

Chapter 20

Health—Using Critical Incident Reporting to Improve Patient Safety

1.0 MAIN POINTS

In healthcare, a critical incident is a serious adverse health event that did or could have resulted in serious harm or death of a patient. Critical incident reporting is a recognized tool in improving patient safety in the healthcare sector.

In 2023–24, healthcare organizations (e.g., Saskatchewan Health Authority, Saskatchewan Cancer Agency) reported 215 critical incidents (2022–23: 145 critical incidents) to the Ministry of Health.¹

Since our original audit in 2021, the Ministry made some improvements to its critical incident reporting processes, but further work remains.

The Ministry still needs to:

- Sufficiently assess planned corrective actions and contributing factors in critical incident reports to help ensure the actions effectively address causes of critical incidents. We found 17 of the 20 reports we tested had weak planned corrective actions. We also found 10 reports did not describe why the incident happened limiting the healthcare organizations' ability to identify contributing factors and develop appropriate actions to address them.
- Monitor and enforce compliance with critical incident reporting deadlines set in *The Critical Incident Regulations, 2023*. The Ministry continues to frequently receive critical incident reports from healthcare organizations later than the timeframes required by law. In 2023–24, we found the Ministry received 62% (2019–20: 44%) of initial notifications later than the three-day requirement. We also found the Ministry received 90% (2019–20: 73%) of the critical incident reports later than the 60-day requirement.
- Regularly confirm the critical incident listings with planned corrective actions received from the Saskatchewan Health Authority are complete and accurate to enable effective monitoring of the implementation status of corrective actions; we found six incidents were not included in the Authority's listing. The Ministry also reported 340 outstanding corrective actions as of June 30, 2023, with 94% noted as not yet implemented by the Authority.
- Effectively determine when to issue a patient safety alert and monitor the alert's effectiveness. The Ministry has not issued any patient safety alerts since September 2019. Management indicated the Ministry plans to use its new guidance for two potential patient safety alerts—it plans to issue the alerts by December 2024.
- Further analyze critical incidents and use the Ministry's framework to implement system-wide improvements.

¹ Ministry of Health, *2023–24 Annual Report*, p. 31.



By June 2024, the Ministry expanded the list of adverse health events it requires healthcare organizations to report as critical incidents to fully align with good practice, confirmed critical incident reporting forms are complete, and compared specific critical incidents to other health data sources (e.g., Canadian Institute for Health Information).

Through effective use of critical incident reporting, the degree of injury and the types of critical incidents that occur in Saskatchewan healthcare facilities should reduce over time.

2.0 INTRODUCTION

2.1 Background

Critical incident reporting refers to reports healthcare organizations must, by law, make to the Ministry of Health about a serious adverse health event, including, but not limited to, the actual or potential loss of life, limb, or function related to a health service provided by the organization.^{2,3}

The Ministry is responsible for overseeing critical incident reporting, evaluating whether steps healthcare organizations identify are likely to prevent recurrence of similar future incidents, and preparing patient safety alerts that address system-wide concerns.

Critical incident reporting and investigating such incidents is one method of promoting patient safety. Identifying incidents that resulted, or could have resulted in patient harm, and recommending and implementing actions to improve systems make healthcare safer.

2.2 Focus of Follow-Up Audit

This chapter describes our first follow-up audit of management's actions on the recommendations we made in 2021.

We concluded that, for the 12-month period ended December 31, 2020, the Ministry of Health had effective process for using critical incident reporting to improve patient safety except for the areas reflected in our 10 recommendations.⁴

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Ministry's progress toward meeting our recommendations, we used the relevant criteria from the original audit. Ministry management agreed with the criteria in the original audit.

To carry out our follow-up audit, we interviewed key Ministry staff and examined relevant documentation such as guidelines, critical incident IT system and data, critical incident listings, and critical incident reporting. We tested a sample of critical incident reports received and reviewed by the Ministry. We also consulted with an independent consultant with subject matter expertise in the area.

² Ministry of Health, *Saskatchewan Critical Incident Reporting Guideline*, 2023.

³ Healthcare organizations include the Saskatchewan Health Authority, healthcare affiliates (e.g., long-term care operators) contracted by the Saskatchewan Health Authority, the Saskatchewan Cancer Agency, eHealth Saskatchewan, and Health Shared Services (3sHealth).

⁴ *2021 Report – Volume 1, Chapter 6*, pp. 51–75.

