation/deactivation of the emergency notification system, pursuant to the respective municipal Emergency Response Plan. Steps include: formal declaration/termination of an emergency, media release, notification to organizations and activation/deactivation of the Emergency Operations Centre (EOC). The full Emergency Response Plans should be available on the respective municipal websites

5.0 Preparing for Heat

5.1 Community Partner Preparedness

Early each spring, the list of community partners (Appendix A) should be contacted to review the following;

- 1) Verify primary and secondary contacts
- 2) Determine if each partner is still able to provide support to the program
- 3) Determine if they need additional resources (i.e. posters, flyers, etc)
- 4) Determine their capacity and availability of support staff in the event of a prolonged heat wave.

5.2 Places to Cool Down

A list of places to cool down is provided in Appendix C. This list should be reviewed in the spring to verify hours of normal operation.

5.3 Stay Cool Windsor-Essex

The website (staycoolwindsor-essex.com) should be updated routinely prior to and during the heat season. Communications tools developed as support to the community partners should be provided on the website in formats that allow easy downloading and printing.

The places to stay cool should also be updated to ensure that the information remains accurate.

The number of visits to the website should be monitored and used to evaluate the success of the awareness campaign.

5.4 211 Call Centre

211 should be provided with all updated information as it pertains to the heat alert and response plan and awareness campaign.

211 will also be asked to track the number of calls received for heat related questions. This information will assist in the evaluation of the awareness campaign.

5.5 Education

The Education Campaign will be lead by the Windsor Essex County Health Unit and the City of Windsor's Environmental Coordinator. Community partnerships will be crucial for the success of this campaign. Such partnerships will be necessary to ensure that the messages are getting out across the community.

The beginning of the heat season represents a timely opportunity to build public awareness of heat wave notification protocol (internally and with the general public), associated health risks, and protective measures. The heat season is defined roughly as the period from mid-April to early-October. In addition to the Stay Cool Windsor Essex website and 211, a marketing campaign will be executed. The marketing campaign may vary year-to-year depending on the funding and the success of certain tactics implemented. Posters, banners, brochures, advertisements, fridge magnets are all examples of tactics that may be implemented.

Train the trainer sessions will be conducted in the Spring of 2011. These sessions will provide an overview of the history and future of excessive heat in Windsor/Essex, heat-related illness, and how the community partners can support the heat alert and response plan. A list of participants in the train the trainer sessions will be maintained and those able to provide support to the program will be listed as a community partner in Appendix A.

6.0 Supporting Documents

This heat alert and response plan was developed with support of Health Canada's Climate Change and Health Office through a two-year pilot project. The pilot project has allowed Health Canada to develop numerous information resources that are intended to support Canadian communities in developing their own heat alert and response plans. These resources were developed through lessons learned in the four pilot communities and will also be useful in the evaluation and adaptation of this heat alert and response plan.

The following is a list of documents developed through the pilot project with the assistance of Health Canada:

Windsor-Essex specific documents

- Extreme Heat Event, Exercise HARS Reality, February 24, 2010
- Assessment of Vulnerability to the Health Impacts of Extreme Heat in Windsor
- Communications Audit, Strategy and Big Picture Landscape

Health Canada documents, Heat Resilient Canadians and Communities

- Guidelines for Assessing Health Vulnerability and Adaptation to Extreme Heat Events
- Communicating the Health Risks of Extreme Heat Events: Toolkit for Public Health and Emergency Management Officials
- Audience Specific Public Heat-Health Fact Sheets
- Best Practices for Developing Heat Alert and Response Systems to Protect Canadians
- Guidelines for Health Care Workers Regarding Extreme Heat Events
- Facts Sheets for Health Care Workers
- Simulating Extreme Heat Events to Develop Heat Alert and Response Systems
- Extreme Heat Events User Guide for health care organizations

APPENDIX A

Community Partners

Confirm support of Community Partners each spring

Community Partner	Contact Info	Support pledged
To be completed April/May 2011		

APPENDIX B

Heat-Health Illnesses – Draft from Health Canada's Communication Tool kit.

Extreme heat events can lead to one or more of the following health effects presented in descending order of severity¹

Heat stroke – Most serious type of heat illness that is a result of body heat overload. Signs of heat stroke may include a core body temperature greater than 40°C/104°F, complete or partial loss of consciousness and/or reduced mental ability.¹³ Sweating is not a good indicator of heat stroke as there are two types of heat stroke:

1. **Classic** – Accompanied by little or no sweating, usually occurring in children, persons who are chronically ill, and older adults
2. **Exertional** – Accompanied by increase in body temperature because of strenuous exercise or occupational exposure in combination with environmental heat and where sweating is usually present

Heat exhaustion – Caused by excessive loss of water and salt. Symptoms may include heavy sweating, weakness, dizziness, nausea, headache, diarrhea, and muscle cramps.

Heat fainting – Caused by the loss of body fluids through sweating, and by lowered blood pressure due to pooling of blood in the legs. Symptoms include temporary dizziness resulting from insufficient flow of blood to the brain while a person is standing.

Heat edema – Heat-induced swelling frequently noticeable in the ankles, feet and hands and is most often seen in people who are not regularly exposed to heat.

Heat rash – Is a result of inflammation of clogged sweat glands and is accompanied by tiny red spots on the skin, which may give a prickling sensation.

Heat cramps – Caused by a salt imbalance resulting from a failure to replace salt lost through excessive sweating. Symptoms are sharp muscle pains.

APPENDIX C

List of Places to Stay Cool

Reviewed each spring for updated hours of operation

Location	Address	Hours of Operation	Contact Name / Phone Number	A/C Yes/no	Generator Yes/no	Any Conditions
		Community Centres				
		Libraries				
		Pools				
		Spray Pads				
		Non-Municipally owned facilities				