Chapter 6
Government Relations—Alerting the Public about Imminently Dangerous Events

1.0 MAIN POINTS

The Ministry of Government Relations uses SaskAlert to notify the public of emergencies in real time via mobile devices (like cell phones), radio, television, or its website. At March 2019, about half of Saskatchewan's municipalities and about five percent of Saskatchewan's First Nations can issue alerts through SaskAlert. About 115,000 mobile device users have downloaded the SaskAlert mobile app. SaskAlert is part of a national alerting system.

For the 12-month period ending January 2019, the Ministry of Government Relations had generally effective processes for alerting the public about imminently dangerous events that may pose risks to public health and safety. It needs to make improvements in the following areas. The Ministry needs to:

➢ Maintain a robust and enforceable written contract with the service provider that it uses to administer SaskAlert on a day-to-day basis, and to give training and help-desk support to participating municipalities and First Nations. In addition, it needs to monitor the delivery of those services. Active monitoring will help ensure municipalities and First Nations receive sufficient training and support to issue public alerts properly and promptly.

➢ Ensure participating municipalities and First Nations complete practice alerts as expected so they are capable of creating accurate and timely alerts when an emergency situation arises. As well, active monitoring of all alerts would help the Ministry identify participants at a greater risk of issuing an inaccurate alert, and in need of additional training and support.

➢ Periodically confirm the continued appropriateness of user access of individuals from participating municipalities and First Nations to the national alerting system. Regular review of user access reduces the risk of issuing inappropriate alerts that could threaten the SaskAlert program's reputation.

Timely, accurate and clear public alerting can help residents and visitors to Saskatchewan adequately prepare for situations that pose risks to their health or safety.

2.0 INTRODUCTION

This chapter sets out the results of our audit of the Ministry of Government Relations' processes, for the 12-month period ending January 31, 2019, to alert the public about imminently dangerous events in Saskatchewan.

Imminently dangerous events include emergencies related to weather (e.g., flood, tornado, wildfire), missing persons, and other threats to public health or safety.

2.1 Provincial Responsibility for Emergency Public Alerting

Where provinces or territories choose to provide a public alerting program, they decide how alerts will reach the public. Each province and territory is responsible for its own alerting program. By law, the Ministry of Government Relations is responsible for:

➤ Developing, implementing, co-ordinating, promoting, evaluating, and enhancing policies, programs, procedures and standards related to public safety, emergency planning, or emergency management

➤ Co-operating with other public and private organizations to improve public safety, emergency responses, and emergency management

➤ Establishing and supervising training courses

➤ Collecting, organizing and disseminating information[1]

The Ministry operates the SaskAlert program through its Public Safety division. The SaskAlert program leverages the federal National Alert Aggregation and Dissemination system (Alert Ready) to issue public alerts.[2]

The SaskAlert program provides the public with critical information on emergencies in real time.[3] The program includes communicating alerts created by authorized users in Alert Ready via the SaskAlert website (saskalert.ca) and the SaskAlert mobile app.

Authorized users are individuals from municipalities, First Nations, or provincial government agencies who voluntarily agree to participate in the SaskAlert program.[4]

In June 2016, Saskatchewan launched the SaskAlert website and the SaskAlert mobile app, allowing the public to receive both critical and advisory alerts created in Alert Ready directly to their handheld devices and computers.[5]

The Ministry spent over $550,000 on the SaskAlert program in 2018 (2017: approximately $465,000) with more than 80% paid to various service providers responsible for delivering aspects of the program.[6]

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[1] *The Government Relations Administration Act* (section 3).
www.publications.gov.sk.ca/freelaw/documents/english/Statutes/Statutes/G5-101.pdf (27 March 2019).
[2] The National Alert Aggregation and Dissemination system is commonly called Alert Ready. In 2008, the Federal Government engaged the operator of The Weather Network to develop and implement the National Alert Aggregation and Dissemination system.
[3] www.saskatchewan.ca/saskalert-program#utm_campaign=q2_2015&utm_medium=short&utm_source=%2Fsaskalert-program (27 March 2019).
[4] In Saskatchewan, municipalities are responsible for safe communities under *The Municipalities Act* (section 4) www.publications.gov.sk.ca/freelaw/documents/English/Statutes/Statutes/M36-1.pdf; *The Northern Municipalities Act, 2010* (section 4) www.publications.gov.sk.ca/freelaw/documents/English/Statutes/Statutes/N5-2.pdf; and *The Cities Act* (section 4) www.publications.gov.sk.ca/freelaw/documents/english/Statutes/Statutes/c11-1.pdf. (17 April 2019).
[5] To issue alerts, an authorized participant accesses Alert Ready and creates an alert. Alert Ready pushes alerts to the public through the SaskAlert website and the SaskAlert mobile app.
[6] For the period January-December 2018.

2.2 Emergency Public Alerting in Canada

The Federal Government, all three territories, and most provinces use Alert Ready to issue alerts.

