Ottawa Public Health
Emergency Plan

Version 4.2, Dec 2016

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A WORD FROM THE MEDICAL OFFICER OF HEALTH

The goal of Ottawa Public Health is to minimize the negative health impacts and societal disruption that emergencies may cause among Ottawa residents. The Ottawa Public Health (OPH) Emergency Plan provides the framework for ensuring that OPH staff can respond quickly and efficiently to public health emergencies and emergencies with public health impacts. The OPH Emergency Plan ensures that our management and staff know what to do when an emergency strikes. In this way, we can maximize our ability to protect the health and safety of Ottawa residents.

The OPH Emergency Plan is aligned with the City of Ottawa Emergency Management Plan and elaborates on the functions that OPH is accountable for within the City plan. It ensures that OPH can respond in a collaborative and seamless way with other City responders.

Timely and successful response by OPH illustrates the importance of excellent internal and interagency emergency planning and partnerships.

Sincerely,

Isra Levy, *MBBCh, MSc, FRCPC, FACPM*

Medical Officer of Health

Table 1: Acronyms and Abbreviations

Acronym/ Abbreviation	Definition
AAR	After Action Report
AQHI	Air Quality Health Index
A/MOH	Medical Officer or Health or Associate Medical Officer of Health
ACES	Acute Care Enhanced Surveillance
ARES	Amateur Radio Emergency System
BIMS	Business Information Management System
C4	Clinical Care Coordination Centre
CAP	Corrective Action Plan
CBRNE	Chemical, Biological, Radiological, Nuclear and Explosive
CD	Communicable Disease
CDO	Corporate Duty Officer
City Plan	City of Ottawa Emergency Management Plan
CMOH	Chief Medical Officer of Health
CP	Clinical Programs Branch
EHP	Environment and Health Protection Branch
EMCPA	Ontario Emergency Management and Civil Protection Act
EMIS	Emergency Management Information System
EMO	Emergency Management Ontario
EOC	Emergency Operations Centre
EOC-CG	Emergency Operations Centre Control Group
EOC-OG	Emergency Operations Centre Operations Group
EPALC	Emergency Preparedness Advisory and Liaison Committee
ERMS	Emergency Response Management Services
ESS	Emergency Social Services
HEPAR	Health Emergency Preparedness and Response Workgroup
HEPCO	Hospital Emergency Preparedness Committee of Ottawa
HERO radio	Healthcare Emergency Radio of Ottawa
HIRA	Hazard Identification and Risk Assessment
HPDP	Health Promotion and Disease Prevention Branch
HPPA	Health Protection and Promotion Act
IAP	Incident Action Plan
ICP	Incident Command Post
IMS	Incident Management System
IQS	Integration, Quality and Standards Branch
MOH	Medical Officer of Health

Acronym/ Abbreviation	Definition
MOHLTC	Ministry of Health and Long-Term Care
OEM	Office of Emergency Management
OPH	Ottawa Public Health
OPH Plan	Ottawa Public Health Emergency Plan
OPHIL	Ottawa Public Health Information Line
OPHET	Ottawa Public Health Executive Team
OPHS	Ontario Public Health Standards
PHAC	Public Health Agency of Canada
PHI	Public Health Inspector
PHN	Public Health Nurse
RMS	Record Management System
SCC	OPH Service Command Centre
SDO	Service Duty Officer
SEM	Security and Emergency Management
SSB	Strategic Support Branch
The City	The City of Ottawa
VMS	Variable Messaging Signs
3-1-1	City Contact Centre

PART 1: INTRODUCTION

The Ottawa Public Health Emergency Plan directs OPH response during an emergency situation. The OPH Emergency Plan describes the OPH emergency management structure, responsibilities and response processes and is aligned with relevant legislation, Ontario Public Health Standards and the City of Ottawa Emergency Management Plan.

This plan, and the OPH functions contained herein, is informed by OPH participation in an annual City of Ottawa Vulnerability Analysis (VA) which identifies hazards relevant to public health that may give rise to a public health emergency and/or emergency with public health impacts. Each hazard is evaluated using a qualitative risk analysis methodology (probability and consequence), assessed against current capability to respond and then ranked.

A copy of this document is available in accessible formats upon request. For further information regarding the Ottawa Public Health Emergency Plan please contact:

Health Emergency Preparedness and Response Workgroup
Ottawa Public Health
100 Constellation Crescent, 7th Floor West, Mail Code: 26-50
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OPHEmergencyPlanningTeam@ottawa.ca

PART 2: AIM

The aim of the OPH Emergency Plan is to ensure that OPH is prepared to respond to a public health emergency or an emergency with public health impacts. In the event of an emergency, strategic objectives include:

- Protect the health and safety of responders
- Save lives
- Reduce suffering
- Protect the health of the public
  - Assess the threat to health of Ottawa residents
  - Determine the needs of the affected, or potentially affected, population
  - Ensure implementation of measures to protect the health of Ottawa residents

In order to achieve the above strategic objectives, Ottawa Public Health will

- Ensure 24/7 response to emergencies and for notifications from the Office of Emergency Management (OEM)
- Have measures in place to detect threats to public health through surveillance mechanisms
- Work with partners to mitigate the effects of the emergency on water and food safety
- Assess the needs of vulnerable populations and respond as required
- Prevent and control communicable disease of public health importance
- Organize and manage mass immunization/prophylaxis clinics that may be required as a result of the emergency
- Provide coordination within the broader healthcare system during an emergency

2.1 Relationship to Other Plans

This plan is intended as a gateway to other supporting plans. Tables 2 and 3 list OPH and interagency supporting plans and their mandate by the Ontario Public Health Standards and/or the City of Ottawa Emergency Management Plan. City plans with identified lead City services are listed in Table 4. These plans can be found on Ozone, in hard copy in the OPH Service Command Centre (SCC) at 100 Constellation Crescent, room 794W, and alternate SCC at 110 Laurier Avenue, Richmond Room. For more information on these supporting plans, contact the Health Emergency Preparedness and Response Workgroup (HEPAR) at OPHEmergencyPlanningTeam@ottawa.ca.

Table 2: OPH Supporting Plans

OPH Supporting Plan	Mandate and Purpose
OPH CBRNE Plan and Anthrax Response Protocol	Aligns with the City of Ottawa 2013 CBRNE Task Force Plan Mandated by the Ontario Public Health Standards (OPHS) to identify, investigate and manage health hazards. Outlines how OPH will fulfill the prophylaxis portion of the '*Immunization and Prophylaxis'* function and the '*Hazardous Materials*' function in the City Plan
OPH Continuity of Operations Plan (CoOP)	Mandated by OPHS and required as part of the City of Ottawa Emergency Management Program Supports decision-making required to maintain core critical services when normal operations are disrupted
Drinking Water Advisory Protocol	Outlines actions for OPH and partners in response to a threat to the safety of drinking water
OPH Ebola Virus Disease Response Plan	Outlines actions for OPH and partners in response to a suspected or confirmed case of Ebola Virus Disease
OPH Emergency Home Visit Deployment Kit	Assists OPH managers to safely deploy staff in the field for activities such as home visiting Provides procedures, forms and list of resources
OPH Emergency After Hours Translation Guide	Outlines the process for securing after hours translation
Enhanced Response Phone Line Plan	Addresses the *Assessment of Vulnerable Population* function Supports Ottawa residents in an emergency by providing health information as required by the emergency situation, assessing health impacts, counseling and referral to community resources
Mass Immunization Clinic Plan	Mandated by OPHS and addresses the *Hygiene and Public Health* function in the City Plan Outlines how OPH will organize and manage mass immunization
OPH Influenza Pandemic Preparation and Response Plan	Outlines how OPH will lead, coordinate and respond to an influenza pandemic in Ottawa as mandated by the Ontario Health Plan for an Influenza Pandemic (OHPIP) and as outlined within Ottawa's Interagency Influenza Pandemic Plan (OIIPP)
OPH On-Call Guide	Outlines OPH on-call infrastructure to provide urgent OPH services 24/7, as mandated by OPHS and as required by the City Plan On-call staff include: MOH, Environment and Health Protection Manager, Communicable Disease Control Manager, Service Duty Officer, Health Information Coordination, PHN and PHI
OPH Service Command Centre Operations Manual	Provides instructions for activation of SCC and use of SCC equipment

