

GLOBAL PUBLIC HEALTH INTELLIGENCE NETWORK (GPHIN)**SYNOPSIS**

On July 25, the Globe and Mail published an article: *Without early warning you can't have early response: How Canada's world-class pandemic alert system failed*. This article was critical of Canada's early response to COVID-19, and focussed on what it described as the decline of the Global Public Health Intelligence Network (GPHIN).

SOMMAIRE

Le 25 juillet, le Globe and Mail a publié un article intitulé *Without early warning you can't have early response: How Canada's world-class pandemic alert system failed* (Sans alerte rapide, on ne peut pas avoir d'intervention rapide : pourquoi le système d'alerte à la pandémie de calibre mondial du Canada n'a pas fonctionné). L'auteur de cet article critiquait les mesures d'intervention rapide prises par le Canada en réponse à la COVID-19 et se concentrait sur ce qu'il décrivait comme étant le déclin du Réseau mondial d'information sur la santé publique (RMISP).

POTENTIAL QUESTIONS

- Why was Canada's public health early warning network switched off prior to COVID-19?
- Why was no alert issued by GPHIN regarding COVID-19?
- Why was GPHIN redirected to do domestic surveillance instead of international surveillance?

QUESTIONS POTENTIELLES

- Pourquoi le réseau d'alerte rapide en matière de santé publique du Canada a-t-il été désactivé avant l'épidémie de COVID-19?
- Pourquoi le RMISP n'a-t-il pas émis d'alerte concernant la COVID-19?
- Pourquoi le RMISP a-t-il été réaffecté à la surveillance nationale plutôt qu'à la surveillance internationale

KEY MESSAGES

- Global Public Health Intelligence Network (GPHIN) is Canada's internationally respected public health event early-warning system.
- The first report of a mysterious pneumonia outbreak in China, which would later be known as COVID-19, was reported in Agence France-Presse on the evening of December 30, 2019.
- This information was disseminated quickly through several mechanisms, including the December 31, 2019, GPHIN Situational Awareness Daily Report, distributed to Canadian public health practitioners at the federal, provincial and territorial levels, a posting on the Program for Monitoring Emerging Diseases (ProMED), and an official reporting from the Wuhan Municipal Health Commission.
- This enabled a rapid response, both domestically and globally. Enhanced surveillance and reporting began on December 31, 2019, and the WHO stood up its Incident Management Support Team on January 1, 2020.

MESSAGE CLÉ

- Le Réseau mondial d'information sur la santé publique (RMISP) est le système d'alerte rapide aux événements de santé publique respecté à l'échelle internationale du Canada.
- La mystérieuse épidémie de la pneumonie qui devait être connue plus tard sous le nom de COVID-19 survenue en Chine a été signalée pour la première fois par l'Agence France-Presse dans la soirée du 30 décembre 2019.
- Cette information a été diffusée rapidement au moyen de plusieurs mécanismes, y compris le rapport quotidien de

connaissance de la situation du RMISP du 31 décembre 2019, distribué aux praticiens canadiens de la santé publique aux niveaux fédéral, provincial et territorial, un message du Programme de surveillance des maladies émergentes (ProMED) et un rapport officiel de la Commission municipale de la santé de Wuhan.

- Cela a permis de prendre rapidement des mesures d'intervention, tant au niveau national que mondial. Le renforcement de la surveillance et du signalement a commencé le 31 décembre 2019 et l'OMS a mis sur pied son équipe de soutien à la gestion des incidents le 1^{er} janvier 2020.

IF PRESSED ON WHY A GPHIN ALERT WAS NOT DONE FOR COVID-19

- The information on the mysterious pneumonia in China had already been disseminated widely through a number of mechanisms.
- Canada's response to the initial report of the mysterious pneumonia in China was swift. Enhanced surveillance and reporting began immediately. A GPHIN alert would not have made Canada's response to COVID-19 faster or more effective.

EN CAS DE QUESTIONS INSISTANTES SUR LA RAISON POUR LAQUELLE UNE ALERTE DU RMISP N'A PAS ÉTÉ LANCÉE POUR LA COVID-19

- L'information sur la mystérieuse pneumonie en Chine avait déjà été largement diffusée au moyen d'un certain nombre de mécanismes.
- Le Canada a réagi rapidement lorsque la mystérieuse pneumonie en Chine a été signalée pour la première fois. Le renforcement de la surveillance et du signalement a commencé

immédiatement. Une alerte du RMISP n'aurait pas rendu la réponse du Canada à la COVID-19 plus rapide ou plus efficace.

IF PRESSED ON GPHIN REPORTING

- GPHIN's comprehensive Situational Awareness Daily Report provides timely reporting to Canadian public health practitioners at the federal, provincial and territorial levels.
- GPHIN also develop special reports to address needs identified by organizations, such as the World Health Organization (WHO).

