

INTERVENTION SUPPORT TOOL



AUTHOR

Éric Langlois, M. Sc., Scientific Advisor Direction de la santé environnementale et de la toxicologie

GROUPE DE TRAVAIL POUR LE DÉVELOPPEMENT DES FICHES DE SIGNALEMENT ET DU QUESTIONNAIRE D'ENQUÊTE (APPENDICES 3, 4 AND 5)

Under the coordination of

Éric Langlois, M. Sc., Scientific Advisor

Direction de la santé environnementale et de la toxicologie

Jean-François Betala-Belinga, M.D., M. Sc., CSPQ, FRCPC, Physician Advisor

Direction de santé publique du Centre intégré universitaire de santé et de services sociaux

du Saguenay-Lac-Saint-Jean

Huy Hao Dao, M.D., Ph. D., FRCPC, Physician Advisor

Direction de santé publique du Centre intégré universitaire de santé et de services sociaux de la Montérégie-Centre

Maryse Duchesne, B. Sc., Nursing Advisor

Direction de santé publique du Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale

Pascale Leclerc, M. Sc., Research Officer

Direction de santé publique du Centre intégré universitaire de santé et de services sociaux

du Centre-Sud-de-l'Île-de-Montréal

Carole Morissette, M.D., FRCPC, Physician Advisor

Direction de santé publique du Centre intégré universitaire de santé et de services sociaux

du Centre-Sud-de-l'Île-de-Montréal

EDITING AND LAYOUT

Véronique Paquet, Administrative Officer Direction de la santé environnementale et de la toxicologie

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Nina Alexakis Gilbert, Angloversion

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Direction de santé publique du Centre intégré universitaire de santé et de services sociaux du Centre-Sud-de-l'Île-de-Montréal

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Urgences-santé

FOREWORD

The Institut national de santé publique du Québec (INSPQ) is a centre of expertise and reference in public health in Québec. Its mission is to support Québec's Minister of Health and Social Services, regional public health authorities and health and social services institutions in fulfilling their public health responsibilities, by offering its expertise and specialized laboratory and screening services.

In addition, the regional directors of public health are responsible, by virtue of the Act respecting health services and social services (see Appendix 1), for identifying situations likely to endanger the health of the population in their region and for ensuring that the necessary measures are put in place to protect it. To accomplish this, they are authorized under the Public Health Act, along with the Minister and the National Director of Public Health, to intervene if the health of the population is threatened.

Given the INSPQ's mission and the powers and responsibilities of the above-mentioned public health authorities, the Ministère de la Santé et des Services sociaux mandated the INSPQ to develop this practical guide for regional public health authorities to support the management of reports and episodes of excess drug overdoses.

This request stems in part from concerns associated with the episodes of excess drug overdoses that took place in the Montréal and Québec City regions in 2014 and 2015, respectively. These episodes of excess overdoses constitute a health threat and are part of a trend observed in Canada, the United States and elsewhere in the world.

Given this context, and in response to the need expressed by the Ministère de la Santé et des Services sociaux and by certain public health departments, it was deemed necessary to better equip public health actors to intervene during episodes of overdoses. To this end, we present here a number of courses of action in the form of a practical guide.

The aim of this initial guide is to support public health authorities in exercising their responsibilities through actions taken in the context of drug overdose situations. It may be amended over time, as necessary. It must be aligned with the capacities and means of the public health departments for which it is intended. Its aim is to facilitate a fair, timely and effective response to episodes of overdoses.

This guide is intended to complement proven public health protection practices, such as those discussed in Québec's reference framework for public health risk management (La gestion des risques en santé publique au Québec : cadre de référence). It deals specifically with the subject of drug overdoses and the particularities that distinguish their management from the usual risk management methods. The content is based on current practices related to public health

investigations and interventions in situations where there are excess overdoses. Such practices have been applied previously, including during the overdose waves that took place in 2014 and 2015 in Montréal and in Québec City respectively.

The composition of this guide is consistent with Axis 4 (management of health risks and threats and health emergency preparedness) and Axis 2 (adoption of lifestyles and creation of healthy and safe environments) of the Québec Public Health Program for 2015-2025, as well as with its resulting tripartite thematic action plan. It also aligns with the organizational priority of addressing the issue of "psychoactive substances" identified by the INSPQ in 2015.

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GLOSSARY

Adulterant: substance added as a diluent to a drug. It may be inert or pharmacologically active. Often synonymous with "cutting agent" (1).

Contaminant: a by-product of the manufacturing process (2).

Counterfeit: fraudulent and deliberate imitation of a product or medicine intended to deceive the user about its identity and/or origin. Such products may contain no active ingredient, another active ingredient, or the expected active ingredient in the correct or wrong dosage.

Drug: a generic term used to refer to any substance that alters mental processes and whose use can lead to abuse or dependence. In common parlance, the term "drug" often refers to illicit drugs such as methamphetamine, cocaine, heroin (3). It may also refer to certain prescribed medications, such as opioids, in the context of abuse.

Naloxone: opioid-specific antidote. Naloxone temporarily blocks and reverses the effects of an opioid overdose.

Overdose: serious or fatal intoxication where the user has consumed a dose that is too high for their body to handle. Translation of the French term *surdose* (3).

Product: word used in this document to mean "an assemblage of legal and/or illicit substances intended for a user." A product can take many forms and usually contains one or more psychoactive substances (e.g., ecstasy tablet, fentanyl patch).

Psychoactive substance: any substance that acts on the central nervous system, modifying sensory perceptions, the state of consciousness, intellectual processes or overall behaviour, regardless of the type of effect induced (depressant, stimulant or hallucinogen). A term often used as a synonym for "drug" (3).

Substance: synonym for "chemical compound."

Substitute: pharmacologically active substance added to replace, in whole or in part, the expected substance, without the knowledge of the user.

Threat: the presence within the population of a biological, chemical or physical agent that may cause an epidemic if it is not controlled, as per the Public Health Act (4). Generally, it is associated with a significant health risk.

LIST OF ABBREVIATIONS AND ACRONYMS

CAPQ Centre antipoison du Québec (Québec antipoison centre)

CHUSJ Centre hospitalier universitaire Sainte-Justine (Sainte-Justine university

hospital centre)

CISSS Centre intégré de santé et de services sociaux (integrated health and

social services centre)

CIUSSS Centre intégré universitaire de santé et de services sociaux (integrated

university health and social services centre)

CRD Centre de réadaptation en dépendance (addiction treatment centre)

CTQ Centre de toxicologie du Québec de l'INSPQ (the INSPQ's toxicology

centre)

DAS Health Canada's Drug Analysis Service

DSPublique Direction de santé publique (public health department)

INSPQ Institut national de santé publique du Québec (Québec public health

institute)

LSJML Laboratoire de sciences judiciaires et de médecine légale (forensic science

and legal medicine laboratory)

MSSS Ministère de la Santé et des Services sociaux (department of health and

social services)

PEMS Pre-hospital emergency services

PHA Public Health Act

RSSS Réseau de la santé et des services sociaux (health and social services

network)

BACKGROUND 1

Drug use is a current phenomenon creating concern among public authorities and the population (5, 6). It represents an important public health issue because of the significant social and health impacts associated with it. Overdose, with or without death, is a serious health consequence of drug use. Throughout North America, overdoses are on the rise (7-9). This is part of a global trend in which the emergence of a large number of drugs (10-12) and of highly potent drugs is being observed (13-16). Increased use of opioid medications, both for medical (17-18) and non-medical purposes, is also associated with this trend.

In the United States, the rate of deaths from drug overdoses increased by 137% between 2000 and 2014, and by 200% for opioids alone (7). Drug induced deaths are now the leading cause of injury deaths in the United States, surpassing those caused by motor vehicles or firearms (19).

Canada is also experiencing a serious opioid-related overdose crisis. In 2016, there were 2,861 apparent opioid-related deaths in Canada (20).

In British Columbia, the drug overdose mortality rate doubled between 2010 and 2015, despite the province's expansion of harm reduction services (21). Numbers continued to rise so significantly that in 2016 provincial authorities declared a public health emergency for the first time in their history (6). For purposes of comparison, the number of drug overdose deaths in this province in 2016 was over three times higher than the number of traffic fatalities that occurred in the previous year (22-24).

In Ontario, the rates of deaths due to drug and opioid overdoses have exceeded the rate of deaths due to motor vehicle collisions for several years, and the upward trend continues (25).

In Québec, the mortality rate due to opioid intoxication has been steadily increasing since 2000 (26). Although in 2016 this rate was among the lowest in Canada (20), Québec is not immune to experiencing a crisis such as the one seen in western Canada. Thus, the Minister of Health and Social Services launched an epidemiological investigation in the spring of 2017, as provided for under the Public Health Act (PHA), based on the apprehended threat to the health of the population represented by opioid overdoses.

The Montréal and Québec City regions experienced episodes of excess overdoses in 2014 and 2015, respectively. These events led regional public health directors along with the department of health and social services (MSSS) to launch Québec's first public health epidemiological investigations related to drug overdoses (27, 28).

Given the increase in the number of overdoses and of episodes of excess overdoses, it is clear that we are facing the emergence of a real public health problem, which requires new cooperative efforts and the development of knowledge that extends beyond traditional public health practices. To respond to this need, it appeared necessary to better equip public health actors to manage such events, in accordance with the framework of their responsibilities (4).

This guide may help to reduce organizational delays and optimize the appropriateness of responses when an excess of overdoses occurs in a region. It is presented in the form of a practical guide in order to facilitate its assimilation and its use to support intervention in situations involving reports or episodes of drug overdoses. It will help guide action when overdoses are reported by providing a common understanding of various aspects related to preliminary analysis, investigation and intervention by public health.

This guide must be incorporated into a broader approach involving other public health functions (surveillance, health promotion, prevention), which exceeds the scope of this guide.

The guide begins by presenting the various actors who may be involved in the intervention process. The main body details the different aspects of the process undertaken by public health authorities: reporting, preliminary analysis, epidemiological investigation, intervention and evaluation. The appendices provide tools for reporting overdoses and conducting investigations as well as various types of information about potential partners.

THE RESPONSIBILITY OF PUBLIC HEALTH 2

Since an excess of drug overdoses implies a health threat of a chemical nature as defined by the PHA, public health authorities have a responsibility to put measures in place to protect the population. To this end, it is necessary to clearly identify the professionals or the team responsible for this problem in each of the regional public health departments (DSPubliques), upstream of any report, so that reports of overdoses or excess overdoses can be quickly and adequately managed. Alternatively, if a director of public health does not have the necessary resources within their team, they may choose to identify a professional or a team within another department of the integrated health and social services centre or integrated university health and social services centre (CISSS/CIUSSS), with whom they have formed an agreement.

The purpose of this guide is not to identify precisely who should be responsible, but rather to make authorities aware of the importance of identifying who is responsible for the issue within their organization so as to develop the expertise required to appropriately manage the issue and to be better prepared to act in a timely manner. Assigning such responsibility will also help determine who will receive this practical guide within the various organizations and encourage its assimilation.

THE VARIOUS PARTNERS AND ACTORS 3

Although public health authorities have the power to investigate and intervene when the health of the population is threatened (4), it is important to recognize that a significant portion of the information, data and expertise required to enable them to act lies in the hands of various actors or organizations. It is therefore particularly important to be familiar with these potential partners and to mobilize their involvement when the situation requires it. Ideally, a network of these partners should be developed to ensure better and more timely support.

In the context of a cluster of drug overdoses, some of the relevant organizations may not be traditional public health partners. Some may work in the health sector, whereas others may work in the public safety or community sectors.

It therefore seems relevant to take the time now to obtain an overview of these various partners and their missions. To this end, the reader is invited to review the table in Appendix 1, which provides an overview of these various key partners and the nature of their contributions to the management of overdose clusters. This table will facilitate understanding of some of the elements presented later in this guide.

Key partners include:

- The Bureau du coroner (coroner's office);
- Ambulance services; first responder services; CISSS/CIUSSS pre-hospital emergency services (PEMS);
- Centre antipoison du Québec (CAPQ);
- Institut national de santé publique du Québec (INSPQ) (advisory services and monitoring);
- Reference laboratories:
 - Centre de toxicologie du Québec (CTQ) de l'INSPQ;
 - Laboratoire de sciences judiciaires et de médecine légale (LSJML);
 - Laboratoire de biochimie spécialisée du Centre hospitalier universitaire Sainte-Justine (the CHUSJ's specialized biochemistry laboratory);
 - Drug Analysis Service (DAS) of Health Canada;
- Police services:
- Hospitals (emergency and intensive care);
- Addiction treatment centres; CISSS/CIUSSS directions des programmes santé mentale et dépendances (mental health and addiction programs divisions);

- Community organizations or public agencies providing services to drug users (and other organizations working with persons in vulnerable situations);
- Peer groups or drug user associations;
- Any other organization deemed relevant.

In some cases, it may be necessary to clarify the roles and responsibilities that some of these partners will be called upon to fulfill and the information they can provide to other partners in the context of public health interventions aimed at controlling the drug threat. This will be discussed in the next section.

FROM REPORTING TO INVESTIGATION TO EVALUATION 4

To fulfill their responsibilities with regard to any situation that may present a real or apprehended threat to the health of the population (a chemical, biological or physical threat), public health authorities must receive reports, perform a preliminary analysis and, if necessary, carry out an epidemiological investigation that will allow them to characterize the risk and determine and implement the measures required to protect the health of the population. The chemical threat created by any drug causing an excess of overdoses is approached in this manner.

Furthermore, waves of overdoses constitute an emerging public health problem that requires new cooperative efforts and the development of knowledge that extends beyond traditional boundaries of public health.

This section therefore presents a practical overview of different aspects related to drug reports and investigations that can support the interventions of public health authorities. The factors specific to drugs are examined with a view to helping optimize these interventions.

Often, when drug overdoses are reported, the emergency or nearemergency situation means that certain steps in the risk management process must be carried out in an expedited manner (29), based on the data available. Thus, the challenges faced are tied to the complexity, uncertainty, ambiguity or potential urgency of the situations encountered (29). Nevertheless, in such situations it is necessary to characterize the risk and the threat, then to appropriately alert, if needed, and implement a suitable response. The solution includes mobilizing and coordinating a network of key partners.

Reporting, preliminary analysis and management options 4.1

Upon receipt of a report, a preliminary analysis of the situation should be conducted based on summary information to determine the appropriate management option. In this section, some answers to the following questions will be provided:

- Does the report fall within the responsibility of public health?
- Does the report describe a situation that meets the definition of a threat to the health of the population?
- Where does one obtain the data and information needed to document the situation and thus support informed decision-making?
- Is a public health intervention required?

What are the options to consider?

4.1.1 Report reception and sorting

Any public health process related to a potential episode of drug overdoses usually begins with a report being sent to a regional DSPublique or the provincial public health authorities by a person or organization that has reason to believe the health of the population is or may be threatened (PHA, c. X (4)). Such a process may also be initiated without a report being sent when a DSPublique has reason to believe that the health of the population is or may be threatened, based, for example, on available surveillance data.

A threat may be signalled in different ways depending on the situation and the source of the information. Thus, a threat may be signalled by any of the following situations, or a combination thereof:

• The occurrence of drug overdoses.

The sources of this information may be diverse (health care system, community organization, treatment centre, etc.). Drug overdoses can be reported using one of the proposed reporting forms in Appendices 3 and 4 (see Section 4.2.3 for details).

An unusual drug seizure.

The police are the source of this information.

• Circulation of a drug that raises concerns.

The sources of this information may be diverse (community organization, treatment centre, police, etc.).

Formal identification of a substance contained in a drug or biological sample.

Reference laboratories are the source of this information.

Following receipt of a report, it may be necessary to contact the declarant to validate the information and, if necessary, obtain additional information. It is important to note that under section 95 of the PHA, the declarant is not permitted to disclose personal or confidential information (unless it is requested by a public health authority in the course of an epidemiological investigation).

When a report is received, it is necessary to determine whether the situation reported should be managed by public health authorities. To answer this question, it is important to determine whether the reported problem represents a threat to the health of the population (PHA, s. 2 (4, 30)). A report of an overdose may not require action by public health authorities, particularly if it does not meet the definition of a threat to the health of the population. A preliminary analysis of the situation is therefore required (see Sections 4.1.1 and 4.1.2) to sort reports, based on, among

other things, the definition of a threat to the health of the population, and to judge whether it is relevant for health authorities to take charge of the situation.