3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at June 30, 2024, and the Ministry of Health's actions up to that date.

3.1 Requirements for Reporting Adverse Health Events Aligned with Good Practice

We recommended the Ministry of Health reassess the types of adverse health events it requires healthcare organizations to report as critical incidents. (2021 Report – Volume 1, p. 58, Recommendation 1; Public Accounts Committee agreement January 11, 2022)

Status—Implemented

The Ministry of Health expanded the list of adverse health events it requires healthcare organizations to report as critical incidents to fully align with good practice.

In spring 2022, the Ministry conducted a review of the Saskatchewan Critical Incident Reporting Guideline, which included a comparison to other provinces (e.g., Manitoba, British Columbia), European countries (e.g., England, Scotland, Ireland), and good practice (e.g., Canadian Patient Safety Institute).⁵

In May 2023, the Ministry updated the Guideline to fully align with good practice, including updating its definition of critical incidents to provide clarity on what serious adverse events require reporting. The Guideline now requires healthcare organizations to report all 'never events' including:⁶

- Patient death or serious harm due to uncontrolled movement of a ferromagnetic object in an MRI area (e.g., moving metal projectiles such as a pair of scissors)
- Patient death or serious harm resulting from transport of a frail patient or patient with dementia where staff did not follow protocols to ensure they left these patients in a safe environment

The Ministry also updated the Guideline to require healthcare organizations to report deaths from healthcare associated infections (e.g., pneumonia, sepsis, post-procedural infections). We found the Ministry appropriately updated its critical incident IT system to capture the changes to the Guideline (e.g., expanded categories for critical incident events).

We found the Ministry clearly communicated these updates to the Guideline with all healthcare organizations and conducted various education/training sessions with the organizations' patient safety staff and leadership prior to implementing the changes.

⁵ The Canadian Patient Safety Institute (CPSI) was a not-for-profit organization funded by Health Canada. In 2023, CPSI and Canadian Foundation for Healthcare Improvement amalgamated into Healthcare Excellence Canada.

⁶ Never events are patient safety incidents resulting in serious patient harm or death and are preventable using organizational checks and balances. CPSI created *The Never Events for Hospital Care in Canada* in September 2015. www.healthcareexcellence.ca/media/eceoshdc/never-events-for-hospital-care-in-canada.pdf (2 May 2024).



Guidelines that include all adverse events outlined in good practice will help Saskatchewan healthcare organizations report a broadened scope of critical incidents to the Ministry, should they occur. When made aware of these expanded critical incidents, the Ministry can assess whether healthcare organizations do enough to protect patients from these types of events.

3.2 Criteria Used to Assess Critical Incident Reports But Reporting Needs Improving

We recommended the Ministry of Health ask healthcare organizations to include root causes of the incident when reporting critical incidents.

(2021 Report – Volume 1, p. 59, Recommendation 2; Public Accounts Committee agreement January 11, 2022)

Status—Partially Implemented

We recommended the Ministry of Health (or responsible healthcare organization) apply consistent criteria to assess whether planned corrective actions effectively address causes of critical incidents.

(2021 Report – Volume 1, p. 67, Recommendation 6; Public Accounts Committee agreement January 11, 2022)

Status—Partially Implemented

The Ministry of Health’s Critical Incident Review Committee used criteria to assess critical incident reports, but reports do not always include sufficient corrective actions or explain why the incident happened to effectively address causes of critical incidents.

When completing a critical incident report, the Ministry requires healthcare organizations to document recommended actions for improvement to address contributing factors (i.e., causes) identified. In May 2023, the Ministry added documentation guidance to the Saskatchewan Critical Incident Reporting Guideline, which provides additional information about each field required in a critical incident report, including a description for contributing factor and recommended action, as shown in **Figure 1**. We found these changes align with good practice.

Figure 1—Contributing Factor and Recommended Action Documentation Guidance

Contributing Factor: A statement identifying any current practice, procedure or factor involved in the provision of the health service or the operation of the program that:

- a) Contributed to the occurrence of the critical incident; and
- b) If corrected or modified, may prevent the occurrence of a similar critical incident in the future.

This will be the basis for developing recommended actions.

Recommended Action: Recommended action that the reporting organization will implement to address the identified root cause. Implementation of the action should be likely to prevent the incident or mitigate the harm.

