From Cocoanut Grove to COVID-19:

4 Key Events in Understanding Disaster Response, and the Mental Health of Public Safety Personnel

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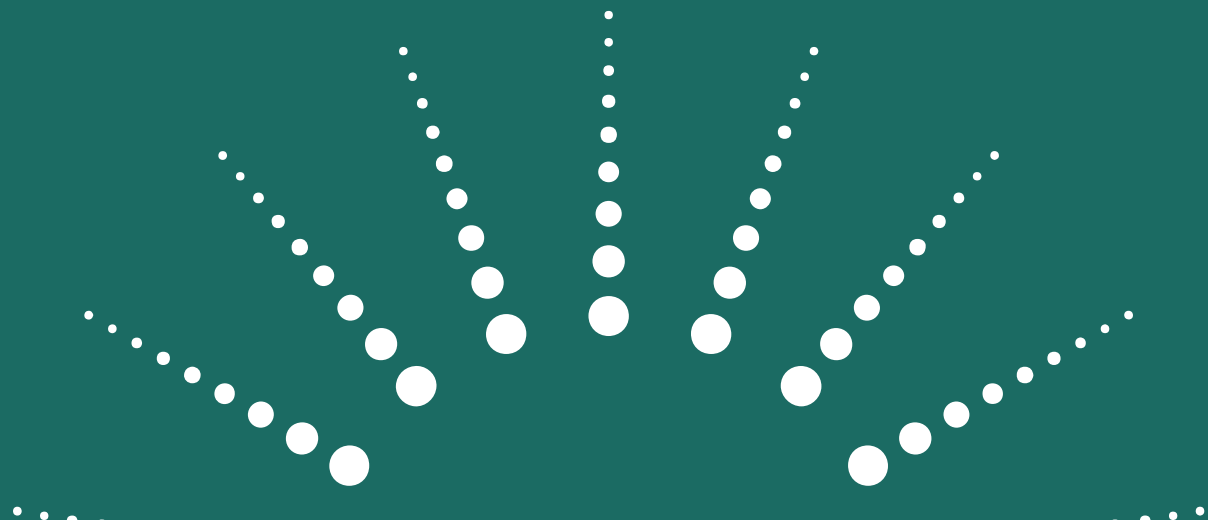
Key Event #1:

The Cocoanut Grove Nightclub Fire



- Current theories and applications of *Disaster Response*, *Crisis Intervention, Community Mental Health, Grief*, and *Posttraumatic Stress Disorder* can be traced back to the 1942 Cocoanut Grove Nightclub fire in Boston, Massachusetts, where nearly 500 people lost their lives.
- Dr. Erich Lindemann, a German-born Harvard psychiatrist, who treated many of the survivors and their family-members, wrote a seminal paper, *"Symptomatology and Management of Acute Grief"* about his observations of patients in the aftermath of this tragedy.
- Dr. Alexandra Adler, an Austrian-American psychiatrist and neurologist, studied the survivors of this disaster, and found that 50% still experienced multiple psychiatric symptoms one year later. She became one of the first clinician-scientists to document what would later come to be known as Posttraumatic Stress Disorder.

The careful observations of Drs Lindemann and Adler, and documentation of the effects of the Cocoanut Grove Nightclub fire, started a revolution in attempts to understand the predictable psychological effects of crisis and disaster on the public. They pioneered the “migration” of mental health thought and treatment from the *consulting room* into the *community*.

Definition of Disaster

"A sudden, calamitous event that seriously disrupts the functioning of a community… causing human, material, economic or environmental losses that exceed the community's… ability to cope, using its own resources."

(The International Federation of Red Cross and Red Crescent)

- Can be caused by **nature, human-made**, or **both**

Epidemiology of Disaster Exposure

- **Exposure** to traumatic events is common. *76% of Canadians* report exposure to at least one event sufficient to cause PTSD. Over 65% of Americans report exposure, with 20% exposed in any year.
- But, *some areas of the world* have large populations at *greater risk of exposure* to *large-scale disasters* like war, famine, floods and earthquakes
- Therefore **risk of exposure worldwide likely higher** than numbers reported in Canada and U.S. (Kessler, 2000)

Disaster and Posttraumatic Stress Disorder

- PTSD most studied MH consequence of disaster
- *Wide range* reported post-disaster (15%-75%)
- Most reports show *decline in PTSD over time,* but some show *stable* or *increased rate* (up to 10 years post-disaster) (Neria 2007)
- Higher prevalence of PTSD occurs among **direct victims and first-responders**
- Rates reported among these groups:
  - **Victims:** 30-40%
  - **First-responders:** 10-20%
  - **General population:** 5-10% (Neria, 2007)

One approach: "Disaster Lifecycle" of Psychological Risk/Reaction

Four Distinct phases identified in the Disaster lifecycle.