4.1.2 Estimating the magnitude of the situation

In the circumstances being discussed, the notion of a "threat to the health of the population" refers to the presence of a drug liable to cause an epidemic (30) of overdoses or serious health effects if its presence is not controlled (4). An initial analysis of the situation can therefore be based on the number of overdoses reported.

A number of overdoses that does not suggest an abnormal situation is generally more of a clinical responsibility than a population health issue, as it is insufficient to presume the presence of an overdose epidemic. However, the possibility of the situation escalating and potentially requiring intervention cannot generally be ruled out. It therefore seems legitimate to remain vigilant and ensure communication with the reporting partner and/or other key partners (see Section 3) in order to monitor the evolution of the situation and to benefit from any additional information that could potentially justify the intervention of health authorities. In certain specific cases, it may be appropriate to issue a call for vigilance.

A small number of overdoses could, despite its size, require management by public health authorities if, for example, the level of risk is considered too high (31) (see Section 4.1.2).

A higher than normal number of overdoses may require action by public health authorities, particularly if the number reported exceeds the number of overdoses previously observed in the region concerned. While it would be relevant to have access to this information, it is not usually directly available, which is a limitation that impedes the process.

However, at the time of publication of this report, the INSPQ was maintaining an overdose monitoring system (overdose deaths, emergency room visits, administration of naloxone by ambulance services, calls to the CAPQ, etc.). This system was developed as part of the epidemiological investigation launched in the spring of 2017 by the Minister of Health and Social Services, as provided for under the PHA. The system was accessible to all public health departments through the INSPQ's infocentre portal. The sustainability of this monitoring system beyond the conclusion of the epidemiological investigation was still uncertain at the time of writing. In the event that this system is still in operation, it represents an essential tool for use in estimating the extent of the situation.

Alternatively, in the absence of this monitoring system, data can be obtained from various partners for the purpose of assessing whether there is an excess of overdoses as compared what would be considered the "normal" situation. Below are some examples:

- The number of deaths caused by or associated with a drug overdose can be obtained from the coroner's office, which is responsible for investigating causes of death, such as cases of intoxication;
- Information about calls received at the CAPQ concerning drug intoxication can be obtained from this same agency;
- The number of drug-related interventions carried out by ambulance services and first responders can be obtained from the pre-hospital emergency services at the CISSS or CIUSSS concerned. Alternatively, this number can be obtained directly from these services. For the Montréal and Laval regions, this information can be obtained from Urgences-santé.

4.1.3 Estimating the level of risk

In addition to the number of overdoses, there are additional kinds of information that can be taken into account in an effort to fully understand the problem and its context. This information can help to better characterize the risk and lead to a more informed decision about whether to take charge of the situation. It is therefore appropriate to take the necessary steps to obtain the information relevant to an evaluation of the situation.

For example:

- Clinical presentations:
 - Have any deaths been reported?
 - Have any unusual and severe symptoms been reported?
- Epidemiological situation:
 - Have there been similar reports in other regions recently?
 - Are the reported overdoses related to the use of the same product (drug)?
- Product:
 - Does the product contain a different substance than the one expected?
 - Does the potency of the substance pose an additional risk?
 - Is the substance new or unfamiliar?
 - Does the use involve a mixture, whether expected or not, of substances?
 - Is the product in question a counterfeit of a pharmaceutical version or of another product intended for human use?

- Do the purity, the doses, an unexpected variation in doses, or the repetition of doses (such as when a second dose is taken before the first dose has taken effect - because the user believes the initial dose is too low to achieve the desired effect) pose an additional risk?
- Does the packaging suggest that the product is legal and therefore "safe" from the user perspective?
- Does the method of use or route of administration pose an additional risk?
- Is the product being used concurrently with another product (e.g., alcohol, benzodiazepines, etc.) that poses an additional risk?

• Setting:

- Does use take place in a setting that poses a particular risk?
- Have there been any significant drug seizures recently (likelihood of significant market presence or supply displacement)?
- Are there any upcoming events where there is a reasonable expectation of increased drug flow (e.g., electronic music festival (32))?

This information can be used to better assess the level of risk and to estimate the position of the situation on the World Health Organization's (WHO) risk matrix, reproduced in Québec's reference framework for public health risk management (La gestion des risques en santé publique au Québec : cadre de référence) (29).

These types of contextual information may be sourced elsewhere than from public health authorities. Therefore, it may be necessary to solicit key partners (see Section 4.2.2) to obtain the data available and assess the level of risk. Doing so can lead to more informed decisions about what to do next.

4.1.4 Management options

At the end of the preliminary analysis, and depending on the situation, there are different options for management (not mutually exclusive):

- No action: the report does not describe a situation that meets the definition of a health threat and there is no reason to believe that the health of the population is or may be threatened.
- **Heightened vigilance**: the report does not describe a situation that fully meets the definition of a health threat, but the health of the population could potentially be threatened. It may be appropriate to heighten vigilance so as to gather additional information and to actively track down new cases with the support of key partners (see Section 3).

- **Epidemiological investigation:** the report describes a situation that meets the definition of a health threat and there is reason to believe that the health of the population is or may be threatened. The launch of an epidemiological investigation allows for the exercise of additional powers under the PHA.
- Immediate communication: depending on the situation, for purposes of prevention or protection, it may be appropriate to communicate, in the short term, with various recipients. In particular, it may be appropriate to issue a call for vigilance to clinicians, community actors, ambulance services, first responders, or police services, based on the reports received and any additional information available (see Sections 4.2.5 and 4.2.6). It may also be appropriate to issue a communication intended for users, certain vulnerable groups or the general population (see Sections 4.2.5 and 4.2.6).

The challenge here is to manage the uncertainty resulting from often fragmented or uncertain information so as to make an informed and timely decision about whether or not to take charge of the situation and what approach to adopt.

4.1.5 INSPQ advisory services

For assistance with reporting, conducting a preliminary analysis, managing a situation or launching an investigation related to drug overdoses, you can contact:

- During office hours:
 - Éric Langlois, Scientific Advisor at the INSPQ, at 418 650-5115, ext. 4644 or at eric.langlois@inspg.gc.ca. In case of absence: 418 650-5115, ext. 5254.
 - During office hours, advisory services also include support for monitoring and reviewing calls for heightened vigilance.
- After hours:
 - the INSPQ's on-call environmental health physician, by calling the Centre antipoison du Québec, at 1 800 463-5060.

Epidemiological investigation 4.2

Where there is reason to believe that the health of the population is or may be threatened, it may be necessary for a public health director to conduct an epidemiological investigation (as described in the PHA, c. XI (4)). In this case the PHA provides for an extension of powers, allowing access to certain information and authorizing the implementation of measures to protect the health of the population (4). The objective of such an investigation is to characterize the situation that threatens the health of the population (causes, circumstances, risks, etc.) and to implement the appropriate measures, as required to prevent it from worsening, to reduce its effects or, ultimately, to eliminate it.

When such an investigation is launched, it is important to consider various factors that may be associated specifically with drugs. These factors are discussed in this section, which is informed in part by the first two drug-related epidemiological investigations that were launched in Ouébec.

It is well to remember the importance of having an action plan, even a limited one, when there is a health threat, and to call upon the appropriate partners, who can support the process in drug-related matters.

4.2.1 Case definition

In order to actively search for new cases, it is necessary to develop a case definition as part of the epidemiological investigation. This is initially developed using the information available at the beginning of the investigation, which is usually based on data received in initial reports and from certain key partners. The case definition is specific to each overdose outbreak.

The case definition includes various elements, including time-place-person specifics. Depending on the situation:

- Overdose (with or without death);
- Clinical manifestations: symptoms, consequences;
- Temporal and spatial limits;
- Product: identification of the product used or presumed used (not to be confused with the name of the substance), street name and appearance;
- Substance (when confirmed by a reference laboratory);
- Intent: unintentional or with undetermined intent; exclusion: intentional overdoses (suicides and attempted suicides are not considered threats to the health of the population as defined by the PHA (30));
- Others, as needed.

The definition should be broad enough to not exclude cases that may be related to the problem, but narrow enough to not include those that are unrelated, potentially resulting in unnecessary intervention.

In drug-related matters, it is important not to take for granted the accuracy of assumptions or hypotheses, particularly as regards the identity of the substance involved (see Section 4.2.4). Thus, the case definition must be based solely on the facts. The case definition may be adapted to the situation if additional information allows for more precision, such as possible laboratory identification of the substance while the investigation is ongoing.

4.2.2 Core partners

As mentioned earlier, much of the information, data, and expertise that enables public health authorities to take informed action in drug-related matters lies in the hands of various actors and organizations. It is therefore particularly important to be familiar with these and to mobilize them by forming a group of core partners for the purpose of the epidemiological investigation, and to do so at the start of the process. Close collaboration with key partners is essential for reporting overdoses, monitoring and understanding the situation, identifying the substance(s) involved and implementing appropriate prevention and protection measures. However, the support provided by partners will be determined by their specific mission.

A list of key partners is presented in Section 3, and a detailed description of these partners is included in Appendix 1. Also provided is a diagram showing the relationships between the various partners that illustrates the interactions between them which derive from their respective missions (see Appendix 2).

Experience has shown that the partners, beyond being so mandated by the PHA (e.g.: s. 55 and c. XI), are willing to assist in the investigation process and in the search for and implementation of solutions, under the coordination of the public health department. Following the epidemiological investigations in Montréal and Québec City, in 2014 and 2015 respectively, the partners and the public health departments involved expressed a common interest in remaining in contact so as to share relevant information more proactively.

4.2.3 Monitoring the situation and collecting data

Monitoring the situation

Close collaboration with partners is necessary and essential for proper monitoring of the situation.

In a crisis situation, regular meetings of the core partners strengthen collaboration and facilitate the exchange of information useful to the investigation (frequency is adapted to the situation; weekly or other). These are opportunities for public health authorities to take stock of the situation with partners, ensure ongoing monitoring and coordinate further action.

At all times, public health authorities must be informed by their partners of any new information that arises during the investigation. The nature of the contribution and the type of data that can be expected from these various partners is presented in Appendix 1.

Collecting data

If additional steps are required after the preliminary analysis to estimate the baseline rate of overdoses in "normal" situations, these are undertaken early in the data collection process. The baseline rate is used to estimate the scale of excess overdoses and to assess the scope of the situation during the investigation. However, the number of overdoses that specifically meet the case definition is a data point that is usually unavailable. Nevertheless, this limitation that can be partially circumvented, albeit imperfectly, by referring to the number of overdose deaths, which the coroner's office can provide, or to any study of this specific subject, for example (33, 34).

During the investigation, data is collected when potential cases are reported. To this end, reports should be solicited not only from partners, but also from organizations to which calls for vigilance are usually sent. For this purpose, two types of **overdose report forms** are proposed in the appendices. They can be used both during and outside of an epidemiological investigation.

- Appendix 3: Overdose report form for use by community actors to report situations that are reported to them. No personal data is collected with this form.
- Appendix 4: Overdose report form for use by health care professionals. Minimal personal data is collected with this form only during an investigation or when the person agrees to provide it.

These forms have been made available on the INSPQ website, in Word format, to allow public health authorities to customize and modify them, if necessary, according to the situation and their needs (see Appendices 3 and 4).

Data collection is carried out using an **investigation questionnaire** specific to overdose situations. A questionnaire created for this purpose is provided in Appendix 5. Using the questionnaire helps to identify cases that meet the case definition and to better characterize the threat so that appropriate measures can be taken to protect the health of the population. This questionnaire is intended for use in the context of an epidemiological investigation. It could also be used outside of an investigation, when a report is retained for the purpose of gathering additional information. In this type of situation, however, it is important to remember that under section 95 of the PHA, the person making the report is not permitted to disclose personal or confidential information.

The questionnaire has been made available on the INSPQ website, in Word format, to allow public health authorities to customize and modify it, if necessary, according to the situation and their needs (see Appendix 5).

Data collection can be carried out in collaboration with different partners, depending on the specific circumstances surrounding each reported case:

- Ambulance and first responder services;
- Hospitals (medical records);
- The coroner's office;
- Police services;
- The poison centre;
- Addiction treatment centres;
- Community organizations;
- A victim who survived the overdose, a witness or a relative;
- Other.

Relevant information to be gathered during data collection may include (see Appendix 5):

- Identification of the overdose victim;
- Identification of information sources;
- Event description:
 - Date and location of overdose;
 - Circumstances;
 - Product used alone or in the presence of others;
 - Intent of overdose:
 - Brief description of the event (including effects felt and observed);
 - Aid and services received:
 - 9-1-1, first responders, police, ambulance attendants, hospital;
 - Signs and symptoms;
 - Interventions (administration of naloxone, ventilatory support, chest compression)
 - Final outcome (survival, death);
- Description of products used in the moments preceding the overdose:
 - Name of product used and suspected substance;
 - Physical description of the product, its packaging and characteristics that differ from what is usually seen;

- Prescription status;
- Information about use: amount used, mode of use, change in mode of use, frequency of use;
- Source: date and place acquired, change of supplier;
- Availability of the product for analysis;
- Description of products used in the days preceding the overdose:
 - Names of the products used;
 - Prescription status;
- Use profile:
 - Use habits:
 - Previous overdoses;
- Counselling provided following the overdose;
- Toxicological analyses performed;
- Substances that may have caused the overdose;
- Additional information.

It remains the responsibility of the DSPublique to judge what information it is relevant to collect. Thus, the questionnaire can be used in full or in part, according to the judgment of the DSPublique. It may also be deemed necessary to collect other information in addition to what is proposed.

The objective of this data collection process is to gather as much information as possible for the investigation in order to better define the situation and enable the adoption of measures that can effectively reduce the number of overdose cases.

In addition to collecting this information, the identity of the substance(s) involved in each reported overdose case should be sought. This information is needed to confirm whether the reported case meets the case definition and is indeed related to the episode of overdoses under investigation. A laboratory analysis is the only way to obtain this information.

Laboratory analyses may be, or may have been, performed on biological samples (blood, urine) taken from overdose victims:

- in a hospital setting, prior to the report being submitted;
- as part of the coroner's investigation, after the death;

• or, prospectively, when a directive is issued, samples may be taken specifically for the purposes of the epidemiological investigation.

Thus, it is necessary to solicit the involvement of various actors to obtain laboratory analyses.

Prospectively, for living subjects, emergency and intensive care medical staff can be directed through a specific call for vigilance to obtain samples for the purposes of the investigation (under Section 100 of the PHA), when overdose cases consistent with the case definition are encountered. The procedure to be followed for the collection, storage and shipment of samples to the reference laboratory will be provided at such time. This procedure will have been developed in collaboration with the laboratory. The public health reference laboratory for this type of analysis is the INSPQ's CTQ. Alternatively, it may be advisable to contact the CAPQ when an overdose case arises in order to benefit from the CTQ's emergency-specific analysis services (in some cases, analyses might be performed at the CHUSJ's specialized biochemical laboratory).

Retrospectively, still for living subjects, samples may have been taken in hospital in while care was being administered to the intoxicated patient. Where there is information that such samples were taken, it may be appropriate to recover the samples (if they still exist, as provided under Section 100 of the PHA) so that the CTQ can carry out specialized analyses. In such a case, it is recommended to contact the CTQ for instructions on how to store the samples and send them to the laboratory (refer to the contact information in Appendix 6). If the samples are no longer available, but basic analyses have been performed to identify the type of substance involved, the results can be requested, again under section 100 of the PHA. However, the limitations associated with these analyses must be considered (see Appendix 7).

For subjects who die as the result of an overdose, the coroner conducts an investigation, as provided for by the Act respecting the determination of the causes and circumstances of death (35). The investigation process includes sample collection and requests for analyses to be performed by the reference laboratory (CTQ or LSJML). No intervention from public health authorities is required to initiate these investigations. However, it is necessary to request the data obtained by the coroner's office related to overdose cases that may meet the case definition, as provided for under Section 100 of the PHA. Under this same section and Section 98 of the PHA, the results of toxicological analyses and the performance of additional analyses may be requested for the purposes of the public health investigation. It is therefore necessary to make arrangements with both the coroner's office and the reference laboratory where the analyses are performed (CTQ or LSJML).² Considering how long it typically takes to carry out such analyses (a few weeks), it may be necessary to make sure that the laboratory can process

Beginning November 1, 2018, all toxicology analyses required by coroners will be performed at the LSJML.

