Recommendations for Action:

A Community Meeting in Preparation for a

Mass Opioid Overdose Casualty Event

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I. INTRODUCTION: Preparing for a mass casualty event

Recent events across Ontario involving illicit opioids[1] have prompted municipalities, health system partners and government agencies to prepare for, respond to and recover from a potential surge in overdoses secondary to new opioids in our communities. The growing severity and scope of the opioid situation in Ontario has put the problem-solving skills of municipal, provincial, and federal leaders to the test. This issue requires planning, preparation, and collaboration among a variety of partners across the province. In developing effective and sustainable solutions to address the opioid problem, we aim to reduce the population-level harms of opioids in Ontario communities.

On Monday, February 27th, 2017, KFL&A Public Health, in partnership with Hastings Prince Edward Public Health, Leeds, Grenville and Lanark District Health Unit, Ottawa Public Health, and Public Health Ontario, hosted a full-day workshop involving table-top exercises and discussions on how to prepare for, respond to, and manage, a mass casualty event secondary to opioids in South Eastern Ontario. The workshop brought together more than 95 officials representing emergency responders, acute care and health service providers, community and street health groups, public health agencies, as well as provincial/territorial and federal partners. The workshop identified the various challenges faced by service partners, provided an understanding of the roles and responsibilities of partner agencies, and helped to determine next steps to address a mass opioid overdose situation at the local level.

The following report is the result of compiled discussions, recommendations, worksheets, and feedback received throughout the day-long workshop. This report suggests key roles and responsibilities of partners involved in responding to a mass casualty event secondary to opioids, and a protocol to help determine when to activate an Incident Management System.

[1]Here, the term illicit opioids is used to describe naturally occurring opioids, semi-synthetic opioids, and synthetic opioids that may be produced illicitly or diverted from pharmaceutical sources (UNODC, 2017).

II. KEY ROLES AND RESPONSIBILITIES

This section outlines the key roles and responsibilities in managing a mass opioid casualty event as identified by participants in the workshop. The following list is intended for partners to understand each other's key roles in the first few critical hours of a mass opioid casualty event, the on-going management of the situation, and recovery phase. The list includes the most relevant roles and responsibilities for first responders, local and regional health services, and provincial, federal, and territorial partners.

i. Local & Regional Health Services

Public Health

Surveillance

- Determine the epidemiological triggers for an alert through analysis of surveillance data from partners.
- Create a community task force with terms of reference to share surveillance data on an ongoing regular basis including people who use drugs.

Communication

- Communicate dangers of exposure to opioids to community partners, people who use drugs, and the public through a preplanned multi-component strategy.
- Communicate the confirmed or suspected presence of high-risk opioids to the public.
- Share epidemiological and other relevant information with acute care and community providers.

Harm Reduction

- Assist with distributing naloxone in the community and support an urgent ramp up in the availability of naloxone to at-risk community members.
- Connect with community and street health partners to ensure people who use drugs have the proper training on harm reduction.
- Provide needle exchange and education programs.

Acute Care

Manage opioid cases

- Provide emergent healthcare and stabilize patients, prepare for a surge in visits, plan code orange responses, ensure the availability of ICU beds and naloxone, provide naloxone kits to users upon discharge, refer patients to the appropriate agency or services in follow-up, know and refer to the harm reductions services available in the community.

Communication

- Immediate communication regarding overdoses to the local public health agency, Ministry of Health and Long-Term Care (MOHLTC) Emergency Management Branch, partner hospitals, and relevant agencies including Public Health Ontario (PHO) as part of the hospital disaster plan.

Surveillance

- Count possible, probable and confirmed cases and record toxicology results.
- Assess patient medical history and identify possible links between cases.

Community and Street Health Clinics

Harm reduction

- Provide outreach services and send front-line workers into high-risk areas to help with risk communication and provision of harm reduction services.
- Provide naloxone kits, training, and refills for clients.
- Ensure availability of supervised consumption sites if warranted and effective needle exchange programs.
- Provide opioid agonist therapy, withdrawal management, and addiction and mental health services.

Education

- Disseminate information and notify staff and regular clients of dangers associated with opioid use.