SaskAlert uses two levels of alerts in Alert Ready:

➢ Critical – life and safety are under immediate threat and time is critical (e.g., tornado)[7]

➢ Advisory – when emergency situations are occurring, or have the potential to occur, that can affect the decisions people make to protect their safety (e.g., boil water advisory)

Alert Ready collects, aggregates, and disseminates emergency alerts created by authorized users throughout Canada (including Saskatchewan) to the public. It pushes critical alerts to the public through radio and television broadcasts, as well as all compatible cell phones and wireless devices.[8]

Overall, SaskAlert provides a single point of entry in Alert Ready for emergency alerts created by trained users from participating jurisdictions including provincial, municipal and First Nations' participants. SaskAlert also issues alerts created by federal participants such as Environment Canada.[9]

2.3 Importance of Timely and Accurate Public Alerting

A growing number of serious weather-related events have compromised the safety of people and property in Saskatchewan in recent years. For example, southern Saskatchewan experienced tornados resulting in severe damage, loss of life, and multiple injuries.[10] Recently, many Saskatchewan communities also experienced flooding events at greater intensities.[11]

When climate-change impacts are considered, Saskatchewan anticipates future climate variability.[12] Expected variability in the frequency and severity of storms and weather events in Saskatchewan along with the province's widely dispersed population increases the importance of alerting the public promptly and as events develop.

Timely notification about developing dangerous events allows residents and visitors in Saskatchewan the ability to take action to protect themselves, their families, and property.

Having numerous participants creating alerts across Saskatchewan increases the risk of alerts being inaccurate or not adhering to standards and protocols.[13] Inaccurate emergency alerts can cause unnecessary anxiety for citizens. In addition, frequent

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[7] Critical alerts are also referred to as "broadcast immediate" alerts.
[8] Beginning in April 2018, Alert Ready disseminates critical alerts through compatible cell phones and wireless devices. Compatible devices at December 2018 include android devices with version 4.2 and higher, and iPhones with version 8 and higher. Saskatchewan residents receive these alerts on their devices regardless of whether they have downloaded the SaskAlert mobile app.
[9] Alerts issued by federal participants are outside the scope of our audit.
[10] Whittrock, V. et. al, *Saskatchewan Flood and Natural Hazard Risk Assessment*, (2018), p.87.
[11] Ibid., pp.vi, 27, 29.
[12] Ibid., pp.1, 19. 20.
[13] For example, in January 2018, one of Saskatchewan's municipalities issued an alert warning people about a flood and fire that did not exist. The municipality had inadvertently entered a practice alert into the live system in error.

inaccurate or unnecessary alerts may result in the public viewing SaskAlert as an unreliable source or result in them ignoring alerts.

Timely, accurate, and clear notifications of risks and hazards can help Saskatchewan residents adequately prepare for situations that may pose a risk to their health and/or safety (e.g., flood, power outage, wildfire, and tornado).

3.0 AUDIT CONCLUSION

We concluded that, for the 12-month period ending January 31, 2019, the Ministry of Government Relations had effective processes, other than in the following areas, to alert the public about imminently dangerous events in Saskatchewan. The Ministry needs to:

➤ **Maintain an enforceable contract with, and monitor the party providing day-to-day administration for the SaskAlert program**

➤ **Periodically review appropriateness of user access to the national alerting system — Alert Ready**

➤ **Monitor public alerts about imminently dangerous events created in Alert Ready and take action on those who issue inaccurate or untimely alerts**

Figure 1—Audit Objective, Criteria, and Approach

Audit Objective:

Assess the effectiveness of the Ministry of Government Relations' processes, for the 12-month period ending January 31, 2019, to alert the public about imminently dangerous events in Saskatchewan.

Audit Criteria:

Processes to:

1. Set clear protocols to create alerts
   1.1 Follow national guidance and standards to create alerts in the National Alert Aggregation and Dissemination system (e.g., type, classification, common alerting protocol)
   1.2 Agree on clear roles and responsibilities of service providers and participants (e.g., provincial government agencies, municipalities, First Nations)
   1.3 Train participants to create alerts (e.g., templates, manuals, training sessions, support)

2. Issue timely and accurate alerts to the public
   2.1 Issue alerts that align with Ministry guidance (e.g., protocols)
   2.2 Clearly define responsibilities for availability and security (e.g., back-up processes, disaster recovery, user access) of relevant IT systems (i.e., National Alert Aggregation and Dissemination system, SaskAlert website, and SaskAlert application) with key service providers
   2.3 Control user access to relevant IT systems to protect systems and data from unauthorized or inappropriate access
   2.4 Monitor distribution of alerts (e.g., IT system availability, timeliness, accuracy)
   2.5 Increase awareness of public alerting in Saskatchewan

3. Monitor service providers and participants
   3.1 Periodically test the National Alert Aggregation and Dissemination system, SaskAlert website, and SaskAlert application (e.g., availability, timeliness, accuracy)
   3.2 Take action on non-compliant service providers (e.g., meet availability targets, accuracy/timeliness of alerts, system error)
   3.3 Take action on non-compliant participants (e.g., require further training, remove access)

> **Audit Approach:**
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> To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance* (CSAE 3001*)*. To evaluate the Ministry's processes, we used the above criteria. Ministry management agreed with the above criteria. We based the criteria on our related work, reviews of literature including reports of other auditors, and consultations with management.
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> We examined the Ministry's policies and procedures that relate to alerting the public about imminently dangerous events. We interviewed staff and participants. We assessed the Ministry's agreements with service providers and participating jurisdictions. We examined the Ministry's procedure manuals, training materials, alert templates, reports from service providers, and public information about instances of dangerous events. We tested a sample of participants, and a sample of alerts issued.