Each phase emphasizes *different risks* for *mental health problems.*

1. Pre-Disaster Phase

Populations at increased risk of MH problems in disaster:

- Female gender, children
- Low Socioeconomic Status
- Racialized, Marginalized
- Chronic mental or physical illness
- Limited social support

2. Threat (Warning) Phase

- Both **positive** and **negative** effects
- Can serve as a "**time for preparation**"
- But, can also **precipitate stress reactions** and **fear-driven behavior**, leading to detrimental results, eg surge on local healthcare systems (Ursano et al, 2007)

3. Hazard (Impact) Phase

- ***Magnitude* of forces of harm** determines impact on survivors
  - Physical effects (**destruction, displacement, injury, death**) but also,
  - **Psychological stress** experienced by population
    - E.g., witnessing destruction, exposure to body parts, other disturbing scenes
- ***Frequency* of impacts increases** the stress response
  - **Multiple strikes,** more devastating than single event
    - E.g., earthquakes with aftershocks, series of hurricanes making landfall
- ***Proximity* to** geographic **epicentre** increases psychological impact

4. Post-Hazard (Loss and Change) Phase

- In ***wake* of disaster**, confronted by psychological stressors due to:
  - Loss of family, community, social support
  - Physical harm, pain, disease outbreaks
  - Destruction of home, displacement, refugee conditions
  - Lack of basic necessities and services (food, healthcare)
  - Unresolved grief reactions (denial, anger, depression)

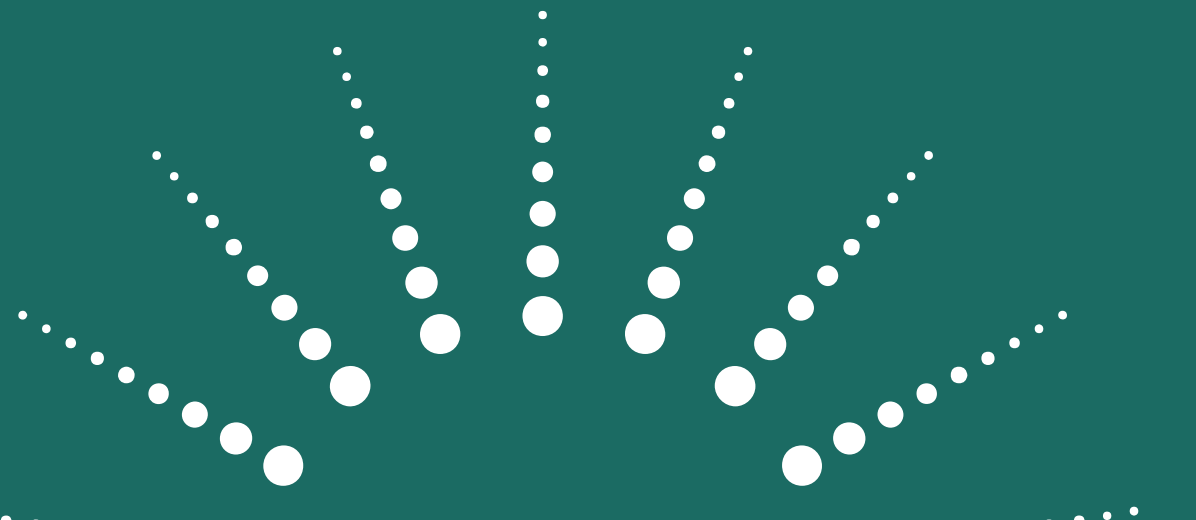
Significance of Type of Disaster

Human-generated disasters, especially *intentional acts of violence*, cause more psychological distress than natural disasters

(Shultz et al, 2013; Norris et al, 2002)