Considerations should be given to the hierarchy of effectiveness^A and system-level response.^B

Actions should be written using the “SMART” format:

- **Specific** – tackle a clearly defined issue and have a clear scope
- **Measurable** – can demonstrate impact on process and outcomes
- **Attainable** – can be achieved with available resources
- **Realistic** – do a reality check to predict if it will be accepted, implemented
- **Timely** – have a timeframe for implementation

Source: Ministry of Health, *Critical Incident Report: Documentation Guidelines*.

^A Recommended actions have varying degrees of effectiveness (e.g., removing a product that may cause a patient significant harm is more effective than training people to use it better, if other safer product options exist). Healthcare organizations should choose the most effective solution that is reasonable and/or possible. Good practice, recommended by the Canadian Patient Safety Institute, includes using the hierarchy of effectiveness (see **Figure 3**) to aid in determining whether a corrective action will be strong enough to modify behaviour and improve patient safety.

^B Recommended actions should be targeted at the right system level (e.g., consider whether the contributing factor affects only a specific department at specific hospital or all healthcare organizations in the province) and ensure the action is appropriate for that level.

The Ministry’s Critical Incident Review Committee reviews all reported incidents for compliance with the Guideline. The Committee meets weekly and is comprised of Ministry staff from different disciplines (e.g., medical advisor, nurse, pharmacist) and subject matter experts (e.g., long-term care, mental health) are invited to attend the review of incidents in specialized areas. Its review includes assessing contributing factors identified and whether the recommended actions will sufficiently address those factors and prevent or mitigate future harm. In winter 2023–24, the Ministry created a new form for the Committee to document the results of its review.

The Committee reviews each critical incident report using the criteria described in **Figure 2**—all criteria must be met before a critical incident can be closed.

Figure 2—Critical Incident Report Review Criteria

- Contributing factors contain items that:
 - a) Contributed to the occurrence of the critical incident
 - b) If corrected or modified, may prevent the occurrence of a similar critical incident in the future
- Recommended actions contain items that will address identified contributing factors when implemented, and should be likely to prevent the critical incident from occurring again or mitigate the harm
- Identified data indicator(s) for measuring effectiveness after implementation will provide reasonable confirmation that implementing corresponding recommended actions result in a desired and sustainable outcome

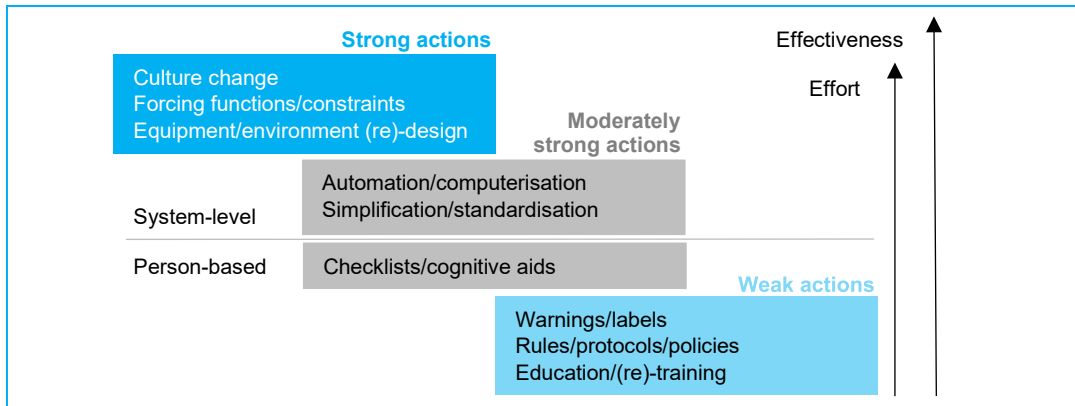
Source: Adapted from the Critical Incident Review Committee Record of Decisions.

The Committee requests follow-up with the reporting healthcare organization if a report is incomplete or clarification is required. The Ministry will follow up with healthcare organizations on behalf of the Committee. We found the Ministry often seeks clarification or suggests improvements to proposed corrective actions from healthcare organizations in critical incident reports and notes this on their review form. However, the Ministry does not always require the reporting healthcare organizations to change the details (e.g., corrective actions) in the final critical incident reports to align with the Ministry’s concerns.

