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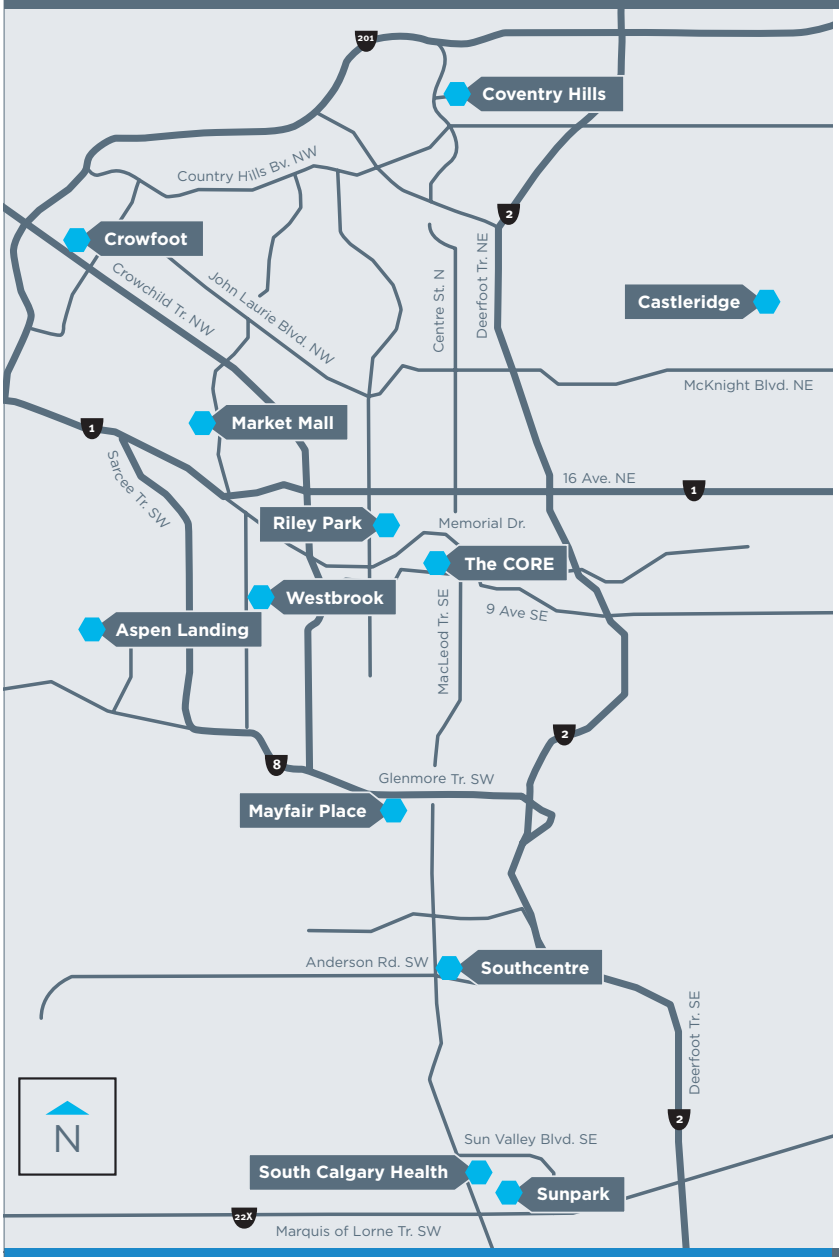

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A CALGARY & AREA MEDICAL STAFF SOCIETY PUBLICATION

June 2017

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SUBMISSIONS:
Vital Signs welcomes submissions (articles, notices, letters to the editors, announcements, photos, etc.) from physicians in Alberta. Please limit articles to 1000 words or less.

Please send any contributions to: Spindrift Design Studio Inc. Hellmut Regehr, hregehr@studiospindrift.com

Vital Signs reserves the right to edit article submissions and letters to the editor.

The deadline for article submissions for the next issue of Vital Signs is June 16, 2017.

Contents:

Save the Dates!

CAMSS
Council Meeting
June 7, 2017 | FMC Boardroom 152 – 5:45-8:45 pm

CZMSA
Executive Meeting
June 8, 2017 | WebEx

EZMSA
Executive Meeting
June 15, 2017 | Misericordia, 5:00-5:30 pm

Council Meeting
June 15, 2017 | Misericordia IN-106, 5:30-7:30 pm

SZMSA
Council Meeting
September 11, 2017 | Teleconference, 5:30 pm

ZMSA Address Change

ZMSA office is moving effective June 1st. This change also applies to CAMSS, CZMSA, ACH MSA and FMC MSA.

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RECEPTION:
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Phone numbers remain the same.

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Lessons Learned

Dr. Sandra Corbett

Dr. Sandra Corbett

The heads of the various Clinical Departments of the Northern Lights Regional Health Centre (NLRHC) met for our monthly meeting at 7 am on the morning of May 3, 2016, at the hospital in Fort McMurray. We did not know then that by the end of that day we would all have left the city behind and would have successfully evacuated the hospital. We knew there were wildfires in the area. We heard that the municipality had convened an Emergency Operations Centre and that the health centre had representation there. We thought the fire was under control and were informed that we would be getting regular updates as available. In retrospect, our time that morning would have been best spent planning the hospital evacuation and preparing to evacuate our families and ourselves. Ironically, the first full week in May every year is Emergency Preparedness week. But we were not prepared.

We knew from the previous disasters that we should anticipate an increase in demand for our services in the year after the fire.

As the fire entered the city and began to burn up neighbourhoods, we became familiar with Alberta's Emergency Alert system. Warnings were broadcast through a variety of media, alerting the public to the status of the fire and advising what action should be taken. As the fire spread, community members were advised to shelter in place, then to voluntarily evacuate, and eventually the whole community was told the entire city was under a mandatory evacuation order. We were advised where evacuation centres had been set up and, depending on where we were, whether we should head north or south.

Approximately 88,000 people were evacuated. With so many vehicles on the roads the city became gridlocked. Journeys that usually took minutes were taking hours and people were scared watching the fire spread. The safety consciousness of the workforce is credited for the lack of casualties and the orderly evacuation. Unfortunately, there were two fatalities the day following the evacuation, when the vehicle that young adults were travelling in veered into the path of an oil tanker on a highway south of town.

The hospital evacuation couldn't go exactly to plan because of the gridlocked traffic situation and the lack of EMS personnel, emergency vehicles and priority routes. I helped coordinate the evacuation of the in-patient psychiatry unit over the phone, because I couldn't get back to the hospital.

Lessons have been learned from previous disasters, including the Slave Lake Fire and the Southern Alberta Floods, about preparing for disasters, coordinating the response and managing the recovery process.

What we learned helped us plan our addiction and mental health resources to respond to the increase in acute stress and anxiety that was experienced in the immediate aftermath. We knew from the previous disasters that we should anticipate an increase in demand for our services in the year after the fire. We expanded access to these services to cope with the grief and depression that people experienced when dealing with what they had lost, the increase in PTSD and the substance use issues people developed when trying to cope with their stress.

In the past year, Fort McMurray has been and will continue to be a focus for researchers and surveys. There has been much attention on the impact the wildfire had on the mental health of the community. I have been interviewed on numerous occasions by various media about this. A recent Edmonton Journal article of one of these interviews can be found at http://edmontonjournal.com/news/insight/psychological-struggle-a-living-legacy-of-fort-mcmurray-wildfire.

There are lessons that can be learned from the Fort McMurray Wildfire experience that will add to what is already known about disaster response and will help us all be better prepared for future disasters.

Dr. Sandra Corbett, Psychiatrist
North Zone Medical Staff Association President
Fort McMurray, Alberta

A Personal Perspective
of the Fort McMurray Evacuation

Dr. Brian Dufresne

2016 was a year of challenges for Fort McMurray, but as it has in the past, it has persevered and is as strong as ever. On May 3, 2016 the largest wildfire in Canadian history forced the evacuation of 88,000 people, destroyed 2,800 homes and burnt more than 1.5 million acres of forest. It was the costliest natural disaster in Canadian history, with 3.8 billion dollars to structures, 70 million a day in lost revenue and an estimated 8 billion to Canada's economy. All 88,000 residents were evacuated in a 24-hour period.