4.0 KEY FINDINGS AND RECOMMENDATIONS

4.1 Responsibilities of Key Parties Well Defined

The responsibilities of each key party involved in the delivery of SaskAlert program are well-defined through either agreements, or well-established working relationships. However, the Ministry does not have an enforceable written agreement finalized with the service provider responsible for day-to-day administration of the SaskAlert program.

As shown in **Figure 2**, a number of key parties assist the Ministry in delivering the SaskAlert program. They include authorized participants, a program administrator, the Alert Ready system operator, and the SaskAlert system operator.

Figure 2—Key Parties Involved in Issuing Public Alerts for SaskAlert
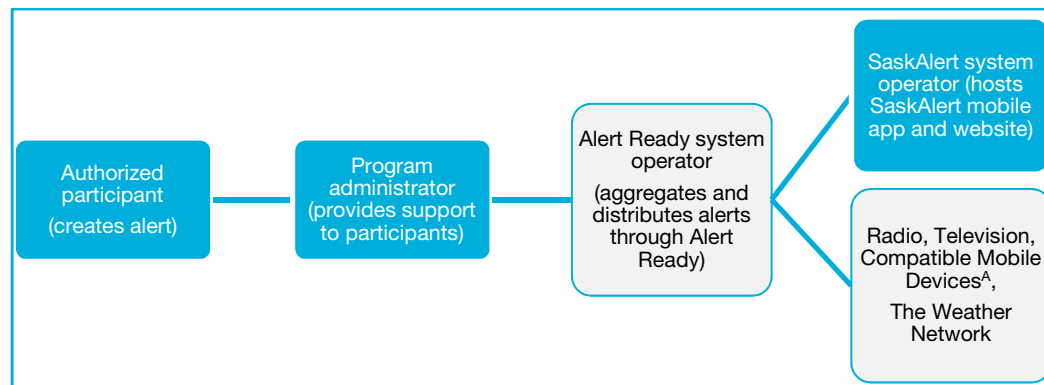
Source: Adapted from information provided by the Ministry of Government Relations.
Blue boxes indicate provincial responsibility (SaskAlert program).
Gray boxes indicate federal responsibility of the Alert Ready system.
[A] Compatible devices at December 2018 include android devices with version 4.2 and higher, and iPhones with version 8 and higher.

The Ministry clearly sets out the expectations of participants with standard forms and guidance. It asks various agencies in levels of government (e.g., provincial government agencies, municipalities, First Nations) to voluntarily participate in the public alerting program. It requires interested participants to complete standard forms and training before they can become authorized participants. In general, authorized participants are responsible for issuing alerts relevant to their responsibilities (for example, municipal participants can issue alerts in their geographic location only for events such as fire, water quality, etc.).

At March 2019, 353 municipalities, 3 First Nations, and 12 government agencies (e.g., Ministry of Environment, Saskatchewan Health Authority, SaskPower) participate in the SaskAlert program.

As shown in **Figure 3**, the Ministry uses three service providers to carry out key functions in delivering the SaskAlert program.

Figure 3—Key Responsibilities of SaskAlert Service Providers

Related Arrangement	Key Responsibilities	
	Service Provider	**Ministry**
Alert Ready system operator	➢ Operate and maintain Alert Ready (including system availability, security, software updates, and licences) ➢ Distribute alert messages in accordance with specified standards ➢ Provide a 24-hour help-desk function and online resource centre to support system users ➢ Set policy for public testing of Alert Ready[A] ➢ Determines (with consultation) timing of public testing (maximum of five times per year)	➢ Follow specific standards and protocols of Alert Ready (e.g., Common Alerting Protocol – Canadian Profile (CAP-CP))[B] when issuing alerts for distribution. Examples of CAP-CP requirements include: ○ limits on the length of an alert ○ classification of alerts by specific event types (e.g., flood, fire, health) ○ identification of the alert issuer to the public ➢ Authorize user access to Alert Ready ➢ Train authorized users on preparing alerts in accordance with specified standards ➢ Participate in public testing of Alert Ready
SaskAlert system operator	➢ Host SaskAlert website and mobile app (including system availability, security, software updates, and licences) ➢ Operate help-desk services and system support for mobile app ➢ Give Ministry information on operation, performance, and use of the website and mobile app (e.g., how many people have the mobile app and how much time they spend on it) ➢ Restrict user access to the SaskAlert website and mobile app to the SaskAlert system operator and its subcontractors	➢ Monitor the SaskAlert system operator via monthly reports ➢ Raise concerns with the SaskAlert system operator where the operator is not meeting agreed-upon expectations
Program administrator	➢ Set up participants in Alert Ready with access aligned with their jurisdiction's responsibilities set out in the approved user access form ➢ Train (using Ministry guidance) participants to create alerts in Alert Ready, and review participants' practice alerts in Alert Ready test environment ➢ Operate a help-desk to support participants creating alerts ➢ Review every live alert issued for accuracy and follow up with participants as required, effective February 1, 2019	➢ Set training requirements for participants ➢ Perform quarterly site visits to evaluate the operation of the SaskAlert program, and to check files and system data ➢ Perform periodic review of program administrator files to identify discrepancies between participants' responsibilities (set out in their user access agreements), and their user access to Alert Ready