Communication

- Communication to staff members, community partners, and people who use drugs on how opioids are entering the drug supply chain within the community.
- Utilize a community communication contact chain to reach clients and community partners.
- Collect and collate information from clients and determine whether the high-risk opioids are from a common source.

ii. First Responders

Paramedic Services

Provide primary and advanced care

- Respond to calls for service, provide emergency care to victims, transport patients to hospital, and prepare for surge requirements in call volume and naloxone.

Connect with para-medicine partners

- Communicate that there is a rise in opioid overdoses from baseline using the possible, probable, and confirmed case definitions, in the municipality with paramedic services and allied agencies immediately, and request assistance and resources from neighbouring paramedic services as needed.

Police

Communication

- Police were identified by many participants as the communication lead and therefore establish incident command and manage communications between first responders, emergency department, public health, and partners in an IMS structure.
- Provide a joint media release to the public via social media, press conference etc.

Enforcement
- Initiate an investigation to determine the source of illicit opioids.

Support paramedic services
- Assist with scene management.

Fire

Support first-response partners
- Support paramedic services responding to calls and providing first-aid at the scene to mitigate consequences of paramedic offload delays and overwhelmed resources.
- Provide HazMat services and support if required.

iii. Provincial, Federal, and Territorial Partners

Provincial/Territorial

Support
- MOHLTC Emergency Operations Centre (EOC) to support regions and municipalities with coordination and resources throughout a mass opioid overdose crisis utilizing the provincial Emergency Medical Assistance Team (EMAT) and National Emergency Stockpile System (NESS).
- Office of the Fire Marshal for Emergency Management (OFMEM) to coordinate and support a provincial response to a mass opioid overdose crisis utilizing the Provincial Emergency Operations Centre (PEOC) with the support of upper- and lower-tier municipal emergency operations centres (MEOC).
- PHO provides scientific support.

Surveillance
- MOHLTC and PHO conduct surveillance with local partners.

Communication
- Notify the LHINs of a response to an increase in opioid-related emergencies.
- The MOHLTC along with PHO provide a public health advisory.
- Assist with debrief for lessons learned.

Federal (PHAC)

Communication
- Assist with debriefing following a response to increased opioid-related emergencies for situations involving more than one province, and share the lessons learned with partners.

Policy development

- Inform provincial policy direction.
- Develop evidence-based policy across Canada.
- NESS availability if required.

Research

- Review scientific evidence and share what is happening across the country.

III. RECOMMENDATIONS

The following recommendations are suggested by KFL&A Public Health to address the feedback and challenges raised throughout the workshop regarding the response to, and prevention of, a mass opioid casualty event. In total, 15 recommendations emanated from discussion at the mass opioid casualty workshop. Some of the major challenges that were identified by participants included: determining the triggers for an urgent community response, communicating and coordinating between the various partners, responding to emergencies in rural communities, resource strain, privacy implications for investigative purposes, and after-action evaluation for continuous quality improvement and lessons learned.

These recommendations are intended for first response agencies, public health, healthcare providers, community and street health, provincial, federal, and territorial government agencies. It should be noted that some of the recommendations may be accompanied by existing practices.

i. Recommendations for first responders, public health, acute care, community and street health, municipal council, provincial, federal, and territorial partners.

1. ***Establish or join a local task force to address the opioid problem. Include officials from: public health, acute care, community and street health, first response agencies, the community emergency management coordinator, universities and colleges, school boards, and the regional coroners' office.***

Several participants from the workshop felt their agencies were not receiving up-to-date information on opioid-related trends and initiatives.

A local task force will allow municipalities and local partners/service providers to maintain regular communication and share new and emerging trends from surveillance data and analysis. The task force could also discuss and develop solutions to address current opioid-related issues in their communities and to prevent further harm from occurring.

Currently, local public health leads a local task force comprised of three local public health agencies, Kingston Police, Community Health Centres, hospital emergency departments, EMS, Ontario Provincial Police, and the coroners' office (see Appendix A for draft terms of reference). This task force meets monthly and has been successful in maintaining regular communication and sharing updates on surveillance data in a timely fashion and initiatives for harm reduction, education, and targeting the illicit supply of opioids in the region.