Dr. Brian Dufresne

The entire community remained evacuated for four weeks while fire destroyed two major subdivisions and partially destroyed three others. The fire was eventually contained on July 5. Firefighters from around the world and across Canada fought to restore the safety of the community and beginning June 1 residents were allowed to return for resettlement to face the impact of the fire and its devastation.

The evacuation of our hospital was orchestrated with very little warning but within hours, nurses, physicians and health care staff worked in unison to triage, stabilize and transport 105 patients and 31 long-term care patients to alternative evacuation sites. Many of the staff were in the midst of anguish about there own families' safety and the destruction of their homes and community, but still chose to stay and provide help to those in need at Northern Lights Regional Health Centre (NLRHC).

The initial evacuation saw that all unstable patients were evacuated to Edmonton and Calgary by air, while the remaining patients were transported by ground to the northern evacuation site at Firebag, 80 km north of the community. Complications arose when Emergency physicians and nurses were forced to travel south, while all patients were forced to travel north; What is normally a 90-minute drive, turned into a grueling 8-hour ride for patients caught in the long line of traffic.

As luck would have it, the southern route gave the medical team access to helicopters which were used to transport the physicians, nurses and necessary medical supplies north arriving a full six hours before the patients started to arrive. With the help of local industry, a fully functional mobile Emergency unit was established well before the arrival of the patients. The clinic successfully treated dozens of patients, organized the air evacuation of all 136 patients and assisted in the transport of over 8,000 evacuees. The initial evacuation team worked endlessly for over 36 hours, many even longer without sleep until relief teams could be organized.


Evacuation day.

Drs. Dufresne, Sheppard and Falk manning the PIC unit.

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Within 72 hours, the mobile Emergency centre in Firebag was also forced to evacuate due to the approaching wildfire. With the help of the Canadian Military Hercules Aircraft, the entire clinic was air lifted out of the fire zone. Forty eight hours later, a more permanent emergency treatment facility was established within striking distance of the hospital utilizing a Portable Isolation Containment System (PICS). The portable units are a series of tents each with their own ventilation, heating and water system. In less than 72 hours, a fully functional ER, laboratory, x-ray and surgical unit were established.

Local Emergency physicians and nurses staffed the PICS throughout the entire four weeks of the evacuation working 12 to 24-hour shifts.

The NLRHC itself escaped any direct physical damage from the fire, however, the combination of smoke and water damage forced the replacement of all internal supplies, roofing tiles and floors. This was accomplished by a staffed team of hundreds working 24 hours a day resulting in the opening of the ER in less than four weeks after evacuation. This accomplishment was a truly astounding feat, but a predetermined necessity in order for residents to be able to return to their homes. By June 1, the ER reopened to full capacity with the remaining hospital reopened by August. The rebuilding of Fort McMurray still continues today, but by September 2016 over 80% of the residents had returned. Although the fire has not been forgotten, the spirit of Fort McMurray is returning with thousands of individuals contributing to the rebuilding of hundreds of homes, and the economy of the region returning to normal.

The evacuation had an astounding impact on the community, and a lasting impact on the health care providers who worked throughout the evacuation, while managing their own personal struggles along the way—some losing homes of their own.

Many continue to struggle with their decision to remain in the community when the impact has been so great. The community is moving forward, but at a pace that seems to have slowed, as the reality of what challenges lay ahead unfolds.

Like most, the decision to remain in the community throughout the disaster was never a difficult one, and those who chose to provide care to evacuees and emergency response teams did so without question. As Emergency room physicians and nurses, we cope with the challenges of patient sickness, trauma, and death by avoiding our own emotional and personal involvement. It becomes more difficult when the community you are serving is home, and the events unfolding in front of you affect those you care most about.

From a personal perspective, I have been fortunate to have escaped any loss but I wish I could say the same about those around me. For every challenge, it can be said that you emerge from the struggle with some personal growth. Having spent weeks in tents, airplanes, and airport hangers with those we often take for granted, I know the real heroes of the work done during the fire was by individuals I work with everyday who showed strength in dire extraordinary circumstances. We have shared an experience that comes but once in a lifetime and will endure for years to come.

The Fort McMurray fire was an unprecedented disaster to Canada. It has made me realize how fortunate I am to be a part of the Fort McMurray community, part of the hospital, and part of an incredible team that makes this emergency what it is.

Brian Dufresne, MD
Chief of Emergency
Northern Lights Regional Health Centre
Fort McMurray, Alberta

Last Firebag crew evacuated

FROM LEFT TO RIGHT: Konstantin Safonov – Pilot, Jon Gogan – Pilot, Kyr Bjorgum – Air Medical Crew RN, Gennifer VanWerkhoven – Air Medical Crew EMT-P

STARS Disaster Planning
and the Fort McMurray Fire

Dr. JN Armstrong

Dr. JN Armstrong

On May 1, 2016, a wildfire began about 15 km southwest of Fort McMurray, Alberta, Canada. It was known as the Horse River Fire, as it began near a small waterway known as Horse River. Likely human caused, it was initially two hectares in size when first spotted, but by May 3 it had exploded to 10,000 hectares and had swept into Fort McMurray, forcing the largest wildfire evacuation in Alberta's history.

The Shock Trauma Air Rescue Service (STARS) is a western Canadian air medical transport service with bases in Alberta, Saskatchewan, and Manitoba and provides care and transport for the critically ill and injured. In Alberta we have bases in Grande Prairie, Calgary, and Edmonton. With this mandate, disaster planning is an important part of the organization's activities. Further this planning requires two main foci: planning for internal emergencies such as an overdue aircraft, and external emergencies, such as the Pine Lake tornado and the Horse River — Fort McMurray — wildfire.

Through 2015 and early 2016, STARS revamped our approach to emergency management, shifting from multiple prescriptive emergency response plans for a variety of circumstances, such as building specific events (fire), and aviation specific events (overdue aircraft), to a single overarching Emergency Management Plan (EMP). Our EMP is based on the Incident Command System (ICS) and incorporates an all-hazards approach. ICS is a standardized approach and structure for emergency management. The elements of the ICS structure are consistent and scalable, enabling it to be used in any situation from a single motor vehicle accident, to a mass gathering event, or a major disaster. Most North American jurisdictions use ICS as the backbone of their emergency management plans.[1] As a result our EMP then can be used for internal emergencies such as an overdue aircraft, or for integrating into external emergencies with our partner agencies, all of whom use ICS.

The preparatory work on our EMP positioned STARS well for when, on May 3, 2016, the STARS Emergency Link Centre (ELC) Director received a call from the Director of the Alberta Health Services (AHS) Central Communications Centre providing an update on the Horse River fire. A second call shortly after the first advised us that plans were underway to evacuate the Northern Lights Regional Health Center (NLRHC) in Fort McMurray. With that, the STARS EMP kicked in and the organization shifted to functioning within the ICS structures.

A STARS Emergency Operations Centre (EOC) was activated with representatives from Grande Prairie, Edmonton, Aviation, Safety, Communications, Finance, and the ELC. With the use of tele and video conferencing it functioned as a "virtual" EOC and as such the team planned and coordinated the STARS response.

STARS Edmonton Air Medical Crew (AMC) played key roles in the initial evacuation of Fort McMurray on May 3. Two AMC staffed an AHS King Air fixed-wing air ambulance to transport five patients to Edmonton. Other AMC supported the Patient Transition Room (PTR) at the Edmonton International Airport and even gave blood to a post-partum patient on the tarmac of the Edmonton International Airport. One AMC and a Transport Physician (TP) flew on a 737 to accompany 58 patients and another 98 passengers back to Edmonton.

Other TP roles included the STARS Edmonton Base Medical Director, Dr. Eddie Chang, remaining on call for all Fort McMurray related calls. Dr. David Lendrum from the STARS Calgary Base deployed with Canada Task Force 2 (along with Online Medical Control physician Dr. Kevin Hanrahan) and the Edmonton TPs created an availability roster to support the PTR if needed.

Industry Services in the ELC supported our clients by activating their emergency response plans and responding to queries. On one shift a single Communication Specialist handled 160 calls between 1900h and 2400h. We also worked with the Fort McMurray EOC to share our site registration information in order to expedite evacuation notices. We ramped up work-alone monitoring for people going into Fort McMurray to work on utilities and other infrastructure. 600 people registered on the system.