Source: Adapted from agreements and terms of reference.
[A] Public testing requires the Ministry to create a live alert in Alert Ready for dissemination to the public through all media channels.
[B] *Common Alerting Protocol* is an international alerting standard published by the Organization for the Advancement of Structured Information Standards. *Common Alerting Protocol – Canadian Profile* addresses public alerting issues specific to Canada. It was published by Public Safety Canada. www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/mrgnc-prprdnss/capcp/index-en.aspx (07 April 2019).

<u>Alert Ready system operator</u>: The Ministry entered into a generally adequate and up-to-date agreement with the Alert Ready system operator to gain access to Alert Ready.[14] By agreement, the Ministry must follow specific standards and protocols of Alert

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[14] The Ministry of Corrections, Public Safety and Policing originally signed the agreement in November 2011. Cabinet moved the responsibility for public safety to the Ministry of Government Relations in 2012.

Ready when issuing alerts for distribution. The agreement clearly describes the responsibilities of the system operator and of the Ministry. The agreement also contains general provisions regarding dispute resolution and termination. While the agreement does not contain explicit mechanisms for monitoring and reporting, in practice, the Ministry receives monthly reports on system availability to enable monitoring.

SaskAlert system operator: The Ministry has an adequate and up-to-date agreement with the SaskAlert system operator, signed in 2016.[15] The Ministry is responsible for the SaskAlert website and mobile app, and the data contained within. The Ministry hired, through an agreement, a SaskAlert system operator to host the SaskAlert website and mobile app. It has also made the operator responsible for their availability, security, software updates and licences. The agreement clearly outlines the responsibilities of the SaskAlert system operator and its subcontractors, and the Ministry. It requires the SaskAlert system operator and its subcontractors to provide monthly reports to the Ministry that allow the Ministry to monitor their compliance with key terms in the agreement. The agreement also contains general provisions regarding dispute resolution and confidentiality.[16]

Program administrator: The Ministry does not have a finalized or up-to-date agreement with the program administrator. Under its Alert Ready agreement, the Ministry is responsible for authorizing user access to Alert Ready for Saskatchewan participants who issue alerts, and for providing training to those participants. In addition, it is responsible for the content of alerts issued. It hired a program administrator to carry out these responsibilities on its behalf without having an enforceable written contract in place. Rather, the Ministry uses a 2017 draft Terms of Reference that outlines key responsibilities of both the program administrator and the Ministry for the SaskAlert program.[17]

We found the draft Terms of Reference do not include mechanisms for monitoring and reporting on the program administrator's services. In addition, they are not current, as they do not reflect additional live alert review responsibilities assigned in February 2019.

Without a complete or formal agreement with its program administrator, the Ministry may have difficulty enforcing the requirements of the draft Terms of Reference (e.g., completing changes to participant information within three working days, responding to participant requests in 24 hours) and additional arrangements (i.e., alert reviews). Not providing participants with sufficient support when issuing alerts may cause undue delays, which in turn may give the public less time to prepare for emergencies.

1. **We recommend the Ministry of Government Relations maintain a robust and enforceable written contract with the party providing day-to-day administration for the SaskAlert program.**

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[15] The SaskAlert system operator has subcontracted certain functions to other companies (e.g., provision of help-desk services, system support for mobile app).
[16] The term of the agreement is set out in the Ministry's original request for proposal.
[17] In April 2018, the Saskatchewan Public Safety Agency signed an agreement with the program administrator to provide public safety services related to emergency communications. The agreement described specific responsibilities about the operation of the 911 call centre in Prince Albert, but it did not specifically outline key responsibilities related to the SaskAlert program. At March 2019, Ministry staff operate the Agency.

4.2   Robust Guidance for Issuing Alerts Aligns with National Standards

The Ministry's guidance for creating alerts is extensive and aligns with national Alert Ready standards, which it has agreed to follow.

The Ministry keeps up-to-date on national standards and guidance through staff involvement on a national alerting governance council, and related committees and working groups (e.g., Public Alerting Working Group).[18] The Public Alerting Working Group is a federal/provincial/territorial group of senior officials responsible for emergency management strategies in Canada. It established Common Look and Feel Guidance to promote consistency between alerts to make them more understandable to the public (e.g., how alerts are displayed, alert expiry). We found Ministry staff were familiar with national standards and guidance.