Table 3: Interagency Supporting Plans

Interagency Plans/ Agreements	Mandate and Purpose
Canadian Red Cross (CRC) Protocol	A framework for collaboration between OPH and the CRC for provision of volunteer assistance and emergency supplies in an emergency response such as door to door visiting

Interagency Plans/ Agreements	Mandate and Purpose
	CRC support is coordinated through SEM during enhanced operations
Extreme Weather Plan	An interagency plan that fulfills OPHS mandate for identification, investigation and management of health hazards in the environment
Health Emergency Plan for Priority Populations	• Fulfills OPH responsibility for health assessment of vulnerable populations within the City Plan • Enables OPH and community network partners to better support priority residents during an emergency
Ottawa Health Response Plan for Evacuation of Northern Ontario Communities (Draft)	Outlines how Ottawa will provide coordinated health services to residents evacuated from northern First Nation communities
Ottawa Interagency Influenza Pandemic Plan (OIIPP)	• Outlines how Ottawa partners will respond to an influenza pandemic as mandated by OHPIP • Ottawa's Interagency Influenza Pandemic Planning Committee (OIIPPC) is responsible for OIIPP.
Stockpile Agreement with the Ottawa MacDonald-Cartier International Airport Authority	• Mandated by OHPIP to maintain a pandemic stockpile for Occupational Health and Safety. • Agreement between OPH and the Ottawa Airport Authority for storage of OPH emergency supplies at the airport in exchange for purchase of hand sanitizer by OPH

Table 4: City Emergency Plans

Plan	Lead Service
Chemical, Biological, Radiological, Nuclear and Explosive 2013 Task Force Response Plan	Security and Emergency Management (SEM)
Decision Centres' Concept of Operations	SEM
Disaster Psychosocial Plan	Emergency Social Services (ESS)
City of Ottawa Emergency Management Plan	SEM
Emergency Management Program Recovery Guide	SEM
Emergency Social Services Plan	ESS
Mass Casualty Plan	Police
City of Ottawa Evacuation Plan	SEM

Plan	Lead Service
City of Ottawa Re-Entry Plan	SEM
Natural Death Surge Plan	OPH
Northern Ontario Evacuation - Host Community/Transportation Hub Plan	SEM

PART 3: AUTHORITY

The OPH Emergency Plan complies with the following provincial and federal legislation:

- *Canadian Standards Association CAN/CSA-Z1600 2008:* Emergency Management and Business Continuity Programs
- *Canadian Standards Association CAN/CSA-Z731-03 (R2009):* Emergency Preparedness and Response
- *Clean Water Act, 2006, S.O. 2006, c. 22*
- *Coroners Act, R.S.O. 1990, c. C.37*
- *Day Nurseries Act, R.S.O. 1990, c. D.2*
- *Elderly Persons Centres Act, R.S.O. 1990, c. E.4*
- *Emergency Management and Civil Protection Act, R.S.O. 1990, c. E.9*
- *Environmental Assessment Act, R.S.O. 1990, c. E.18*
- *Environmental Protection Act, R.S.O. 1990, c. E.19*
- *Food Safety and Quality Act, 2001, S.O. 2001, c. 20*
- *Health Protection and Promotion Act, R.S.O 1990, Chapter H7*
- *Homes for Special Care Act, R.S.O. 1990, c. H.12*
- *Homes for the Aged and Rest Homes Act, R.S.O. 1990, c. H.13*
- *Long-Term Care Home Act, R.S.O. 2007*
- *Mental Health Act, R.S.O. 1990, c. M.7*
- *Occupational Health and Safety Act, R.S.O. 1990, c. O.1*
- *Ontario Emergency Management and Civil Protection Act, R.S.O.1990*
- *Ontario Public Health Standards 2008*
- *Ontario Social Housing Reform Act*
- *Safe Drinking Water Act, 2002, S.O. 2002, c. 32*
- *Vital Statistics Act, R.S.O. 1990, c. V.4*

As enabled by the *Ontario Emergency Management and Civil Protection Act* (EMCPA), the *City of Ottawa Emergency Management Plan* and its elements have been issued under:

- The City of Ottawa Emergency Management By-law 2011-277
- The Emergency Management Program: Schedule "A" to the By-law
- The City of Ottawa Emergency Management Plan: Schedule "B"

The legal authority for the City Plan is *The Ontario Emergency Management and Civil Protection Act,* R.S.O.1990.

3.1 Ontario Public Health Standards

The OPH Emergency Plan addresses the requirements designated by the Ministry of Health and Long-Term Care (MOHLTC) in the Ontario Public Health Standards (OPHS).

These standards establish requirements for fundamental public health programs and services, which include assessment and surveillance, health promotion and policy development, disease and injury prevention, and health protection (MOHLTC, 2008, p.3).

The goal of the *Emergency Preparedness Program Standard* is to enable and ensure a consistent and effective response to public health emergencies and emergencies with public health impacts. This standard states that each public health unit shall develop its emergency response plan, in consultation with community partners and governmental bodies, to address the identified hazards for which the board of health and medical officer of health will have a lead role in responding to, consistent with an Incident Management System and in accordance with the *Public Health Emergency Preparedness Protocol*, 2008 (MOHLTC, 2015).

3.2 Ontario Chief Medical Officer of Health and the Minister of Health and Long-Term Care

In Ontario, the Chief Medical Officer of Health (CMOH) is the senior public health official with authority during public health emergencies. Under the *Health Protection and Promotion Act (HPPA) R.S.O 1990*, "if the Chief Medical Officer of Health is of the opinion that a situation exists anywhere in Ontario that constitutes or may constitute a risk to the health of any persons, he or she may investigate the situation and take such action as he or she considers appropriate to prevent, eliminate or decrease the risk" (*HPPA*, 1990, part 6.1.77.1). The CMOH may provide direction to the Board of Health and the Medical Officer of Health during an emergency.

The Minister of Health and Long-Term Care may also give direction to local boards of health, medical officers of health, public health laboratories and public health inspectors under the *HPPA*. Refer to the *HPPA, Part VII: Administration*, for more information about the Minister's authorities.

3.3 Provincial Emergency Management Structure

In a health emergency, OPH reports to the Ministry of Health and Long-Term Care Emergency Operations Centre (MEOC). The MEOC reports to the Chief Medical Officer of Health and the Minister of Health and Long-Term Care.

OPH is also responsible for fulfilling functions within the City of Ottawa Emergency Management Plan and participates in the City of Ottawa Emergency Operations Centre (City EOC). The City EOC reports to the Emergency Management Ontario Emergency Operations Centre, who in turn report to the Commissioner of Emergency Management.

In a health emergency, the Hospital Emergency Preparedness Committee of Ottawa (HEPCO) may activate the Clinical Care Command Centre (C4) as required. OPH

coordinates health emergency response with the C4. OPH participates as a member on HEPCO and on C4.