On request by AHS, STARS deployed a helicopter, a BK-117 with the call sign STAR 6, to Lac La Biche from May 4 to May 16 in order to provide support to the south of Fort McMurray. Pilots from all STARS bases and AMC from all Alberta bases plus Saskatoon supported the deployment. Engineering juggled busy maintenance schedules to ensure uninterrupted service. A long-standing STARS supporter

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On request by AHS, STARS deployed a helicopter, a BK-117 with the call sign STAR 6, to Lac La Biche from May 4 to May 16 in order to provide support to the south of Fort McMurray. Pilots from all STARS bases and AMC from all Alberta bases plus Saskatoon supported the deployment.

in Grande Prairie supplied a fully prepared trailer and truck to serve as our temporary base in Lac La Biche. With the NLRHC closure and the wildfire area still unstable, the role of STARS in this Lac La Biche deployment was to provide critical care services for the area as normal, and to provide access to patients and bridge resource gaps created by the fire emergency. This included transporting patients to Lac La Biche for a rendezvous with fixed wing transport.

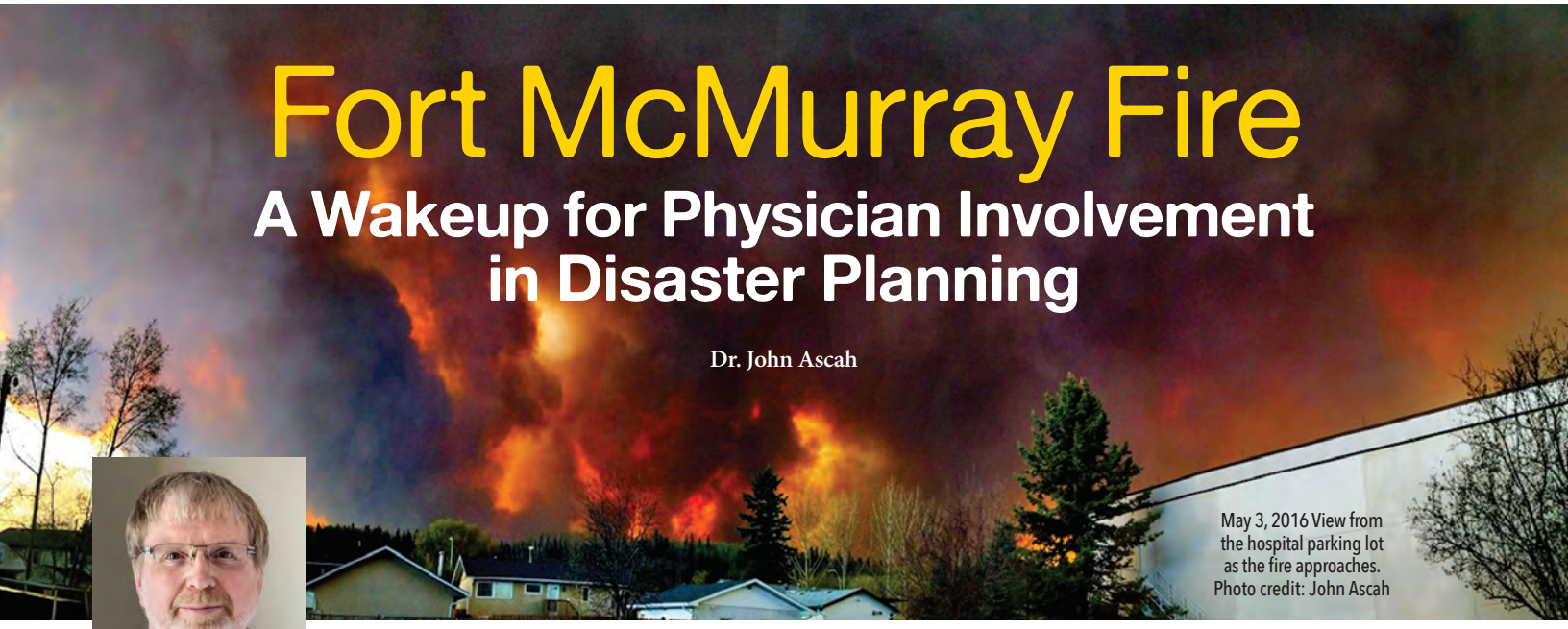
After the main fire event, STARS deployed again to Conklin, Alberta from May 31 to June 6, in order to support the re-entry of residents to Fort McMurray.

This combined team effort enabled STAR 6 to fly 13 missions and transport seven patients. In addition, we provided a secure and reliable safety net for the province and for all the people impacted by, or working on, this incredible fire disaster.

JN Armstrong, Chief Medical Officer, Executive Vice President, STARS
Anesthesiologist, Alberta Health Services (AHS), Associate Professor Anesthesia, Cumming School of Medicine, University of Calgary. Calgary, Alberta

FOOTNOTES

[1] http://www.icscanada.ca/en/about+ics+canada.html 2017. Accessed 05/05/2017



Fort McMurray Fire

A Wakeup for Physician Involvement in Disaster Planning

Dr. John Ascah

May 3, 2016 View from the hospital parking lot as the fire approaches. Photo credit: John Ascah

Dr.John Ascah

On May 3, 2016, I found myself on a city transit bus in the company of a variety of patients and housekeeping staff from Northern Lights Regional Health Centre (NLRHC) as we escaped the sudden, extremely close, raging forest fire to begin a long journey to an unknown place. I have often wondered what it would be like be involved in a disaster situation in some far-fetched part of the world, but had never expected for one minute that this would happen in my own country.

I am an anesthesiologist and had just begun a locum in Fort McMurray the day before the "Beast" fire started. I was involved in the evacuation of the hospital, the set-up of the temporary tent hospital, and the re-opening of the hospital with its first intake of patients after extensive renovations had taken place.

As I write this, a year has passed and I have had the opportunity to listen to many informal and formal stories and accounts of the town's evacuation. I have also had time to reflect on my own experiences and have shared these through presentations. I feel that my experiences may also be of interest to not only the physicians of Alberta, but also the rest of Canada.

There have been many different stories describing the medical response to the wildfire and subsequent evacuation of the NLRHC; some have been documented[1,2,3] and others may never be told.

I want to highlight the fact that in a disaster situation such as this, everyone depends on each other. All those who participated in the evacuation

and the path to safety deserve deep appreciation and thanks. There were many involved: the disaster coordinators, hospital administration and management who orchestrated a smooth and successful evacuation; the transit bus drivers who took us away from the hospital; Suncor and their employees who met us, took care of us, and helped set up the staging area at Firebag; the air paramedics from all over Alberta who transported the complex patients to Edmonton; WestJet and its flight crew who were at Firebag when we arrived and then transported patients who were able to sit in an airline seat; and all the hospital staff who accompanied the patients on the buses from the hospital (senior hospital administrators, nurses, doctors, respiratory therapists, and housekeeping staff). There was a small medley of physicians involved in the evacuation who ended up on transport buses: an internist, obstetrician, three anesthetists, and a family practice resident. In addition, a medical director, hospitalist, general surgeon, and some emergency physicians made their way to the staging area separately by car or helicopter. In all of this, the true heroes of the day were the patients who put up a brave front and were helpful and positive, despite their ailments, pain and the lack of supplies and medications whilst in transit.

There are many lessons to be learned from the Fort McMurray evacuation. Most importantly, every institution should consider planning for an event such as this. While hospitals often prepare for disasters, they don't usually go the extra step and develop a contingency plan for an event when the hospital has to close completely for an undefined period of time. In this case, many were deprived of any significant health care for more than 24 hours after the hospital evacuation. This not only included the 80,000 plus residents of Fort McMurray who found themselves stranded on the surrounding highways, but also the fire fighters, RCMP, and many others who had defended the city and tried to extinguish the fire. For the local paramedics and firefighters who had to stay behind to contain the fire and offer what help they could, the nearest place for care was in Edmonton, 400 km away. Fortunately, there were no calls to respond to major injuries — no trauma cases, no burn victims, and no mass causalities. However, perhaps it would have been beneficial if more of the medical staff stayed on at Firebag instead of the lone ER doc and family practice resident. It will always haunt me that I could have stayed myself.

On reflection of the events a year later, it is my hope that a complete and transparent analysis will take place and be made available to all as a learning tool for future disaster responses. As an ex-Canadian Military physician colleague said to me after the disaster, "This was the best disaster simulation imaginable. A complex logistical nightmare without any loss of life. So much to learn." I am in total agreement. We have so much to learn from this experience, I sincerely hope it does not go to waste and we can analyze the situation realistically and without criticism.