2. ***Develop a mass opioid overdose response plan in the event of a surge within the community. The plan, developed by local public health agencies, hospitals, the LHIN and first responders, could describe:***
    a. ***The various roles and responsibilities involved in the response by each sector.***
    b. ***Plans to share information including a list of key contacts, and the point or trigger at which specific agencies and officials at various levels of government should be contacted and informed of the increase in health events.***
    c. ***Plans to acquire additional support and resources should they be overwhelmed (i.e. pre-hospital response, treatment supplies, patient transfers).***

Coordination and planning was identified by all participants as integral for responding to a mass opioid overdose crisis. Participants expressed concern over coordination, and not knowing who should be contacted, and at what point in the response they should be contacted.

Interagency collaboration is required to coordinate communications, resources, and to develop a plan to meet short and long-term targets. Emergency preparedness involves understanding the roles and responsibilities of your and partner agencies. Developing a response plan will provide more effective coordination, minimize response times, and ultimately save lives.

3. ***Local level officials collaborate with provincial, federal, and territorial partners to debrief following a response and disseminate lessons learned to partners within and outside of province.***

It was noted by provincial/territorial and federal partners that after-action is often overlooked.

Each organization playing a role in a response effort to manage an increase in opioid-related harms should evaluate their response and associated outcomes to ensure continuous quality improvement and identify solutions to improve the emergency response. The provincial, federal, and territorial governments will assist with debriefing and developing and disseminating the lessons learned on what worked and what aspects require improvement.

4. ***Increase public awareness on opioid-related harms and educate the community on how they can contribute to the solution. The funding and resources necessary to ensure information is being disseminated should be secured.***

The workshop demonstrated the need to share information with the public regarding the dangers of opioid use or unintentional exposure to opioids.

All organizations and service providers should have a role in a public awareness campaign utilizing various methods of information sharing including pamphlets, news media, social media, presentations, and town hall meetings. Communication to the public should be conducted in collaboration with the local public health unit to ensure information being received by the community is valid and up-to-date.

5. ***Local public health agencies coordinate with other community partner educational sessions, and assist in disseminating informational material to frontline community partners and the public.***

Participants identified a lack of education and training for employees in their respective agencies.

Education and training for frontline workers can minimize the harms associated with illicit opioids. Frontline agencies, including first responders, and community and street health partners, in collaboration with the local public health agency, could provide adequate training and education to their employees about the dangers of exposure to high-risk opioids including fentanyl and carfentanil, and the proper handling procedures for these substances. Training for front-line workers could also include how to provide first-aid and administer naloxone to an overdose victim. Education and training will aid in understanding the importance and severity of opioid-related harms and help to provide safer, more effective services to the public.

6. ***Develop standardised descriptive diagnostic coding scheme across the province to improve surveillance for opioids and communication amongst healthcare providers.***

Participants employed in health-related sectors expressed a need for a common language or diagnostic codes across the province. When information is received from other healthcare providers, there is confusion surrounding the reason for patient visits (i.e. respiratory arrest/VSA/overdose/substance misuse) and the sensitivity and specificity of surveillance systems to detect a signal from the data or a cluster or change from baseline.

The development of a standardized diagnostic coding scheme for opioid-related health emergencies will improve surveillance capabilities and communication between healthcare providers as well as emergency departments and paramedic services, and increase the efficiency of a community response when managing an increase in opioid overdoses.

ii. Recommendations for public health.

7. ***Local public health agencies could develop and deliver a communication strategy in collaboration with schools which includes information for teachers, parents, and students.***

Discussion amongst participants concerning recent opioid overdose deaths in Ottawa revealed the need for a strategy to communicate the dangers of opioid exposure to youth, parents, and teachers.

The recent fentanyl-related death in Ottawa involving a 14-year-old has demonstrated the young age at which individuals can be exposed to opioids. In partnership with school boards, public health agencies could develop an effective communication strategy to: a) educate and increase awareness among youth about the dangers of exposure to opioids, b) reduce stigma surrounding addiction and seeking treatment, and c) educate youth, parents and teachers on how they can prepare themselves to assist a potential overdose victim.

8. ***Local public health agencies in the province could conduct surveillance of hospital ED visit and admission, paramedic services, coroner, and naloxone distribution/usage data to detect surges in baseline opioid overdoses.***

Real-time surveillance and dissemination of overdose data was identified by participants as a key mechanism to being able to perform their independent roles effectively in the face of a crisis.