Beginning November 1, 2018, all toxicology analyses required by coroners will be performed at the LSJML.

the results more quickly for the purposes of the investigation, and that they will be transmitted directly to the DSPublique, at the same time they are sent to the coroner.

Delays in obtaining analyses from reference laboratories are usually a factor limiting the ability of public health authorities to monitor the situation. It is therefore necessary to form an agreement with them to provide results more quickly. Upon request, it may be possible to obtain the preliminary results of analyses to reduce the wait time associated with the production of the definitive results, which can be sent later. In such a situation, one must be aware of the limitations associated with these non-definitive results. Contact information for the laboratories is provided in Appendix 6.

It is also recommended to contact the laboratories to properly communicate what is needed, to identify the limits of the analyses being performed or to adjust the request, if necessary. There are several types of laboratories, each with its own mandate and particularities, which it is important to understand before soliciting their services. Therefore, a description of each is presented in Appendix 7.

Data analysis

Ultimately, the collection of information about each of the reported cases will determine whether or not they will be included in the investigation, based on the case definition. Cases that are retained are usually considered "confirmed" when use of the drug in question is confirmed by laboratory analysis or other means, and are deemed "probable" when information is missing.

The data collected about cases that are retained may be subject to further analysis. This analysis of the data will provide a more accurate portrait of the situation and will potentially reveal elements that will help to better identify the specific risk factors associated with the reported overdose cases. Interventions can then be developed and implemented in a more targeted manner and ideally bring an end to the excess of overdoses.

4.2.4 Characterization of the product causing the threat

Accurate and precise identification of the **product** causing the overdoses and the <u>substance</u> it contains is of paramount importance to the threat management process. This information is required to ensure that interventions and the content of any messages delivered are properly targeted and, ultimately, able to control the threat.

The appearance and street name of a drug do not guarantee its composition, so users cannot be certain of the identity of the substances they are using. In reality, there is often a disparity between what they think they are using and what they actually are using (36-40). Thus it is highly relevant to characterize the product and its composition when this is possible. Successful

identification of the substance(s) in the product that led to the overdoses, helps to identify with greater certainty which of the substances caused the overdoses. This is particularly true and useful when several substances are found in the biological samples analyzed (blood, urine) or when no biological sample has been analyzed.

Often, the difficulty may lie in discovering what product led to the overdose and/or in obtaining a sample of it to identify its physical characteristics and have its contents analyzed. Samples may come from police seizures, from exhibits collected by the coroner at a death scene under investigation, or directly from a user or a relative during a medical or community intervention.

In some cases, the product and/or substance may have been formally identified at the reporting stage or earlier, while in other situations, all or part of the product and/or substance remains to be identified.

Early identification of the product and substance is ideal in that it allows the bulk of efforts to be focused on monitoring the situation and controlling the threat, making success more likely.

When the product causing the overdoses is not identified at the beginning of the process, efforts to identify it should be be carried out concurrently with monitoring and attempting to control the situation. Given such a context, monitoring the situation is more complex and interventions are necessarily less targeted and may be less effective in controlling the threat. Thus, it is highly preferable to invest the necessary effort in identifying the product early in the process.

Identification of the product

The product can be identified by means of several complementary characteristics:

- The appearance: form (powder, tablet, counterfeit tablet of a pharmaceutical product, capsule, dried plant product, liquid, paste, wax, etc.), shape, colour, size, logo, packaging, etc.;
- The street name;
- The substance it is presumed to contain;
- The substance(s) it has been confirmed to contain.

Unlike medications and other products intended for human use, drugs are not subject to any regulatory control. The same substance can therefore have several different appearances and these can change rapidly over time (e.g.: a tablet's logo, shape or colour). Therefore, the initial description of a drug should not be considered static. Rather, one should keep in mind that its appearance and even its content could potentially change during the course of the investigation.

Since the appearance and street name of a drug are no guarantee of its composition, it is important to:

- understand and distinguish between the identification of a product and the identification of the substance(s) it contains;
- not limit product identification to its street name and/or appearance and/or the substance it is presumed to contain;
- expend the necessary effort to have the substance identified by a reference laboratory;
- consider the identity of the substance to be "presumed" until confirmation is obtained from a reference laboratory.

Identification of the substance

In practice, there is only one way to identify a substance with certainty: this is to have it analyzed in a reference laboratory. Once again, it is important to be able to rely on the appropriate partners for identification of the substance involved.

Laboratory analyses can be performed on:

- biological samples (blood, urine) taken from overdosed individuals, and/or;
- a sample of the product (drug) or the equipment involved in its use (syringe, pipe, etc.).

The ideal is to have the benefit of both types of analyses to enable formal identification of the substance responsible for the overdose episode; otherwise it is best to take the necessary steps to obtain them.

Additional factors concerning product and substance identification

In addition to their identifying characteristics, the product and the substance can be qualified by various factors, either singly or in combination. There may be:

- a substance other than the one expected;
- a mixture, unexpected or not, of substances;
- a new and unknown substance;
- a very powerful substance;
- a psychoactive pharmaceutical product;
- a counterfeit of a pharmaceutical product or of another product intended for human use;
- a product not intended for human use, but used because of its psychoactive properties;
- a substitute, an adulterant;

- a contaminant (by-product, impurity);
- a higher purity or higher than expected dose;
- an unexpected dose variation.

4.2.5 Public health actions and interventions

Launching the investigation is the first action taken to ensure that a public health authority is taking charge of the situation. Forming the group of core partners and holding regular **meetings** are actions that improve monitoring of the situation and ensure the implementation of appropriate prevention and protection measures.³

In addition to these elements which frame the intervention, information sharing, awareness raising and prevention activities are needed to reduce the number of overdoses and their consequences. These actions should ideally be implemented early in the investigation, even if all the information is not available. Unnecessarily delaying certain interventions could allow the situation to worsen. Interventions must be tailored to the scope and severity of the situation.

Calls for vigilance

An initial step is to issue a call for vigilance. This is sent out to **inform and alert the** appropriate organizations that there is an unusual situation involving drug overdoses.

Depending on the situation, the potential recipients are:

- ambulance and first responder services (pre-hospital emergency services);
- physicians and nurses in emergency departments, intensive care units and other clinicians;
- the CAPQ;
- police services;
- the coroner's office;
- addiction treatment centres;
- community organizations or public agencies providing services to drug users (and other organizations working with persons in vulnerable situations, as needed);
- peer groups or drug user associations;
- any other organization deemed relevant, including the neighbouring public health departments, the MSSS public health department and the INSPQ.

Although this is not usually necessary, the DSPublique could invoke its powers under Section 55 and Chapter XI of the PHA to ensure the participation of partners in seeking solutions and implementing appropriate measures.

Calls for vigilance are short and describe, at a minimum, the status of the situation. The content is adapted to the situation and to the recipients. Depending on the circumstances, they may include the following information:

- Recipients and date of dissemination;
- Number of cases:
- A brief description of the unusual situation (symptoms, overdoses, death, etc.);
- Information about the product in question;
- Information about the substance (if identified);
- Notice of an ongoing public health investigation;
- Information and recommendations for clinicians:
- Instructions for collecting biological samples and sending them to the laboratory;
- Preventive messages to be communicated to users;
- Recommendations for workers who may be exposed to drugs (occupational health);
- Solicitation of reports and details on how to submit a report;
- Any other information deemed relevant.

The description of the situation's status should focus on what is known and may address areas of uncertainty. However, it must avoid spreading unverified or inaccurate information, which could potentially undermine the effectiveness of interventions. The circulation of inaccurate information about drugs is not uncommon (41). It is therefore good practice to validate the content of calls for vigilance with certain key partners (e.g., INSPQ, CAPQ; see Section 4.1.4) in order to ensure the accuracy and relevance of the information communicated in the call for vigilance (or any other form of communication). Updates to calls for vigilance may be issued as the situation changes and new information becomes available.

Communications both targeted and for the general public

Concurrently with calls for vigilance (which are more specifically aimed at organizations and professionals), communications aimed at the general public may be issued, with a view to preventing overdoses and deaths from overdoses.

Issuing alerts specifically to users is one possible way to limit overdoses. The overarching principle, however, is to appropriately alert, if needed. Alerts usually take the form of a simple poster containing only the essential information: the unusual situation, advice for reducing the risk of overdose, and what to do when someone is overdosing. The message should be clear, very concise and use language familiar to drug users. Ideally, the poster should attract attention using various means (colour, images, fonts, etc.). To ensure that the content draws the attention of users, it should ideally be reviewed by users and community actors and modified as needed before being released. At the same time, the warning can be distributed in the form of leaflets or cards, with content similar to that found on the posters. Such warnings are sent primarily to organizations that provide services to drug users, such as addiction treatment centres, some community organizations, and peer groups and user associations. They should be posted in places that users tend to frequent (see Section 4.2.6 for drug-specific best communication practices). A sample poster is included in Appendix 8.

Communication with the general public also provides an opportunity to inform and educate a wider audience about the unusual situation and its risks. Among other things, it makes it possible to reach users who do not frequent the places where posters are located, as well as the relatives of users.

Possible modes of communication include:

- Press releases:
- Press conferences;
- Media interviews (press, radio, television);
- Posters placed in public settings (health facilities, bars, etc.);
- Messages posted on the website of the DSPublique or of the CISSS/CIUSSS;
- Messages posted on social media.

ACCESS TO AND TRAINING WITH NALOXONE

At very high doses, opioids cause respiratory depression, which can be fatal. Naloxone is the specific antidote to opioids. It temporarily reverses the effects of an opioid overdose and restores breathing. Administering it to a person who has overdosed can save their life. Naloxone does not prevent overdoses, but it makes it possible to prevent deaths from opioid overdoses.

Naloxone was removed from the Prescription Drug List by Health Canada in 2016 to make it more accessible. Since November 2017, naloxone has been available free of charge and without prescription in all Québec pharmacies. However, not all of them keep it in supply. It may be necessary to have it ordered.

To find a resource that provides naloxone, visit one of the following web links:

[•] the Québec government's health and wellness portal https://www.sante.gouv.qc.ca/en/repertoireressources/naloxone/

[•] the INSPQ's interactive mapping tool https://www.inspq.gc.ca/sites/default/files/cartes/naloxone/index.html

[•] the health and social services department's directory of resources: https://sante.gouv.qc.ca/en/repertoireressources/

When there is an opioid threat, increasing access to naloxone in the community and providing training in its administration are particularly important measures to consider (42). The distribution of naloxone kits to at-risk populations as well as to community actors and to professionals who provide services to these populations helps prevent deaths from opioid overdose.

Distribution of naloxone should, at a minimum, be accompanied by training in its administration, but ideally it would be accompanied by broader training that includes, for example, the essentials of:

- overdose prevention;
- recognition of the signs and symptoms of an overdose;
- handling of overdoses (e.g., administration of naloxone, chest compression, calling 9-1-1, etc.)

Police interventions

The drug market, like all markets, is characterized by a balance between supply and demand. Therefore, optimally, public interventions aimed at controlling a threat to population health should target both harm reduction and supply and demand reduction. Public health interventions are more focused on harm reduction and demand reduction, whereas supply reduction falls to the responsibility of police.

Although their approaches are very different, the actions of public health and public safety authorities are complementary. In fact, the police usually conduct their own investigations and operations, in parallel with public health interventions, when overdoses occur. Police can help control the health threat, including through seizures and by sharing certain non-critical information obtained in the field. Thus, it is important to recognize that police interventions contribute, in their own way, to better controlling the threat, to the benefit of public health.

Collaboration between public health and public safety authorities is therefore advantageous in drug overdose situations. Although such collaboration is not necessarily a natural occurrence, experience has shown that it is undertaken voluntarily. Alternatively, under Section 98 of the PHA, the public health director can, if necessary, request that police authorities to conduct an investigation. Collaboration with police authorities can allow for the coordination of certain interventions.

However, there are limits to this collaboration, in particular as concerns confidentiality. When carrying out their own interventions, police may wish to obtain certain personal or confidential information obtained by public health authorities conducting the epidemiological investigation. It should be noted that public health authorities cannot disclose such information for such

purposes, as stipulated under Section 132 of the PHA. However, information may be disclosed in certain cases, under conditions and circumstances identified in that same section of the Act.

The interventions described above (see Section 4.2.5) were, for the most part, implemented in the course of the epidemiological investigations of 2014 in Montréal and of 2015 in Québec City. In both cases, the number of overdoses reported decreased significantly following their implementation. Although it is not possible to determine which action(s) had a decisive impact, they are all considered appropriate when there is a wave of overdoses. Other interventions might also be implemented, depending on the situation.

4.2.6 Communication: drug-specific best practices

Communication is a very important aspect of managing public health crises, including those involving drug overdoses. In addition to the communication concepts discussed in Québec's reference framework for public health risk management (29), several elements specific to drugs are worth noting (43).

In drug-related matters, even well-intentioned communication can lead to unintended consequences if it is not adapted to the reality of the users. Because risk may be perceived differently by users, public messages must be adjusted to avoid negative consequences that could exacerbate the risk of overdose.

Specifically, the use of formulations with words such as "powerful," "strong," "concentrated" or "intense" should be avoided. Such qualifiers may be viewed by some as an indication of quality and encourage them to seek out the product (36, 44-46). Additionally, some users look for new experiences and these qualifiers could also lead them to seek out the drug in question. Such an unintended consequence may increase the risk of overdose, which is obviously contrary to the intended outcome of the intervention. To avoid thus indirectly promoting the product's use, is therefore clearly preferable to use words that convey the idea of harmful health effects. Such words are more effective at changing users' behaviour; "toxic," "deadly," or "dangerous" are recommended alternatives.

In addition to serving to warn people, messages should also incite users to take certain actions to reduce the risk of overdose and death. Preventive messages aimed at harm reduction are recommended. Below are some examples of general messages to highlight:

- Do not use alone;
- When in a group, do not all use at once;
- Decrease the dose to test its effect;
- Do not use with alcohol or other drugs;

- Have naloxone on hand and know how to use it;
- For people who inject, use supervised injection services (if available);
- In case of overdose, call 9-1-1 (47, 48). If necessary, point out the existence of the the Good Samaritan Drug Overdose Act⁵ (49, 50).

In addition, a reminder of how to access naloxone can be included when overdoses involve opioids.

Messages should also include some details about the signs and symptoms of overdoses, or of any negative reactions, so that witnesses can recognize an overdose and help people who are overdosing.

It is also desirable to include a description of the product responsible for the overdoses, if this is known. This description would detail the physical characteristics of the product, including its packaging, when relevant. Providing a photo is an excellent way to familiarize those concerned with the product. Ideally the street name under which the product is sold can be communicated, as well as the name of the substance it contains. When the substance is unknown or has not yet been formally identified by a reference laboratory, it may be acceptable to mention it explicitly. However, in such situations it is important to avoid being definite about the content of the product until this has been confirmed.

Finally, any form of language that stigmatizes drug use, addiction or drug users themselves should be avoided (51, 52). Stigma increases the isolation of users and is a significant barrier to their access to health services. This can have a negative effect on the health of drug users, which runs contrary to the intended effect of public health interventions. Non-stigmatizing language also helps to ensure that the message is well received by users and that they follow the advice. Reducing stigma can help prevent avoidable overdoses and deaths.

For posters intended specifically for users, a few additional best practices are recommended:

- Use a simple format that attracts attention (colour, image, font, etc.);
- Use language that is clear, very concise and familiar to drug users;
- Limit content to the essentials:
 - what in particular is unusual (identify the product, if known);

[&]quot;The Good Samaritan Drug Overdose Act provides some legal protection for individuals who seek emergency help during an overdose. It applies to anyone seeking emergency support during an overdose, including the person experiencing an overdose. The Act protects the person who seeks help, whether they stay or leave from the overdose scene before help arrives. The Act also protects anyone else who is at the scene when help arrives (49)."