I was debriefed by the Alberta Health Service (AHS) Department of Medical Affairs about medical leadership during the evacuation, otherwise I have not been asked for or been given a significant opportunity by anyone to offer my observations and thoughts on how we could better prepare for a disaster in the future, especially regarding the nuts and bolts of the evacuation. Other involved physicians share this experience. I hope that a critical analysis is being done with specific recommendations that can be acted on and shared for the benefit of all, including the rest of Canada. I look forward to changes in my work place that will better prepare us for future disasters.

Going forward, I would urge all physicians to play a much larger and active role in the specifics of disaster planning. Consider your actual roles and responsibilities in the event of a disaster. What will you be doing on the ground during a disaster? Disasters are not limited to frontline responders, such as emergency room physicians; they cross barriers to all physicians whose role it is to provide treatment.

Every hospital should consider the circumstances that may bring its functioning to a halt and have a contingency plan in place to provide alternative health care. The study of disasters has taught us that in the first 24 hours or more, significant response can be met only by people on the spot. During the Fort McMurray evacuation, I found myself hurriedly collecting supplies from the operating room core to make a portable surgical unit that could be taken with the patients in the event of an emergency; it felt like I was on a shopping spree in a grocery store randomly grabbing things. Surely we can do better than that.

I echo other physicians, such as Dr. Graham Dodd of British Columbia, when I urge for more physician involvement in Canadian disaster planning:

> "While we often cannot prevent disasters, we can make our communities more disaster resilient through better planning and preparedness activities. Physicians have an important and necessary role in that process. Appropriately educated and prepared health care professionals are among the most essential components in reducing mortality and morbidity following any disaster.[6] It is time for us to become more involved."[4]

The Fort McMurray fire has taught us a valuable lesson: all Canadian physicians should actively engage in the disaster planning process. Though Canada is a developed country, we are not immune to devastating and crippling disasters.

John Ascah, BA, MD, FRCP, MPH
Locum anesthesiologist who helped evacuate the hospital and worked at the temporary field hospital set up in Fort McMurray after the fire.

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May 4, 2016 Temporary staging area in a Suncor hanger at Firebag. All the patients evacuated from the hospital arrived here on buses and ambulances, and then flown to Edmonton. Photo credit : John Ascah

Responding to the Fort McMurray Wildfires with Canada Task Force 2:

The Medical Team Perspective

Dr. Gwynn Curran-Sills

Dr. Gwynn Curran-Sills

My goal is to provide an introduction and background to Alberta's Canada Task Force 2 (CANTF2) and use the Fort McMurray Wildfires to highlight some of the capabilities of the medical team within this organization. I will conclude with a few areas that are actively evolving in our medical group. Albertans are fortunate to have an organization that is ready to assist.

CANTF2 is an all-hazards disaster response team based in Calgary that, when requested to deploy, is equipped to be fully self-sustaining once on scene and provide incident command, rescue, and medical services to in the acute phase of a disaster. Since its inception in 2002, the team has been deployed in Alberta during the Slave Lake wildfires (2011), the Calgary/High River floods (2013), and the Fort McMurray wildfires (2016). The activation of this team mobilized 103 CANTF2 members during its three-week response to the Fort McMurray wildfires in May 2016. The group has a diverse set of skills and is composed of volunteer Rescue Specialists, Structural Engineers, Communications Specialists, Canine & Technical Searchers, Logistics Specialists, Health Care Professionals, and Command Staff. The entire skills set of the team was not required during the Fort McMurray wildfires, but Logistics, Planning, and Command Staff provided pivotal roles in the Regional Municipality of Wood Buffalo Emergency Operation Center and on the ground.

The medical unit of CANFT2, which works under the direction of the Logistics section, engaged in its first active deployment during the Fort McMurray wildfires. This team was designed to provide medical care for CANFT2 members, along with disaster casualties, and draws from paramedics, nurses, and physicians to achieve this goal. During the wildfires, the medical team's scope expanded, as it became the only medical facility in the vicinity of Fort McMurray post evacuation. The team created a field hospital in the south campus building of Keyano College that actively managed patients over a two-week period. At its peak, the facility was available to ~3000 first-responders and critical infrastructure employees. The field hospital treated 162 patients; 14% of patients required evacuation to a higher level of care secondary to gastrointestinal illness and acute opioid withdrawal. Surprisingly, there were almost no respiratory presentations and many patient complaints revolved around foreign bodies in the eye and wound management. In many of the previous training exercises our medical team had focussed on critically injured patients and being faced with primary care presentations was novel for us, but well with our team's capability.

The use of gumshoe epidemiology identified a gastrointestinal outbreak within one segment of the first responders. This prompted aggressive Infection Prevention and Control protocols, in conjunction with the Alberta Health Services (AHS) North Zone Medical Officer of Health (MOH), given the close living quarters and centralized food distribution for first responders. Beyond this outbreak, monitoring of public health markers continued to be a central focus for the medical team as there was an impromptu staging and housing area for volunteer firefighting teams at the MacDonald Island Park recreational centre. Concerns regarding potable water access, sanitation, and food preparation became key areas of focus for this facility and were addressed once a camp manager position was established with medical oversight. Not surprisingly, as is seen in many humanitarian missions throughout the globe, public health monitoring and interventions

Ultimately, CANFT2 is a team that continues to be introspective in order to evolve and optimize its operational readiness. Our team relies on volunteers with extremely diverse backgrounds and experiences to continually push the boundaries of our organization.

are vitally important aspects of medical care when there are large numbers of displaced people, responders, or casualties.

An overarching theme throughout the Fort McMurray wildfires deployment revolved around fostering relationships with provincial agencies and other stakeholders to gain access to medical transport and medical supplies for the field hospital. This included establishing points of contact with AHS Disaster Management and Pharmacy personnel, a local pharmacist (Mr. David Hill) who remained in Fort McMurray post evacuation, and the Chief of the Northern Lights Regional Health Centre Emergency Department (NLRHC) (Dr. Brian Dusfresne). AHS personnel, in conjunction with CANTF2, developed a means of accessing ground and air medical transport, which included establishing communication protocols, procedures for patient extraction by ground, and landing zones for air transport. With ~30% of patients presenting to the field hospital requiring chronic disease management, access to pharmaceuticals not housed in the CANTF2 cache was critical. Mr. Hill coordinated access to medications for patients through the CANTF2 medical team, while AHS Pharmacy devised a means for establishing and dispensing pharmaceuticals. By the end of second week of deployment, the CANTF2 field hospital was no longer providing medical care for non-CANTF2 members. Dr. Dusfresne, in conjunction with AHS personnel, established an AHS field hospital facility. The CANT2 field hospital transited care of the first responders and critical infrastructure personnel to the new AHS facility. This facility ultimately served as the temporary hospital until the NLRHC was reopened post decontamination procedures.

During the deployment Critical Incident Stress Management (CISM) became a new element of care that was provided through the CANTF2 medical team. Specifically, CISM teams from fire departments in Medicine Hat, Lethbridge, Calgary, Edmonton, and Grand Prairie provided services to first responders with medical oversight through CANTF2 physicians. Since this deployment, the team has identified the need to create capacity for ongoing team debriefing and monitoring of team members' mental health and physical fitness. Areas to address this need include: identifying and bolstering formal CISM training and skills within the CANTF2 team; developing real-time, anonymous questionnaires to probe how team members are responding to physical and emotional stressors while on mission; and creating a means to provide outlets for physical fitness while on deployment.

Ultimately, CANFT2 is a team that continues to be introspective in order to evolve and optimize its operational readiness. Our team relies on volunteers with extremely diverse backgrounds and experiences to continually push the boundaries of our organization. Beyond this, the team networks with other CANTF groups from across Canada and disaster response teams in other countries, allowing for the exchange of new approaches and regional variation in practice.