Good practice, recommended by the Canadian Patient Safety Institute, includes using the hierarchy of effectiveness (see **Figure 3**) to aid in determining whether a corrective action will be strong enough to modify behaviour and improve patient safety. Our assessment of 20 critical incident reports found 17 reports with weak planned corrective actions (e.g., protocol, education/training) based on the hierarchy of effectiveness.



Figure 3—Hierarchy of Effectiveness



Source: Modified from graphics produced by the Institute of Safe Medication Practices and the US National Patient Safety Agency.

For example, our review of critical incident reports found:

- For one report tested, the planned corrective action was review and re-educate staff about guidance and documentation related to stroke screening and alert processes but did not include consideration of using electronic health record triage assessments to automatically flag conditions for stroke alert.
- For another report tested, the planned corrective action was to implement a policy prohibiting anyone from bringing in prohibited items (e.g., weapons) to the emergency department. The action will not reduce the risk of the same or similar incident occurring again. Stronger actions may include the use of metal detectors or pat downs. While the Committee inquired whether the Saskatchewan Health Authority considered stronger actions to prevent individuals bringing concealed weapons into the emergency department, the Committee did not require the Authority to revise its planned actions.

We also found in 10 reports, healthcare organizations did not explain why the incident happened. For example, incident reports stated that staff did not complete a form or an assessment but did not explain why not (e.g., lack of understanding, other tasks prioritized). Without this information, the healthcare organization may not identify all contributing factors and develop appropriate actions to address them.

Using formal criteria to assess causes of critical incidents and planned corrective actions aids in determining whether healthcare organizations adequately assess and report critical incidents. It should also help the Ministry determine whether planned corrective actions will sufficiently address contributing factors or require further actions.

3.3 Incident Reporting Forms Complete

We recommended the Ministry of Health obtain missing critical incident information from reporting healthcare organizations. (2021 Report – Volume 1, p. 60, Recommendation 3; Public Accounts Committee agreement January 11, 2022)

Status—Implemented

The Ministry of Health confirms critical incident reporting forms are complete and follows up to obtain missing information from the reporting healthcare organization, when required.

The Ministry requires healthcare organizations to notify it of critical incidents in accordance with *The Saskatchewan Critical Incident Reporting Guideline, 2023*. Critical incident notifications must include key information such as:

- Region awareness date (i.e., the date the reporting healthcare organization classified the event as a critical incident)
- Location of incident (e.g., hospital, long-term care)
- Patient outcome (e.g., disability/harm, death)

The Ministry's Provincial Quality of Care Coordinators within its Quality and Safety Unit review critical incident reports when submitted to ensure the reports contain the required information (e.g., region awareness date, location of incident), prior to review by the Critical Incident Review Committee.

We tested a sample of 25 critical incident files and found the reporting healthcare organizations reported the required information to the Ministry in the initial notification.

We also reviewed data for all critical incident notifications submitted to the Ministry between April 1, 2022, and March 31, 2024, and found that the system data was reasonably complete. All 340 critical incident files contained a region awareness date and patient outcome. We found only six of 340 (1.8%) critical incident notifications during this period did not include the location of the incident. This is a significant improvement from our 2021 audit where 26% did not include a region awareness date and 12% of files were missing a location.

Having complete data on all critical incidents allows the Ministry to reliably analyze and conclude about whether systemic issues exist that may impact patient safety, as well as whether planned actions are sufficient and put in place within a reasonable time to reduce the risk of similar incidents.

3.4 Critical Incident Reports Continue to Be Late

We recommended the Ministry of Health follow up when receipt of critical incidents reports are beyond established reporting deadlines. (2021 Report – Volume 1, p. 62, Recommendation 4; Public Accounts Committee agreement January 11, 2022)

Status—Not Implemented

The Ministry of Health does not monitor or enforce compliance with the reporting deadline dates set in *The Critical Incident Regulations, 2023*. It continued to frequently receive critical incident reports from healthcare organizations later than the timeframes required by law.

The Regulations set out timeframes for a healthcare organization to notify and report the results of its investigation to the Ministry (see **Figure 4**).

**Figure 4—Regulatory Timeframes for Reporting Critical Incident Reports to the Ministry**

Notification: Healthcare organizations must give notice to the Ministry of Health within three business days of becoming aware of a critical incident (region awareness date).

Final Report: Healthcare organizations must conduct an investigation on each critical incident and submit a final report on the investigation (including recommendations for improvement/corrective actions) within 60 days of becoming aware of the critical incident. The Ministry may allow extensions for submitting final reports (up to 180 days after the healthcare organization becomes aware of the critical incident).