- tips for reducing the risk of overdose;
- recognizable symptoms of an overdose;
- call 9-1-1;
- Include the date the poster was issued so users know it is a recent warning and not an old or "permanent" notice;
- Validate the content with a community organization that provides services to drug users or with a drug users' association. The INSPQ's advisory services may also be called upon (see Section 4.1.5);
- Make sure the poster is removed when the issue is resolved; if necessary, include a removal date and issue another version of the poster on the removal date, if required.

Taken together, these drug-specific best communication practices help to more effectively gain the attention of users and reduce the risk of overdoses.

4.2.7 Closing the investigation

The decision to close the investigation relies heavily on the judgment of the public health director. The determining factor is the return to normal, for a reasonable period of time, of the number of overdoses that meet the case definition. Additional information, such as indications that the product causing the threat is no longer available on the market, may support this decision.

The decision to close the investigation involves a degree of uncertainty, as there is no guarantee that the threat has completely disappeared or that it will not return after the investigation is closed, particularly in another form. Therefore, to some extent, this can be a difficult decision to make. However, it would always be possible to reopen the investigation should the situation require it.

When one or more calls for vigilance have been issued that reference the investigation and, possibly, include instructions for collecting biological samples for laboratory analyses, it is appropriate to use the same means of communication to inform recipients that the investigation has been closed and they can cease collecting samples. It is also good practice to provide an update on the status of the situation as of the date of closure, including the number of cases identified that met the case definition and the reason for closing the investigation (return to normal). This communication also provides a good opportunity to encourage recipients to remain vigilant and to report to public health authorities any new cases that may meet the case definition (even if the investigation is closed) or any future situations that are deemed unusual.

It is also appropriate to communicate a more detailed status report to the partners who were involved in the process.

Finally, it is good practice to produce an investigation report following the conclusion of events and to have it reviewed by the partners. The partners, being specialists in the aspects related to their work, can add a level of nuance and enhance the content of the report, to the benefit of the organization responsible for the investigation. Such an investigation report allows to look back at events, after the fact, to see what worked and to improve certain aspects of the process if necessary, and thus inform action when other overdose episodes requiring public health intervention occur.

It is also good practice to provide a copy of the report to the partners who were involved in the investigation. They are thus made aware of the importance and relevance of their contribution, which can encourage further collaboration in the event of another investigation.

4.2.8 Evaluation

Since overdose episodes and the drug-related epidemiological investigations they prompt are relatively new occurrences in Québec, it is good practice to collect feedback on the experience. Doing so can only be beneficial, especially if another wave of overdoses were to occur. To this end, the following questions may be asked:

- What were the strengths of the investigation?
- What were the limitations of the investigation? How could these limitations be surmounted if a new episode of overdoses were to occur?
- What worked well? What should be improved?
- Should the same approach be taken if new overdoses are reported? How can the process be made more efficient?
- Were all the relevant partners approached? Did the partners participate actively enough?
- Did the data collected allow for adequate characterization of the threat? If not, how could data collection be improved were another overdose episode to occur?
- Were the actions taken appropriate and effective? Were they implemented in a timely manner? Should they be implemented differently?
- What were the strengths and weaknesses of communications within the core group, with other partners and with users?
- Etc.

This process of reflection can be carried out within the public health team, but it can also be expanded to involve key partners who participated in the investigation. The process may lead, not only to observations about the investigation being evaluated, but also to the formulation of recommendations applicable to reports of new cases of overdoses. It may also lead to recommendations aimed at preventing potential overdoses (27). These observations and recommendations should ideally be recorded in writing, either as part of the investigation report or as an appendix, for example.

5 REFERENCES

- European Monitoring Centre for Drugs and Drug Addiction [Online]. Brief glossary of chemical and biochemical terms. Portugal: European Monitoring Centre for Drugs and Drug Addiction; 2013. Retrieved from http://www.emcdda.europa.eu/publications/drug-profiles/glossary
- 2. Cole C, Jones L, McVeigh J, Syed Q, Bellis MA. Cut: A guide to adulterants, bulking agents and other contaminants found in illicit drugs [Online]. United Kingdom: Liverpool John Moores University; 2010. Retrieved from http://www.cph.org.uk/wp-content/uploads/2012/08/cut-a-guide-to-the-adulterants- bulking-agents-and-other-contaminants-found-in-illicit-drugs.pdf
- Ministère de la Santé et des Services sociaux. Plan d'action interministériel en toxicomanie 2006-2011 [Online]. Québec: Ministère de la Santé et des Services sociaux; 2006. Retrieved from http://publications.msss.gouv.gc.ca/msss/fichiers/2005/05-804-01.pdf
- Gouvernement du Québec [Online]. Public Health Act, Chapter S-2.2. Retrieved from https://www.legisguebec.gouv.gc.ca/en/document/cs/s-2.2
- Radio-Canada. Surdoses mortelles: Ottawa n'écarte pas une déclaration d'état d'urgence de santé publique [Online]. November 18, 2016. Retrieved from http://ici.radiocanada.ca/nouvelle/1000975/surdoses-mortelles-ottawa-etat-urgence-ministre-philpott
- Government of British Columbia [Online]. Provincial health officer declares public health emergency; April 14, 2016. Retrieved from https://news.gov.bc.ca/releases/2016HLTH0026-000568
- Rudd RA, Aleshire N, Zibbell JE, Gladden RM. Increases in Drug and Opioid Overdose Deaths United States, 2000–2014. Centers for Disease Control and Prevention, MMWR [Online]. 2016; 64(50);1378-82. Retrieved from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm?s cid=mm6450a3 w
- Government of Canada [Online]. Health Canada; 2016. Statement from the Minister of Health on the Opioid Crisis. Retrieved from https://www.canada.ca/en/health-canada/news/2016/07/statement- from-the-minister-of-health-on-the-opioid-crisis.html
- Martins SS, Sampson L, Cerdá M, Galea S. Worldwide Prevalence and Trends in Unintentional Drug Overdose: A Systematic Review of the Literature. Am J Public Health. Nov 2015;105(11):e29-49.
- 10. United Nations Office on Drugs and Crime [Online]. 2013 World Drug Report notes stability in use of traditional drugs and points to alarming rise in new psychoactive substances. Vienna; 2013. Retrieved from https://www.unodc.org/unodc/en/press/releases/2013/June/2013-world-drug-report-notesstability-in-use-of-traditional-drugs-and-points-to-alarming-rise-in-new-psychoactivesubstances.html
- 11. European Monitoring Centre for Drugs and Drug Addiction. Communiqué de l'Agence sur les droques de l'UE à Lisbonne – Rapport européen sur les droques 2015 – L'Observatoire examine les nouvelles dynamiques et dimensions du problème des drogues en Europe [Online]. Lisbonne; 2015. Retrieved from http://eurotox.org/wp/wp-content/uploads/2015/06/highlights edr2015 fr final1-1.pdf

- 12. Canadian Community Epidemiology Network on Drug Use. Novel Synthetic Opioids in Counterfeit Pharmaceuticals and Other Illicit Street Drugs [Online]. Canadian Centre on Substance Abuse; June 2016. Retrieved from https://www.ccsa.ca/sites/default/files/2019-04/CCSA-CCENDU-Novel-Synthetic-Opioids-Bulletin-2016-en.pdf
- 13. Drug Enforcement Administration [Online]. Washington: DEA; 2015. DEA Issues Nationwide Alert on Fentanyl as Threat to Health and Public Safety. Retrieved from https://www.dea.gov/divisions/hg/2015/hg031815.shtml
- 14. Drug Enforcement Administration [Online]. Washington: DEA; 2016. DEA Issues Carfentanil Warning to Police and Public. Retrieved from https://www.dea.gov/divisions/hq/2016/hq092216.shtml
- 15. Layson G. Elephant sedative carfentanil marks "whole new shift in street drugs." CBC News [Online]. Sep. 10, 2016. Retrieved from http://www.cbc.ca/news/canada/windsor/carfentanil-drug-1.3755325
- 16. Hawkins D. A new front in the opioid war: Elephant tranquilizer. Washington Post [Online]. August 12, 2016. Retrieved from https://www.washingtonpost.com/news/morning-mix/wp/2016/08/12/a-newfront-in-the-opioid-war-elephant-tranquilizer/
- 17. Fischer B, Jones W, Krahn M, Rehm J. Differences and over-time changes in levels of prescription opioid analgesic dispensing from retail pharmacies in Canada, 2005-2010. Pharmacoepidemiol Drug Saf. 2011;20(12):1269-77.
- 18. Gomes T, Mamdani MM, Paterson JM, Dhalla IA, Juurlink DN. Trends in high-dose opioid prescribing in Canada. Can Fam Physician Med Fam Can. 2014;60(9):826-32.
- 19. Drug Enforcement Administration. 2015 National Drug Threat Assessment Summary [Online]. U.S. Justice Department; 2015. Retrieved from https://www.dea.gov/sites/default/files/2018- 07/2015%20NDTA%20Report.pdf
- 20. Special Advisory Committee on the Epidemic of Opioid Overdoses. National report: Apparent opioidrelated deaths in Canada (December 2017) [Online]. Ottawa: Public Health Agency of Canada; 2017. Retrieved from https://www.canada.ca/en/public-health/services/publications/healthy-<u>living/apparent-opioid-related-deaths-report-2016-2017-december.html</u>
- 21. BC Center for Disease Control. BC DOAP Opioid Overdose Response Strategy (DOORS) [Online]. BC Centre for Disease Control; 2016. Retrieved from http://www.bccdc.ca/resource- gallery/Documents/Opioid%20Overdose%20Response%20Strategy.pdf
- 22. Lupick T. Illicit drugs overtake car accidents as the number-one cause of unnatural deaths in B.C. Georgia Straight [Online]. June 9, 2016. Retrieved from http://www.straight.com/news/715741/illicitdrugs-overtake-car-accidents-number-one-cause-unnatural-deaths-bc
- 23. Coroners Service. Motor Vehicle Incident Deaths 2006-2015. British Columbia: Office of the Chief Coroner; 2016.
- 24. Coroners Service. Illicit Drug Overdose Deaths in BC January 1, 2007 February 28, 2017. British Columbia: Office of the Chief Coroner; 2017.

- 25. Waterloo Region Crime Prevention Council. Ontario's Opioid Crisis: An epidemic within an epidemic. Report No. CPC-16-02. 2016.
- 26. Shemilt M, Langlois É, Gagné M, Perron PA, Dubé PA. Décès attribuables aux intoxications par opioïdes au Québec, 2000 à 2012 : mise à jour 2013-2016 [Online]. Institut national de santé publique du Québec; 2017. Retrieved from https://www.inspq.qc.ca/sites/default/files/publications/2298 deces attribuables opioides.pdf
- 27. Leclerc P, Morissette C, Lapierre M. Surdoses sévères liées à la consommation de droques de rue à Montréal: résultats de l'enquête de 2014 et recommandations. Centre intégré universitaire de santé et de services sociaux du Centre-Sud-de-l'Île-de-Montréal; 2015.
- 28. Centre intégré universitaire de santé et des services sociaux de la Capitale-Nationale. Risque de surdoses sévères liées à la consommation de fentanyl 6 août 2015. Mise à jour - Appel à la vigilance [Online]. Centre intégré universitaire de santé et des services sociaux de la Capitale-Nationale; 2015. Retrieved from http://www.ciusss-capitalenationale.gouv.gc.ca/sites/default/files/appel-vigilancesurdose-fentanyl-2015-08-06.pdf
- 29. Cortin V, Laplante L, Dionne M, Filiatrault F, Laliberté C, Lessard P, et al. La gestion des risques en santé publique au Québec: cadre de référence [Online]. Institut national de santé publique du Québec; 2016. Retrieved from https://www.inspg.gc.ca/publications/2106
- 30. Filiatrault F. Mieux comprendre la Loi sur la santé publique une synthèse des principales questions soulevées lors de sa présentation, de janvier à juin 2002 [Online]. Québec: ministère de la Santé et Services sociaux; 2002. Retrieved from http://politiquespubliques.inspq.qc.ca/fichier.php/524/Mieuxcomprendrelaloisurlasantepublique.pdf
- 31. Alberta government [Online]. 2016. Carfentanil detected in two deaths in Alberta. Retrieved from https://www.alberta.ca/release.cfm?xID=43563461B0059-E014-11B5-A620043C6C94379A
- 32. Young MM, Pirie T, Diedrich K, Lund A, Turris S, Bowles R. Preventing Drug- and Alcohol-related Harms at Music Festivals in Canada [Online]. Canadian Centre on Substance Abuse; 2015. Retrieved from http://www.ccsa.ca/Resource%20Library/CCSA-Preventing-Alcohol-Drug-Harms-at-Music-Festivals-Summary-2015-fr.pdf
- 33. Gagné M, Dubé PA, Perron PA, Langlois É, Légaré G, Sirois MJ, et al. Décès attribuables aux intoxications par opioïdes au Québec, 2000 à 2009 [Online]. Institut national de santé publique du Québec; 2013. Retrieved from https://www.inspq.qc.ca/pdf/publications/1738 DecesAttribIntoxOpiodesQc 2000-2009.pdf
- 34. Gagné M, Dubé PA, Légaré G, Perron P-A, Émond V. Décès attribuables à une intoxication par opioïde au Québec, 2000 à 2009, mise à jour 2010-2012 [Online]. Institut national de santé publique du Québec; 2014. Retrieved from https://www.inspq.qc.ca/pdf/publications/1945 Deces Intoxication Opiodes 2010-2012.pdf
- 35. Gouvernement du Québec [Online]. Act respecting the determination of the causes and circumstances of death, Chapter R-0.2. Retrieved from https://www.legisquebec.gouv.gc.ca/en/document/cs/r-0.2

- 36. Canadian Community Epidemiology Network on Drug Use. Fentanyl-related Overdoses [Online]. Canadian Centre on Substance Abuse; February 2015. Retrieved from https://www.ccsa.ca/sites/default/files/2019-05/CCSA-CCENDU-Drug-Alert-Fentanyl-related-Overdoses-2015-en.pdf
- 37. Canadian Community Epidemiology Network on Drug Use. Increasing Availability of Counterfeit Oxycodone Tablets Containing Fentanyl [Online]. Canadian Centre on Substance Abuse; February 2014. Retrieved from https://www.ccsa.ca/sites/default/files/2019-05/CCSA-CCENDU-Oxycontin-Fentanyl-Alert-2014-en.pdf
- 38. Drug Analysis Report on Designer Drugs Seized in Quebec June 2007 to July 2008 [Online]. Ottawa: Health Canada; 2009. Retrieved from https://www.canada.ca/en/health-canada/services/healthconcerns/reports-publications/controlled-substances-precursor-chemicals/drug-analysis-reportdesigner-drugs-seized-quebec-june-2007-july-2008.html
- 39. Royal Canadian Mounted Police [Online]. RCMP warns of heroin laced with Carfentanil. Gouvernement du Canada; 2017. Retrieved from https://www.rcmpgrc.gc.ca/en/news/2017/24/rcmp-warns-heroin-laced-carfentanil
- 40. Dubé PA. Agranulocytose induite par la consommation de cocaïne contaminée au lévamisole [Online]. Institut national de santé publique du Québec; 2010. Retrieved from https://www.inspg.gc.ca/pdf/publications/1074 AgranulocytoseCocaineContaminee.pdf
- 41. Soutwick R. Health Canada statements on W-18 misleading, potentially wrong, experts warn. Calgary Herald [Online]. 2016. Retrieved from http://calgaryherald.com/news/local-news/health-canadastatements-on-w-18-misleading-potentially-wrong-experts-warn
- 42. Webber V. Overdose prevention programming: education and naloxone distribution Practical guide [Online]. National Collaborating Centre for Healthy Public Policy; 2016. Retrieved from https://ccnpps-ncchpp.ca/docs/2016-Practical-Guide-Overdose-Prevention-Naloxone.pdf
- 43. BC Centre for Disease Control and Prevention. Communicating drug alerts Tips for informing people who use drugs about adverse drug events [Online]. 2016. Retrieved from http://www.bccdc.ca/resourcegallery/Documents/CDA%20guidelines%20updated%20Nov%202016.pdf
- 44. Soukup-Baljak Y, Greer AM, Amlani A, Sampson O, Buxton JA. Drug quality assessment practices and communication of drug alerts among people who use drugs. Int J Drug Policy. 2015;26(12):1251-7.
- 45. Miller PG. Media reports of heroin overdose spates: Public health messages, moral panics or risk advertisements? Crit Public Health. 2007;17(2):113-21.
- 46. Kerr T, Small W, Hyshka E, Maher L, Shannon K. "It's more about the heroin": injection drug users' response to an overdose warning campaign in a Canadian setting. Addict Abingdon Engl. 2013;108(7):1270-6.