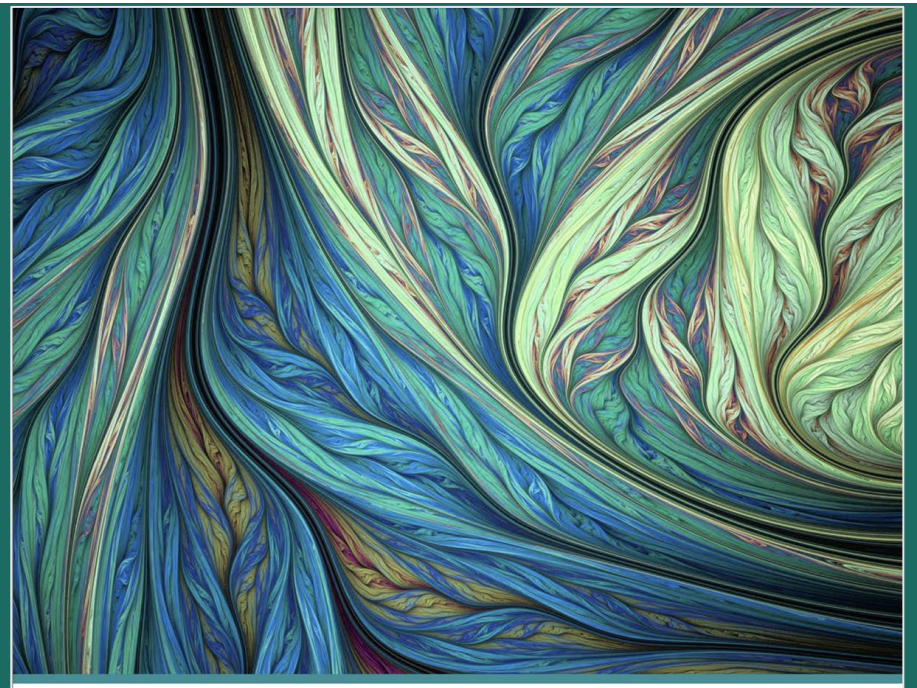
Key Event #2:

The Federal Framework on Posttraumatic Stress Disorder Act



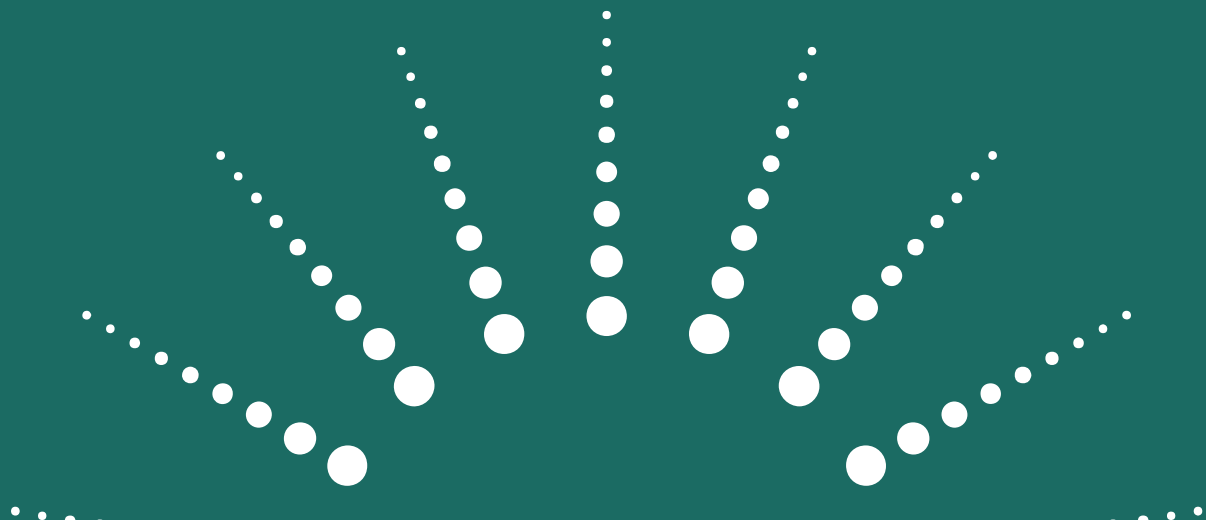
The Federal Framework on Posttraumatic Stress Disorder Act

- June 21, 2018: FFPTSD Act *became law in Canada*
- Received *unanimous support* in H of C
- PTSD Act: *Groundbreaking* recognition by federal govt that *some occupations put those working in them at greater risk of developing PTSD*
- Military members, Veterans and PSP
- Nurses and other HCPs acknowledged
- FFPTSD available online
- https://www.canada.ca/en/public-health/services/publications/healthy-living/federal-framework-post-traumatic-stress-disorder.html



Key Event #3:

The Current International Crisis: COVID-19



COVID-19

Stress-Generating Elements:

- Expectations & roles of frontline “first-responders” changed overnight
- Little or no time to “prepare”
- Uncertainty over how long it will last, continues
- Changing public health rules & mandates

What have been the effects on Canadian Public Safety Personnel working throughout the pandemic?