Figure 1 below provides an overview of the emergency management structure for public health emergencies in Ontario.
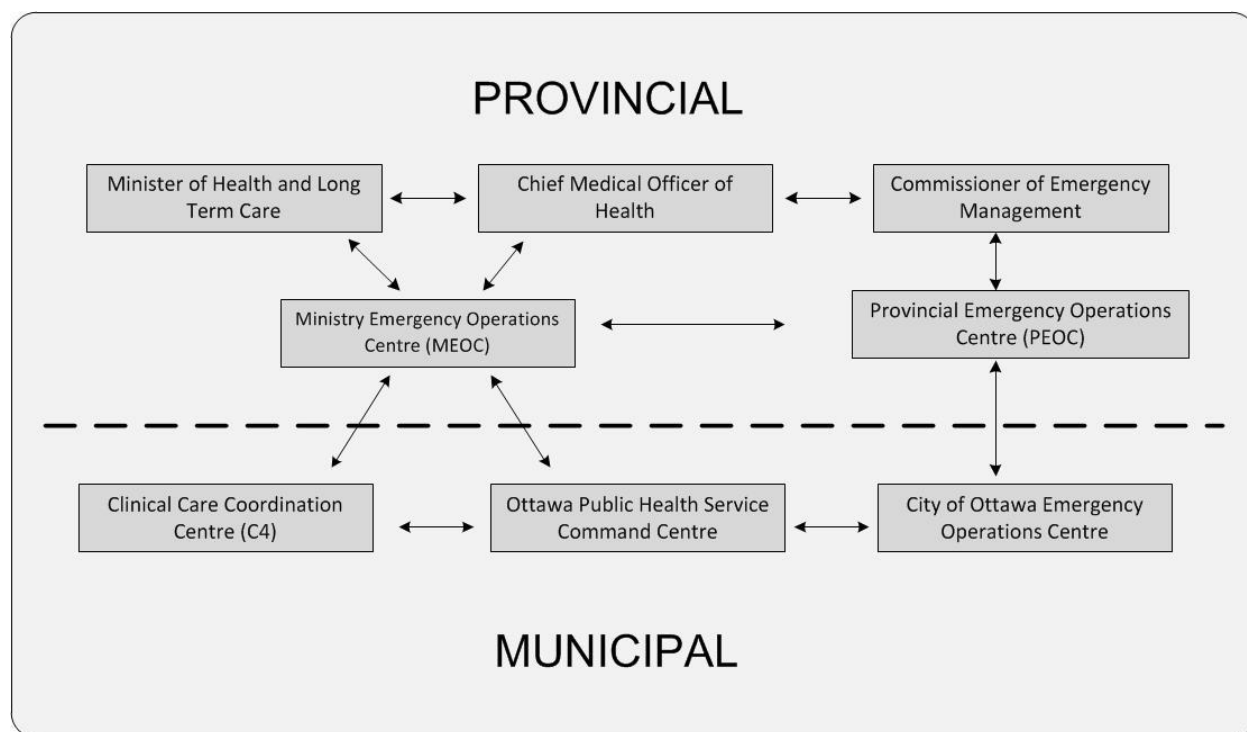
Figure 1: Public Health Emergency Management Structure

3.4 Medical Officer of Health and the Board of Health

The Ottawa Board of Health serves to oversee planning and organizational development, fiscal responsibility and labour relations for Ottawa Public Health.

The Medical Officer of Health is accountable to the Board of Health. In the event of an emergency, the Medical Officer of Health (MOH) works closely with the Board to ensure that appropriate action is taken to mitigate the risks to residents. Two separate roles are defined by the *Health Protection and Promotion Act (HPPA, 1990),* as Manager of Public Health Programs and Services and Independent Statutory Officer are described in Appendix 3.

PART 4: EMERGENCY PROCEDURES

This section outlines OPH surveillance and situational awareness mechanisms, plan activation processes and OPH management structure for emergency response. Also included are activation of the OPH Service Command Centre, options for surge capacity, continuity of operations and occupational health and safety considerations.

4.1 Surveillance and Situational Awareness

OPH surveillance methods enable the detection of threats or emergencies that could impact the health of City of Ottawa residents. Table 5: Health Risk Surveillance Methods outlines OPH, City and partner surveillance and monitoring methods that can detect potential health issues or emergencies.

Table 5: Health Risk Surveillance Methods

Surveillance Method	Surveillance Data	Responsible
Extreme weather surveillance	Humidex thresholds in hot weather Wind chill factor in cold weather Air Quality Health Index (AQHI) Smog alerts Sources of data: The Weather Network, Environment Canada, and Ontario Ministry of the Environment During heat warnings or emergencies, gather reports from Hospital Emergency Preparedness Committee of Ottawa (HEPCO) and hospital emergency departments	EHP Extreme Weather Coordinator monitors incoming data Health Emergency Preparedness and Response Unit
Media monitoring	Traditional media and social media	IQS/HIC
Notification from OEM	OPH Service Duty Officer (SDO) receives notification 24/7 If the EOC is activated, EOC-CG members (A/MOH or assigned manager) will also receive notification	OPH SDO and EOC-CG members
OPH Surveillance mechanisms	Acute Care Enhanced Surveillance (ACES) Lab confirmed cases of reportable diseases Community and institutional outbreaks of reportable and non reportable diseases	IQS/Epidemiology Section Labs: Public Health Ontario, Eastern Ontario Regional Virology, Hospital and private) EHP/Outbreak Management and Communicable Disease

Surveillance Method	Surveillance Data	Responsible
		Program
Provincial surveillance	Provincial health data Sentinel physicians	MOHLTC Physicians
Tracking by primary care physicians	Reports from physicians	Primary care physicians
Tracking of emergency room visits	Unusual spike in number of like cases	Hospital Emergency Departments (Casualty Officer, Infectious Disease physician or Infection Control Practitioner)
Tracking of Environmental Health issues	Spike in number of calls on the Duty Desk related to a specific environmental event or issue Unusual situation detected during public health inspector routine assessments Reports from a variety of data sources (e.g. combined sewer or sanitary sewer overflow reports via phone and e- mail)	EHP
Tracking of institutional outbreaks	Spike in reportable communicable diseases	Long-term care homes, retirement homes, schools, daycares, correctional facilities, group homes
Tracking of OPHIL calls	Spike in number of calls related to a specific event or issue	IQS/OPHIL
3-1-1 calls	Unusual numbers of health-related calls	3-1-1

4.2 Plan Activation

This section describes how the OPH Emergency Plan is activated in response to situations when escalation criteria are met and outlines OPH escalation and response processes.

OPH Response to Situations

The type of situation will determine the level of OPH and City response. To see how different types of situations and response levels align, refer to Figure 2.