- 47. Canadian Community Epidemiology Network on Drug Use. Calling 911 in Drug Poisoning Situations [Online]. Canadian Centre on Substance Abuse; 2017. Retrieved from https://www<u>.ccsa.ca/sites/default/files/2019-04/CCSA-CCENDU-Calling-911-Drug-Poisoning-2017-</u> en.pdf
- 48. Follett K, Piscitelli A, Munger F, Parkinson M. Between Life and Death: The Barriers to Calling 9-1-1 During an Overdose Emergency [Online]. Waterloo Region Crime Prevention Council; 2012. Retrieved from http://preventingcrime.ca/wp-content/uploads/2015/05/911Report.pdf
- 49. Government of Canada [Online]. 2018. About the Good Samaritan Drug Overdose Act Retrieved from https://www.canada.ca/en/health-canada/services/opioids/about-good-samaritan-drug-overdoseact.html
- 50. Government of Canada [Online]. Good Samaritan Drug Overdose Act, C-224. Retrieved from http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=F&Mode=1&DocId=8915365
- 51. BC Centre for Disease Control, Provincial Health Services Authority, Toward the Heart. com. Respectful language and stigma regarding people who use substances [Online]. 2017. Retrieved from http://towardtheheart.com/assets/uploads/1502392191GWLGqDb5w5GlajwRuiq4lPoSyhSoMkp3T7rL 5ml.pdf
- 52. Centre for Addiction and Mental Health. Stigma Understanding the impact of prejudice and discrimination on people with mental health and substance use problems [Online]. 2007. Retrieved from https://www.camh.ca/en/education/about/camh_publications/Documents/Flat_PDFs/Stigma_brochur e.pdf
- 53. Gouvernement du Québec [Online]. Act respecting health services and social services, Chapter S-4.2. Retrieved from https://www.legisguebec.gouv.gc.ca/en/document/cs/s-4.2
- 54. Institut national de santé publique du Québec. Offre de service de l'Institut national de santé publique du Québec [Online]. 2013. Retrieved from https://www.inspg.gc.ca/sites/default/files/publications/1576 offreserviceinspg 2012.pdf
- 55. Gouvernement du Québec. Act respecting institut national de santé publique du Québec [Online]. Chapter I-13.1.1. Retrieved from https://www.legisguebec.gouv.gc.ca/en/document/cs/l-13.1.1?&target=
- 56. St-Onge M, Levasseur H, Letarte A. Provincial Survey of Health Care Professionals Involved in the Care of Poisoned Patients. Qual Prim Care. 2016;24(4):203-6.
- 57. Ministère de la Sécurité publique du Québec [Online]. Toxicologie. Retrieved from http://www.securitepublique.gouv.qc.ca/laboratoire/services-expertises/toxicologie.html
- 58. Ministère de la Sécurité publique du Québec [Online]. À propos du Laboratoire. Retrieved from http://www.securitepublique.gouv.gc.ca/?id=533

- 59. Government of Canada [Online]. Health Canada. Analysis of seized illicit drugs. Retrieved from http://www.hc-sc.gc.ca/hc-ps/substancontrol/analys-drugs-drogues/seize-saisie-eng.php
- 60. Gouvernement du Québec [Online]. Police act, Chapter P-13.1. Retrieved from https://www.legisquebec.gouv.gc.ca/en/document/cs/P-13.1
- 61. Gouvernement du Québec [Online]. Act respecting pre-hospital emergency services, Chapter S-6.2. Retrieved from https://www.legisguebec.gouv.gc.ca/en/document/cs/S-6.2
- 62. Ministère de la Santé et des Services sociaux. Guide de gestion de l'urgence [Online]. Ministère de la Santé et des Services sociaux; 2006. Retrieved from http://publications.msss.gouv.qc.ca/msss/fichiers/2006/06-905-01.pdf

APPENDIX 1 PARTNERS AND ACTORS

This table describes the main partners to be considered. There may be other relevant partners, depending on the context and on the choices made by the public health authority.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses

Missions, functions and powers ^A	Fields of expertise ⁸	Scope	Nature of the potential contribution ^C
DSPubliques (public health departments)			
 The public health director shall be responsible, in the region, for (53): (1) informing the population on its general state of health and of the major health problems, the groups most at risk, the principal risk factors, the interventions he considers the most effective, monitoring the evolution thereof and conducting studies or research required for that purpose; (2) identifying situations which could pose a threat to the population's health and seeing to it that the measures necessary for its protection are taken; (3) ensuring expertise in preventive health and health promotion and advising the CISSS/CIUSSS on prevention services conducive to reducing mortality and avoidable morbidity; (4) identifying situations where intersectorial action is necessary to prevent diseases, trauma or social problems which have an impact on the health of the population, and, where the public health director considers it appropriate, taking the measures considered necessary to foster such action; The public health director shall assume, in addition, any other function entrusted to him by the Public Health Act (PHA) (4). 	 Regional public health authority; Protection of the health of the population. 	Regional.	 In compliance with the PHA: Receive reports; Determine if there is a threat to the health of the population; Conduct an epidemiological investigation if there is reason to believe that the health of the population is threatened; Investigate, and mobilize relevant partners in support of the epidemiological investigation; Implement the interventions needed to protect the health of the population.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Ministère de la Santé et des Services sociaux (MSSS) (departmen	nt of health and social services		
 Notably, under the Public Health Act (PHA) (4): The Minister may choose to coordinate the actions of several public health directors or to exercise, with the necessary modifications, certain or all of the powers granted to the public health director by Chapter IX or Division I of this chapter: 	 Provincial public health authority; Protection of the health of the population. 	Provincial.	Refer to the first column.
 (1) where the national public health director informs the Minister that he or she has received a report concerning an intoxication, infection or disease to which Chapter VIII applies; (2) where the Minister is informed of a situation that is likely to constitute a real or apprehended threat for the population 			
of two or more regions; (3) where the Minister is informed of a situation that is likely to constitute a real or apprehended threat for the population and it is necessary to inform health authorities outside Québec.			
 In those circumstances, the Minister shall act with the assistance of the national public health director, and the orders and instructions given by the national public health director must be carried out in the same manner as those given by the Minister. 			
 The Minister may, at the request of a public health director or the national public health director, mobilize the resources of any health or social services institution in Québec which the Minister considers necessary to respond to a public health emergency. 			

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Ministère de la Santé et des Services sociaux (MSSS) (departmen	nt of health and social services) (continuation)	
 In such a case, the health or social services institutions concerned are required to comply with the Minister's directives. If there is reason to believe, at this stage or at a later date, that another region may be affected, the public health director of that region must be notified. In situations where more than one region is actually affected, the provincial public health department must be informed. It is then up to the Minister to decide, under the PHA, whether to coordinate the actions of the relevant public health directors or to exercise the powers of those directors (4). 			
Institut national de santé publique du Québec (INSPQ) (Québec	public health institute)		
 The INSPQ is a public health expertise and reference centre in Québec. Its mission is to support Québec's Minister of Health and Social Services, regional public health authorities, and health and social services institutions in carrying out their public health responsibilities, by offering their expertise and specialized laboratory and screening services (54, 55). The functions of the Institute also include administering the Québec toxicology centre known as the "Centre de toxicologie du Québec" (CTQ), whose main function is to provide specialized laboratory services in the field of toxicology, and particularly through the Centre, providing the Centre antipoison du Québec (CAPQ) with the expertise necessary to pursue its mission (55). 	 Expert advice and support for public health authorities in cases of reports and episodes of drug overdoses (elements discussed in this guide); Drug surveillance/monitoring; Knowledge of substances, emergence of new substances and trends. 	Provincial.	 Provide expert advice and support to public health authorities concerning elements discussed in this guide (or another), as needed; Validate and revise the content of calls for vigilance, as needed.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Bureau du coroner (coroner's office)			
 The mission of the coroner's office is to investigate the probable causes and circumstances of deaths to have occurred as a result of negligence or in obscure or violent circumstances (35); The coroner's function is to determine by means of an investigation or, as the case may be, an inquest (35), (1) the identity of the deceased person; (2) the date and place of death; (3) the probable causes of death, that is, the disease, pathological condition, trauma or intoxications having caused, led to or contributed to the death; (4) the circumstances of death; For the purposes of their investigation, coroners may request toxicological analyses from the CTQ or the Laboratoire de sciences judiciaires et de médecine légale (LSJML).^D 	Investigation of the causes and circumstances of death.	• Provincial.	 Provide data on recent and/or previous deaths in which one or more drugs were detected or identified as having contributed to or caused the death; Report deaths that potentially meet the case definition; During epidemiological investigations, collaborate with the public health department and the reference laboratory where toxicological analyses are performed such that it is possible to perform the toxicological analyses required for the public health investigation into cases of death under the coroner's jurisdiction.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Centre antipoison du Québec (CAPQ) (Québec antipoison Centre	e)		
 The clinical mission of the CAPQ is (56): to provide telephone assistance from personnel specialized in toxicological information at all times to the population and to health care professionals throughout Québec concerning real or apprehended cases of acute intoxication; provide telephone consultation services from on-call toxicologists to guide health care professionals in the diagnosis and treatment of complex intoxications; to provide toxicological analyses in support of centres that are insufficiently equipped in terms of performing analyses; two laboratories are mandated for this purpose by the MSSS; to participate in activities targeting prevention and surveillance of acute intoxications; The CAPQ also has a teaching and research mission. 	Telephone consultation service specialized in situations involving acute intoxication.	• Provincial.	 Report overdoses that potentially meet the case definition; Provide data on calls received that potentially meet the case definition; Request that the Centre de toxicologie du Québec (CTQ) conduct analyses when cases potentially meeting the case definition arise, at the request of public health authorities; Provide medical expertise in emergency medicine and toxicology; Validate and revise the content of calls for vigilance, as needed.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Centre de toxicologie du Québec (CTQ) (the INSPQ's toxicology	centre)		
 The CTQ is a laboratory that offers analytical expertise in toxicology for various substances (metals, organic contaminants, pharmaceuticals, drugs, etc.) in biological samples. It is one of the two laboratories that provide the specialized analytical services required by the Centre antipoison du Québec (CAPQ) to fulfill its mission (54, 55). The CTQ is also one of the two toxicology laboratories that provide the analytical services required by the coroner's office to fulfill its mission.D 	Laboratory analyses (blood, urine, non- biological samples).	Provincial.	 Perform specialized analyses of drugs in biological (blood, urine) and non-biological samples required for the epidemiological investigation, as requested by public health authorities, directly or indirectly through the coroner's office or the CAPQ; Report cases that potentially meet the case definition and have not been previously identified by public health authorities, the CAPQ or the coroner's office.
Laboratoire de toxicologie du Laboratoire de sciences judiciaire	s et de médecine légale (LSJMI	L) (the toxicology l	aboratory of the LSJML)
 The CTQ is a laboratory that offers analytical expertise in toxicology for various substances (metals, organic contaminants, pharmaceuticals, drugs, etc.) in biological samples. It is one of the two laboratories that provide the specialized analytical services required by the Centre antipoison du Québec (CAPQ) to fulfill its mission (54, 55). The CTQ is also one of the two toxicology laboratories that provide the analytical services required by the coroner's office to fulfill its mission.D 	Laboratory analyses (blood, urine, non- biological samples).	Provincial.	 Perform specialized analyses of drugs in biological (blood, urine) and non-biological samples required for the epidemiological investigation, as requested by public health authorities, directly or indirectly through the coroner's office or the CAPQ; Report cases that potentially meet the case definition and have not been previously identified by public health authorities, the CAPQ or the coroner's office.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Laboratoire de biochimie spécialisée du Centre hospitalier unive	ersitaire Sainte-Justine (CHUSJ)	(the specialized b	iochemistry laboratory of the CHUSJ)
 In addition to operating as a specialized biochemistry hospital laboratory serving its clientele, the CHUSJ's specialized biochemistry laboratory is also one of the two toxicology laboratories that provide the specialized analytical services required by the CAPQ to fulfill its mission. 	Laboratory analyses (blood, urine).	Provincial (for services provided to the CAPQ).	Perform specialized analyses of drugs in biological samples (blood, urine) required for the epidemiological investigation, as requested by public health authorities, indirectly through the CAPQ.
Health Canada's Drug Analysis Service (DAS)			
• The primary role of the DAS is to analyze drugs seized by law enforcement agencies to identify them and, in some cases, to determine their purity. Each year, the DAS's laboratories receive more than 110,000 drug samples that are often used as evidence in court cases (59).	Laboratory analyses (seized drugs).	Provincial.	Perform analyses of drugs seized by police services, as requested by law enforcement agencies.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Police services			
 The mission of police forces and of each police force member (60) is to maintain peace, order and public security, to prevent and repress crime and, according to their respective jurisdiction as set out in sections 50, 69 and 289.6 of the Police Act, offences under the law and municipal by-laws, and to apprehend offenders. In pursuing their mission, police forces and police force members shall ensure the safety of persons and property, safeguard rights and freedoms, respect and remain attentive to the needs of persons who are victims, and cooperate with the community in a manner consistent with cultural pluralism. Police forces shall target an adequate representation, among their members, of the communities they serve. 	Law enforcement (public safety).	Regional or provincial.	 Provide information relevant to the epidemiological investigation (market, seizures, substances found in seizures, arrests, information from users, drugs in circulation, etc.). It should be noted that law enforcement agencies may conduct their own investigation in parallel with that of public health authorities; Get messages out to the community to protect the health of the population; Remove from the market illegal products causing an excess of overdoses; Report situations that may pose a threat to the health of the population; Report overdoses that potentially meet the case definition; Ask the Drug Analysis Service (DAS) to conduct analyses of seized drugs at the request of public health authorities.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Pre-hospital emergency services (PEMS) of the Centres intégrés and first responders (Urgences-santé for the Montréal and Laval		services sociaux (C	CISSS/CIUSSS), ambulance services
 CISSS, CIUSSS and PEMS authorities must, among other things, (61): develop a three-year pre-hospital emergency service organization plan that includes its priorities in that area which must, if required, provide for the whole of the population, access to a 9-1-1 centre, a health communication centre, a first responder service, ambulance services and centres operated by receiving institutions, in particular those that dispense emergency services; determine the organization model for the pre-hospital emergency services offered in its region and the personnel assigned to the services; coordinate the regional pre-hospital emergency services and ensure their interaction with the health and social services system. An ambulance service means any service which, in keeping with the agency's three-year pre-hospital emergency service organization plan and the protocols determined by the Minister, furnishes pre-hospital emergency care intended to prevent a person's condition from deteriorating and transports the person in an ambulance to a centre operated by a receiving institution or between the facilities maintained by one or more institutions (61). 	 Organization of prehospital emergency services; Pre-hospital emergency services. 	Regional.	 Report overdoses that potentially meet the case definition; Provide data on interventions performed in the case of overdoses that potentially meet the case definition.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Pre-hospital emergency services (PEMS) of the Centres intégrés and first responders (Urgences-santé for the Montréal and Lava		services sociaux (C	CISSS/CIUSSS), ambulance services
 A first responder, on the exclusive assignment of the health communication centre, shall perform primary stabilization techniques on any person whose condition so requires, in accordance with the clinical intervention protocols determined for such purpose by the Minister and in keeping with the level of training recognized by the Minister. Complementing the work of the ambulance technician, the first responder shall apply the protocols intended to prevent the condition of the person in distress from deteriorating and transfer the responsibility for emergency care to the ambulance technician upon the latter's arrival at the scene (61). 			
Emergency services and intensive care (clinicians)			
Emergency services provide at all times each person who presents with an urgent health problem with the quality care and services required by their condition (using a patient-centred approach) (62).	Emergency and intensive care hospital services.	Regional.	 Report situations that may pose a threat to the health of the population; Report overdoses that potentially meet the case definition; Share information about overdose cases encountered in the emergency department.

