

Wildfire Evacuation Lessons From La Ronge, a Northern Saskatchewan Site: Physician Debriefings

Enseignements tirés de l'évacuation liée aux feux de forêt de La Ronge, dans le nord de la Saskatchewan : débriefage des médecins



MAX KARNITSKY, MD, CCFP

Family Physician

Northern Medical Services, La Ronge Site

La Ronge, SK

Department of Family Medicine

College of Medicine

University of Saskatchewan

Saskatoon, SK

DANIEL IRVINE, MD, CCFP

Family Physician

Northern Medical Services, La Ronge Site

La Ronge, SK

Department of Family Medicine

College of Medicine

University of Saskatchewan

Saskatoon, SK

JEFFREY D.C. IRVINE, MPH, MD, CCFP

Family Physician and Researcher

Northern Medical Services, La Ronge Site

La Ronge, SK

Department of Family Medicine

College of Medicine

University of Saskatchewan

Saskatoon, SK

VERONICA MCKINNEY, MD, CCFP

Family Physician and Director

Northern Medical Services

Saskatoon, SK

Department of Family Medicine

College of Medicine

University of Saskatchewan

Saskatoon, SK

Abstract

The 2025 La Ronge wildfire evacuation highlights vulnerabilities in rural health system readiness during climate-driven emergencies. Reflections from 12 family physicians revealed challenges in communication redundancy, clarity of emergency governance, continuity of care for evacuated patients and the emotional strain of dual responder–evacuee roles. These insights, gathered through a post-evacuation debrief, represent physicians' perspectives rather than assessments of organizational performance. The findings echo lessons from previous

Canadian wildfires and inform policy directions to strengthen communication systems, clinical integration in emergency operations, patient-tracking processes and trauma-informed supports for rural and northern health system resilience.

Résumé

L'évacuation de La Ronge lors des feux de forêt de 2025 met en lumière les vulnérabilités du système de santé rural en matière de préparation aux urgences climatiques. Les réflexions de 12 médecins de famille ont révélé des défis concernant la redondance des communications, la clarté de la gouvernance en situation d'urgence, la continuité des soins pour les patients évacués et la charge émotionnelle liée au double rôle d'intervenant et de personne évacuée. Ces observations, recueillies lors d'un débriefage post-évacuation, présentent le point de vue des médecins plutôt qu'une évaluation du rendement organisationnel. Les conclusions font écho aux leçons tirées de précédents feux de forêt au Canada et éclairent les orientations stratégiques visant le renforcement des systèmes de communication, l'intégration clinique pour les opérations d'urgence, les processus de suivi des patients et les mesures de soutien tenant compte des traumatismes, afin d'assurer la résilience du système de santé en milieu rural et nordique.

Introduction

In summer 2025, rapidly advancing wildfires led to the evacuation of La Ronge, Air Ronge and Lac La Ronge Indian Band communities. The region relies on a group of full-scope family physicians, employed by Northern Medical Services (NMS), who provide emergency, in-patient, obstetric and primary care across northern communities, with the closest referral centre over 240 km away along limited transportation routes.

The 2025 wildfires around La Ronge advanced with unusual speed, moving from 26 km away late in the morning to a full community evacuation order that afternoon. Although the response prevented direct fire-related casualties, physicians later reflected on uncertainty, communication limitations and operational challenges during the rapidly evolving event.

The experiences echo lessons from previous climate-related emergencies in Canada, including the 2016 Fort McMurray wildfire and British Columbia's wildfire seasons, where reviews similarly identified communication challenges, jurisdictional complexities and difficulties tracking evacuees (Abbott and Chapman 2018; Kovacs et al. 2019; Sauvé et al 2024). These parallels suggest that lessons from past disasters have not yet been fully embedded into rural and northern emergency preparedness.

This commentary synthesizes La Ronge family physicians' reflections from the 2025 evacuation and offers policy considerations to support health system resilience and coordinated responses during future wildfire evacuations. The insights presented reflect family

physicians' perceptions during an unprecedented, rapidly evolving emergency and are not intended as evaluative judgements of organizational or leadership performance.

Methods

This commentary draws on reflections from 12 family physicians who practise in La Ronge and provide full-scope care to multiple northern Saskatchewan communities. A single in-person, recorded debrief was held several weeks after the 2025 evacuation, allowing physicians to reflect after the initial stabilization. Physicians who could not attend contributed written reflections via e-mail, which were incorporated into the discussion. The debrief focused on physicians' experiences related to communication, governance, clinical care and personal and emotional impacts during the wildfire evacuation.