The Ministry maintains the SaskAlert Standard Operational Procedure and Policy Manual along with standard user access forms and 38 alert templates (12 critical, 26 advisory) for different categories of alerts. The Manual sets out standard operating procedures to help participants understand their responsibilities, and guide them in creating different types of alerts.

The Ministry updates its Manual and templates as needed based on feedback from participants, service providers, and various public alerting committees.

Furthermore, Alert Ready's website that participants use to create alerts has automatic fields (e.g., drop-down menus, check boxes, required fields) to reduce the chance of error in creating alerts. To access Alert Ready, participants require a unique username and password, and they can only create alerts for their own jurisdiction and only for relevant events.

All four alert templates (one critical, three advisory) we tested complied with Common Look and Feel Guidance. The one critical alert template we assessed, in detail, complied with national Alert Ready standards. We also noted that, although not required for advisory alerts, the Ministry's advisory alert templates complied with national Alert Ready standards.

Providing robust guidance for creating alerts reduces the risk of participants issuing incorrect alerts or alerts that are inconsistent with national standards.

4.3   Participants Properly Authorized

The Ministry properly authorized municipalities, First Nations, and provincial government agencies interested in participating in the SaskAlert program (i.e., participating jurisdictions).

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[18] Terms of Reference state the alerting governance council consists of representatives of provincial, territorial and federal governments; broadcasters; national alerting system operator, and the Canadian Association for Public Alerting and Notification. The Council's purpose is to ensure that Alert Ready meets the needs of stakeholders. The Council provides direction on alerting protocols, technical requirements and support needed. It also provides advice on system security measures, back-up systems needed, etc.

The Ministry requires all participating jurisdictions to complete and sign a standard user access form requesting access to Alert Ready, and designating individuals to prepare alerts (i.e., participants). The form states that participants will not have access to create live alerts in Alert Ready until they complete training, and fulfill other requirements (e.g., initial practice alerts). Live alerts are those issued in Alert Ready's real-time environment.

The Ministry, through its program administrator, provides participants with adequate training for creating alerts. The Ministry gives its program administrator comprehensive and up-to-date materials to train participants.

We found the Ministry's training program explicitly covers participant responsibilities set out in the Ministry's Standard Operational Procedure and Policy Manual. It requires participants to:

➢ Familiarize themselves with the Ministry's standard operating procedures (e.g., participant responsibilities, requirement to complete training and initial practice alerts, how participants are monitored, available support)

➢ Complete a training session and issue three initial practice alerts using Ministry templates in the Alert Ready test environment

➢ Complete ongoing quarterly practice alerts

The Ministry's training materials include:

➢ How to create an alert step by step

➢ Templates to guide participants through creating standard alerts

➢ The Ministry's standard operating procedures

As previously noted, the program administrator trains participants on the Ministry's behalf. Through its program administrator, the Ministry tracks participants who complete training and three initial practice alerts.

For each of the 30 participant forms we tested, the Ministry confirmed the participant properly signed and completed the form, and the participant completed the required training and practice alerts before the Ministry granted them access to create live alerts in Alert Ready.

In addition, for the three participants we interviewed (i.e., one from a municipality, one from a First Nation, and one from a provincial agency), each described their responsibilities consistent with the Ministry's standard operating procedures.

Setting out key participant responsibilities helps the Ministry ensure participants fulfill their responsibilities and that they issue timely and accurate alerts. Providing adequate training to participants reduces the risk of participants issuing inaccurate or untimely alerts.

4.4 Alert Ready Operator Adequately Monitored

The Ministry adequately monitors the Alert Ready system operator.

To monitor the Alert Ready system operator, the Ministry primarily uses the Ministry staff's involvement on the national alerting governance council and other working groups along with periodic system testing.

In 2018, the Ministry worked with the system operator to test Alert Ready, the SaskAlert website and mobile app twice, and to follow up on identified issues. The Ministry determined the tests were a success. We also confirmed the Alert Ready software is up to date.

In addition, the Ministry receives monthly reporting from the SaskAlert system operator that provide data on the national system's availability (e.g., number of hours unavailable).

We found it unclear whether the Ministry actively reviews the monthly reports to monitor system availability and follow up on issues, if any. Our review of the monthly reports found only one instance for a 16-hour period where the Alert Ready website was not performing as expected with no follow up by the Ministry.

Our review of program administrator and SaskAlert system operator help-desk logs found two reported concerns with Alert Ready system availability that they had followed up and resolved promptly. Adequate monitoring of the Alert Ready system operator gives the Ministry confidence that Alert Ready will be available when an emergency occurs.

4.5 SaskAlert System Operator Actively Monitored

The Ministry actively monitors the SaskAlert system operator. As noted in **Figure 3**, the SaskAlert system operator hosts the SaskAlert website and mobile app.

The Ministry reviews monthly reports. We found these reports cover all key requirements set out in the agreement (e.g., SaskAlert website and mobile app availability, issues participants raise and their resolution, statistics on SaskAlert website and app use by the public). We confirmed the SaskAlert website, and SaskAlert app software is up to date.