The physician team for the Fort McMurray wildfires deployment comprised of Drs. Kevin Hanrahan, David Lendrum, Kelvin Williamson (from CANTF4 in Winnipeg), Brad Granberg (resident at the University of Calgary), Joshua Bezanson (resident at the University of Alberta), and myself. If there are any interested physicians who wish to learn more about this team and how they can volunteer, please contact Info@cantf2.com

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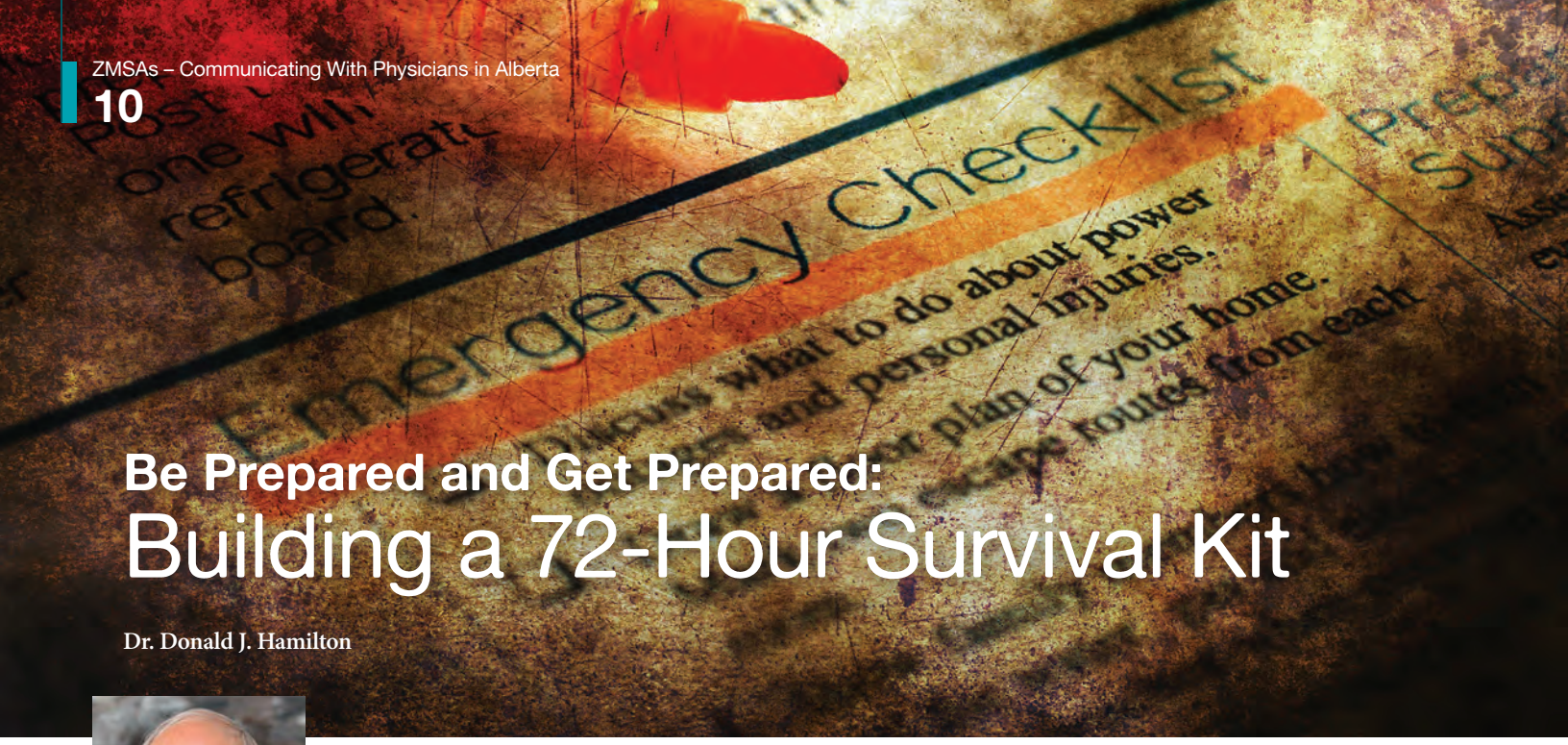

Be Prepared and Get Prepared:
Building a 72-Hour Survival Kit

Dr. Donald J. Hamilton


Dr. Donald J. Hamilton

The river has been rising rapidly for the last two days and is flowing close to your home. This evening there is a knock on your door and you are told that the river is going to be flooding your neighborhood overnight and that you must evacuate.

The fire is raging wildly. This afternoon you are told that the wind has shifted and that you must leave NOW on the bus that is parked over there because there is only one road and it would be impassable if everyone took their own vehicle. Other buses are in other neighborhoods and schools. There is no time to travel around the city to group up with anyone.

You hear a terrible explosion coming from the rail line. Turn on the radio and TV and you hear an emergency broadcast informing you a tanker train has derailed. Some oil tankers are burning, a tank of poisonous gas is leaking, and the gas is coming your way on the breeze. Everyone must leave the path immediately. Schools are evacuated and students taken to several high schools out of the danger path. You can pick up your children where they have been taken. No one knows how long it will be before you can safely return home.

Although these are three scenarios I made up, all three can happen. You can probably think of many more and I would encourage you to think of as many as you can — then you won't be quite so surprised and dismayed if one actually plays out.

For generations, the church I attend has been encouraging members to be self-reliant and to prepare for emergencies. In more recent years, the emphasis has been on what is called a "72 Hour Kit". Governments — municipal, provincial and federal — have also encouraged a 72 hour kit because in an emergency it is often 72 hours before government help can be expected. I will include some web site references.

A 72 hour kit should be portable, prepared, and accessible, and contain the necessities needed to survive for at least 72 hours. School sized backpacks or small, wheeled suitcases for each person are often adequate, packed and stored in a place that is familiar to all and easily retrieved.

EACH KIT SHOULD INCLUDE:

A Plan

Each family grouping is unique and so each plan will be unique. Here are some things to think about. Decide what to do when separated. Have a planned meeting place if the family is separated. Identify a relative or friend who has agreed to be a contact person. They would provide a place to stay if necessary, ideally far enough away not to be affected by the same disaster. Have each person know the phone numbers of the others and have them written down. Know the emergency plans of schools and daycares that your children attend. Know how to authorize an unusual person to pick up the child. Brainstorm with the family for other ideas. Keep a copy of the plan in each kit.

Food and Water

Make plans to have enough food for 72 hours. Hiking and camping stores are good sources of light-weight calorie/protein dense foods that store well. Avoid completely dehydrated food as water will be a valuable but heavy commodity. Canned food — don't forget the opener and maybe some utensils. It's a good idea to replace some of these foods twice a year — spring and fall time changes are good reminders. Generally, 2 litres of water per person per day for drinking and, possibly, about the same for cooking and washing is sufficient. Use small, easily-carried containers. I would add hand sanitizers. A tiny one-burner stove with fuel could be helpful — only in the big person's pack. A water purifier may come in handy. You can't go wrong with having a multi-tool included.

Medication as Needed

Plan for maybe a 2 week supply as pharmacies may not open even after the disaster and other pharmacies may not be able to contact doctors or your pharmacy.

Communication Equipment

Great to have cellphones. Remember they run down so include a charging cable and/or an auxiliary power pack. Texts will sometimes get through a crowded cell tower when voice won't. Cell towers will be busy in an emergency so try to limit usage. Include a battery-powered

radio and flashlight with extra batteries, or hand-cranked radio and flashlight, and include a lot of patience because, in my experience, once the original charge is done, it takes a lot of cranking to get a good charge!

Necessary Clothes

As many changes as you think are necessary — more for little kids and don't forget the diapers! We expect that adequate winter clothes will already be being worn in the winter. This may need to be updated as children grow. Think of sleeping — blankets, sleeping bags, emergency blankets are some things to consider.

First Aid Kit

A light-weight, simple kit is a good idea. Many commercial kits are available or you can make your own.

Entertainment

Think of "Are we there yet?" and change it to "Is it over yet?" or "Can we go home yet?" Good to have some games, little books, etc.and not just for the little people.

Documents

Include ID's for each person. Consider copies of insurance documents, passports, licenses. Consider current photos of each individual in each kit.

Money

You may not have access to ATM's or they may not be up and running even if you do have access. Credit cards will not be helpful if there is no power. The suggestion is to have some cash in smaller bills. There is a good chance you will need money for something.

Toilet Paper

I wasn't sure under which title to put this so I gave it its own title!

These are some suggestions to get you started in thinking about an emergency kit. It is not an exhaustive list but, probably, an adequate list. As I mentioned earlier, each family is unique so the contents of this 72 Hour Kit can, and should be, customized to each family's particular needs.