EN CAS DE QUESTIONS INSISTANTES SUR LES RAPPORTS DU RMISP

- Le rapport quotidien de connaissance de la situation complet du RMISP fournit des rapports en temps opportun aux praticiens canadiens de la santé publique aux niveaux fédéral, provincial et territorial.
- Le RMISP élabore également des rapports spéciaux pour répondre à des besoins déterminés par des organisations telles que l'Organisation mondiale de la santé (OMS).

IF PRESSED ON CONTINUITY OF GPHIN INTERNATIONAL SURVEILLANCE

- GPHIN's primary role as a global event-based surveillance system remains unchanged.
- As public health threats emerge, GPHIN conducts subject-specific surveillance to support PHAC's situational awareness and analysis. This includes both domestic issues, such as vaping, and international issues, such as Ebola.
- GPHIN continues to compile and disseminate international surveillance reports, in addition to its Situational Awareness

Daily Reports.

EN CAS DE QUESTIONS INSISTANTES SUR LA CONTINUITÉ DE LA SURVEILLANCE INTERNATIONALE DU RMISP

- Le rôle principal du RMISP en tant que système mondial de surveillance fondé sur les événements reste inchangé.
- À mesure que des menaces pour la santé publique apparaissent, le RMISP effectue une surveillance propre à chaque sujet pour soutenir la connaissance de la situation et l'analyse de l'ASPC. Ces sujets comprennent des enjeux nationaux tels que le vapotage et des enjeux internationaux tels que la maladie à virus Ebola.
- Le RMISP continue de compiler et de diffuser des rapports de surveillance internationaux en plus de ses rapports quotidiens de connaissance de la situation.

BACKGROUND

GPHIN: KEY FACTS

The Public Health Agency of Canada's (PHAC) Global Public Health Intelligence Network (GPHIN) is an early-warning and situational awareness system for potential chemical, biological, radiological and nuclear public health threats worldwide, including outbreaks of infectious disease. GPHIN users include non-governmental public health agencies and organizations, as well as government authorities who conduct public health surveillance. GPHIN requires a free subscription from eligible users. GPHIN is a significant contributor to the World Health Organization's (WHO) Epidemic Intelligence from Open Sources.

GPHIN consists of two critical components:

- a professional multidisciplinary team of life science analysts, reviewing information in nine languages and conducting rapid risk assessments to detect public health threats; and
- an Information Management Tool that uses machine learning and natural language processing to facilitate the work of the analysts.

Every day, about 7,000 articles are captured in the GPHIN system. The web-based application in the GPHIN system continuously scans and acquires news sources of information worldwide in nine languages (Arabic, Farsi, English, French, Portuguese,

Russian, Spanish, and simplified and traditional Chinese).

Once the data are in the GPHIN system, GPHIN analysts conduct their daily review to validate and assess the data for inclusion in reports, including the Situational Awareness Daily Report published each morning. This report goes directly from GPHIN to Canadian public health practitioners at the federal, provincial and territorial levels, including senior management at the Public Health Agency of Canada (PHAC) and other government departments.

GPHIN has not ceased issuing alerts for disease outbreaks and other public health threats. At present, any GPHIN analyst may identify an emerging issue to management for consideration. The final authorization for issuing an alert rests with the Vice-President of the Public Health Agency of Canada's (PHAC) Health Security Infrastructure Branch.

GPHIN AND COVID-19

As would be the case with any emerging disease, enhanced event based surveillance and reporting on COVID-19 began on December 31, 2019 (then referred to as "viral pneumonia"). On December 30, 2019, the GPHIN system uploaded an article called "China probes mystery pneumonia outbreak amid SARS fears" published by the Agence France-Presse. The GPHIN analysts conducted their review, recognized the potential importance of this issue, and highlighted it in the GPHIN Situational Awareness Daily Report, which was distributed on December 31, 2019 to Canadian public health practitioners at the federal, provincial and territorial levels.

Issuing a separate alert would not have made Canada's reaction faster or more effective. There was already global recognition, beginning on New Year's Eve, that the outbreak in Wuhan was significant. Canada's response was swift, and enhanced surveillance and reporting began immediately.

GPHIN continues to monitor the COVID-19 global outbreak and provides special reports to address information needs identified by Canadian government officials and organizations such as the WHO.

GPHIN ALERTS: 2009 - 2019

According to the *Globe and Mail* article, 1587 GPHIN Alerts were issued between 2009-2019. Internal PHAC records show that 1589 were issued during that time period.

INTERNATIONAL VERSUS DOMESTIC SURVEILLANCE

GPHIN's primary role as a global event-based surveillance system remains unchanged. As public health threats emerge, GPHIN is tasked with subject-specific surveillance to support PHAC's situational awareness and analysis. This can include domestic issues, such as vaping, or international issues, such as Ebola. These reports are compiled and disseminated in addition to GPHIN's regular reporting.

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