- Situations range from an event to an incident, emergency or disaster with increasing magnitude and complexity.
- Response to situations range from normal operations to enhanced operations, activated operations (with activation of the City Emergency Operations Centre) or state of emergency.
- OPH assesses and manages public health dimensions of situations. Where public health is the most significant dimension of the situation, for example an influenza pandemic, OPH would be the lead service area for incident management.
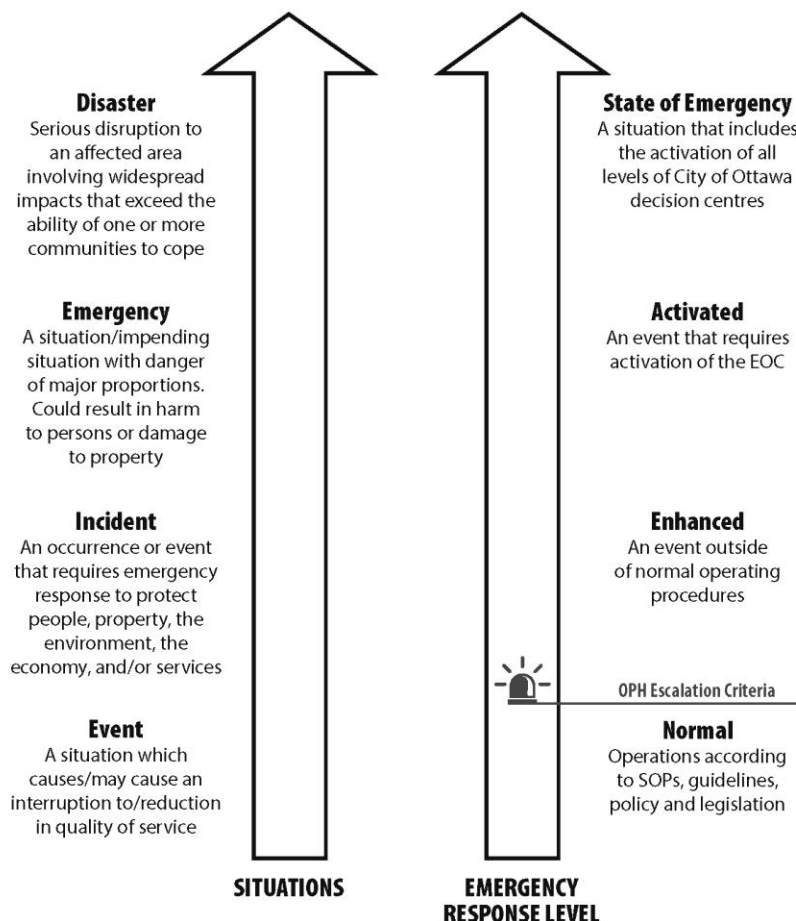
Figure 2: Alignment of Situations and Response Levels

Note: complete definitions of situations and response levels can be found in the Glossary in Appendix 8.

Escalation Processes

OPH continually monitors situations. When escalation criteria (Table 6) are met, a decision will be made for OPH to enter enhanced operations that facilitates the formation of a formal IMS team to manage the situation (Figure 3).

In this situation, the OPH Service Duty Officer (SDO) will provide situational awareness to the Corporate Duty Officer (CDO). The CDO will determine if the corporation enhances its situation readiness, e.g., by sharing situational awareness with all departmental SDOs, entering city-wide enhanced operations or activating the City's EOC Control Group. Similarly, other City services will escalate situations to the CDO

and OPH will be engaged when the corporation shares situational awareness (Figure 4).

Table 6: OPH Escalation Criteria

| Enhanced	Activated

• Medical Officer of Health issuance of Drinking Water Advisory required
• OPH may escalate to an enhanced response when three of the following occur, or at the discretion of the MOH:
   o Public Health Agency of Canada (PHAC) or Ministry of Health and Long Term Care (MOHLTC) issue a request for action or alert
   o Epidemiological data and/or trends of concern
   o Significant and/or imminent public health risk to population or sub-group of Ottawa residents
   o Increased call volume from physicians or the public on OPH intake lines (OPHIL, OPH Inspection Duty Desk, Outbreak Management Line, School Health Intake Line) where the number of calls are related to an issue or specific symptoms
   o Increased stakeholder communications
   o Response requirements exceed Standard Operating Procedures, i.e. staff overtime and/or insufficient OPH staff and increased level of complexity
   o Situation requiring voluntary or mandatory evacuation or displacement of residents or reception of evacuees from elsewhere
	Same criteria as enhanced response PLUS need for support from two or more other City Departments.
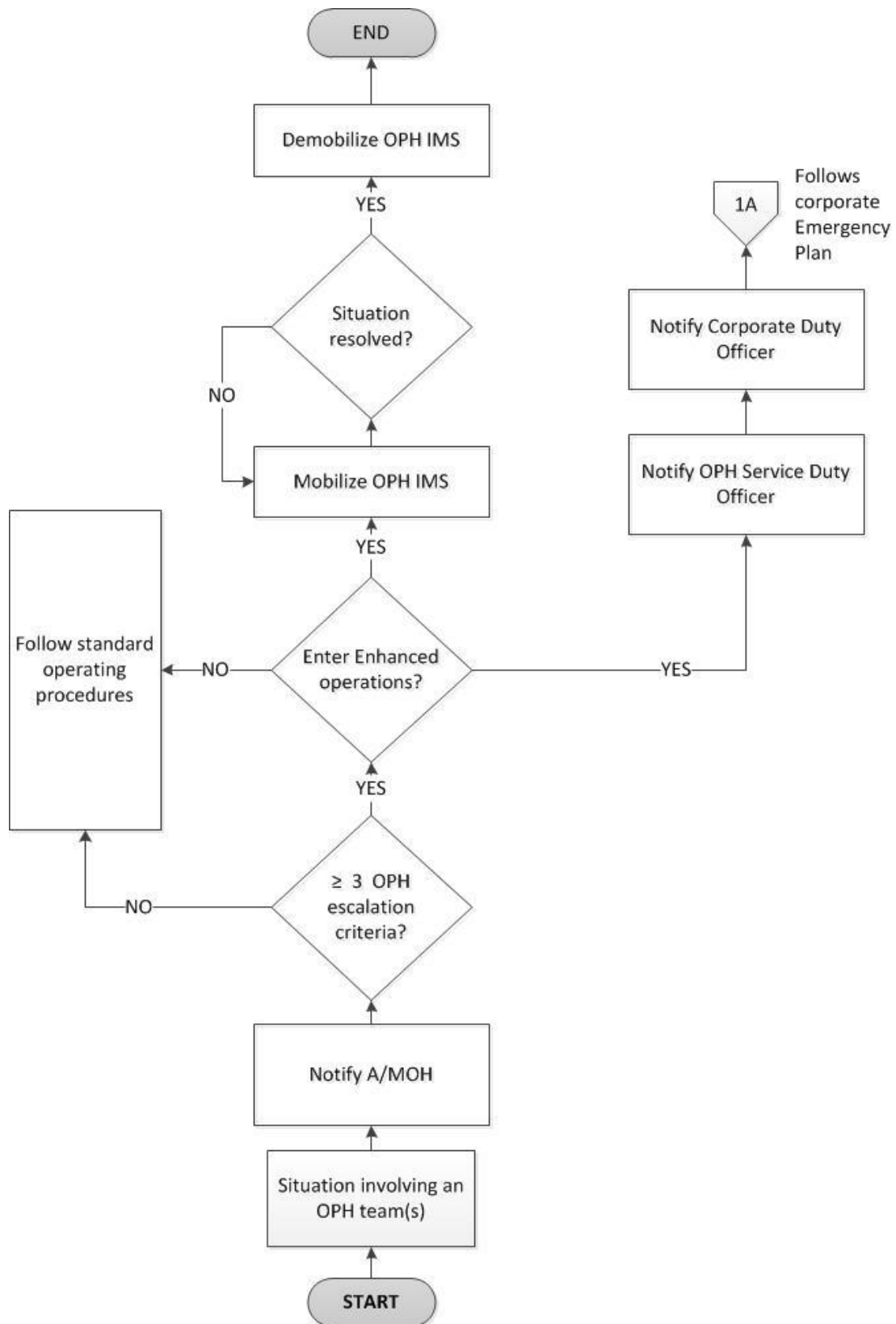
Figure 3: OPH-initiated escalation and response process
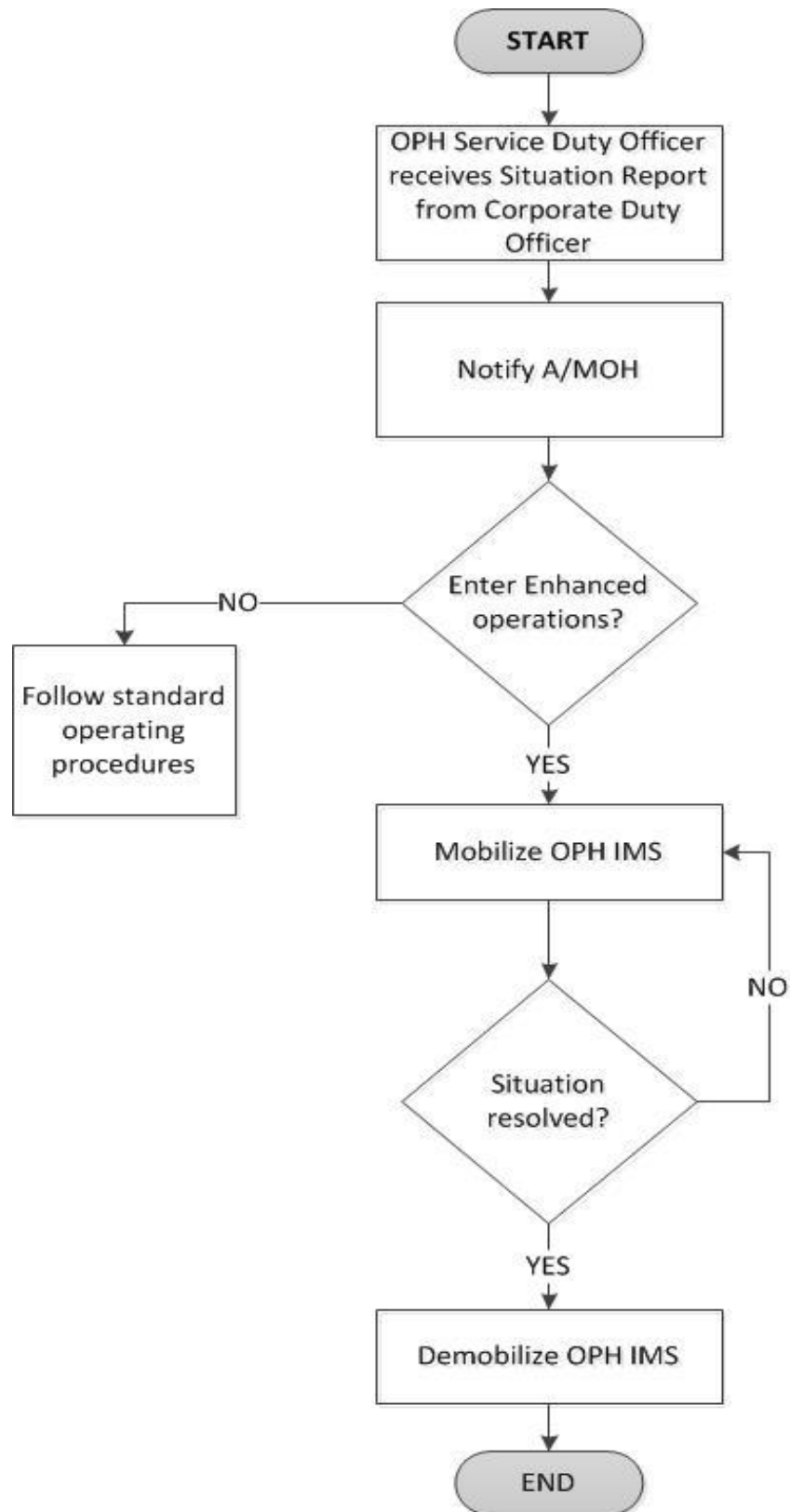
Figure 4: City-initiated escalation and response process