Table 1 Overview of main partners to consider in situations involving reports or epidemiological investigations of drug overdoses (continuation)

Missions, functions and powers ^A	Fields of expertise ^B	Scope	Nature of the potential contribution ^C
Centres de réadaptation en dépendance (CRD) (addiction rehabi	litation centres)		
 The mission of a CRD is to offer adjustment (detoxification), rehabilitation and social integration services to persons struggling with an alcohol, gambling or drug addiction or any other addiction, who require such services, as well as persons to accompany them, or support services for their families and friends (53). 	Addiction services.	Regional.	 Provide information regarding new admissions, ongoing treatments and information obtained from clients; Report situations that may pose a threat to the health of the population.
Community organizations or public agencies providing services	to drug users		
The mission of this type of partner may vary from one organization to another. Generally, their mission is associated with reducing the harms associated with drug use and preventing the transmission of sexually transmitted and bloodborne infections (STBBIs).	Harm reduction for drug users.	Regional.	 Report situations that may pose a threat to the health of the population; Report overdoses that potentially meet the case definition; Provide information about drugs and information that is circulating among drug users; Help adapt messages for circulation among at-risk groups; Deliver messages and assist in implementing certain interventions in the field with the aim of protecting the health of the population.

^A The mission and functions presented in the table may be incomplete. Only those elements relevant to the context of this guide are presented.

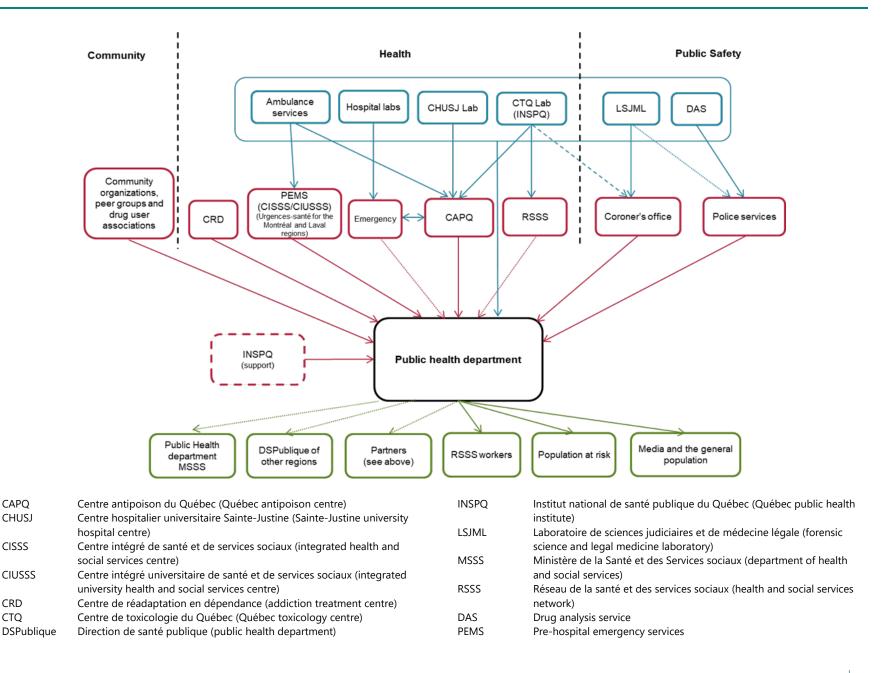
^B The areas of jurisdiction presented in the table may be incomplete. Only those elements relevant to the context of this guide are presented.

^C The nature of the contribution presented may fail to reflect the full range of possible contributions for each organization.

^D Beginning November 1, 2018, all toxicology analyses required by coroners will be performed at the LSJML.

APPENDIX 2 PARTNER DIAGRAM

The diagram on the following page shows the various partners distributed within the community, health and public safety sectors. First-level partners who have data relevant to the investigation are shown in red. Represented in blue are the partners who provide the former with analytical or technical services and who supply some of their data. The various types of recipients to whom communications may be directed when there are reports or excesses of drug overdoses are designated in green.



CISSS

CRD

CTQ

APPENDIX 3 OVERDOSE REPORT FORM FOR COMMUNITY-**BASED ORGANIZATIONS**

Introductory notes

- This overdose report form is intended for use by community-based organizations to signal situations that are reported to them;
- The form can be used during or outside of an epidemiological investigation;
- It is particularly important that confidentiality be respected (see reverse side of the form);
- No personal data is collected with this form;
- The information is collected by the community worker and faxed to the public health department;
- This form should be used when the communityworker believes there is a situation is of concern because:
 - a large number of persons have overdosed in a short period of time, or;
 - the symptoms of the overdose are particularly severe, or;
 - the circumstances are unusual.
- The form is available on the website of the INSPQ at: www.inspg.gc.ca/en/publications/3328. It has been made available in Word format to allow public health authorities to customize and modify it, if necessary, according to the situation and their needs. It must be customized by each public health department before use (logo in the header and orange text).

(Insert the logo of your DSP)

For communitybased organizations

OVERDOSE REPORT FORM

Forward to the public health department's <u>confidential</u> fax number (enter fax number)

»» Details of use on back ««

Identification of the declarant				
Name:	F	unction:		
Organization:	Te	elephone:		
Source of information				
Information obtained from: Overdose victim	☐ Overdose witness	other:		
Description of event				
Date of overdose:	te time: 24-hour format U Outdoor public place	□ Other:		
City/Neighbourhood:				
The victim used: Alone In the presence of others: How many people used the same product(s) at the How many of these people overdosed?	e same time?			
Description of the victim and symptoms				
Gender: M F Trans Other (e.g.: qu	reer, intersex) Age	::		
Symptoms: Difficult, very slow or absent breathing.	ing 🗆 '	Very small pupils (pinpoint)	□ Cold, clammy skin	
☐ Does not react to noise or pain		Blue lips and/or nails	☐ Cardiorespiratory arrest	
☐ Hyperthermia		xcessive sweating	☐ Heart palpitations	
☐ Agitation	шн	lallucinations	☐ Convulsions	
☐ Other: Yes	 □ No □ □	on't know		
Description of products used				
Description of products used Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log	go)	Mode of use (e.g.: swallowed, smoked, injected)	Source (city, neighbourhood, Web, other)	
Product, form, appearance, packaging	go)	(e.g.: swallowed, smoked,		
Product, form, appearance, packaging	go)	(e.g.: swallowed, smoked,		
Product, form, appearance, packaging	go)	(e.g.: swallowed, smoked,		
Product, form, appearance, packaging	go)	(e.g.: swallowed, smoked,		
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log	go) Yes	(e.g.: swallowed, smoked,		
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of interventions Administration of naloxone?		(e.g.: swallowed, smoked, injected)	(city, neighbourhood, Web, other)	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of interventions Administration of naloxone?	Yes Community worker Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers	(city, neighbourhood, Web, other)	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of interventions Administration of naloxone? If so, by whom? If yes, responded to naloxone? Presence/intervention of first responders?	Yes Community worker Yes Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers No	(city, neighbourhood, Web, other) Don't know	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of interventions	Yes Community worker Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers	(city, neighbourhood, Web, other)	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of interventions	Yes Community worker Yes Yes Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers No No	c(ity, neighbourhood, Web, other) Don't know Onnel Other: Don't know Don't know Don't know	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of interventions	Yes Community worker Yes Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers No	(city, neighbourhood, Web, other) Don't know	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of Interventions	Yes Community worker Yes Yes Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers No No No	(city, neighbourhood, Web, other) Don't know	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of Interventions	Yes Community worker Yes Yes Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers No No No	(city, neighbourhood, Web, other) Don't know	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of interventions	Yes Community worker Yes Yes Yes	(e.g.: swallowed, smoked, injected) No Ambulancepers No No No	(city, neighbourhood, Web, other) Don't know	
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X log Description of Interventions	Yes Community worker Yes Yes Yes Yes Liblic health nurse, if	No No No No No No No No	(city, neighbourhood, Web, other)	

Confidentiality of data

The declarant affirms to the person providing the information (victim, witness, other) that all information received will be collected and transmitted in a confidential manner.

The public health department is committed to treating all information as confidential. The form will be received by a confidential fax machine at the offices of the public health department. No data identifying the victim of or witnesses to the overdose will be shared with an external partner.

If, in certain circumstances, there is a reluctance to provide some information in writing, it can be communicated orally by telephone using the numbers listed below.

Explanatory notes

Who should report?

This form is intended to be used by workers in community-based organizations to report situations that are reported to them. It can be used by other types of actors as needed.

If you are a health care professional, you are invited to use the reporting form that has been developed specifically for health care professionals.

What to report?

The form should be used when the declarant believes the situation is of concern because:

- a large number of persons have overdosed in a short period of time, or:
- the symptoms of the overdose are particularly severe, or;
- the circumstances are unusual.

If necessary, validate the relevance of filling out a form with the professional on duty at the public health department:

- During business hours: (insert phone number)
- After hours: (insert phone number)

Details about the sections to be filled in

Although it is not mandatory to complete all sections of the form, it is strongly encouraged to provide as much information as possible. Particularly important elements to document are the date of the overdose, the location of the overdose, and a description of the products used.

Date and location of overdose

Information about the date and location of the overdose can make it possible to determine if an overdose outbreak is underway. Additional details that more precisely position the geographic location of the overdose may be helpful if the victim or witness agrees to provide them (e.g., intersection, known public place).

Products used, forms, appearances and packaging

It is important to collect information on all products used prior to the overdose, not just the one that the victim or witness believes caused the overdose. If possible, note additional details about the product and its packaging (e.g.: format, colour, logo, distinguishing marks)

Other relevant information

If necessary, use another sheet of paper to communicate any additional information that may help to better document or improve understanding of the situation.

APPENDIX 4 OVERDOSE REPORT FORM FOR HEALTH CARE **PROFESSIONALS**

Introductory notes

- This overdose report form is intended to be used by health care professionals to make reports;
- The form can be used during or outside of an epidemiological investigation;
- It is particularly important that confidentiality be respected (see reverse side of the form);
- Minimal personal data is collected with this form only in the context of an investigation or when the person agrees to provide it;
- The information is collected by the health care professional and faxed to the public health department;
- The form should be used when the professional believes there is a situation of concern because:
 - a large number of persons have overdosed in a short period of time, or;
 - the symptoms of the overdose are particularly severe, or;
 - the circumstances are unusual.
- The form should also be completed when the public health department requests reports of overdoses due to a specific situation (epidemiological investigation or other circumstances);
- The form is available on the website of the INSPQ at: www.inspg.gc.ca/en/publications/3328. It has been made available in Word format to allow public health authorities to customize and modify it, if necessary, according to the situation and their needs. It must be customized by each public health department before use (logo in the header and orange text).

(Insert the logo of your DSP)

For health professionals

OVERDOSE REPORT FORM

Forward to the public health department's <u>confidential</u> fax number (enter fax number)

»» Details of use on back ««

Identification of the declarant				
	F			
Name:	Function:			
Organization:	Telephone:			
Identification of the overdose victim				
the person agrees to be contacted by a professiona the public health department is conducting an epide The information collected will be treated as confidential.	I from the public health department to provide more details, OR ; miological investigation.			
Last name: First name:				
Year Month Dey Date of birth:	Telephone:			
Description of event				
Date of overdose:	imate time: 4-hour format imate time: Outdoor public place Other:			
City/Neighbourhood:				
The victim used: ☐ Alone ☐ In the presence of others	□ Don't know			
If used in the presence of others, how many persons overdosed?				
	a a stantas entrario statuto Pario Procendado			
Description of the victim and symptoms				
Gender: M F Age: City of residents				
TOTAL CONTROL SECTION	ate of consciousness			
☐ Cyanosis ☐ Cardiorespiratory arrest ☐ Excessive swea				
☐ Hyperthermia ☐ Heart pal	**************************************			
TOTAL AND	☐ Hallucinations			
☐ Other:				
Is the person deceased?	W			
Description of products used	I Made de la constantina della			
Product, form, appearance, packaging (e.g.: powdered cocaine, white, packet with X logo)	Mode of use (e.g.: swallowed, smoked, injected) (city, neighbourhood, Web, other)			
Description of interventions	<u> </u>			
Administration of naloxone?	□ No □ Don't know			
If so, by whom?	The state of the s			
If yes, responded to naloxone? □ Yes	□ No □ Don't know			
Presence/intervention of first responders?	□ No □ Don't know			
Presence/intervention of ambulance personnel?	□ No □ Don't know			
If transported, to which hospital? :	— — — — — — — — — — — — — — — — — — —			
Presence/intervention of police officers? ☐ Yes	□ No □ Don't know			
Section reserved for use by the public health department				
Voer Month	Day			
Date report received at the DSP:				

Confidentiality of data

The declarant (health professional) affirms to the person providing the information (victim, witness, other) that all information received will be collected and transmitted in a confidential manner.

The public health department is committed to treating all information as confidential. The form will be received by a confidential fax machine at the offices of the public health department. No data identifying the victim of or witnesses to the overdose will be shared with an external partner.

Explanatory notes

Who should report?

This sheet is intended for use by health professionals.

If you are a worker in a community-based organization, you are invited to use the reporting form that has been developed specifically for community actors.

What to report?

The form should be used when the health professional believes the situation is of concern because:

- a large number of persons have overdosed in a short period of time, or;
- the symptoms of the overdose are particularly severe, or;
- the circumstances are unusual.

The form should also be used when the public health department requests reports of overdoses due to a specific situation (epidemiological investigation or other).

If necessary, validate the relevance of filling out a form with the professional on duty at the public health department:

- During office hours: (insert phone number)
- After hours: (insert phone number)

Details about the sections to be filled in

Although it is not mandatory to complete all sections of the form, it is strongly encouraged to provide as much information as possible. Particularly important elements to document are the date of the overdose, the location of the overdose, and a description of the products used.

Date and location of overdose

Information about the date and location of the overdose can make it possible to determine if an overdose outbreak is underway Additional details that more precisely position the geographic location of the overdose may be helpful if the victim or witness agrees to provide them (e.g., intersection, known public place).

Products used, forms, appearances and packaging

It is important to collect information on all products used prior to the overdose, not just the one that the victim or witness believes caused the overdose. If possible, note additional details about the product and its packaging (e.g.: format, colour, logo, distinguishing marks).

Other relevant information

If necessary, use another sheet of paper to communicate any additional information that may help to better document or improve understanding of the situation.

APPENDIX 5 INVESTIGATION QUESTIONNAIRE

Introductory notes

- This questionnaire is intended for use by public health departments to collect data on overdose cases in the context of an epidemiological investigation;
- It can also be used outside of an investigation, when a report is retained for the purpose of gathering additional information. In this type of situation, however, it is important to remember that under Section 95 of the Public Health Act, the person making the report is not permitted to disclose personal or confidential information;
- Data are collected by public health departments from partners who have contacted the public health department or who have been contacted by the department;
- It remains the responsibility of the public health department to judge what information it is relevant to collect. Thus, the questionnaire can be used in whole or in part, according to the judgment of the public health department. It may be deemed necessary to collect other information in addition to what is proposed;
- The investigation questionnaire is available on the website of the INSPQ at: www.inspg.gc.ca/en/publications/3328. It has been made available in Word format to allow public health authorities to customize and modify it, if necessary, according to the situation and their needs.