A National Survey of Public Safety Personnel

Our preliminary findings (n=200) are alarming and suggest that:

Three in ten public safety personnel surveyed across Canada meet criteria for a probable diagnosis of PTSD

Five in ten public safety personnel surveyed across Canada report clinically significant levels of anxiety

Six in ten public safety personnel surveyed across Canada report clinically significant levels of depression

One in two public safety personnel surveyed across Canada report clinically significant levels of stress

10 Key COVID-19-Related Stressors for Public Safety Personnel

1. *Tension and strain between co-workers* due to *different views* on mask-wearing and vaccines
2. Concern that COVID-19 *guidelines* are *affecting the ability* to provide *quality care* and service
3. *Uncertainty and confusion* around pandemic-related *guidelines* and *protocols* that are *unclear*, *difficult to enforce/carry-out*
4. Concern that COVID-19 has brought out *the worst in people*
5. Anxiety around the possibility of contracting COVID-19 and *transmitting it to family*

REMAINING KEY POINTS →

10 Key COVID-19-Related Stressors for Public Safety Personnel

6. Exhaustion and burnout from *inadequate staffing/* working *excessive overtime*
7. *Loss of usual coping* mechanisms, eg going to gym or being with family/friends
8. Growing *distrust and disconnection* between frontline PSP and *leadership*
9. *Lack of specialized mental health supports* and providers knowledgeable about PSP roles*
10. Reluctance to seek treatment for mental health issues because of *fear of stigma and repercussions* from employers and co-workers

*Pre-existing challenges exacerbated by COVID-19

Identity as PSP and Responding to the "Call to Duty"

"So when the pandemic came around, I already had a very strong—what—seven or eight years as…an identity as a first responder, to be resilient to the demands of that challenging and changing career. Knowing…the duty to call, you know—trying to find a word that really describes what I was feeling. It was more or less the foundation of a personal identity…that supported my decision-making to say, "I will work every day. I will take on extra (shifts or) contracts in case "it" really hits the fan (because) we don't have enough paramedics on the road."

- Paramedic

Wanting a Culturally-Competent Therapist

"I need someone to understand that (I've willingly chosen) a violent career path. I know it's a stressful environment. I know that it's going to have an impact on my mental health. I just need to know someone's going to be supportive throughout my journey, right?...I'm willing to put my mental health on the line, knowing that I'm serving my community....So I need the counselor to know that it's not a matter of talking me into a new career path, it's a matter of helping me learn how to work (successfully) through the current one."

- Corrections Officer

Social Identity and Trauma

- Social identity (“we firefighters”, “we refugees”) provides us with a *framework* for *interpreting our experiences*—including traumatic experiences. We assess traumatic events through the lens of our “social identity”.
- Being part of a group with a *positive shared social identity*, decreases the neuroendocrine stress reaction during traumatic incidents (Hausser et al, 2012)
- Conversely, *pathological responses to trauma* will be *amplified* where *trauma weakens* or *undermines* valued social identities. (Muldoon et al, 2020)
  - E.g., CF members post-Somalia; RCMP members who responded to the 2020 Portapique mass killing rampage.
- **Implication: Key strategy is to support a strong positive social identity within PSP occupations**

Strengthening Social Identity

- Trauma can *strengthen* a sense of *collective identity* through shared experiences with a group
- *Community collective efficacy* refers to the sense that a group can *cope* and *overcome adversity*
- Increased sense of community collective efficacy is associated with *lower PTSD symptom severity* following disasters
- **Implications:**
  - **Following trauma exposure, *maintain connections to pre-existing social identities* (i.e., professional/occupational groups)**
  - **Helpers and health care workers need to be sensitive and consider *social identity needs* of disaster survivors and frontline PSP**
  - ***Peer support* can help maintain social identity**

Disaster Mental Health: Strategies that can help PSP

(adapted from the COVID-19 Readiness Resource Project: 2020)

1. Preparedness Training
2. Crisis Communication (Simple, short, frequent)
3. Engaged Leadership
4. Team-Building and Social Support
5. Quarantine relief
6. Self-Care