Our review of two months of reports did not identify any instances of non-compliance that required Ministry follow up. We also reviewed the program administrator and SaskAlert system operator help-desk logs and found no reported instances of SaskAlert system operator non-compliance that required Ministry follow up.

Active monitoring of the SaskAlert system operator helps ensure the SaskAlert website and app are available and secure. This in turn helps ensure the public receives issued alerts.

4.6 Better Monitoring of Program Administrator Needed

The Ministry does not sufficiently monitor whether the program administrator fulfills its expected responsibilities—in particular, in providing support and granting participant user access. In addition, it did not keep results of its monitoring.

As previously noted, at March 2019, SaskAlert had 368 participating jurisdictions with about 500 participants with access to issue live alerts.

The Ministry uses informal feedback from participants and the program administrator to monitor the program administrator's support to participants. Support includes training participants, setting up authorized participants in Alert Ready, operating the help-desk, and reviewing participant alerts (i.e., practice alerts, and effective February 1, 2019, live alerts after their issuance).

For 6 of 15 issued alerts we tested where participants identified system issues, the Ministry or program administrator followed up with participants promptly.

The Ministry is aware that it is not receiving sufficient reporting from the program administrator. In November 2018, it worked with the program administrator to develop a new reporting template.

We found the new reporting template insufficient. Under this template, the program administrator is to give the Ministry information about only some of the program administrator's activities related to expectations set out in the draft Terms of Reference. The Ministry will not receive information on whether the program administrator completes changes to participant information in three working days, or responds to participant help-desk requests in 24 hours, or checks practice alerts within five days of submission.

In addition, the Ministry was unable to show us evidence whether it had done quarterly site visits or periodic reviews of the program administrator's files as envisioned in the 2017 draft Terms of Reference.

File reviews identify discrepancies between participants' responsibilities as set out in user access forms, and their user access to Alert Ready. The Ministry told us it conducted its annual review of the program administrator files in February 2018 but did not document the results of its review.

Our tests of the appropriateness of participant user access found:

➢ Four of 13 new participants we tested had inappropriate access in Alert Ready. Three had inappropriate event access (e.g., a municipal participant had access to create health alerts; a parks participant had access to create school alerts). One Ministry employee had access to issue live alerts three months after retirement. The Ministry had not requested the removal of access for this individual. We reviewed alerts and determined that none of these four individuals issued any alerts.

   The Ministry had not identified the inappropriate access of these participants because it reviewed program administrator files only annually.

➢ For each of 11 participants who no longer required access that we tested, the program administrator removed their access within three working days of the request by the participating jurisdiction indicating that the participant no longer required access.

Not receiving reporting from a key service provider responsible for day-to-day program administration makes it difficult to monitor the quality of services received. In addition, not documenting monitoring activities done, or not monitoring frequently enough, makes it difficult to identify gaps and take timely and appropriate action.

   2. **We recommend the Ministry of Government Relations document its regular monitoring of all key responsibilities of its SaskAlert program administrator.**

In addition, we found neither the Ministry nor the program administrator reviews user access to Alert Ready to confirm the continued appropriateness of that access. For example, they do not obtain a listing of current users from the Alert Ready system and ask participating jurisdictions to confirm the users listed continue to require access. Good practice suggests at least an annual review.

The Ministry indicated the Alert Ready operator was unable to produce meaningful user access reports that it could use for periodic reviews of access by the Ministry and participants.

Under its agreement with the Alert Ready system operator, the Ministry is responsible for authorizing user access to Alert Ready. If participants have unauthorized access, there is increased risk they may issue inappropriate alerts, which could negatively affect the SaskAlert program's reputation.

   3. **We recommend the Ministry of Government Relations work with the operator of Alert Ready (the National Alert Aggregation and Dissemination System) to obtain information needed to enable a periodic review of the appropriateness of user access to the System.**

4.7 Quarterly Practice Alerts Not Always Done and Monitoring of Live Alerts Not Documented

The Ministry does not sufficiently monitor whether participants complete practice alerts each quarter, or document participant errors in live alerts, or suspend participants who do not complete alerts as expected.

In 2018, SaskAlert participants issued 104 alerts (2017: 61 alerts). That means most participants issue alerts very infrequently.

The Ministry requires participants to complete ongoing practice alerts each quarter to maintain familiarity with Alert Ready. When the Ministry identifies a participant who has not completed required practice alerts, its standard operating procedures require it to suspend that participant's access to the live environment of Alert Ready (i.e., remove the ability to issue live alerts).

We found the Ministry only verifies participants are completing ongoing practice alerts annually instead of quarterly. At the time of our audit, the Ministry last verified compliance in February 2018. It did not document the results of its review. The Ministry completed the next verification in February 2019; however, results were not yet finalized and available at March 2019.

For 23 of 30 participants we tested, each participant had not completed a practice alert within the last three months as expected.

In addition, we identified two participants with access received in 2016 and 2017 respectively who never completed ongoing practice alerts (other than initial practice alerts completed during training). At January 2019, both participants had access to create live alerts in Alert Ready.