KFL&A Public Health conducts syndromic surveillance on a real-time basis as data is forwarded from local hospitals to the public health agency electronically in the Acute Care Enhanced Surveillance System (ACES). In turn, the public health agency is able to detect surges in baseline overdose data from emergency department visits within the region triggering an alert to health service providers and community partners of a potential need for an urgent community response.

iii. Recommendations for public health, community and street health, provincial, federal, and territorial partners.

9. ***Increase the distribution of naloxone kits to community and street health providers, people who use drugs, friends and families, and students in high-risk areas including rural First Nations communities, and increase the number of pharmacy partners.***

Provision of a naloxone supply and enhanced medical care to rural First Nations communities were identified as challenges in responding to a mass opioid overdose incident in this jurisdiction.

The high rates of substance use in First Nations communities (CMA, 2015; Health Canada, 2011; MHCC, 2012) coupled with lengthy emergency response times to rural areas illustrates the need for naloxone kits and training to be made readily available to individuals in high-risk communities.

10. ***Facilitate and increase the availability of treatment and counselling for substance use disorders, needle exchange and safe disposal sites, and naloxone kits for people at-risk of experiencing or witnessing an opioid overdose.***

Participants felt that efforts to manage opioid overdoses were largely focused on reactive approaches.

There is a need for preventative approaches through improved treatment and counselling for substance use disorders, and harm reduction efforts. Effective harm reduction strategies will minimize the harms associated with substance use and prevent the spread of disease by eliminating the need to share needles.

iv. Recommendation for police and provincial, federal, and territorial partners.

11. ***Police, in collaboration with judicial system partners, could target the sources of illicit opioids, and develop a plan to divert individuals with substance use disorders away from the criminal justice system to seek appropriate treatment and counselling.***

There was concern among participants that too much police involvement would lead to an enforcement approach to a public health issue. Police also identified the inability to retrieve information from patients in hospital as a challenge to fulfilling their investigative role effectively.

An enforcement approach to a public health issue does not address the root cause of the problem. Police, in collaboration with partners of the judicial system, could focus their efforts and resources on reducing the supply of illicit opioids, and divert individuals with substance use disorders away from the criminal justice system towards appropriate treatment. If patients are afraid of criminal charges for using substances, they may be reluctant to provide information to the police that could be crucial to an investigation.

v. Recommendation for EMS and provincial, federal, and territorial partners.

12. Increase the supply of naloxone to EMS partners funded by the MOHLTC.

EMS participants identified a limited naloxone supply as a challenge to providing pre-hospital care in an opioid overdose surge.

Currently paramedic crews only carry enough naloxone for two patients. It is possible that a single patient may require multiple doses of naloxone to reverse the effects of an opioid overdose. Provincial and territorial governments could work jointly to provide EMS partners with an increased stock of naloxone and increase the amount of naloxone carried in each ambulance.

vi. Recommendations for provincial, federal, and territorial partners.

13. Provincial, federal, and territorial governments, with capacity to support an increase in demand for naloxone, could support strategies to respond to a mass opioid overdose emergency in rural communities.

Participants identified that responding to rural communities would be difficult and potentially have lengthy response times.

The impact of opioid use is felt most strongly amongst vulnerable populations including youth, seniors, First Nations, and those living in poverty (CMA, 2015). Strategies to reduce the time it would take to respond to a potential increase in opioid-related health emergencies in a rural community, including patient transport to hospital, should be developed and implemented.

14. Health Canada could develop a streamlined system for toxicology testing where an opioid overdose has been suspected.

Acute care, public health, and police participants expressed concern about how long toxicology results took to identify the drug associated with an overdose.
Currently, it could take up to several weeks to receive toxicology results. In the case of an opioid overdose surge, timely results would allow healthcare practitioners to confirm the diagnosis,

speed-up the investigation, and help prevent further overdoses. Local task forces should create an opioid testing protocol in advance that would result in the most rapid detection of the responsible opioid(s).

15. Police and fire services in high-risk communities could be equipped to administer naloxone to potential overdose victims.

This recommendation was mentioned in discussion as a future consideration for police officers and firefighters to carry naloxone in communities with high rates of overdoses.

The *Good Samaritan Act* (S.O. 2001, c. 2) would provide legal protection for anyone providing reasonable care to an individual in an emergency. Fire services often have better response times than EMS and police often patrol communities where drug use is visible in the streets. In these circumstances, the ability for firefighters or police officers to administer naloxone may, in some cases, be the difference between life and death.