There are many places that have emergency kits available for sale. I searched "72 Hour Kits for Sale" and found quite a few. It's also kind of fun to plan and make them together as a family — each person having input.

The following websites offer useful information in addition to the above.

www.calgary.ca/ *and search emergency kit*
www.GetPrepared.ca
Alberta Emergency Management Agency: www.aema.alberta.ca

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Bandwagon 420 !!!

Dr. Lloyd Maybaum

Over the years Vital Signs has published a variety of articles that have underscored the importance of practicing evidenced based medicine. In fact, your present author has previously been fairly critical of alternative medicine and the relative lack of evidence to support many such practices.

In this article I would like to address an issue that is slowly engulfing the profession, some embracing it, some recoiling against it, while others seem bewildered not knowing what to make of it. I am speaking about the explosion of medical marijuana and the number of patients seeking green cards and the touted health benefits of 'weed'.

Medical Marijuana is big business especially when we consider the dramatic rise in stock market valuations of involved companies. It seems that most everyone wants to climb onto the bandwagon and cash in, if not perhaps, smoke up.

Cheech and Chong, in their wildest moments of bongs and hot-boxing big fatties likely never could have imagined or foreseen our current mainstreaming of medical marijuana. Frankly, it's the wild-west where almost anything goes and most any outlandish statement regarding the efficacy of weed is accepted or remains unchallenged. Moreover, heaven forbid someone throw cold-water on the process and that person will be marginalized as a pariah, a square, a nerd, not-hip or even uninformed — trying to take the punchbowl away just as the party is getting started. Advocates will claim "don't you know the difference between Indica and Sativa?"

Some of us, however, might prefer a slightly more cautious approach and to take a sober rational view of things. Just to clarify, I am not some anti-weed crusader and I am against the so called 'war on drugs' but frankly, some of the commentary and advocacy that I am seeing and hearing might warrant the profession to pause and give a second, rational thought as to what is going on out there with respect to medical marijuana.

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– continued from page 11

For instance, a certain local Calgary marijuana clinic website has some truly show-stopper information on it. Under the title, "Am I eligible for medical marijuana?," the following is a partial list of conditions listed on the website as compatible with eligibility:

- Acquired hypothyroidism
- Acute gastritis
- Agoraphobia
- Alcohol abuse
- Alcoholism
- Alopecia
- Amphetamine Dependency
- Asthma
- Autism
- ADHD
- Chronic Fatigue Syndrome
- Cocaine Dependence
- Conjunctivitis
- Constipation
- Delirium Tremens
- Diabetes, Adult Onset
- Diabetes, Insulin Dependent
- Diarrhea
- Dysthymic Disorder
- Lymphoma
- Major Depression
- Malignant Melanoma
- Mania
- Mitochondrial disease
- Myeloid Leukemia
- Obesity
- Anorexia
- Anorexia Nervosa
- Obsessive Compulsive Disorder
- Opiate Dependence
- Panic Disorder
- Porphyria
- Post Concussion Syndrome
- Post-Traumatic Stress Disorder
- Prostatitis
- Psoriasis
- Pulmonary Fibrosis
- Quadriplegia
- Radiation Therapy
- Raynaud's Disease
- Rosacea
- Schizoaffective Disorder
- Schizophrenia
- Scoliosis
- Sedative Dependence
- Temporomandibular joint disorder
- Tobacco Dependence
- Traumatic Brain Injury

Also listed are Viral Hepatitis and, my personal favourite, "Writers' Cramp". Yes, folks, it's true, the act of writing this article and getting that pain in my hand makes me eligible for medicinal marijuana. I am not sure whether to laugh or to cry but I'm thinking Cheech and Chong would have big dumb-ass smiles on their faces right about now. Acute gastritis — really? Underscore the word, 'acute' and consider that the afflicted must make, wait and attend an appointment, undergo an interview, select the strain of marijuana and then order it by mail. One would imagine that by the time Canada Post delivers the 'package' the phase of 'acute' has long ago passed by days or even weeks. Meanwhile, plenty of readily available remedies could have been accessed to cure the 'acute' gastritis.

To be sure, marijuana can have some beneficial health effects as evidenced in the recently published meta-analysis; The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research — a 2017 report of the National Academies of Science, Engineering and Medicine from the National Academies Press. *(Copies of this 395 page report can be obtained free online).*

The document indicates that there is conclusive or substantial evidence that cannabis or cannabinoids are effective:

- For the treatment of chronic pain in adults
- As anti-emetics in the treatment of chemotherapy-induced nausea and vomiting
- For improving patient-reported multiple sclerosis spasticity symptoms

The document indicates that there is moderate evidence that cannabis or cannabinoids are effective for:

- Improving short-term sleep outcomes in individuals with sleep disturbance associatedwith obstructive sleep apnea syndrome, fibromyalgia, chronic pain, and multiple sclerosis

Finally, the document declares that there is no or insufficient evidence to support or refute the conclusion that cannabis or cannabinoids are an effective treatment for:

- Cancers, including glioma
- Cancer-associated anorexia cachexia syndrome and anorexia nervosa
- Symptoms of irritable bowel syndrome
- Epilepsy
- Spasticity in patients with paralysis due to spinal cord injury
- Symptoms associated with amyotrophic lateral sclerosis
- Chorea and certain neuropsychiatric symptoms associated with Huntington's disease
- Motor system symptoms associated with Parkinson's disease or the levodopa-induced Dyskinesia
- Dystonia
- Achieving abstinence in the use of addictive substances
- Mental health outcomes

If we consider the National Academy document as a litmus test for the legitimacy of medical marijuana then perhaps my biggest concern with medical cannabis and the clinic website is the assertion that having addiction issues (alcohol, amphetamine, cocaine and/or opiates) is an indication for treatment with medical marijuana. Really? Where is the evidence? None, according to the National Academy. Moreover, the real topper for me is the clinic website suggestion that diagnoses of schizophrenia or schizoaffective disorder are indications for treatment with medical marijuana. Help me understand how treating a schizophrenia patient with marijuana is going to help when the very use of marijuana might actually have unmasked or even helped to precipitate the very psychotic condition that they are now attempting to 'treat'? Now don't get me wrong, the band wagon looks pretty appealing but I'm not climbing on. This, especially when that bandwagon is rushing along largely without evidence, mostly with a gold-rush mentality and a bandwagon that stands to crush at least some patients under its carriage wheels.

From what I see, many patients are signing up for medical marijuana but not actually buying the medical grade since they claim that it is far too expensive. Instead, the green card simply provides cover and legitimizes their use of 'street grade' cannabis. In this regard, I actually think that the legalization of cannabis as proposed by Justin Trudeau will help to resolve some of the 'wild-west' aspects of medical marijuana. Legalization will allow people to use cannabis simply because they want to and not require involvement of the medical profession to legitimize or otherwise condone their use. There is no doubt, however, that legalization has it's own issues.

In conclusion, though my hand may be aching from writing this article, the only 'blazing' that I'm going to do is to cook a steak, since it's time for dinner. Please my dear colleagues, let's be careful out there and let's practice evidence-based medicine. Ponder this; cannabis oil maybe, just maybe, might turn out to be largely another form of snake oil 'treatment' — mind you, a very profitable one.

Dr. Lloyd Maybaum,
Past President, Calgary and Area Medical Staff Association. Calgary, Alberta


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Physician Health
as a Potential Indicator of Quality

Dr. Laura Calhoun

Physicians have long been interested in quality of patient care, sometimes to the exclusion of other factors such as cost, which can lead to one of the tensions between physicians and administrative healthcare leaders. The desire of physicians to do the best for patients to the exclusion of other considerations can also mean that physicians neglect their own health and wellbeing. This selflessness can have the unintended consequence of physician burnout. Several studies point to the concern regarding physician burnout, subsequent risk of mental illness as well as increased risk of death by suicide in the medical profession *(Roman & Prevost, 2015, Wallace & Lemaire, 2009, Leitner et al., 2009).*

Dr. Laura Calhoun

At the same time studies have shown that the stigma around mental illness is high in healthcare and posit that stigma may be one of the factors involved in physician's reluctance to seek psychological treatment *(Knaak, S. & Patten, S. 2014, Wallace, 2010).*

Add to this a third body of knowledge that has emerged in recent years indicating that physicians who are unwell, fatigued or even poorly fed are less likely to provide quality patient care and an opportunity to improve quality of care emerges *(Wallace et al. 2009, Lemaire et al. 2010).*

This paper explores this equation: physician over dedication to patient care leads to fatigue and burnout. Because of the stigma around mental illness physicians tend to keep working and not ask for help. When many physicians are unwell the quality of care they provide decreases.