4.3 Management Structure for Emergency Response

1) OPH-led Health Emergency Response

A three decision-centre structure will provide decision-making related to interagency response requirements within the City of Ottawa. It will function interdependently, drawing on the Incident Management System (IMS). They include

- o City of Ottawa Emergency Operations Centre (EOC)
- o Area Incident Command Centre led by Ottawa Public Health when public health is the most significant dimension
- o Clinical Care Coordination Centre (C4) (if appropriate)

The areas of concern and membership of the three decision centres are outlined in Table 7.

Table 7: Management structure for health emergency response

Command Centre	Mobilized	Concerns	Members
Emergency Operations Centre - Control Group (EOC CG)	Activated	Consequence management Maintaining essential City services Managing consequences of the emergency Liaison with Province and Provincial Emergency Operations Centre (PEOC) if activated	City Manager Chief Security and Emergency Management MOH/General Managers/Chiefs
Emergency Operations Centre - Operations Group	Activated	Consequence Management Site and City support (special resources)	Initially: Corporate Duty Officer Service Duty Officers Evolving to IMS: IMS positions filled as required Technical experts added as needed
Area Incident Command Centre	Escalation Criteria met	Crisis Management Led by Ottawa Public Health Focus: City wide awareness, and Site (community) operations Planning: create objectives for managing a health response in Ottawa	Area Incident Commander (Associate Medical Officer of Health) IMS positions filled by OPH and staff from City departments and

Command Centre	Mobilized	Concerns	Members
		and for each objective, develop strategies and tactics for operations Coordinate the management of health response in the community Ensure situational awareness and information management Liaise with Ministry of Health and Long Term Care and Public Health Agency of Canada	community partners as needed
Clinical Care Coordination Centre (C4)	Activation criteria and triggers are met	Coordination of hospital and Emergency Medical Services (EMS) with public health response Coordination with management of member organizations	Representatives from each hospital, Champlain LHIN, Emergency Medical Services (EMS), Eastern Ontario Regional Laboratory Association (EORLA), OPH
Supported by:			
Service Command Centres (SCC)	Service Escalation Criteria are met	Crisis Management Focus: Tactical support for Area Command operations and city-wide service continuity management Departmental site support: Staff Equipment Information/research/data OPH SCC - Liaison with Ministry of Health Emergency Operations Center if activated (MEOC)	Departmental staff to fill IMS positions Technical expertise as required

2) City of Ottawa Enhanced or Activated Operations

When the City enters into enhanced or activated operations and the response is not an OPH-led health emergency response, OPH will participate within the management structure according to the City of Ottawa Emergency Management Plan.

4.4 OPH Service Command Centre

In OPH enhanced operations, the OPH Service Command Centre (SCC) will become operational. The OPH SCC is located at 100 Constellation Crescent, 7th floor West, Room 794W. The OPH backup SCC is located at 110 Laurier, 2nd floor, Richmond Room. For information on operation of the OPH SCC, refer to Appendix 4: OPH Emergency Resources, and the OPH Service Command Centre Operations Manual.

4.5 Surge Capacity during Emergencies

OPH may utilize the following strategies to increase human resource capacity:

- Follow the OPH Continuity of Operations Plan to deploy existing OPH staff
    a. for emergency response roles, or
    b. to maintain core critical services

- Hire temporary staff

- Request volunteer support. The OPH Service Duty Officer will contact the Corporate Duty Officer to mobilize volunteers

4.6 Continuity of Operations

Throughout OPH emergency response and recovery, OPH strives to maintain services to residents. The OPH Continuity of Operations Plan (CoOP) (2015) supports decision-making required to maintain core critical services when normal operations are disrupted. Core critical services are defined as "services that must be delivered to ensure survival, avoid causing injury, and meet legal or other obligations of an organization" (Public Safety Canada, 2010). The principal focus of the CoOP is to identify staff potentially available for re-deployment to core critical services or emergency response. Also included are internal and external communications processes, assessment guidelines for the impact of service disruptions and recommended mitigation strategies. In the event that an OPH workplace is affected by the situation, alternate core business work locations for staff are provided.