IV. Illicit Opioid Overdose Surge Response Plan

There was consensus that an IMS should be activated in response to a significant surge from baseline of opioid overdoses, however exact details regarding a framework were not discussed. The following opioid overdose surge management framework has been proposed.

This decision instrument is intended to act as a roadmap for deciding when to activate an IMS (figure 1) based on the case definition (figure 3). Figure 2 illustrates the various components required for an emergency control group when an incident meets the decision criteria and an IMS is activated. The Opioid Overdose Surge Response Plan (figure 3) is a process to prepare for, respond to, and recover from an unusual or unexpected public health threat. It is important to note that IMS is not a light switch; it is possible to initiate IMS protocol early, as one individual may perform multiple IMS functions, and the level of response may be escalated as necessary.

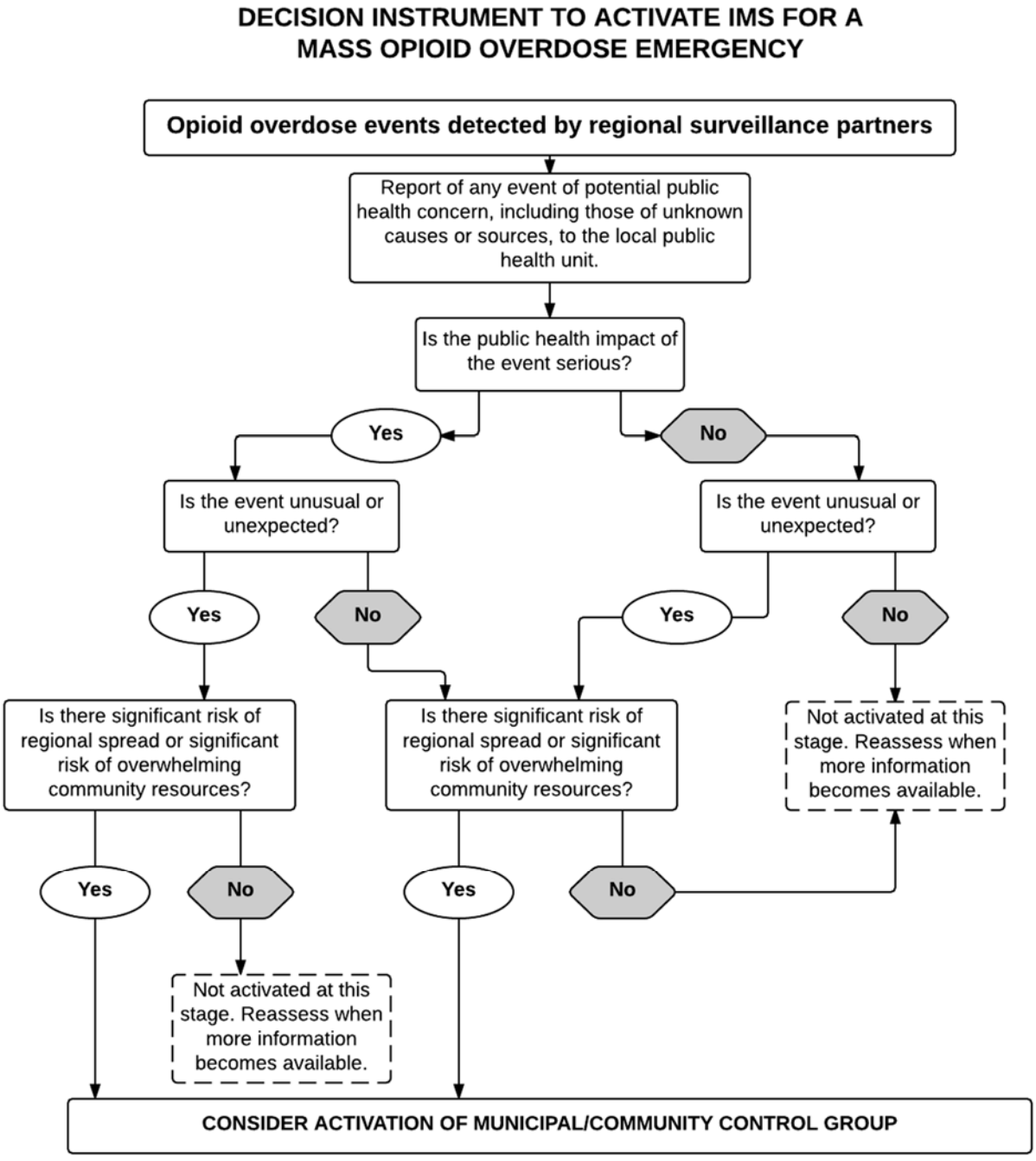

Figure 1. Decision Instrument to Activate Incident Management System. Adapted from the WHO (2008) International Health Regulations (2005) 2nd ed.

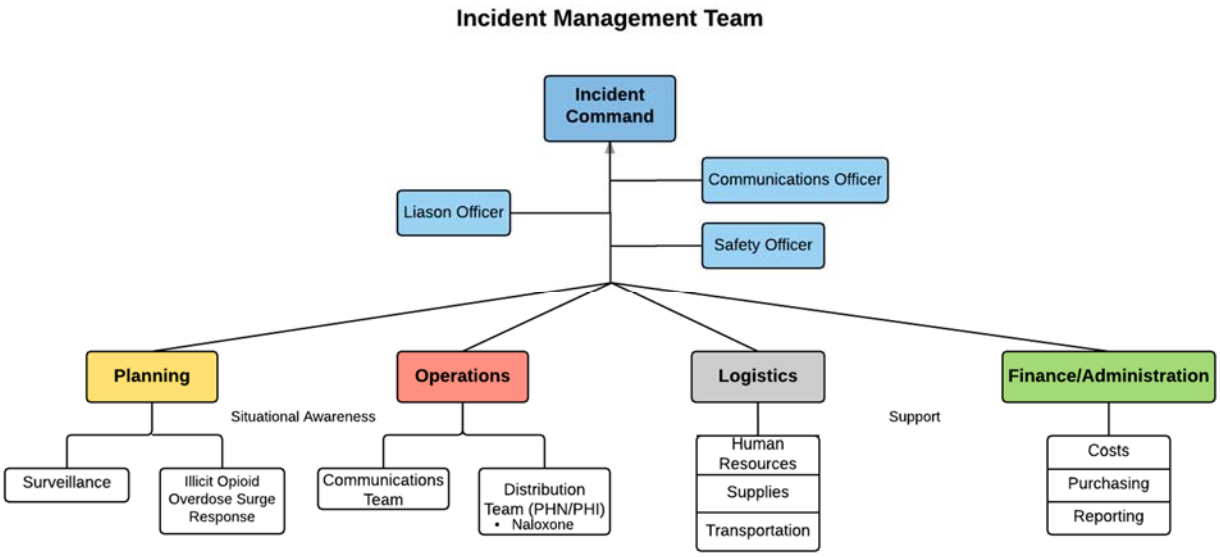

Figure 2. Public Health Opioid Overdose Surge Incident Management Structure.