Up to February 1, 2019, the Ministry had an informal process to review every alert issued.[19] When it identified issues with an alert, it followed up directly with the participant to provide guidance to fix the alert, but did not document guidance it provided to the participant. We tested 15 issued alerts and found all to be clear, accurate, and issued within an appropriate time frame.

The Ministry did not track all concerns or issues with participants after its review of each alert. Without tracking concerns, the Ministry has no way to know which participants may require further training or assistance. Tracking these issues can also help ensure the Ministry's actions (e.g., require additional training, suspend or remove user access) are consistent.

Participants not completing ongoing practice alerts are at an increased risk of not being able to create a timely or accurate alert to notify the public about a real emergency when it occurs. Actively monitoring participants struggling to complete practice or live alerts could help the Ministry identify participants at a higher risk of issuing an inaccurate alert; it can then use its time and resources working with those participants who pose the greatest threat to the SaskAlert program's reputation.

> 4. **We recommend the Ministry of Government Relations actively monitor whether SaskAlert participants complete timely and accurate alerts, and take action where necessary (e.g., suspend system access).**

4.8 Timely and Accurate Alerts Issued by the Ministry and Participants

The Ministry and SaskAlert participants issued timely and accurate alerts.

In 2018, the SaskAlert program issued 370 alerts of which 11 were critical (e.g., missing vulnerable person) (2017: 294 alerts of which 17 were critical). Of those alerts, Environment Canada created 266 for weather events affecting Saskatchewan.[20]

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[19] Effective February 1, 2019, the Ministry requested its program administrator to review each issued alert.
[20] Environment Canada created 6 critical and 260 advisory alerts in 2018.

As shown in **Figure 4**, Saskatchewan participants (including the Ministry and program administrator) issued 104 of the alerts for fire (e.g., wildfire, industrial fire), flood, health (e.g., water quality), and safety (e.g., amber alert, missing person, dangerous animal, utility service disruption).

Figure 4—Number and Type of Alerts by Saskatchewan Participants and the Ministry in 2018
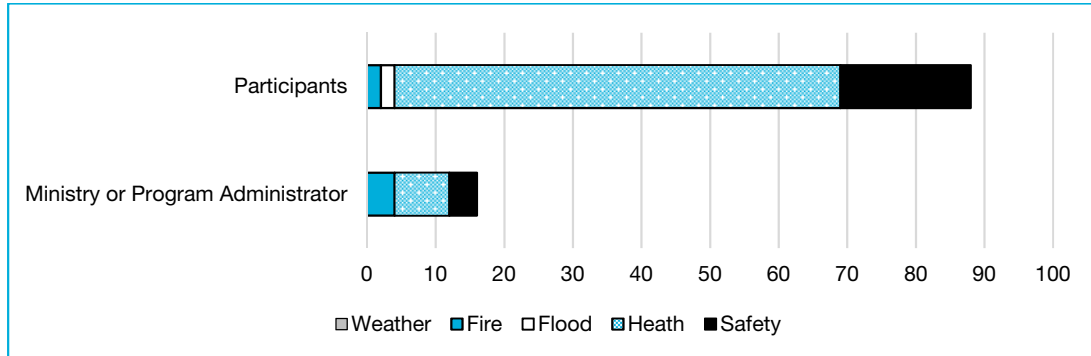
Source: Provincial Auditor Saskatchewan based on information available at emergencyalert.saskatchewan.ca/alerts/2018/index.html (27 March 2019).

For each of the 15 alerts (five critical, 10 advisory) we tested, each alert was clearly worded, followed Ministry templates, created by an appropriate user, and issued within an appropriate time frame.

In addition, we reviewed news articles and public archives to identify imminently dangerous events that occurred during our audit period. We identified four such events (three wildfires, one amber alert)—of which two wildfires occurred on First Nations that do not participate in the SaskAlert program (therefore no alert was issued). For the two events that occurred in jurisdictions participating in the SaskAlert program, we found these alerts were accurate and timely.

Issuing timely and accurate alerts can help Saskatchewan residents adequately prepare for situations that may pose risks to their health and safety.

4.9 Participant Engagement Increasing

The Ministry is taking steps to increase engagement of participants. As shown in **Figure 5**, participation of municipalities and First Nations in the SaskAlert program increased over the last three years.

The Ministry aims to have 100% of Saskatchewan municipalities and First Nations participating in the program. At March 2019, almost half of Saskatchewan's 773 municipalities (i.e., 353 municipalities) and less than five percent of Saskatchewan's 70 First Nations (i.e., three First Nations) participate in the SaskAlert program.