Source: Adapted from *The Critical Incident Regulations, 2023*.

Our analysis of reported critical incidents over the past two years found most incidents reported to the Ministry came from the Saskatchewan Health Authority. From April 1, 2022, to March 31, 2024, the Authority reported 334 critical incidents to the Ministry and the Saskatchewan Cancer Agency reported six critical incidents.

We analyzed initial notifications of critical incidents, as shown in **Figure 5**, and found the Ministry continues to receive notifications later than the three business days required by law. This issue has worsened since our original audit—62% of initial notifications were late in 2023–24 compared to 44% in 2019–20. Management indicated many initial notifications were late as the Authority’s critical incident investigation and documentation process is manual and staff are adjusting to the requirements in the updated Guideline.

Figure 5—Critical Incident Notifications Later than Required by Law

| Fiscal Year | Critical Incident Notifications | Notifications Later than Three Business Days | % of Notifications Received Late |
|----------------------|---------------------------------|--|----------------------------------|
| 2019–20 ^A | 231 | 101 | 44% |
| 2022–23 | 146 | 83 | 57% |
| 2023–24 | 194 | 120 | 62% |

Source: Critical incident report data provided by the Ministry of Health.

^A Statistics at time of original audit.

During our testing of 25 critical incidents, we found the Ministry received 18 critical incident notifications late—ranging from 1–374 days late. Healthcare organizations did not provide reasons for the delays.

As shown in **Figure 6**, we found the Ministry receives most final reports for completed investigations later than the 60 days required by law. In 2023–24, the Ministry received 90% of final reports after 60 days, with 12% of these reports taking longer than 180 days.

Figure 6—Critical Incident Final Reports Received Later than Required by Law

| Fiscal Year | Total Incident Reports Received | Final Reports Received Later than 60 Days but Less than 180 Days | | | Final Reports Received Later than 180 Days | | |
|----------------------|---------------------------------|--|-----------------------------|--------------------------------------|--|-----------------------------|--------------------------------------|
| | | Final Reports | % of Final Reports Received | Average Days to Submit Final Reports | Final Reports | % of Final Reports Received | Average Days to Submit Final Reports |
| 2019–20 ^A | 290 | 129 | 44% | 107 | 85 | 29% | 314 |
| 2022–23 | 134 | 69 | 51% | 106 | 42 | 31% | 394 |
| 2023–24 | 69 | 54 | 78% | 98 | 8 | 12% | 307 |

Source: Critical incident report data provided by the Ministry of Health.

^A Statistics at time of original audit.

During our testing of 25 critical incidents, we found the Ministry received 16 final reports 68–627 days after the region awareness date. The Ministry had yet to receive the final report for five critical incidents tested—these reports were 305–947 days past the region awareness date (at June 2024).

The Ministry prepared a 2022–23 annual report on critical incidents, which it shared with its senior and executive management, the Saskatchewan Health Authority, the Saskatchewan Cancer Agency, and 3sHealth. We found the report reasonable as our analysis on compliance with reporting timelines determined similar results.

The Ministry indicated it does not follow up with the Authority to determine why it takes longer than the required deadline of three business days to notify it of a critical incident. In addition, we found the Ministry does not follow up on final critical incident reports not received within 60 days of the notification of the incident. The Ministry indicated it is focusing on improving the quality of the reports and implementation of recommended actions. Once it sees improvements in those areas, it expects to focus on timeliness of reporting.

In December 2023, the Ministry notified healthcare organizations that starting April 1, 2024 (i.e., 11 months after implementation of the new Guideline), the Committee would only review critical incident reports that included all components (e.g., details on measuring and monitoring recommended actions).

From April 1–May 31, 2024, we found the Saskatchewan Health Authority filed only three critical incident reports with the Ministry. As shown in **Figure 7**, the Authority filed significantly fewer reports than in previous years over the same period. The Authority informed the Ministry to expect delays in critical incident reporting as its operational leaders had yet to complete training on measuring and monitoring corrective actions.

Figure 7—Reported Critical Incidents from April 1–May 31, 2024

| 2021 | 2022 | 2023 | 2024 |
|------|------|------|------|
| 36 | 31 | 15 | 3 |

Source: Information provided by the Ministry of Health.