(Insert the logo of your DSP)

INVESTIGATION QUESTIONNAIRE Drug overdoses

Internal file No.:	, 	File opening date:	Year Month Day
VALIDATION STAT	US (based on case definition) As of	Status	Notes
Preliminary status:	Year Month Day	☐ Case under investigation☐ Case not retained	
Final status:	Year Month Day	☐ Case retained ☐ probable ☐ confirmed ☐ Case not retained	

IDENTIFICATION OF THE OVERDOSE VICTIM

		First name:				
Date of birth:	Age:		Gender:	□М	□F	
Language : □ French		Health Insurance #:				
Address:						
City:				Postal code:		
	☐ Private residence (apartment, house)		☐ Other:	<u> </u>	4 8	
Type of residence: ☐ Homeless (street, squat, shelter, hostel)			□ Unknown			
☐ Room (hotel, motel, boarding house, rooming house)						
Telephone:			Cellular:			
NAME OF THE PROPERTY OF THE PR			Other:			
Email address:						
Notes:						

2 IDENTIFICATION OF INFORMATION SOURCES

2.1 Declarants

(individuals or organizations who contacted the public health department)

SOURCE 1					
☐ Ambulance se	services Poison centre			☐ Relative or friend	
☐ Police service		☐ Coroner's office		☐ Victim	
☐ First responde		☐ Addiction treatment centre		☐ Other:	
☐ Hospital centr	е	☐ Community organization			
Name of organiz	ation (if applicable):				
Address:					
City:			Postal code:		
Contact person					
Last name:			First name:		
Function:			Email address:		
Talashasa	Work:		Cellular:		
Telephone:	Home:		Other:		
SOURCE 2					
☐ Ambulance se	ervices	☐ Poison centre		☐ Relative or friend	
☐ Police service	s	☐ Coroner's office	☐ Victim		
☐ First responde	ers	☐ Addiction treatment centre	☐ Other:		
☐ Hospital centr	e	☐ Community organization			
Name of organiz	ation (if applicable):				
Address:					
City:		Postal code:			
Contact person					
Last name:		First name:			
Function:			Email address:		
Talanhana	Work:		Cellular:		
Telephone:	Home:		Other:		

2.2 Additional information sources (persons or organizations contacted by the public health department for additional information)

SOURCE 3					
☐ Ambulance s				☐ Relative or friend	
☐ Police service				☐ Victim	
☐ First respond ☐ Hospital cent	2014 - 407 (CONTROL - 100 - 10			☐ Other:	
	100	☐ Community organization			
31	ration (if applicable):				
Address:					
City:			Postal code:		
Contact persor			Ī		
Last name:			First name:		
Function:	Γ		Email address:		
Telephone:	Work:		Cellular:		
relepitorie.	Home:		Other:		
SOURCE 4					
SOURCE 4		□ Deisen senfre		Deletine au friend	
☐ Ambulance service		□ Poison centre□ Coroner's office		☐ Relative or friend☐ Victim	
☐ First respond		☐ Addiction treatment centre		☐ Other:	
				Li Other.	
☐ Hospital centre ☐ Community organization					
Name of organiz	ration (if applicable):				
Address:			ī		
City:		Postal code:			
Contact person			I		
Last name:		First name:			
Function:			Email address:		
Telephone:	Work:		Cellular:		
relepitorie.	Home:		Other:		
SOURCE 5					
☐ Ambulance s	enires	□ Poison centre		☐ Relative or friend	
☐ Police service		☐ Coroner's office		☐ Victim	
☐ First respond		☐ Addiction treatment centre		☐ Other:	
☐ Hospital cent		☐ Community organization		dilici.	
	ration (if applicable):				
Address:	Lation (II applicable).				
an control deposition			Postal code:		
City: Contact person			FUSIAI CODE.		
Last name:			First name:		
Function:			Email address:		
	Work:		Cellular:		
Telephone:		Other:			

SOURCE 6				
☐ Ambulance s	ervices	☐ Poison centre		☐ Relative or friend
☐ Police service		☐ Coroner's office		□ Victim
☐ First respond	ers	☐ Addiction treatment centre		☐ Other:
☐ Hospital cent	re	☐ Community organization		
Name of organia	zation (if applicable):			
Address:				
City:		Postal code:		
Contact person				
Last name:		First name:		
Function:		Email address:		
Work:		Cellular:		
Telephone: Home:		Other:		

3 DESCRIPTION OF EVENT

DATE AN	D LOCATION OF OVERDOSE
DATEAN	Year Month Day 24-hour format
Date:	Tear Month Day 24-hour format Approximate time:
Location	☐ Private residence
1	☐ Indoor public place
	□ Outdoor public place
	□ Other:
Address o	r other indication of location:
CIRCUMS	TANCES
Use:	□ Alone
	☐ In the presence of others
	□ Unknown
	If in the presence of others:
	Number of persons who used the same product at the same time:
	Number of persons who overdosed at the same time:
	Contact information for persons who used the same product at the same time:
	Name:
	Telephone:
	Email address:
	Notes:
Intent:	☐ Unintentional overdose
intent.	☐ Intentional overdose (suicide, homicide, other)
	☐ Intention unknown
	SCRIPTION OF THE EVENT the effects felt and observed before the arrival of emergency services)
(morading	the checks lost data supervise believe the diffraction of chieffer by solutions.

3.1 Aid and services received:

9-1-1/FIRST RESPONDERS/ POLICE/ AMBULANCE ATTENDANTS/HOSPITAL					
9-1-1 was called:		□ Yes	□ No	□ Unknown	
Presence/intervention of first	responders:	□ Yes	□ No	□ Unknown	
Presence/intervention of police	ce officers:	□ Yes	□ No	□ Unknown	
Presence/intervention of amb	bulance personnel:	□ Yes	□ No	□ Unknown	
Hospital Visit:		□ Yes	□ No	☐ Unknown	
Hospital Name:		3-6-3	File No.:		
Seen in emergency dept.		☐ Yes	□ No	☐ Unknown	
Hospitalization:		□ Yes	□ No	☐ Unknown	
If yes, ICU admission	n:	☐ Yes ☐ No ☐ Unknown			
SIGNS AND SYMPTOMS OF	BSERVED BY EMERGI	ENCY SERVIC	ES OR ON ARRIVAL AT	THE HOSPITAL	
Respiratory distress:		☐ Yes	□ No	□ Unknown	
Altered state of consciousnes	ss:	☐ Yes	□ No	□ Unknown	
Myosis:		☐ Yes	□ No	□ Unknown	
Cyanosis:		☐ Yes	□ No	□ Unknown	
Cardiorespiratory arrest:		☐ Yes	□ No	□ Unknown	
Excessive sweating:		☐ Yes	□ No	□ Unknown	
Agitation:		☐ Yes	□ No	□ Unknown	
Seizures:		☐ Yes	□ No	□ Unknown	
Hallucinations:		□ Yes	□ No	□ Unknown	
Other (specify):	Other (specify):				
Other (specify):		<u> </u>		2 2 2 2	<u>, , , , , , , , , , , , , , , , , , , </u>
Other (specify):					7/ No. 10 No.
Vital signs observed on arr	rival at the hospital				
Glasgow Scale (score):	N	Respiratory r	ate and rhythm:		Temperature:
Blood pressure:		Heart rate an	d rhythm:		
VENTILATORY ASSISTANCE	CE				
Performed:	☐ Yes ☐ No	0	☐ Unknown		
	☐ Ambulance personnel		☐ Community worker		☐ Nurse outside hospital
Performed by:	☐ First responder		☐ Fellow user		☐ Nurse in hospital
Performed by.	☐ Police officer		☐ Relative or friend		☐ Physician
	□ Other:		8		
CHEST COMPRESSION					
Performed:	□ Yes □ No	0	☐ Unknown		
	☐ Ambulance personnel		□ Community workerr		☐ Nurse outside hospital
Performed by:	☐ First responder		☐ Fellow user		☐ Nurse in hospital
L	☐ Police officer		☐ Relative or friend		☐ Physician
	□ Other:				

ADMINISTRATION OF NA	LOXONE			
Performed:	□Yes	□ No	□ Unknown	
Administration 1				
	☐ Ambula	ance personnel	☐ Community worker	☐ Nurse outside hospital
5	☐ First re	sponder	☐ Fellow user	☐ Nurse in hospital
Performed by:	□ Police	officer	☐ Relative or friend	☐ Physician
	☐ Other:			Name .
Route of administration:	□ IM □ IN □ IV	Number of doses or volume administered:	Concentration:	24-hour format Time:
Responded to naloxone:	☐ Yes	□ No	□ Unknown	
Notes:				
Administration 2				
		ance personnel	☐ Community worker	☐ Nurse outside hospital
Performed by:	☐ First re	**	☐ Fellow user	☐ Nurse in hospital
	□ Police		☐ Relative or friend	□ Physician
	□ Other:		_	
Route of administration:	□ IM □ IN □ IV	Number of doses or volume administered:	Concentration:	24-hour format Time:
Responded to naloxone:	☐ Yes	□ No	□ Unknown	
Notes:				
Administration 3				
	☐ Ambula	ance personnel	☐ Community worker	☐ Nurse outside hospital
Performed by:	☐ First re	sponder	☐ Fellow user	☐ Nurse in hospital
Performed by.	□ Police	officer	☐ Relative or friend	☐ Physician
	☐ Other:		_	
Route of administration:	□ IM □ IN □ IV	Number of doses or volume administered:	Concentration:	24-hour format
Responded to naloxone:	□Yes	□ No	□ Unknown	
Notes:				
3.2 Final outcome				
☐ Survival (if known sequel	ae, specify)			, , , , , , , , , , , , , , , , , , ,
☐ Death from overdose:		Year Date:	Month Day Coroner's file	No.:
□ Unknown				
Final outcome as of:	Yea	ar Month Day		

DESCRIPTION OF PRODUCTS USED (AS REPORTED)

It is important to note that Section 4.1 applies to products used within 3 hours prior to the overdose, while Section 4.2 applies to products used within 3 days prior to the overdose (excluding those already included in Section 4.1).

4.1 Products used in the moments preceding the overdose (within approx. 3 hours)

#	PRODUCTS USED*
1	
2	
3	
4	

Instructions: Provide the names of the products that the person reports having used (street names or other). Verify that no product used has been forgotten. See the examples of products below.

Examples of products:

- Alcohol: wine, beer, spirits, pre-mixed drinks, etc.
- · Amphetamines: amphetamine, methamphetamine, crystal meth, Ecstasy, etc.
- · Cannabis: herbal, concentrate (wax, dabs, shatter, BHO), oil, hashish, etc.
- Cocaine: cocaine, crack
- Opioids: heroin, Dilaudid/Hydromorph Contin (hydromorphone), OxyContin (oxycodone), morphine, fentanyl, codeine, etc.
- Other drugs: GHB, bath salts (mephedrone, MDPV, other cathinone derivatives), synthetic cannabinoids (K2, Spice, etc.), NBOMe, poppers (nitrites), ketamine, PCP, LSD, magic mushrooms, etc.
- Antidepressants: Wellbutrin (bupropion), Cipralex/Celexa (citalopram), Prozac (fluoxetine), Paxil (paroxetine), Zoloft (sertraline), Effexor (venlafaxine), etc.
- Antipsychotics: Seroquel (quetiapine), Zyprexa (olanzapine), Clozaril (clozapine), Risperdal (risperidone), etc.
- Benzodiazepines: Xanax (alprazolam), Rivotril (clonazepam), Ativan (lorazepam), Lectopam (bromazepam), Valium (diazepam), etc.
- Smart drugs: Ritalin (methylphenidate), Biphentin (methylphenidate), Vyvanse (lisdexamfetamine), Strattera (atomoxetine), Adderall (amphetamine), Concerta (methylphenidate)

Instructions for the following pages:

- Complete the tables on the following pages for each of the products listed in the table above.
- If necessary, inform the victim of the overdose or their respondent of the possibility of using an anonymous phone line for reporting

"In parallel with the public health department's investigation, the police may conduct their own investigation to remove the drug causing the overdoses from the market. If you wish to provide information to the police anonymously and confidentially, you can call the phone line (replace this text with the name of the line to call in your area) at the following number: (replace this text with the telephone number)."

Each public health department must specify the number to call in their region. If the local police force does not have an anonymous phone line, information can be conveyed to Crime Stoppers at 1-800-711-1800.

PRODUCT 1				
Product description				
Name of the product used:				
Presumed substance:				
Appearance: Product description:		□ Tablet; form: □ Capsule □ Powder □ Liquid □ Other:		
	Colour:			
	Markings/logo:			
	Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown		
Package Description:	Material, colour, logo, distinctive signs, etc.:			
r askage Bessription.	Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown		
Characteristics differ from what logo, smell, taste, packaging):		☐ Yes. Specify: ☐ No ☐ Unknown		
Prescription:		☐ Prescribed to the victim ☐ Prescribed to another person ☐ Not prescribed ☐ Unknown		
Use				
Quantity used:				
Mode of use:		☐ Ingestion (swallowed) ☐ Injection ☐ Intranasal ☐ Inhalation (smoked) ☐ Other:		
Changes in mode of use:		□ Yes, Specify: □ No □ Unknown		
How frequently is the product	usually used by the victim?			
Source				
Place acquired (city, neighbourhood, online, other):				
Date acquired:		Year Month Day		
Recent change of supplier:		☐ Yes ☐ No ☐ Unknown		
Availability of the product for	or analysis			
Product is available for analysis:		☐ Yes ☐ No ☐ Unknown If yes, follow- up: ————————————————————————————————————		
Other information				

PRODUCT 2				
Product description				
Name of the product used:				
Presumed substance:				
Product description:	Appearance:	□ Tablet; form: □ Capsule □ Powder □ Liquid □ Other:		
	Colour:			
	Markings/logo:			
	Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown		
Package Description:	Material, colour, logo, distinctive signs, etc.:			
r askage Bessription.	Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown		
Characteristics differ from what logo, smell, taste, packaging):		☐ Yes. Specify: ☐ No ☐ Unknown		
Prescription:		☐ Prescribed to the victim ☐ Prescribed to another person ☐ Not prescribed ☐ Unknown		
Use				
Quantity used:				
Mode of use:		☐ Ingestion (swallowed) ☐ Injection ☐ Intranasal ☐ Inhalation (smoked) ☐ Other:		
Changes in mode of use:		□ Yes, Specify: □ No □ Unknown		
How frequently is the product	usually used by the victim?			
Source				
Place acquired (city, neighbourhood, online, other):				
Date acquired:		Year Month Day		
Recent change of supplier:		☐ Yes ☐ No ☐ Unknown		
Availability of the product for	or analysis			
Product is available for analysis:		☐ Yes ☐ No ☐ Unknown If yes, follow- up: ————————————————————————————————————		
Other information				

PRODUCT 3	PRODUCT 3			
Product description				
Name of the product used:				
Presumed substance:				
Product description:	Appearance:	□ Tablet; form: □ Capsule □ Powder □ Liquid □ Other:		
<u> </u>	Colour:			
	ANTE STILL OF			
	Markings/logo: Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown		
Deales as Descriptions	Material, colour, logo, distinctive signs, etc.:	1 res (Lattached) Livo Librariowii		
Package Description:	Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown		
Characteristics differ from wha logo, smell, taste, packaging):		☐ Yes. Specify: ☐ No ☐ Unknown		
Prescription:		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed □ Unknown		
Use				
Quantity used:				
Mode of use:		□ Ingestion (swallowed) □ Injection □ Intranasal □ Inhalation (smoked) □ Other:		
Changes in mode of use:		☐ Yes. Specify: No ☐ Unknown		
How frequently is the product	usually used by the victim?			
Source				
Place acquired (city, neighbourhood, online, other):				
Date acquired:		Year Month Day		
Recent change of supplier:		☐ Yes ☐ No ☐ Unknown		
Availability of the product for	or analysis			
Product is available for analysis:		☐ Yes ☐ No ☐ Unknown If yes, follow- up:		
Other information	Other Information			

PRODUCT 4	PRODUCT 4				
Product description					
Name of the product used:					
Presumed substance:					
	Appearance:	□ Tablet; form: □ Capsule □ Powder □ Liquid			
Product description:		☐ Other:			
	Colour:				
	Markings/logo:				
	Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown			
Package Description:	Material, colour, logo, distinctive signs, etc.:				
o seedad is made and Francis	Photo available:	☐ Yes (☐ attached) ☐ No ☐ Unknown			
Characteristics differ from who logo, smell, taste, packaging)		☐ Yes. Specify: ☐ No ☐ Unknown			
Prescription:		☐ Prescribed to the victim ☐ Prescribed to another person ☐ Not prescribed ☐ Unknown			
Use					
Quantity used:					
Mode of use:		☐ Ingestion (swallowed) ☐ Injection ☐ Intranasal ☐ Inhalation (smoked) ☐ Other:			
Changes in mode of use:		☐ Yes. Specify: ☐ No ☐ Unknown			
How frequently is the product	usually used by the victim?				
Source					
Place acquired (city, neighbou	urhood, online, other):				
Date acquired:		Year Month Day			
Recent change of supplier:		□ Yes □ No □ Unknown			
Availability of the product for	Availability of the product for analysis				
Product is available for analysis:		☐ Yes ☐ No ☐ Unknown If yes, follow- up: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐			
Other information					

4.2 Products consumed in the 3 days preceding the overdose

Information about the products consumed in the 3 days preceding the overdose allows for a more accurate interpretation of the results when toxicological analyses are performed (Section 7).