Physician wellness as a quality indicator has been suggested in the past *(Wallace, Lemaire & Ghali, 2009)* and some macro level system changes are emerging in Canada that have great potential. This paper also reports on some of the emergent changes at the macro level of healthcare in Canada and points to an opportunity for the meso level of healthcare where quality indicators are decided and for the micro level of the system; among physicians themselves.

Scope of the Problem

In the November 5th, 2016 edition of the Lancet, West et. al. noted that burnout has reached "epidemic levels" for physicians in the United States *(West, & Dyrbye, et.al. 2016).*

The latest American Physician's survey (www.[physicianfoundation.org) states that "The majority of physicians surveyed, describe their morale as somewhat or very negative".

Although Canada-wide data is outdated — the last CMA survey was in 2008 *(Leitner et al. 2009)* our data is generally similar to that of the United States. The 2008 survey revealed that workload coupled with personal and workplace value incongruence explained the increased risk of burnout in physicians. The survey revealed that 46% of respondents were at an advanced stage of burnout *(Leiter et al. 2009).*

A recent review of physician health literature by Roman and Prevost (2015) states: "Because of methodological differences, it is difficult to accurately determine the actual prevalence of mental health problems among physicians, but there is a higher frequency of burnout and death by suicide compared to the population as a whole." *(Roman & Prevost, 2015).*

Paradoxically the general public generally perceives physicians as a healthy group: as they are mostly self-employed they have control over their time, ostensibly allowing them to attend to their self-care. Further, their workplace affords them access to knowledgeable colleagues so they can quickly get an educated opinion on how to manage their own health *(Roman & Prevost 2015).*

What is Burnout?

Burnout is most frequently described and measured using the Maslach definition and inventory. The Maslach Burnout Inventory (MBI) scale measures the three components of burnout: Emotional exhaustion, depersonalization and a low sense of personal accomplishment *(Maslach et al., 2001).*

Depersonalization is experienced as a detachment, especially from emotions and thoughts such that the person is aware they have emotions but cannot feel them, and their thinking can feel slowed and cloudy. Depersonalization is a defense mechanism also used by survivors of trauma to protect themselves from their experiences.

Not all physicians will experience burnout at the same rate given the same experiences *(Roman & Prevost, 2015).* The causal factors thought to underlie burnout are multiple and the interdependencies between the factors create individual physician risk profiles. Roman and Prevost (2015) have conceptualized these causal factors by dividing them into three groups. Intrinsic factors; that is intrinsic to the physician work place, factors extrinsic to the physician work place and internal factors; intrapersonal characteristics that each physician brings with them into their work world.

Intrinsic Factors

Intrinsic factors are those that are due to the physician's workplace. These include: constantly working in an emotionally charged environment that involves suffering and/or death, dealing with patients who have chronic disease and unrealistic expectations, conveying bad news to patients and families, dealing with difficult patients and colleagues, the vicarious trauma of repeatedly witnessing death, dismemberment and other sufferings, making an error that results in patient harm or death, always being held accountable for poor outcomes despite not having full control of a care team *(Roman and Prevost, 2015, Lemaire and Wallace, 2010. Leitner et al. 2009).*

In a Canadian study of physician stress, 28% of respondents identified intrinsic factors as major contributors to their stress levels *(Lemaire & Wallace, 2010).*

Extrinsic Factors

Extrinsic factors as a source of burnout are due "not to medical practice itself, but rather to how it is organized." *(Roman and Prevost, 2015).* Examples include: the ever-increasing workload, rising expectations to be more than a medical expert, shortage of time required to do all things well, long duty hours and resulting fatigue, rapid changes in medicine as well as governance and structure, decreasing professional autonomy, lack of work-life balance, increasingly being called to take on management and leadership roles, media reports on the low value for money of Canadian health care combined with the knowledge that physicians are one of the main drivers of health care costs *(Roman and Prevost 2015, Lemaire and Wallace, 2010).*

Lemaire and Wallace (2010) discovered that physicians identified extrinsic factors as the number one source of their own stress. "Approximately one-half (43%) of the physicians indicated that the most stressful aspect of their work was related to feeling overwhelmed with their workload."

Individual Factors

Many authors have identified individual factors that put physicians at increased risk of burnout. *(Lemaire & Wallace 2014, Roman & Prevost 2015, Gabbard & Meyer 2008)* Personality traits such as perfectionism are known to increase the risk of major depression in the general population and physicians are no different. Gabbard and Meyer (2008) describe a triad of personality traits, common to physicians that increase the risk of burnout and mental illnesses including self-doubt, guilt and an exaggerated sense of responsibility.

Lemaire and Wallace (2014) found that 36% of the physicians in their sample self identified as "control freaks". Physicians with a high need for control can have detrimental impacts on their care teams when something goes awry, such that others on the team are walking on egg shells trying to avoid the ire of the physician. This type of interpersonal dynamic can lead to poor communication between team members and a decrease in care quality.

Barriers to Self-Care

Care barriers are at the individual, organizational and system level, however individual barriers offer the biggest opportunity for change.

Dike Drummond *(commonly known as The Happy MD)* astutely observes that the medical education that physicians endure and require to be successful also sets them up for burnout. He observes that physicians are trained to be "perfectionistic, superheroes, lone rangers and workaholics" and that these ways of behaving and thinking can be adaptive — when they are used in the right place and time. However when these unconscious structures become automatic and generalized they can lead to burnout, lost relationships, and ill health.

The stigma surrounding mental illness is an individual barrier to care. Stigma is defined as an overarching term that includes labeling, separation, prejudice and discrimination. *(Abbey et al, 2012).* Stigma against the mentally ill is widely identified as one of the biggest barriers to care.

Self-stigma comes about as an internalization of others' beliefs. Self-stigma is understandably a major barrier for physicians who have signs and symptoms of burnout or mental illness. Doctors are well aware what a "formal diagnosis" might mean including scaling back workload, loosing privileges or being uninsurable *(Roman & Prevost, 2015).* "Stigma is reinforced by teaching and encouraging physicians to place a low priority on their own health, to deny they have any health problems, to keep any concerns about themselves or their colleagues to themselves, and to deal with it on their own." *(Wallace J., 2010).*

Stigma is highest inside healthcare itself. *(Wallace, J., 2010, Patten & Knack, 2014).* The Mental Health Commission of Canada (MHCC) has a project aimed at decreasing stigma inside healthcare for the very reason that they identified healthcare providers as highly stigmatizing.

Physicians' addictions and mental illnesses can come to light during the investigation phase of a patient complaint or an adverse event. When the adverse event is related to physician illness, the physician has traditionally been disciplined which sends the message that 'to be ill is to be bad' further increasing stigma *(Wallace, J. 2010).*

Furthermore, in physicians with perfectionistic personality traits, this type of investigation can be traumatic and lead to increased risk of death by suicide *(Gabbard & Myers, 2008)*.

"Self-treatment becomes a strategy that is accepted and even encouraged by colleagues, since it allows physicians to stay on the job and avoid the discomfort of having to assume the role of patient." *(Roman & Prevost, 2015)*.

Drilled into physicians during their extensive and intensive training is the identity of caregiver, or healer and the idea that physicians care for and heal "the other"; ie. patients. This binary division sets up a false dichotomy between physicians and patients, which is adaptive when used appropriately and maladaptive when taken to extreme. When physicians internalize the idea that needing help means being one of "them", that coming forward with emotional concerns means losing your social identity as a healer, defense mechanisms like denial are employed to defend against the resulting anxiety *(Unger & Knaak, 2013)*.

Quality of Patient Care

Systemic quality of care indicators are listed by the Canadian Institute of Health Information (CIHI) as: "appropriate *(evidence based)*, patient centered, safe, and timely" (www.cihi.ca).

These indicators are at the macro level, and it is up to individual provinces to model what they measure inside their own systems to align with these macro indicators. At the meso level in Alberta Health Services for example the quality indicators are: appropriateness, acceptability, accessibility, effectiveness, efficiency and safety (www.hqca.ca). Inside each of these indicators there are measurements taken on a regular basis that, as a group make up the indicator. As an example, one of the safety indicators measures is 'adverse events'.