4.7 Occupational Health and Safety Measures

Due to the nature of emergencies, there must be heightened vigilance of hazards posing risk. Employers are required to comply with applicable provisions of the Occupational Health and Safety Act available at http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o01_e.htm. Supervisors must maintain a safe environment where hazards are identified and either eliminated or a hazard mitigation strategy applied to protect staff.

Protection of workers from infectious diseases and other hazards may best be achieved using a hierarchy of controls – at the source, along the exposure pathway and with the worker. This requires a comprehensive strategy that includes, in order of effectiveness:

1) Engineering controls that make the work environment safer, for example, physical barriers

2) Administrative controls - work practices that reduce the risk of infection, for example, screening policies and procedures

3) Personal protective equipment (PPE) used by health care workers, for example, N95 respirators, when in direct contact with a patient with influenza-like illness. OPH maintains a stock of PPE for staff protection as described in Appendix 4: OPH Emergency Resources

Under IMS, employee and supervisor responsibilities under the Act continue and the Safety Officer's role is to address any staff health and safety issues. Examples of health and safety responsibilities include ensuring that psychosocial supports are in place and ensuring staff have appropriate PPE for infection control.

For information regarding OPH stock of PPE and other protective equipment, contact the Health Emergency Preparedness and Response Section at OPHEmergencyPlanningTeam@ottawa.ca.

PART 5: OPH ROLES AND RESPONSIBILITIES

Roles and responsibilities of OPH management and staff in emergency response are described below. For more detail, refer to the *OPH Emergency Management Program Policy*.

OPH Emergency Control Group

The Ottawa Public Health Executive Team (OPHET) will most often act in the capacity of the OPH Emergency Control Group. This control group is the 'public health senior management group' as designated by the *Public Health Emergency Preparedness Protocol*, 2008. The OPH Emergency Control Group supports and provides policy direction for command and ensures that core critical services are maintained according to the OPH *Continuity of Operations Plan*.

Initially, the MOH or designate will appoint the Incident Manager. The first responsibility of the Incident Manager is to achieve situational awareness and to assemble an IMS team. The Incident Manager may also call for external support in managing the incident if the requisite expertise does not reside within OPH. The IMS structure then defines the emergency management, decision-making and reporting relationships.

Associate/Medical Officer of Health

When the escalation criteria are met to move into Enhanced Operations, the A/MOH or delegate responds as follows:
- Assume the role of initial OPH Incident Manager
- Inform OPHET, who become the OPH Emergency Control Group
- Activate the OPH Emergency Plan
- Inform appropriate OPH management and staff using the Emergency Key Contact List and emergency staff notification processes (refer to Appendix 7: Emergency staff notification)
- Activate the OPH Service Command Centre and convene a meeting as required
- Declare and document that OPH has entered Enhanced Operations
- Form an Incident Management System (IMS) structure to manage the emergency. Refer to Part 6: Steps to Develop an Incident Management System
- When the EOC Control Group (EOC-CG) is activated, the A/MOH or alternate is deployed as the EOC-CG member

Incident Management System Team

The IMS team is formed to manage the emergency. Refer to Part 6 of this plan for details of how to activate the IMS team and manage an emergency within IMS.

OPH On-call Team

OPH maintains 24/7 coverage for notification and/or emergency response. The on-call team is comprised of on-call A/MOH, Environment and Health Protection Manager, Communicable Disease Control Manager, Service Duty Officer, Health Information Coordination staff, public health nurse and public health inspector. For detailed roles and responsibilities of the on-call team, refer to the OPH On-call Guide.

OPH Service Duty Officer

The OPH Service Duty Officer role is to:
- Act as a single point of contact between OPH and the Corporate Duty Officer
- Notify the Corporate Duty Officer of OPH decision to enter enhanced operations
- Be available to respond on a 24/7 basis (on-call)
- Respond to Corporate Duty Officer notifications without delay
- Confirm receipt of notification
- Inform OPH management as per OPH protocol
- Act as the initial EOC Operations Group (EOC-OG) member until released by the EOC–Ops Deputy Director or relieved by the OPH SCC
- Use OPH Emergency Plan for guidance
- Provide resource management on behalf of OPH
- Assess the requirement for OPH to respond to, or monitor, emergency situations

Health Emergency Preparedness and Response Workgroup

The Health Emergency Preparedness and Response Workgroup (HEPAR) ensures OPH is prepared for emergency response through planning, training and exercises. HEPAR supports activation of the OPH Service Command Centre and formation of the IMS structure and supports the IMS team as required.

Ottawa Public Health Staff

OPH staff must:
- Be aware of their roles under the general and specific emergency functions as described in Part 8 of this plan
- Participate in the Respiratory Protection Program
- Comply with Occupational Health and Safety Standards
- Ensure that their personal contact information is up to date to ensure they receive emergency notifications
- Complete forms according to the OPH Enhanced Response Finance Process
- Respond to emergency notifications from their supervisor as soon as possible:
  - During work hours when in the office, follow instructions in the message. If on standby, remain in the office and await further instructions
  - During work hours while on the road, check mobile device and voice mail for messages. If unable to receive messages, listen to the radio for instructions
  - Outside of working hours, respond as directed and stay tuned for further direction

PART 6: STEPS TO DEVELOP AN INCIDENT MANAGEMENT SYSTEM

OPH activates the Incident Management System (IMS) in all situations when standard operating procedures are not sufficient to manage the response.

There are three steps in the development of an IMS structure. These steps include conducting a Hazard Identification and Risk Assessment, preparing the Incident Action Plan (IAP), and preparing an IMS structure (Public Health Ontario, 2013). These three steps will form the basis for planning and operations during a response.

6.1 Conduct a Hazard Identification and Risk Assessment

The Hazard Identification and Risk Assessment (HIRA) determines what hazards need to be mitigated and establishes prioritized objectives for the IAP. The HIRA uses a grid to assess the probability of a hazard occurring versus the impact that the occurrence would have on the community (Figure 5).
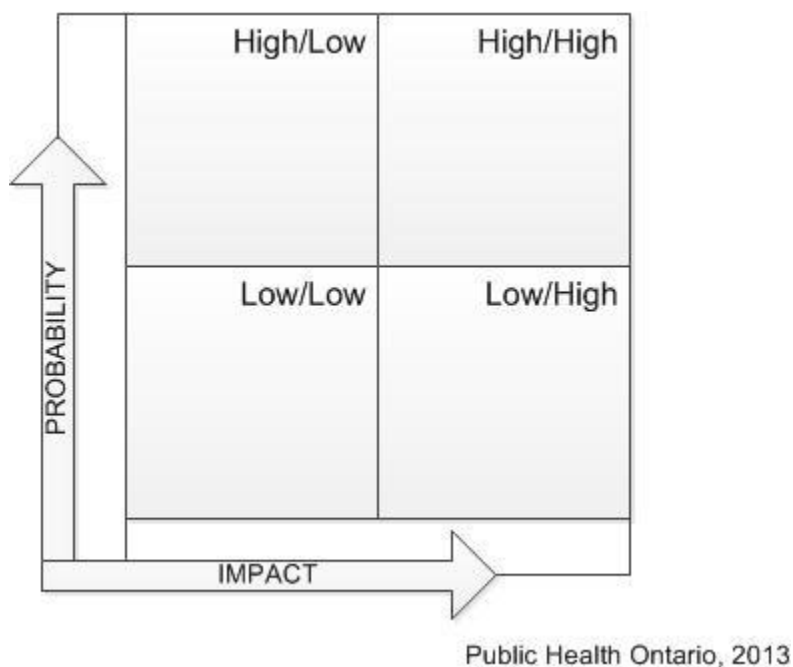