#	PRODUCTS USED*	PRESCRIPTION	
1		☐ Prescribed to the victim ☐ Prescribed to another person ☐ Not prescribed	□ Unknown □ N/A
2		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	☐ Unknown ☐ N/A
3		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	□ Unknown □ N/A
4		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	☐ Unknown ☐ N/A
5		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	☐ Unknown ☐ N/A
6		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	☐ Unknown ☐ N/A
7		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	☐ Unknown ☐ N/A
8		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	☐ Unknown ☐ N/A
9		□ Prescribed to the victim □ Prescribed to another person □ Not prescribed	□ Unknown □ N/A
10		 □ Prescribed to the victim □ Prescribed to another person □ Not prescribed 	☐ Unknown ☐ N/A

Examples of products:

- Alcohol: wine, beer, spirits, pre-mixed drinks, etc.
- Amphetamines: amphetamine, methamphetamine, crystal meth, Ecstasy, etc.
- Cannabis: herbal, concentrate (wax, dabs, shatter, BHO), oil, hashish, etc.
- · Cocaine: cocaine, crack
- Opioids: heroin, Dilaudid/Hydromorph Contin (hydromorphone), OxyContin (oxycodone), morphine, fentanyl, codeine, etc.
- Other drugs: GHB, bath salts (mephedrone, MDPV, other cathinone derivatives), synthetic cannabinoids (K2, Spice, etc.), NBOMe, poppers (nitrites), ketamine, PCP, LSD, magic mushrooms, etc.
- Antidepressants: Wellbutrin (bupropion), Cipralex/Celexa (citalopram), Prozac (fluoxetine), Paxil (paroxetine), Zoloft (sertraline), Effexor (venlafaxine), etc.
- Antipsychotics: Seroquel (quetiapine), Zyprexa (olanzapine), Clozaril (clozapine), Risperdal (risperidone), etc.
- Benzodiazepines: Xanax (alprazolam), Rivotril (clonazepam), Ativan (lorazepam), Lectopam (bromazepam), Valium (diazepam), etc.
- Smart drugs: Ritalin (methylphenidate), Biphentin (methylphenidate), Vyvanse (lisdexamfetamine), Strattera (atomoxetine), Adderall (amphetamine), Concerta (methylphenidate)

Instructions: provide the names of all drugs and medications that the person reports having used in the 3 days preceding the overdose, excluding those used in the moments preceding the overdose (Section 4.1). Verify that no product used has been forgotten. See the examples of products

5	VICTI	M'S I	JSE	PRO	FILE
---	-------	-------	-----	------------	------

USE HABITS	
Drug use in the past month:	☐ 1 use – the one leading to overdose ☐ Occasionally, not every week ☐ Regularly, 1 or 2 days a week ☐ Regularly, 3 to 6 days a week ☐ Every day ☐ Unknown
Drug injection in lifetime:	☐ Yes If yes, injection within the past month: ☐ Yes ☐ No ☐ Unknown ☐ No ☐ Unknown
PREVIOUS OVERDOSES	
Previous overdoses:	☐ Yes If yes: ☐ Within the past month ☐ Within the past year ☐ No ☐ Unknown

COUNSELLING PROVIDED FOLLOWING THE OVERDOSE

Verify whether counselling was provided and, if necessary, provide counselling when possible.

COUNSELLING PROVIDED				
Preventing overdoses:	□ Yes	□ No	☐ Already aware	Unknown
Recognizing the signs and symptoms of an overdose:	□ Yes	□ No	☐ Already aware	□ Unknown
Knowing how to intervene in case of an overdose:	□ Yes	□ No	☐ Already aware	□ Unknown
Administering naloxone:	□ Yes	□ No	☐ Already aware	□ Unknown
Knowing where to get naloxone:	□ Yes	□ No	☐ Already aware	Unknown
Referral to a supervised injection service, when applicable:	□Yes	□ No	☐ Already aware	Unknown
Referral to an addiction treatment centre:	□Yes	□ No	☐ Already aware	□ Unknown
Referral to a mental health service:	□ Yes	□ No	☐ Already aware	Unknown
Other (specify):				
Other (specify):				

TOXICOLOGICAL ANALYSES

The aim of toxicological analyses is to search for drugs and medications in biological matrices, products used or use materials in order to identify the substances involved.

SAMPLE 1		
Sample submitted:		Analysis performed by:
□ Blood		☐ Centre de toxicologie du Québec (INSPQ)
☐ Urine		☐ Laboratoire de sciences judiciaires et de médecine légale
☐ Ocular fluid		☐ Hospital. Which one:
☐ Product used (drug))	☐ Drug Analysis Service (Health Canada)
☐ Use material		☐ Other:
☐ Other:		
Date of collection:	Year Month Day	Collection Location:
Analyses requested or per	formed:	
We conclude # discusses the value of the control of		
*New Colors		
Notes:		
Consult the laboratory re	eport for results	
☐ Preliminary report	Reference No.:	Year Month Day Date:
☐ Final report	Reference No.:	Year Month Day Date:
SAMPLE 2		
Sample submitted:		Analysis performed by:
☐ Blood		☐ Centre de toxicologie du Québec (INSPQ)
☐ Urine		☐ Laboratoire de sciences judiciaires et de médecine légale
☐ Ocular fluid		☐ Hospital. Which
☐ Product used (drug)		one: Drug Analysis Service (Health Canada)
☐ Use material	!	
☐ Other:		U Other:
- other.	Year Month Day	
Date of collection:		Collection Location:
Analyses requested or per	formed:	
Notes:		
Notes: Consult the laboratory re	eport for results	
COST Transition And Annual Cost	eport for results Reference No.:	Year Month Day Date:

SAMPLE 3	
Sample submitted: Blood Urine Ocular fluid Product used (drug) Use material Other: Date of collection: Analyses requested or performed:	Analysis performed by: Centre de toxicologie du Québec (INSPQ) Laboratoire de sciences judiciaires et de médecine légale Hospital. Which one: Drug Analysis Service (Health Canada) Other: Collection Location:
Notes:	
Consult the laboratory report for results	
☐ Preliminary report Reference No.: ☐ Final report Reference No.:	Year Month Day Date:
0 00000	
SAMPLE 4	
Sample submitted: □ Blood □ Urine □ Ocular fluid	Analysis performed by: ☐ Centre de toxicologie du Québec (INSPQ) ☐ Laboratoire de sciences judiciaires et de médecine légale ☐ Hospital. Which one:
☐ Product used (drug) ☐ Use material ☐ Other:	☐ Drug Analysis Service (Health Canada) ☐ Other:
Date of collection: Year Month Day	Collection Location:
Analyses requested or performed:	
Notes:	
Consult the laboratory report for results	
☐ Preliminary report Reference No.:	Year Month Day Date:
☐ Final report Reference No.:	Year Month Day Date: , , , , ,

SUBSTANCES THAT MAY HAVE CAUSED THE OVERDOSE

This section relies on the investigator's judgment, based on the data collected during the investigation.

#	SUBSTANCE(S)
1	
2	
3	

9	NC	OTES

Date of initial interview:	Year Month Day		
Professional 1:	Name in block letters	Signature	
Professional 2:			
Name in block letters		Signature	

APPENDIX 6 CONTACT DETAILS OF REFERENCE **LABORATORIES**

Centre de toxicologie du Québec de l'Institut national de santé publique du Québec (CTQ-INSPQ)

Responsable de la division clinique 945, avenue Wolfe, 4e étage Québec (Québec) G1V 5B3 Telephone: 418 650-5115

Fax: 418 654-2148

Email: ctglab@inspq.qc.ca

Website: https://www.inspg.gc.ca/ctg/accueil

Opening hours: 8:30 a.m. to 4:30 p.m.

Centre antipoison du Québec (CAPQ) opening hours: 8 a.m. to 12 a.m. (365 days/year)

Laboratoire de toxicologie du Laboratoire de sciences judiciaires et de médecine légale (LSJML)

1701, rue Parthenais, 12^e étage Montréal (Québec) H2K 3S7 Telephone: 514 873-2704

Fax: 514 873-4847

Email: lsiml@msp.gouv.gc.ca

Website: http://www.securitepublique.gouv.gc.ca/laboratoire/a-propos.html

Opening hours: 8 a.m. to 5 p.m.

Health Canada's Drug Analysis Service (DAS)

1001, rue St-Laurent Ouest Longueuil (Québec) J4K 1C7 Telephone: 450 928-4027

Fax: 450 928-4144

Email: sad longueuil@hc-sc.gc.ca

Websites: https://www.canada.ca/en/health-canada/services/health-concerns/controlled-

substances-precursor-chemicals/drug-analysis-service.html

http://www.hc-sc.gc.ca/hc-ps/substancontrol/analys-drugs-drogues/seize-saisie-fra.php#gc

Opening hours: 8:15 a.m. to 4:30 p.m.

Laboratoire de biochimie spécialisée du Centre hospitalier universitaire Sainte-Justine (CHUSJ)

3175, chemin de la Côte-Sainte-Catherine

Montréal (Québec) H3T 1C5 Telephone: 514 345-4642

Fax: 514 345-4805

Email: <u>laboratoires.ubm.hsj@ssss.gouv.qc.ca</u> Website: https://www.chusj.org/fr/accueil

Opening hours: 8 a.m. to 10 p.m.

APPENDIX 7 REFERENCE LABORATORIES

There are several types of laboratories. They each have mandates and particularities that are important to understand before soliciting their services, so that the substance representing the threat can be identified with certainty, which will effectively support the public health investigation.

On the one hand, there are generalist laboratories, such as those in hospitals. These laboratories offer their services mainly to the internal clientele of their establishment. They offer a wide range of biological analysis services, but often not specialized enough to accurately identify a drug. Indeed, these laboratories typically rely on technologies that identify a few traditional drug classes (amphetamines, cocaine, cannabis, opiates, PCP, and others on occasion) rather than a wide range of specific or less traditional substances. For example, fentanyl is usually not detected by standard hospital-based analyses. Therefore, exposure to this opioid cannot be excluded on the basis of a negative result obtained in this type of laboratory. The same is true for many synthetic opioids, including fentanyl derivatives. The technologies used by these laboratories also do not allow the concentration of substances to be quantified and they may yield false positive or false negative results. There are therefore real limits to the analyses performed by this type of laboratory. However, these laboratories do have an advantage over the reference laboratories (below): the results are made available quickly.

On the other hand, there are the reference laboratories for drug analysis. When there is a need to identify substances that pose a threat to health, it is clearly preferable to take advantage of the expertise offered by these laboratories:

- the Centre de toxicologie du Québec de l'Institut national de santé publique du Québec (CTQ-INSPQ);
- the Laboratoire de toxicologie du Laboratoire de sciences judiciaires et de médecine légale (LSJML);
- the Laboratoire de biochimie spécialisée du Centre hospitalier universitaire Sainte-Justine (CHUSJ);
- Health Canada's Drug Analysis Service (DAS).

These laboratories perform analyses for the benefit of their specific clients, in accordance with their mission. Their clients may include the CAPQ (Québec's antipoison centre), the coroner's office, the RSSS (the health and social services network) or the police. These laboratories rely on qualified personnel and high technology instrumentation to precisely identify the substances detected.

The following table presents some of the features that distinguish them.

Table 2 Specific features of each reference laboratory

Laboratory	Clientele	Type of sample	Type of analysis
СТQ	RSSSCAPQCoronersA	Biological (and occasionally non-biological)	 Qualitative Quantitative
CHUSJ (Laboratoire de biochimie spécialisée)	CAPQ RSSS (supra-regional)	Biological (and occasionally non-biological)	Qualitative
LSJML	 Coroners (when an autopsy is performed at the LSJMLA) Police services Prosecutors 	Biological Non-biological	QualitativeQuantitative
DAS	Police services	Non-biological (seized drugs)	QualitativeQuantitative (for some substances only)

A Beginning November 1, 2018, all toxicology analyses required by coroners will be performed at the LSJML.

The CTQ and the CHUSJ's Laboratoire de biochimie spécialisée are associated with the health network, whereas the LSJML's Laboratoire de toxicologie and Health Canada's DAS are more closely associated with public safety. However, they all have a role to play in drug identification.

The CTQ is the health network's reference laboratory for specialized analyses of substances of toxicological interest in biological media (blood, urine). Among other things, it is obliged to respond to urgent requests from the CAPQ, without delay, as soon as samples are received, from 8:00 a.m. to midnight, 365 days a year. The CTQ also performs analyses required by coroners as part of their investigations aimed at clarifying the causes and circumstances of deaths.6

The CHUSJ's Laboratoire de biochimie spécialisée is a hospital laboratory that offers, among other things, specialized analysis services for substances of toxicological interest in biological samples (blood, urine, etc.). Although it offers its services internally and to other Québec hospitals, this laboratory also responds, in the context of situations that are the subject of this guide, to requests for urgent analyses from the CAPQ, as does the CTQ. The determining factor in choosing either the CTQ or the CHUSJ is usually the distance between the laboratory and the patient.

Beginning November 1, 2018, all toxicology analyses required by coroners will be performed at the LSJML.

The LSJML's Laboratoire de toxicologie is the public safety network's reference laboratory for specialized analyses of substances of toxicological interest in biological media (blood, urine, etc.) and in non-biological form (syringe, powder, tablet, etc.). It responds primarily to provincial and municipal police forces, Crown prosecutors and coroners (when an autopsy is performed at the LSJML⁷).

All of these laboratories provide screening (substance identification; qualitative results) and confirmation (substance identification; qualitative or quantitative results) services for a wide range of substances. However, there are limitations associated with specialized analyses that should be kept in mind when interpreting results. For example, the range of substances analyzed by different laboratories may vary. These ranges change over time. This can be a very important factor, for example, when the threat is associated with an emerging substance that has not yet been integrated into the service offer of all laboratories and when the investigation is compiling results from several laboratories. It is therefore appropriate to consider this type of limitation when assessing the comparability of analysis results. It is advisable to ask for the list of substances analyzed along with the analysis results in order to evaluate the differences.

The high potency of some drugs that are active at very low doses, such as carfentanil, is another of the other limitations/difficulties associated with identifying the substance of interest (11). It can be difficult to detect these because of their very low concentration in blood or urine (31). The unknown metabolism of new drugs may also limit efforts to detect the substance of interest or its metabolites.

Despite these limitations, the service offer of these reference laboratories is highly advanced and suited to identifying the drug of interest during overdose investigations.

Finally, Health Canada's DAS is mandated to analyze drugs seized by police agencies in Canada. Its role is to identify controlled or psychoactive substances in seized drugs. Since the DAS provides services exclusively to law enforcement, it is necessary for public health departments to partner with enforcement agencies and the DAS when analyses of products being used is required to better characterize a threat. This laboratory provides an emergency analysis service to police upon request. Such services can be put to good use in the context of an epidemiological investigation. It may be appropriate to remind police services that they can avail themselves of this emergency service. Please note that drug purity testing is not a core service offered by the DAS.

Beginning November 1, 2018, all toxicology analyses required by coroners will be performed at the LSJML.

APPENDIX 8 EXAMPLE OF A POSTER



QUE TU CONSOMMES SOUVENT OU À L'OCCASION :

- Ne le fais jamais seul
- Baisse ta dose (coupe-la par 4)
- Consomme lentement

Si tu penses qu'une personne est en danger, appelle vite une ambulance (911).

Tu pourrais lui sauver la vie!

FAIS ATTENTION À CES SIGNES :

- · difficulté à respirer
- · respiration de plus en plus lente
- lèvres bleues
- perte de conscience (pas capable de réveiller la personne)

Agence de la santé et des services sociaux de Montréal

Québec i



Source: Direction de santé publique de Montréal, 2014.

Translation of the poster

OVERDOSES are in town:

lower your dose

it won't kill you

Summer 2014

WHETHER YOU USE OFTEN OR OCCASIONALLY:

- Never use alone
- Lower your dose (to a quarter dose)
- Use slowly

WATCH OUT FOR THESE SIGNS:

- Difficulty breathing
- Breathing more and more slowly
- Blue lips
- Loss of consciousness (can't wake the person up)

If you think someone is in danger, call an ambulance (911) right away. You could save their life.

Centre de référence et d'expertise



www.inspq.qc.ca