Only first-hand physician experiences are included in this commentary. Second-hand accounts from other healthcare providers or agencies were excluded to maintain accuracy and clarity of perspective. This work is intended as a reflective, physician-informed commentary grounded in quality-improvement principles rather than as a formal qualitative study. No thematic coding or analytic frameworks were applied. Ethics approval was not required, as this work is a reflective commentary based on a voluntary physician debrief conducted for quality-improvement purposes, with no collection or reporting of identifiable individual-level data.

Key Challenges and Physician Insights

Communication infrastructure and response limitations

Communication challenges occurred as cellular and cable Internet systems failed across northern communities. Satellite phones, though available in select locations, were limited by smoke interference and incompatibility with Saskatchewan's interactive voice response system for medical transport and consultation lines. These limitations reduced access to provincially coordinated clinical support and underscored the importance of redundant communication systems in remote regions.

Even internal notification systems proved inconsistent. Several physicians did not receive emergency alerts within the hospital due to poor cellular reception inside the building and the absence of Wi-Fi-enabled alert redundancy. Public alerts were useful but often lacked the specificity needed for clinical decision making.

Several potential improvements emerged from the discussion:

- Strengthen satellite-compatible direct-dial clinical support lines and backup communication modes (e.g., P25 radios, portable boosters, satellite Internet).
- Build Wi-Fi-based alert redundancy and improve geographic specificity in public messages.
- Conduct pre-season communication testing across NMS, Saskatchewan Health Authority (SHA), Saskatchewan Public Safety Agency (SPSA) and local providers.

Similar communication limitations were documented during British Columbia's 2017 wildfire season, where after-action reviews highlighted the need for improved redundancy, clearer notification pathways and more consistent interagency communication during rapidly evolving emergencies (Abbott and Chapman 2018).

Decision-making structures and clinical integration

The wildfire's rapid progression created uncertainty for physicians about Emergency Operations Centre (EOC) functioning and decision communication. Family physicians recognized that medical health officers (MHOs) serve as the clinical leads for emergency response in Saskatchewan and that NMS plays a central coordinating role during evacuations. These activities occurred within Saskatchewan's EOC framework, which coordinates multi-agency emergency response and communication (SPSA 2023). These structures were active during the evacuation, but the unprecedented speed of events meant that front-line clinicians did not always have immediate visibility into how operational decisions were unfolding.

From the physicians' perspective, the earliest hours of the evacuation felt disorienting. Clinicians were simultaneously responsible for patient care, assisting with in-patient transfers, staying connected with colleagues and ensuring the safety of their own families. The rapid environmental shifts and fast-moving timelines contributed to a sense of fragmented information flow.

Several suggestions emerged from their discussion:

1. Enhancing shared awareness of emergency response roles and structures

Physicians felt that greater familiarity with the responsibilities of NMS, MHOs, SPSA, SHA and First Nations governance would support smoother collaboration during crises.

Suggested approaches included the following:

- a. annual or semi-annual orientation sessions outlining emergency governance structures and key agency roles;
- b. development of a concise "emergency roles guide" summarizing clinical and operational responsibilities and communication pathways; and
- c. interdisciplinary tabletop exercises bringing together physicians, NMS leadership, community partners and emergency management agencies to rehearse wildfire scenarios in advance.

2. Strengthening cascading communication pathways

Physicians noted that structured, predictable communication systems could help reduce uncertainty in fast-moving emergencies. Several pathways already proved effective during the 2025 evacuation, including the liaison work carried out by the local NMS physician, who also serves as an SHA clinical lead, and by the La Ronge emergency department family physician lead, both of whom played valuable roles in relaying information and supporting

two-way communication. Physicians suggested that these effective approaches could be further strengthened and formalized.

Additional strategies included the following:

- a. automated or semi-automated update systems delivering EOC notifications to front-line clinicians via text, e-mail or secure messaging; and
- b. establishing standard communication intervals during high-risk periods so clinicians know when to expect new information.

Such pathways may help ensure alignment between provincial, regional and local teams during wildfire responses.

3. *Integrating clinical leadership early in EOC activation*

Physicians emphasized the value of early involvement from MHOs and designated NMS representatives to ensure that operational planning reflects clinical realities on the ground.

Constructive ideas included the following:

- a. implementing formal triggers for MHO and NMS participation when wildfire risk escalates;
- b. inviting clinical liaisons to initial EOC briefings, even if remotely, to support two-way information flow; and
- c. establishing rapid-notification protocols to alert clinicians when EOCs are activated and when clinical input is being sought.