One of the main purposes of critical incident notification is to inform senior and executive management within the Ministry timely about serious harm or death of a patient in care. Delays in receipt of initial notifications of critical incidents cause delay in the Ministry becoming aware of the most serious events of harm to patients in the healthcare sector.⁷

The critical incident reports received by the Ministry include results of investigated incidents, such as contributing factors and planned corrective actions to reduce the likelihood of serious harm or death occurring to another patient in the healthcare system. Delays in receiving investigation results mean the Ministry does not undertake timely assessment of planned actions for improvement, which increases the risk that factors contributing to a critical incident continue to exist and similar patient harm events reoccur.

⁷ When the Ministry of Health's Provincial Quality of Care Coordinators receive notification of a new critical incident, they prepare and distribute a notification email to certain individuals in the Ministry (e.g., Deputy Minister, Associate and Assistant Deputy Ministers). The Provincial Quality of Care Coordinators typically send these emails the same day or next day following initial notification.



3.5 Monitoring of Critical Incident Corrective Actions Needs Strengthening

We recommended the Ministry of Health monitor the status of implementation of corrective actions set out in critical incident reports.

(2021 Report – Volume 1, p. 68, Recommendation 7; Public Accounts Committee agreement January 11, 2022)

Status—Partially Implemented

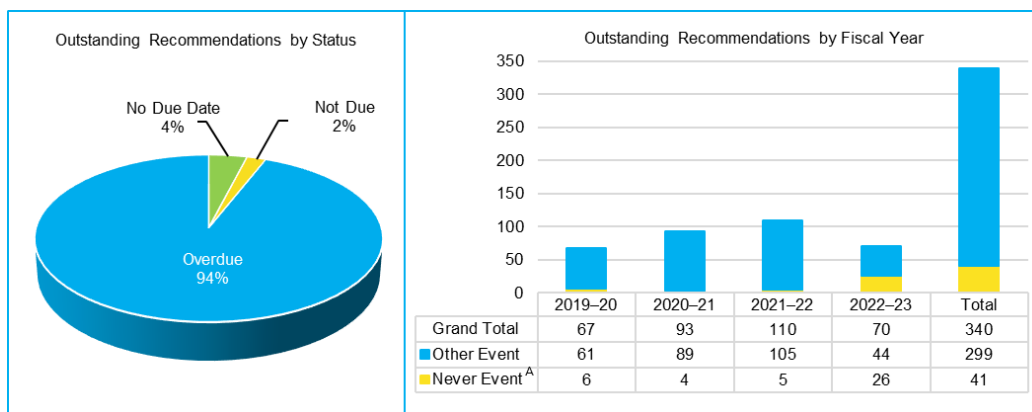
The Ministry of Health monitored the status of corrective action implementation set out in critical incident reports by receiving quarterly critical incident listings from the Saskatchewan Health Authority that include the status of corrective actions. The listings show the Authority did not implement the corrective actions timely, and the Ministry did not act. Also, the Ministry does not regularly confirm the listings provided are complete and accurate.

In September 2022, the Ministry began receiving quarterly critical incident listings from the Authority that included the number of corrective actions (i.e., recommendations), the due date, and status (e.g., complete or incomplete) for each incident.

Based on the information provided by the Authority, the Ministry analyzes and summarizes the Authority’s outstanding recommendations. We found the Ministry periodically reports the results to senior management of the Ministry and the Authority but does not take steps to advance timely implementation of corrective actions. However, the Ministry included targets for the implementation of recommendations in its 2024–25 accountability letter to the Authority. For example, by March 31, 2025, 80% of recommendations for critical incident events (excluding ‘never events’) should be fully implemented by the due date.

In its 2022–23 annual critical incident report, the Ministry reported 340 outstanding recommendations as of June 30, 2023, with 94% noted as not implemented and past the planned implementation date provided by the Authority (see **Figure 8**).⁸

Figure 8—Status and Number of Saskatchewan Health Authority Critical Incident Outstanding Recommendations at June 2023



Source: Ministry of Health’s 2022–23 Critical Incident Summary Report.

^A Never events are patient safety incidents resulting in serious patient harm or death and are preventable using organizational checks and balances.

⁸ At the time of our audit, the Ministry of Health had yet to complete its 2023–24 annual critical incident report.

