

# Descriptive Epidemiology of Patients Presenting to a Field Hospital During the Fort McMurray Wildfires

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## Background

- The Fort McMurray Wildfires (FMMW) were the most economically devastating Canadian disaster.
  - >80,000 evacuated
  - >1,600 structures burned
  - Cost >\$9 Billion CAD
- Canada Task Force 2 (CANTF2) is Alberta's all-hazards disaster response team with Heavy Urban Search and Rescue and Disaster Medical Assistance Team capacity.
- CANTF2 provided Incident Management, Logistics and Medical support to the FMMW.
- A field hospital was established to support the emergency responders and infrastructure workers in the the evacuated city.
  - Closest community Emergency Dept. ~300km away
  - Closest tertiary care facility ~ 450km away
- Primary medical goal for CANTF2 was to provide support to members.

## Objective

To describe the epidemiology of patients that presented to the CANTF2 field hospital during the FMMW.

## Methods

- A retrospective chart review of all Patient Care Reports was completed.
- Chief complaint, disposition, and patient characteristics were extracted.
- Chief complaint was classified as per the Canadian Emergency Department Information System (CEDIS) presenting complaint list by a single reviewer.<sup>1</sup>

## Results

- 162 Patients were seen over a 14-day period.
- Proportions of patients presenting with each chief complaint are presented in Table 1.
- CANTF2 patients accounted for 20% (32/162) of patients.
- 86% (139/162) of patients were managed on site.
  - The remainder were evacuated by air or ground to a higher level of care (23/162).
  - Evacuated patients included those presenting with gastrointestinal illnesses and acute opioid withdrawals.

Table 1: Chief Complaints classified as per CEDIS presenting complaints (N=162)

Chief Complaint	Cases (%)
Prescription / medication request	47 (29)
Foreign body, eye	14 (9)
Diarrhea	11 (7)
Nausea and/or vomiting	9 (6)
Other skin conditions, (foot care)	9 (6)
Orthopedic, (other)	9 (6)
Headache	7 (4)
Laceration / puncture	7 (4)
Minor complaints NOS	6 (4)
Respiratory, (other)	6 (4)
ENT, (other)	5 (3)
Sore throat	4 (2)
Abdominal pain	4 (2)
Lower ext. pain	4 (2)
Localized swelling / redness	4 (2)
General and minor, (other)	3 (2)
Skin	3 (2)
Genitourinary, (other)	2 (1)
Mental health, (other)	2 (1)
Neurologic, (other)	2 (1)
Ophthalmology, (other)	2 (1)
Unknown	1(1)
Cardiovascular	1 (1)

## Discussion & Lessons Learnt

- The majority of patients presented with primary care type complaints.
- Most complaints were addressed onsite.
- Prescription requests, nausea / vomiting and diarrhea, and eye complaints were the most common presentations.

## Discussion & Lessons Learnt Con't

- Eye problems and medication issues have been previously reported in the wildfire context.<sup>2</sup>
- Respiratory problems were less common than previously described.<sup>2</sup>
- A major challenge was dealing with a GI illness outbreak amongst emergency services workers.
  - Illness surveillance, aggressive-containment, and involving public health resources early were paramount in managing the outbreak.
  - Finding pharmacy resources in an evacuated city proved challenging.
  - Establishing appropriate channels of communication earlier in the deployment phase would have facilitated more seamless transfer of care and reintegration of local health care resources.

## Conclusion

- Presentations were similar to those previously described
- Future planning will focus on:
  - Pharmacy service provision
  - Eye protection in wildfire hazard zone
  - Illness outbreak containment

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## References

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