In a 2009 Lancet article titled: Physician Wellness, a missing quality indicator, the authors make the argument that, should physician wellness be a priority for individual physicians as well as for health care systems, improvements would be seen in productivity and efficiency, quality of care, patient satisfaction and adherence to treatment, medical errors, and recruitment and retention of physicians. They state that "measurement of provider wellness as a health-system quality indicator could be highly beneficial." *(Wallace et al., 2009)*.

Other authors have made the link between physician burnout and quality of patient care *(Cole & Carlin, 2009)*. A Canadian study revealed the link between proper nutrition of physicians and the quality of patient care delivered *(Lemaire et al., 2010)*. In an exploratory study the authors found that physicians themselves do not recognize the link between their own self-care and the quality of the care they provide (Wallace & Lemaire, 2009). Some research reveals that physicians who have experienced the beneficial effects of a healthy lifestyle are better at promoting these benefits to patients *(Goldman & Dickstein, 2000, Frank, E. 2004)*.

On the flip side of this coin, many studies have shown the effect of physician burnout with reduced efficiency and safety, especially medical errors. On the Resident of Canada website (www.residentdoctors.ca) at the time this article was written was a link to multiple articles on physician burnout and its effect on quality of care. Wallace, Lemaire and Ghali *(2009)* also site numerous studies.

Moving Physician Wellness Forward

At an organizational level, the majority of provincial medical associations offer a range of health and wellness services to physicians. These services rely on self- identification and are anonymous, so little data is available. Some health authorities, such as Alberta Health Services are beginning to incorporate physician wellness into their Human Resources strategy, recognizing that without healthy physicians, the goal of "patient first" health care is impossible to achieve.

At a systems level national stakeholders have demonstrated their commitment to physician health and wellness. For instance, within the Professional CanMEDS Role, through the Royal College of Physicians and Surgeons of Canada, residents must demonstrate a commitment to maintaining their own health as well as that of their colleagues. The Canadian Medical Association (CMA) has aligned its medical professionalism initiative, such as revising the 1998 CMA Policy on Physician Health and is creating a Forum of Canadian Physician Health Programs that will bring together provincial and territorial health programs in Canada. Major initiatives have also been initiated by other national organizations, including those representing students and residents. The Canadian Federation of Medical Students (CFMS) recently completed the first national survey of medical student health and wellness and the Resident Doctors of Canada (www.residentdoctors.ca) are developing a Resiliency Curriculum, among other initiatives.

The Mental Health Commission of Canada (MHCC) has been working in the area of stigma in the workplace for many years and provide hope for physician leaders. In the past 5 years the MHCC has developed, offered and evaluated programs that help reduce stigma in the military and in first responders. Two programs — Opening Minds and **Road to Mental Readiness (R2MR)** have been shown to decrease stigma and increase mental wellness in these two populations. Currently the MHCC is working on implementing this training in Nova Scotia's health authority (personal communication). The Resident Doctors of Canada have also developed their own Resiliency Curriculum based on the R2MR program (www.residentdoctors.ca).

While these regulatory and supporting bodies work in physician health is important, physicians themselves have the biggest opportunity to effect change. The future will require physicians who value their own health and the quality of patient care at the same time. It will require physicians to let go of the binary "us and them" and tolerate the uncertainty of a continuum of identity. Empowering physicians to put their own health on an equal footing with patient's health is but the first step.

Conclusion

Physicians have the right and the responsibility to be physically and emotionally healthy. Patients deserve healthy physicians. Health organizations must invest in this valuable human resource, and consider measuring their investment as one of the indicators for quality patient care. The evidence surrounding the need for healthy physicians is mounting, how long can we afford to wait to take action?

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Non-Medical Reading…

Being of a certain age (Neolithic), I recall when I was a medical student (terribly young, when I look back on it), I saw physicians at the end of their career in one of two categories: those who were wise and had an immense amount of experience, and those who seemed to have simply "existed" for the last ten to fifteen years. Those in the first category held my attention as they seemed both wise in medicine and in other arenas. They seemed to have a focus on something more than "medicine." They were inspirational and you listened to their every word; they knew so much and were so willing to teach you.

Dr. Richard Bergstrom

I do not wish to denigrate those who focus just on medicine, for that is our job. Though, to strictly define what medicine is can be a rather daunting experiment. For me, it has to do with our work being service industry, not a "servant's industry." As I have mentioned before, medicine in my lifetime has evolved. In my simple lifetime, it has evolved a great deal! As a child, you never went to the doctor unless you were ill, in severe pain, bleeding excessively, or moribund. A doctor was someone who would prescribe a treatment after examining you, and you followed that treatment, period. Now, I believe we have medicine that is "advised". We see patients whilst they are sick or the thought of prevention *(hypertension, colonic polyps, high cholesterol, arthritis and other early disease states)*. We often find out that someone who appears "well" might have a pre-malignant lesion, undiagnosed disease states which have grave end points later down the road. Health care has evolved, diversified and will continue to do the same over the next while. As I steal from Dr. Nohr, it is not what we do to patients; it is what we do for them and with them. It is a conversation — a change for the better.

We need to read, discuss, learn, experience, argue and listen to gain both knowledge and the wisdom of those who have seen and experienced so much more than us. We can learn so much without learning from our own errors. That, in my opinion, is why simulation is so great. I tell the residents that the most important thing in a simulation is to fail and then learn why you failed. You then do not have to learn on a patient, a human being, a sentient being. We need to learn from failure, we need to learn and not repeat it.

Yet, I also believe in the bigger picture of medicine. That is, the leadership value of great physicians. We have those who provide great learning opportunities by great research. Who does not want to provide better care when you can? Good for the patient and good for our souls.

I think we can learn from some "non-medical" literature. Leadership is a common theme. I would also suggest "good business practice"; by that I mean "how do we participate in a system whereby we contribute to a common goal/mission?" I need to be responsible for advocating for my patient, for they have often given me their life to hold and care for. The term "professionalism" is often mentioned but is often hard to pin down.

I read a great book this weekend which I think most physicians could read and find therein an inspirational theme. The book is called "I Shall Not Hate" written by a Gaza-raised physician who becomes an infertility specialist. To me, it sounded kind of weird. Someone who is raised in a community of poverty and isolation, not to mention violence, wants to be an infertility specialist? I thought that was a "First World" problem. Yet, I come from a First World environment with First World experience and have not experienced Gaza nor have I an understanding of the real problems of Gaza. I just watch the news.

It is a great, great book. I tried to imagine how he grew up; poverty, crowding, isolation and scarcity of those commodities which we can get with the turn of a tap, a walk down the street and now a click of a button. As one immigrant physician taught me, "Richard, when you have known true hunger, it never leaves you." This statement humbled me and taught me my true ignorance.

This is not about the difficult history of the Middle East and the disputes therein. This is about someone who actively does not "hate" when it is the easiest thing to do. Think about it. Hate is so easy, it is a gut reaction and it comes out of our mouths with great ease. Vitriol is so easy to enjoy. The feeling of the fire of hate… I have done it numerous times. It actually feels good! Schadenfreude: The joys of watching others suffer. Sounds like it should be outlawed, but is actually something we actively enjoy. How easy it is and how easy to justify. Yet, does it serve us and does it serve humanity?

To not hate takes discipline. This is not Barney the Dinosaur, Follow the Yellow Brick Road, Mary Poppins, etc. This is not Pollyanna. This is not the happiness from a child's television program. This takes focus, hard work and more of the same. When has hate helped? Accountability when wrong happens, yet, does hate work?

I see it in myself and it is so, so damned easy to let hate rule. It is so, so easy to let hate take over your life and your ethos. It is difficult to not let your gut instinct tell you what to do. *(Sometimes it is right, sometimes not.)*

We do not need to live in a world where "the sun always shines and everyone is good". We live in the real world with real world challenges. Life is not so easy for all of us, yet, for many in this world, it is far more difficult for others.

I would encourage you to read the book. It is not about Gaza. It is not about Palestinians. It is not about being a refugee. It is about rising above it all — not to be drawn down into the pit of hate. Rather, to rise above hate and serve ourselves, our families, our patients and our community. To choose not to hate. Hard work but well worth it.

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