Based on our analysis of the Authority's critical incident listing at March 31, 2024, we found 58 recommendations still outstanding from the Authority's 2022–23 critical incidents. Of these 58 outstanding recommendations:

- 54 recommendations were past due ranging from 1–394 days late (on average 209 days late)
- One recommendation did not have a due date
- Three recommendations were not yet due as of March 31, 2024

The Ministry also does not regularly confirm whether the information provided by the Authority is complete and accurate. We identified six critical incidents that the Authority reported to the Ministry but were not included in the March 31, 2024, listing.

Without verifying the information provided by reporting healthcare organizations, the Ministry cannot effectively monitor and follow up on the planned corrective actions to determine whether organizations address actions timely. Delays in implementing planned corrective actions may lead to the same critical incident occurring again, resulting in patient harm or death.

3.6 Patient Safety Alert Guidance Not Complete

We recommended the Ministry of Health (and/or responsible healthcare organization) utilize criteria to determine when to issue patient safety alerts.

(2021 Report – Volume 1, p. 71, Recommendation 8; Public Accounts Committee agreement January 11, 2022)

Status—Partially Implemented

We recommended the Ministry of Health work with the Saskatchewan Health Authority to monitor the effectiveness of patient safety alerts.

(2021 Report – Volume 1, p. 74, Recommendation 10; Public Accounts Committee agreement January 11, 2022)

Status—Not Implemented

The Ministry of Health developed criteria to determine when to issue a patient safety alert, but had not used it yet and does not have guidance for monitoring an alert's effectiveness. In October 2023, the Ministry drafted criteria for when to issue patient safety alerts, which the Provincial Patient Safety Executive Committee approved in December 2023.⁹ Following a critical incident review, the Ministry determines whether a patient safety alert may be required if all the following criteria are met:

- There is potential for the issue to exist at other reporting healthcare organizations

⁹ The Provincial Patient Safety Executive Committee was established in November 2022. Its purpose is to set strategic direction and provide oversight for system initiatives that promote excellence in public safety. It is comprised of members from the Ministry of Health, the Saskatchewan Health Authority, the Saskatchewan Cancer Agency, and 3sHealth.



- There is a risk of death, permanent harm, or severe and/or temporary harm
- Issue can be rapidly addressed by the source (e.g., healthcare organization), with actions to prevent or reduce errors
- Issue is new or under-recognized, and constructive organization-level actions that would reduce the risk exist, or the issue is not new or under-recognized, but there are new or under-recognized resources or interventions to consider

When a critical incident meets the above criteria, the Ministry then conducts further analysis and issues a patient safety alert when:

- The Ministry compiles a summary of past critical incidents in the same category and their corresponding recommended actions, along with a literature review on current good practices
- Partners from the Ministry and reporting organizations, as well as content experts (e.g., surgery, pharmacy) assess the required actions for feasibility, effectiveness, unintended consequences, equality impact, and cost justification
- Required actions are specific, measurable, achievable, realistic, and timely
- Other recognized sources (e.g., medical device manufacturers, drug companies) have not issued a patient safety alert with similar content in the last two years, or the safety alert requires updating based on new good practices

We found the above criteria and rationale for issuing patient safety alerts align with good practice.

The Ministry has not issued any patient safety alerts since September 2019.¹⁰ Management indicated the Ministry will use its new guidance on two potential patient safety alerts—it plans to issue the alerts by December 2024.

The Ministry also had yet to develop guidance for assessing the effectiveness of patient safety alerts—it plans to do so in 2024–25. Timely assessment, after allowing time for the alert to have impact, can determine whether reported critical incidents in the area improved, if updates are required, or if an alert is no longer applicable as the issue has been resolved.

Using standard criteria to determine when a patient safety alert is warranted reduces the risk that an alert is made for a minor or localized issue. Moreover, criteria help to ensure that an alert addresses systemic issues with higher recurrence. Without follow up on patient safety alerts, the Ministry cannot determine whether they are implemented and successful.

¹⁰ The Ministry of Health makes its patient safety alerts available to the public at www.ehealthsask.ca/services/resources/Pages/Patient-Safety.aspx (20 June 2024)

3.7 Critical Incident Framework for Systemic Issues Not Yet Implemented

We recommended the Ministry of Health analyze critical incidents for systemic issues. (2021 Report – Volume 1, p. 73, Recommendation 9; Public Accounts Committee agreement January 11, 2022)

Status—Partially Implemented

We recommended the Ministry of Health analyze the nature and types of critical incidents reported as compared to other health data sources. (2021 Report – Volume 1, p. 64, Recommendation 5; Public Accounts Committee agreement January 11, 2022)

Status—Implemented

The Ministry of Health analyzed reported critical incidents and identified certain systemic issues, and created a framework for implementing system-wide improvements to address these issues. However, it had yet to use its new framework to make improvements.