Public Health Ontario, 2013

Figure 5: Hazard Identification and Risk Assessment

6.2 Prepare the Incident Action Plan

An initial IAP can be created at the initial command meeting. The Planning Chief:

- Is responsible for preparing and seeking approval of the written IAP by the Incident Manager

- Completes the written IAP (IMS form 202). Management objectives should be specific, measurable, achievable and realistic within the timeframe of the operational period and define the goal and how the goal will be achieved

- Develops the assignment list (IMS form 203)
- Creates an incident map, evacuation plan, security plan or emergency information plan if required

6.3 Develop an IMS structure

IMS is a standardized approach to emergency management encompassing all aspects of emergency response operating within a common organizational structure. In every incident, there are certain management functions that must be carried out regardless of the number of persons involved, the size, location, complexity, or duration of the response.

Based on the HIRA and Incident Action Plan, establish the IMS structure and assign positions:

- **Incident Manager**: manages all activities pertaining to the incident

The Command Staff (reporting to the Incident Manager) include:

- **Liaison Officer:** primary contact for assisting and supporting external organizations and advises Incident Manager of opportunities for assistance from other organizations or any issues identified

- **Communications Officer:** responsible for the development and release of approved emergency information for internal and external communications

- **Safety Officer:** monitors safety conditions and develops safety measures to ensure the health and safety of all responders

The General Staff positions include:
- **Operations Chief:** leads the Operations section and implements the IAP
- **Planning Chief:** leads the Planning section and develops the IAP
- **Logistics chief:** leads the Logistics section which ensures all resources required to support the incident are provided
- **Finance and Administration Chief:** provides financial and administrative support to the incident.

6.4 Incident Management team

Every situation is different and the structure and roles will vary depending on the needs of the situation as captured in the Incident Action Plan (IAP). The IAP will determine the units and staffing levels that must be created within each section by section chiefs. Incident Management Teams may be created at an individual 'site', at the OPH Service Command Centre (SCC) and at the City's Emergency Operations Centre. OPH staff may be assigned to an IMS Team operating at any of these decision centres as illustrated in Figure 6.
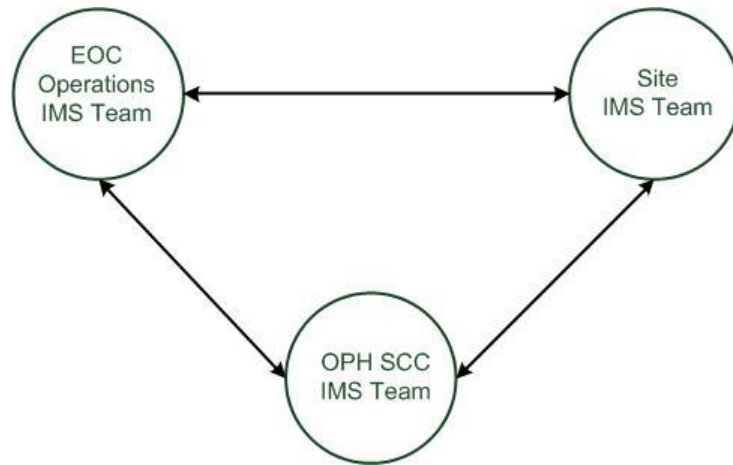
Figure 6: Incident Management Teams

An example of an OPH IMS structure is depicted in Figure 7. The structure would be formed and staff assigned according to the requirements of the situation.
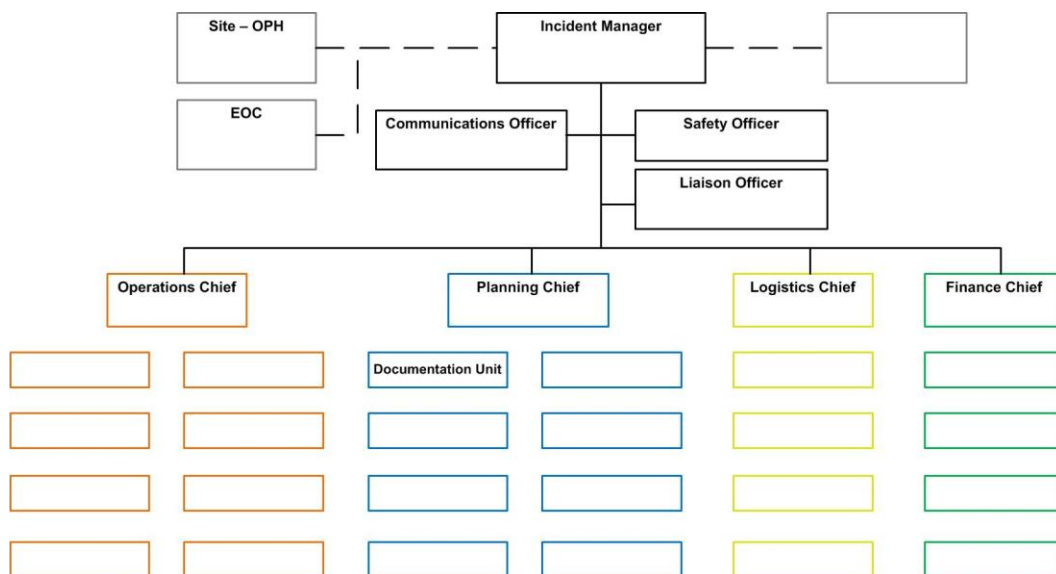

Figure 7: Sample OPH IMS Structure

PART 7: COMMUNICATIONS AND EMERGENCY INFORMATION

In the event of an emergency, effective and timely communication is crucial. OPH and the City of Ottawa collaborate to ensure partners, public, media and internal staff receive timely and accurate information. For more information on risk communications, refer to Appendix 5: Risk Communications.

7.1 Emergency Communication Tools

Timely and accurate internal and external communications are important. Table 8: OPH Emergency Communications Tools identifies the tools that OPH can use to disseminate health information and provide residents with access to information.

Table 8: OPH Emergency Communications Tools

Tool	Description
3-1-1 Contact Centre	24 hour City of Ottawa phone line. 3-1-1 is the point of contact to reach OPH off-hours through the on-call PHI. In the event 3-1-1 becomes aware of a health issue through escalated calls, they will notify OPH
Amateur Radio Emergency System	Communications support during emergencies is provided by the Amateur Radio Emergency Services group to HEPCO and non-profit organizations under an agreement with SEM
Blackberries	Smart phones allow communications such as phone, email, BBM, text, internet and social media among staff
Call blasts	Can be used by SEM to send out a voicemail to a large group of telephone numbers within a specified area
Conferencing solutions	Options to teleconference, video conference and WebEx (online sharing of files) are available
Emergency Management Information System (EMIS)	EMIS is cloud-based solution managed by SEM to share emergency information among City responders. The two components of EMIS are: -ERMS: for notification of Service Duty Officers -WebEOC: for management of situations
Emergency Response Management Solutions (ERMS)	Automated messaging system used to notify OPH's external stakeholders via e-mail and fax. Database includes physicians, community network partners and identified OPH staff for situational awareness
Enhanced Response Phone Line (ERPL)	Activated as required for additional phone line capacity in emergency situations. The ERPL is managed by HPDP and staffed by public health nurses.
Fan-out lists	Hard copies of the Synrevoice database containing staff personal contact information are used as fan-out lists for back-up to the Synrevoice