Figure 5—Number of Saskatchewan Communities Participating in the SaskAlert Program
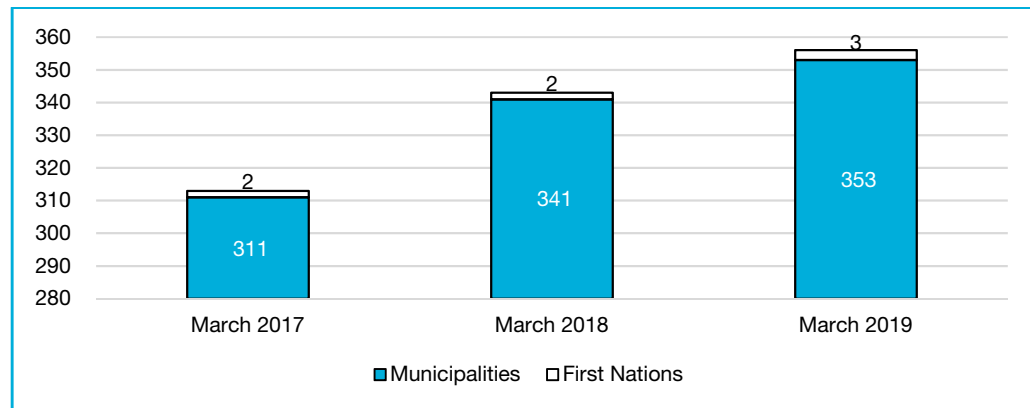
Source: Adapted from information provided by the Ministry of Government Relations.

The Ministry identified factors limiting municipalities and First Nations from participating in the SaskAlert program, and factors affecting the level of engagement of existing participants (e.g., time commitment, practice alert requirements, re-training needed due to frequent turnover). It developed reasonable strategies to improve participant engagement that it plans to implement (e.g., make training more user-friendly, develop a tool to capture feedback from jurisdictions).

The Ministry promotes the SaskAlert program to potential participants via attendance at municipal conferences (e.g., Saskatchewan Urban Municipalities Association annual conference). It also provides provincial Emergency Services Officers with information on the program to share when they interact with municipalities and First Nations.[21]

Increased participant engagement in the SaskAlert program can allow alerts to reach more communities.

4.10 Public Engagement Increasing

The Ministry is also taking steps to increase public engagement in using the SaskAlert website and/or mobile app. At March 2019 as shown in **Figure 6**, over 115,000 of the estimated 970,000 (i.e., nearly 12%) mobile device users in Saskatchewan downloaded the SaskAlert mobile app; more than doubling since March 2017.[22,23] Saskatchewan's population is an estimated 1.17 million as of December 31, 2018.[24]

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[21] Provincial emergency services officers regularly communicate with Saskatchewan municipalities and First Nations to assist communities in their emergency response efforts.

[22] 115,000 obtained from data provided by the Ministry of Government Relations management.

[23] 970,000 determined by applying Saskatchewan's smartphone penetration of 84% (from the Canadian Radio-Television and Telecommunications Commission's *Communications Monitoring Report 2018*) to Saskatchewan's population at December 31, 2018.

[24] www.saskatchewan.ca/government/news-and-media/2019/march/21/population-numbers (07 April 2019).

Figure 6—Number of Mobile Devices with the SaskAlert App
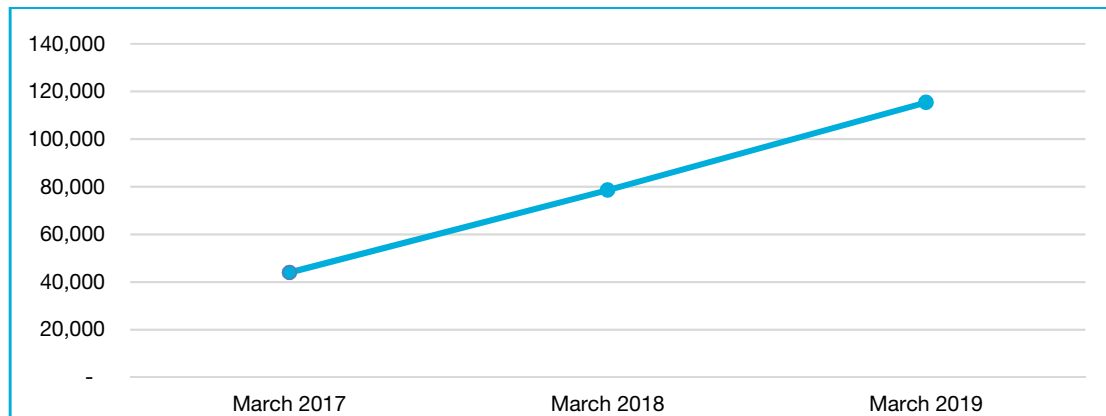
Source: Adapted from information provided by the Ministry of Government Relations.

The Ministry receives reporting from its SaskAlert system operator to help it identify trends and issues with the website and the mobile app (e.g., number of users, amount of time logged on the website and app). The Ministry could use this information to identify trends or issues and develop further strategies to improve public engagement.

The Ministry communicates clearly to the public about the SaskAlert program using social media, information brochures, and online information and videos. It communicates how to access alerts through the SaskAlert website and app.

Increasing public engagement in using SaskAlert can help ensure alerts reach more residents so they can adequately prepare for situations potentially affecting their health and safety. Having more members of the public use the SaskAlert website and app contributes to the SaskAlert program meeting its objective of informing as much of the general public as possible about imminently dangerous events affecting them.

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