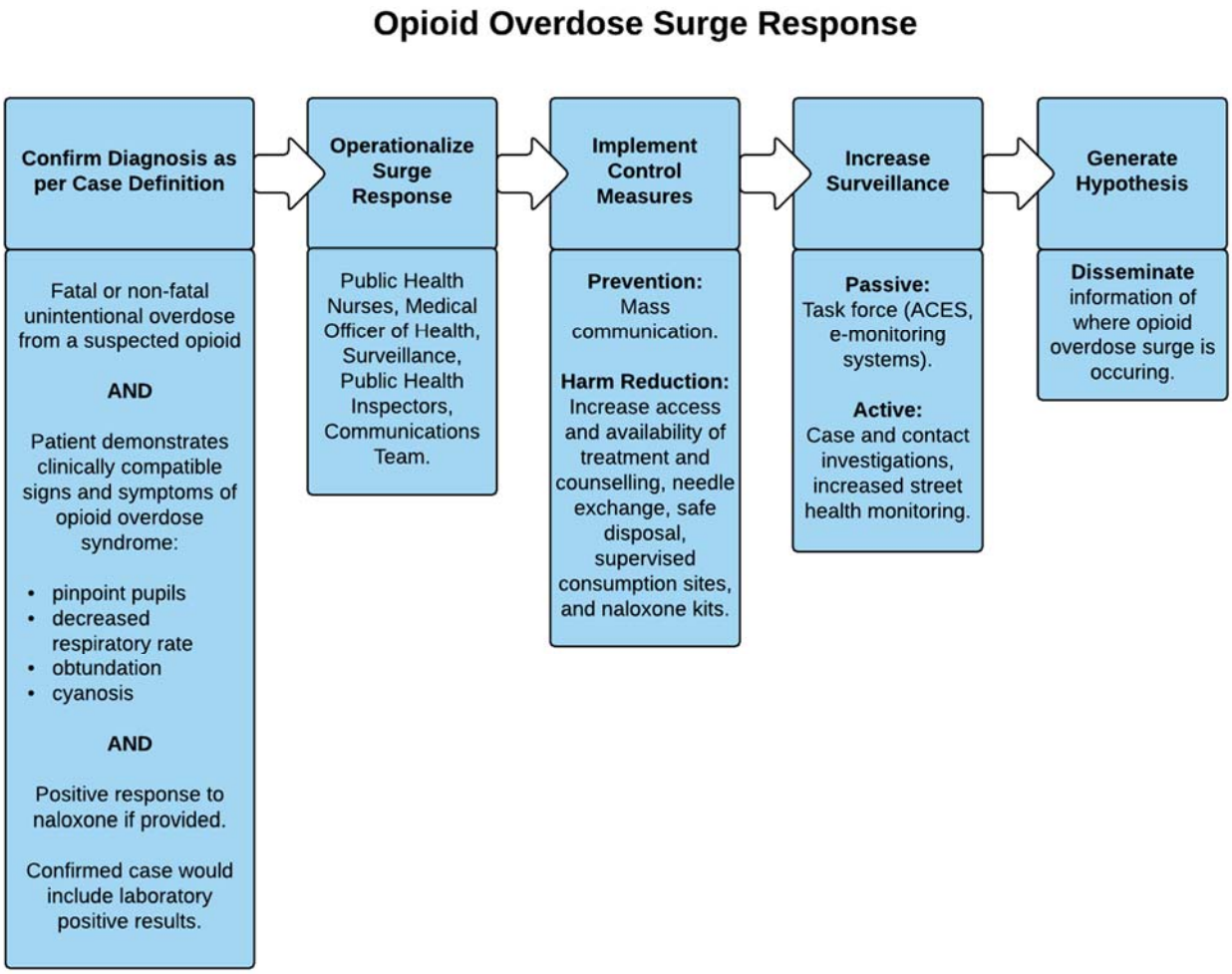

Figure 3. Opioid Overdose Surge Response as part of the planning function of an Emergency Control Group.

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Appendix A

Terms of Reference: Joint Agency Group on Drugs of Abuse

1. Purpose

To provide a forum for effective communication, coordination, and collaboration between agencies on narcotic and drugs of abuse control issues.

2. Activities

a. Provide awareness and share information of importance to the member agencies and other relevant enforcement agencies as needed.

b. Address and make recommendations on issues affecting narcotic/drugs of abuse control.

c. Co-ordinate enforcement and policy activities as needed.

3. Membership

Membership is on a voluntary basis and will be representative of all member agencies.

Kingston, Frontenac and Lennox & Addington Public Health, Hastings and Prince Edward Counties Health Unit, Leeds, Grenville & Lanark District Health Unit, Ontario Provincial Police, Royal Canadian Mounted Police Customs & Excise Unit, Kingston Police Force, Canada Border Services Agency Lab, and Ministry of Revenue -Special Investigations Branch, Regional Coroner, EMS/Fire, Street Health, Needle Exchange program, and others.

4. Roles

4.1 Chair

A representative from KFL&A Public Health shall act as Chair.

4.2 Recorder

The recorder will be assigned on an alphabetical rotating basis according to last name.

5. Decision-making

Decisions are made by consensus of the committee. Where no agreement is reached, that matter may be decided by the Chair or referred for future consideration by the committee.

6. Meetings

The committee will meet quarterly, or more frequently as needed.

7. Documentation

The events of each meeting will be recorded and distributed to all committee members. Relevant documents will be appended for reporting purposes. A copy of the minutes will be kept on file by the Chair.