Tool	Description
	automated messaging system
Radios • Short-wave radios • Healthcare Emergency Radio of Ottawa (HERO)	• Six short wave radios on the City of Ottawa's Emergency Radio Communications System • Radio for communications with Ottawa area hospital emergency departments. Base unit is located in the SCC at 100 Constellation and satellite unit at OPHIL reception
Folios	OPH management and identified staff are provided with HP Folios/air card, which can connect with City networks. On-call managers also have offline access to the *On-call Managers Resources* folder using the "Always available offline" feature.
Media	OPH uses traditional media such as radio, television, newspaper, posters, printed materials to communicate with residents as appropriate Social media is used to communicate health messaging to residents, partners and media and enables surveillance of trends and emerging issues Twitter (@ottawahealth and @ottawasante) Facebook (facebook.com/ottawahealth and facebook.com/ottawasante) OPH Blog (ottawahealth.tumblr.com and ottawasante.tumblr.com)
OPH emergency response e-mail in global address	When IMS is activated, the "OPH Emergency Response" (OPHEmergencyResponse@ottawa.ca) address can be used for emergency communications from the Incident Manager or as a point of contact for the SCC. Login information is available in the SCC Operations Manual
Ottawa Public Health Information Line (OPHIL)	Operates during regular business hours and is staffed by public health nurses
OPH website	ottawa.ca/health
Synrevoice	Synrevoice, an automated messaging system, is used for emergency staff notification by phone and email after hours. The database includes staff information such as personal phone numbers, job title, team, languages spoken, ward staff live in and license (if any)
Roadside variable messaging signs	Used to notify the public of alerts, driving conditions, emergencies, etc. This City asset can be mobilized through the Corporate Duty Officer as needed

7.2 Internal Communications

Internal communications include communications within OPH; and within all City of Ottawa departments.

Internal communications within OPH

It is important to ensure that OPH staff are aware of emergency situations and OPH response activities. This allows staff to be prepared to respond as well as contribute to effective communications with clients and stakeholders. Department-wide emergency communications are organized by the IMS Communications Officer. OPH communicates with staff using global email during work hours and Synrevoice (Automated Notification System) or fanout after hours.

Internal communications within all City departments

Corporate Communications is responsible for ensuring communications among City departments and staff in the event of a city-wide emergency. The City EOC oversees all communications. The EOC and Corporate Communications communicate with responders using the Emergency Management Information System (EMIS), including Web EOC, Emergency Response Management Solutions (ERMS) and WebEx as well as video/teleconferencing systems.

7.3 External Communications

OPH communicates externally with community partners and the general public.

OPH Partners

Strong collaboration has been formed between many stakeholders such as hospitals, family physicians, school boards, community groups and non profit organizations. Within OPH many staff members have established relationships within community networks. These staff members continue to serve as liaisons within the community, working with the Liaison Officer. OPH can utilize tools such as ERMS, e-mail, voice mail, OPH website, OPHIL, Healthcare Emergency Radio of Ottawa (HERO) and video/teleconferencing. Additionally, the Emergency Management Communications Tool (EMCT) is currently being rolled out through the LHIN to health sector partners.

General Public

During an emergency, OPH is responsible for ensuring that current health information is available to the public, as well as for providing a means for residents to contact OPH for health information. The Communications Officer in the IMS structure ensures that appropriate strategies are implemented for communications to the public.

PART 8: SPECIFIC EMERGENCY FUNCTIONS

As a department within the City of Ottawa, OPH is assigned responsibility for emergency functions and tasks within the City of Ottawa Emergency Management Plan. OPH Specific Emergency Functions are matched to the City Plan but are adapted to include the OPH branch responsible for the function and additional tasks added to reflect OPH's responsibilities.

The involved department(s), service(s), or program(s) are assigned either Responsible, Partner or Support roles.

The internal OPH Emergency Plan includes details of roles and responsibilities, which have been removed for public distribution.

PART 9: RECOVERY

This section provides guidance on recovery, demobilization, debriefing, reporting and quality improvement processes.

9.1 Recovery

As outlined in the City of Ottawa Recovery Plan (2014), recovery operations typically begin concurrently with, or shortly after the initialization of response operations. A Recovery Unit, reporting to the Operations Chief, should be included within the IMS structure, as required.

Recovery actions usually occur in three phases – initial, short-term and long-term recovery actions:

- Initial recovery actions are taken to reduce life-safety hazards and reinstate critical services. Examples include providing emergency information and activating the Continuity of Operations Plan
- Short-term recovery operations focus primarily on social and human needs such as providing expanded social, medical, and mental health services
- Long-term recovery focuses on re-establishing the affected areas while mitigating future hazards and optimizing community improvements. Examples include restoration of regular health operations and coordinated delivery of long-term social and health services

Recovery task forces, led by a Recovery Director, may be established as required. Recovery task forces such as Emergency Social Services, Infrastructure and Technology and Claims and Finance may be formed. OPH is identified as a member of the Emergency Social Services Task Force. Examples of roles and responsibilities of this task force include ensuring public health standards are met and meeting the needs of vulnerable populations.

9.2 Demobilization

A Demobilization Unit should be created within the Planning Section of the IMS structure to develop a demobilization plan. Demobilization activities can include:

- Assure controlled, orderly, safe and efficient demobilization of incident resources.
- Ensure timely communications (internal and external as appropriate) as emergency services plan to demobilize
- Provide psychosocial support for staff as they are demobilized and re-integrated back to regular duties e.g. group debriefing or individual counselling through Employee Assistance Program
- Reassign any incomplete or open activities
- Complete and forward all documentation to the Documentation Unit
- Advise the Finance section of any outstanding financial commitments
- Return all borrowed or acquired equipment/supplies

- Participate in debriefs
- Clean up and organize work stations

9.3 Debriefing

After each response, OPH will conduct an internal debrief session and will participate in inter-departmental and interagency debriefs as required.

The timing and objectives of hot and cold debriefing are outlined below in Table 9: Debriefing Session Objectives.

Table 9: Debriefing Session Objectives

	Hot Debriefing	**Cold Debriefing**
When	Held within minutes or hours (less than 36 hours)	Ideally held within days
Length	30 to 60 minutes	1 to 3 hours
Objective	- Allow a smooth transition from emergency operations back to normal activities - Share experiences - Express emotions - Exchange information on response activities and evolution of the event - Discuss successes and difficulties	- Analyze events and actions - Take a step back for a fresher look on the events - Identify success factors - Identify possible improvements - Establish follow-up mechanisms - Gather information for the debrief report

The questions in Appendix 6: OPH Debriefing Template are used to debrief all OPH enhanced and activated emergency response activities. Probing questions specific to the response are developed as needed.

9.4 Quality Improvement Processes

Quality improvement processes ensure that lessons learned during emergency response result in improved emergency preparedness and response in future. The following steps ensure that feedback is gathered, recommendations approved and required actions are implemented and tracked.

1. Ensure excellent documentation and time tracking through the IMS Documentation Unit
2. Evaluate the response through the Evaluation Unit within the IMS structure as appropriate
3. Conduct a debriefing session and document feedback
4. Develop an After Action Report including recommendations for quality improvement
5. Secure management validation and approval of recommendations and assign follow up tasks and deadlines

6. Implement the assigned tasks
7. Track completion of assigned tasks
8. Prepare an annual report for management on progress

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