These experiences mirror national findings that emphasize the importance of early integration of clinical leadership within emergency governance structures (Public Safety Canada 2019).

Continuity of care and operational preparedness

The evacuation of in-patients and long-term care residents required rapid action. Physicians commended the preparedness work of nursing and medical staff, whose detailed evacuation binders and clinical summaries supported safe and effective handovers. Physicians noted instances of patients having difficulty accessing routine medications during the evacuation period, including chronic therapies and stable opioid or other controlled-substance prescriptions. This highlighted the need for clearer emergency prescribing and dispensing protocols, including expanded pharmacist authority during declared emergencies, to support continuity of care during future events. Challenges with tracking displaced patients and maintaining continuity of care have been reported in other Canadian wildfire evacuations, including Fort McMurray in 2016, where fragmented information systems complicated assessment of ongoing medical needs (Kovacs et al. 2019).

1. *Flexible triage and transport pathways*

When fire progression is highly dynamic, waiting to confirm receiving sites may delay safe evacuation. Physicians suggested identifying stabilization or muster sites outside high-risk zones where evacuated patients could be initially assessed before being moved onward.

2. *Centralized evacuee tracking*

Family physicians experienced challenges in locating evacuated patients once they dispersed across the province. A centralized, privacy-compliant registry would support continuity of care, facilitate communication between providers and assist with family reunification. This echoes recommendations from Saskatchewan Ombudsman reports and lessons from other Canadian disaster responses (Abbott and Chapman 2018; Sauvé et al. 2024; Tram et al. 2025).

3. *Mobile clinical capacity*

In the early phase of relocation, family physicians lacked access to laptops, diagnostic tools and basic supplies. Although these issues were resolved quickly through strong inter-agency collaboration, physicians suggested pre-assembled evacuation medical kits, stored outside areas at high risk of rapid evacuation, to expedite clinical setup in future events.

Emotional and ethical strain among physicians

Physicians described the emotional complexity of serving simultaneously as responders and evacuees during the wildfire. Some needed to leave early with their families, while others remained longer to support in-patient transfers. These differing circumstances, combined with uncertainty about fire conditions, contributed to moral tension.

A pre-existing group messaging channel among family physicians proved helpful for initial coordination but created significant information overload as the situation evolved. Physicians noted that this improved substantially once NMS established daily, organized briefings, which clarified roles, reduced speculation and helped align clinical decision making during a fast-moving event.

Consistent with evidence from disaster psychology, physicians also reflected on the importance of appropriate post-event supports. Research has shown that single-session psychological debriefing does not prevent post-traumatic stress disorder and may, in some cases, increase distress and therefore should not be used as an early intervention during disaster recovery (NICE 2018; Rose et al. 2002). Instead, physicians emphasized the value of approaches better aligned with evidence-informed practice, including the following:

- quality-improvement-oriented after-action reviews focused on systems learning, paired with recognition of collective successes during the response;
- clear expectations for off-duty time and structured opportunities for clinicians to temporarily disengage from response activities; and
- accessible, trauma-informed supports for healthcare workers.

These recommendations align with Canadian public health and climate adaptation guidance, which emphasizes the need to support responder well-being, strengthen psychosocial resilience and provide accessible mental health resources during and after wildfire events (Hayes et al. 2022; PHAC 2024).

Discussion

The reflections shared by La Ronge family physicians illuminate several recurring structural vulnerabilities in the rural health system's emergency readiness. Although these insights arise from a single northern Saskatchewan community, the challenges they describe, including communication breakdowns, uncertainty in emergency governance, difficulty maintaining continuity of care and the emotional strain placed on small clinical teams, mirror patterns observed in previous Canadian wildfire responses (Public Safety Canada 2019; Sauvé et al. 2024). The alignment between these local experiences and broader provincial and national evaluations suggests that climate-driven emergencies repeatedly expose the same pressure points across jurisdictions.

These patterns suggest that vulnerabilities persist despite established emergency frameworks. Rural isolation, limited infrastructure and layered governance may hinder preparedness. In La Ronge, the rapid pace of the 2025 wildfire meant that clinical teams were responding simultaneously as caregivers and evacuees, illustrating the reality that rural providers frequently operate within overlapping personal and professional risk environments. These dual roles highlight the need for emergency plans that explicitly account for the unique staffing vulnerabilities and limited redundancy inherent to rural practice.