In 2022, the Ministry began preparing annual reports on critical incidents using information from its critical incident IT system and the Saskatchewan Health Authority’s quarterly critical incident listings (see **Section 3.5**) to summarize and analyze incident information by areas such as:

- Organization/Area (e.g., Saskatchewan Health Authority [Saskatoon, Regina, South East, etc.], Saskatchewan Cancer Agency)
- Program/Department (e.g., long-term care, emergency, surgery)
- Patient Outcome (e.g., disability/harm, death)
- Category (e.g., surgical event, care management event)
- Subcategory (e.g., retention of foreign object, medication error)

In each area, the Ministry provides trend information for a five-year period. As shown in **Figure 9**, the number of critical incidents decreased significantly in 2022–23.

Figure 9—Critical Incidents Reported to the Ministry of Health from 2018–24

| Category | 2018–19 | 2019–20 | 2020–21 | 2021–22 | 2022–23 | 2023–24 |
|---|---------|---------|---------|---------|---------|---------|
| Surgical Events (e.g., retention of a foreign object in a patient after surgery) | 9 | 14 | 3 | 11 | 9 | 12 |
| Product and Device Events (e.g., use or function of a device in patient care in which the device is used or functions other than as intended) | 5 | 6 | 5 | 9 | 1 | 7 |
| Patient Protection Events (e.g., patient disappearance, patient suicide or attempted suicide) | 47 | 42 | 34 | 22 | 18 | 37 |



| Category | 2018–19 | 2019–20 | 2020–21 | 2021–22 | 2022–23 | 2023–24 |
|---|------------|------------|------------|------------|------------|------------|
| Care Management Events (e.g., medication or fluid error, error in diagnosis, Stage 3 or 4 pressure ulcers acquired after admission to a facility) | 108 | 191 | 117 | 160 | 91 | 125 |
| Environmental Events (e.g., patient death from a fall, delay or failure to reach a patient for emergent or scheduled services) | 44 | 35 | 33 | 25 | 19 | 18 |
| Criminal Events (e.g., sexual or physical patient assault) | 8 | 2 | 3 | 4 | 7 | 16 |
| Total Critical Incidents Reported | 221 | 290 | 195 | 231 | 145 | 215 |

Source: Ministry of Health, *2023–24 Annual Report*, pp. 28–31.

The Ministry’s report on critical incidents noted the decrease is not necessarily an indication the healthcare system is safer, rather organizations may not be reporting all critical incidents. The Ministry corroborated incidents are under-reported through its comparisons of reported incidents to other healthcare data sources.

We found the Ministry compared its own critical incident report data to Canadian Institute of Health Information (CIHI) data on retained foreign object events.¹¹ The analysis showed that prior to 2021–22 there were more retained foreign object events reported to CIHI by healthcare organizations (e.g., Saskatchewan Health Authority) than critical incidents reported to the Ministry. We found the Ministry also compared other critical incident data (e.g., suicides) to other health sources on an ad hoc basis to support its analysis of critical incidents.

The Ministry’s annual reports on critical incidents highlighted certain systemic issues, identified through its trend analysis. For example, in both its 2021–22 and 2022–23 reports, the Ministry noted the two most common ‘never events’ were critical incidents related to an unintended foreign object left in a patient following a procedure and stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility.

The Ministry selected one systemic issue (e.g., unintended foreign objects left in a patient following a procedure) and began analyzing the critical incidents that occurred because of this issue, including comparing to other health data sources.

In January 2023, the Ministry created the *Framework for Implementing Critical Incident System-Wide Improvements*. The Framework includes various steps such as identifying an area for improvement, collecting data, developing strategies, implementing strategies, and monitoring effectiveness. The Ministry, along with the Saskatchewan Health Authority, plans to trial the Framework on the unintended foreign objects left in a patient following a procedure. Management expects to begin this work in 2024–25.

Analyzing reported critical incidents and corrective actions enables the Ministry to identify systemic issues in healthcare and improve patient safety.

¹¹ Canadian Institute of Health Information is a not-for-profit organization that provides health data and information to improve healthcare and population health across Canada.