At the same time, physicians' reflections underscore areas of strength that can shape future policy direction. The rapid mobilization across NMS, MHOs, SHA, SPSA and Indigenous governments demonstrates that interagency collaboration is both possible and essential during climate emergencies. What physicians describe, therefore, is not system failure but rather system stress, revealing where communication pathways, governance structures and operational supports require further reinforcement to withstand the escalating demands of wildfire seasons.

These insights point toward a set of actionable considerations for health system planners: improving communication redundancy, ensuring clear and timely integration of clinical leadership within emergency operations, strengthening patient-tracking mechanisms and embedding trauma-informed supports for healthcare workers. Addressing these areas would not only respond to the experiences described in La Ronge but also advance Canada's broader efforts to build resilient, climate-adapted health systems capable of functioning under conditions of rapid disruption.

Policy Recommendations

- Invest in redundant, multi-modal communication systems suited to northern environments.

- Embed MHOs and NMS representation early in EOC activation to support coordinated clinical communication.
- Standardize cascading communication pathways linking provincial, regional and front-line clinical teams.
- Develop a centralized, privacy-compliant evacuee registry to improve continuity of care and family reunification.
- Identify stabilization or muster sites in advance for rapid evacuation triage during fast-moving wildfire events.
- Assemble provincial evacuation medical kits to support immediate clinical operations upon relocation.
- Clarify emergency prescribing and dispensing protocols for declared emergencies, including pharmacist-led extensions of therapy.
- Integrate trauma-informed supports and quality-improvement review processes into emergency preparedness frameworks.

Correspondence may be directed to Jeffrey D.C. by e-mail at jeffrey.irvine@usask.ca.

References

- Abbott, G. and M. Chapman. 2018. *Addressing the New Normal: 21st Century Disaster Management in British Columbia*. Government of British Columbia. Retrieved July 13, 2026. <<https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/bc-flood-and-wildfire-review-addressing-the-new-normal-21st-century-disaster-management-in-bc-web.pdf>>.
- Hayes, K., A. Cunsolo, J. Augustinavicius, R. Stranberg, S. Clayton, M. Malik et al. 2022. Mental Health and Well-Being. In P. Berry and R. Schnitter, eds., *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action* (pp. 226–85). Government of Canada.
- Kovacs, P.J.E., G.A. McBean, R.G. McGillivray and K. Pulsifer. 2019. Fort McMurray Wildfire: Learning From Canada's Costliest Disaster. Zurich Insurance Company Ltd., in collaboration with the Institute for Catastrophic Loss Reduction.
- National Institute for Health and Care Excellence (NICE). 2018. Post-Traumatic Stress Disorder. NICE Guideline NG116. Retrieved July 13, 2026. <<https://www.nice.org.uk/guidance/ng116>>.
- Public Health Agency of Canada (PHAC). 2024. *Wildfires in Canada: Toolkit for Public Health Authorities*. Retrieved July 13, 2026. <<https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/wildfires-canada-toolkit-public-health-authorities/64-02-24-3619-02-wildfires-guidance-report-en-final-v2.pdf>>.
- Public Safety Canada. 2019. *Emergency Management Strategy for Canada: Toward a Resilient 2030*. Government of Canada. Retrieved July 13, 2026. <<https://www.publicsafety.gc.ca/cnt/tsrcs/pblctns/mrgncy-mngmnt-strtgty/mrgncy-mngmnt-strtgty-en.pdf>>.
- Rose, S., J. Bisson, R. Churchill and S. Wessely. 2002. Psychological Debriefing for Preventing Post Traumatic Stress Disorder (PTSD). *Cochrane Database of Systematic Reviews* 2: CD000560. doi:10.1002/14651858.CD000560.
- Saskatchewan Public Safety Agency (SPSA). 2023. *Saskatchewan Provincial Emergency Management Plan*. Government of Saskatchewan. Retrieved July 13, 2026. <<https://publications.saskatchewan.ca/api/v1/products/119381/formats/141094/download>>.
- Sauvé, M., J. Bly and L.H. Francescutti. 2024. Healthcare and Successive Natural Disasters: Lessons Still to Be Learned. *Healthcare Management Forum* 37(2): 108–12. doi:10.1177/08404704231219996.
- Tram, J., A. Marko-Omene and A. Quon. 2025. Province's Delays in Response to Wildfire Evacuees Have "Fuelled Distrust": Sask. Ombudsman. *CBS News*. Retrieved July 13, 2026. <<https://www.cbc.ca/news/canada/saskatchewan/saskatchewan-ombudsman-investigation-government-response-wildfires-1.7557236>>.