1. Preparedness Training:

Militaries know this. *No pre-pandemic opportunity*, but regular, brief meetings or “huddles” for information updates, training etc. **decreases anxiety and isolation**, **increases trust in leaders and increases “sense of agency” in frontline PSP**

2. Crisis Communication:

Delivers information during chaotic milieu of a crisis. **Short**, **consistent**, **key** messages delivered by a **trusted person**. Encourage **questions**. Express **empathy**. Be **transparent**. **Express appreciation of team** efforts. This bolsters **self esteem**. Leverage **social media** and **“public-spirited”** behavior and attitudes

3. Leadership:

Be **visible**, **available**, and **"have your peoples' backs"**. This bolsters morale. Acknowledge shared stressors affecting team-members. Support **peer support**. Help team **find meaning** in the situation, e.g. **contributing to the greater good** of the community

4. Team-Building and Social Support:

Social support is the **great antidote** to traumatic stress disorders. Support positive peer-to-peer relationships through **consistent work cycles** and **team composition**. Encourage solutions for team-members to **meet basic needs**

5. Quarantine Support:

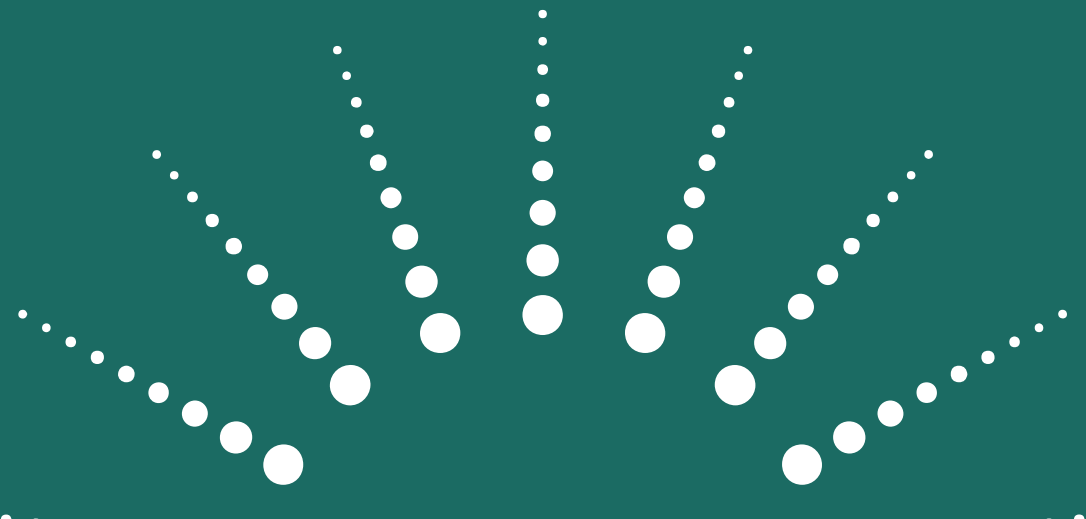
Isolation is a **risk** for loneliness, guilt, boredom, fear, substance use, and increased domestic violence. **Stay connected** with quarantined peers as a *"valued part of the team"*, to maintain **identity**. Ensure **access to services and supplies**. **Buddy system for return to work**. Check-in, provide **family resources**

6. Self-Care:

Long work hours, exhaustion, PPE and fear of infection contribute to distress. **Maintain** healthy **routines**, **sleep**, **nutrition**, **exercise**. Stay **connected** to **family**, **friends** and **coworkers** to preserve sense of community and well-being. **Minimize** negative **social media**. Seek out **professional help** as needed

Key Event #4:

Follow-up to the Federal Framework on Posttraumatic Stress Disorder Act



“Addressing PTSD and Trauma in Those Most Affected by COVID-19”

In 2021, The Public Health Agency of Canada, in a significant follow-up endeavor to support the “PTSD Act” awarded $28.2 million for the creation of a **Knowledge Exchange Hub**, and **8 Applied Research Projects**, to support the mental health and well-being needs of those Canadians most affected by the COVID-19 pandemic, with a priority focus on the needs of *Public Safety Personnel* and *Healthcare Workers*, their *families* and *caregivers*.

The Canadian Institute for Pandemic Health Education and Response (CIPHER)

CIPHER is the Knowledge Hub that is being created, and will *curate* and *mobilize* the mental health and well-being supports developed by the 8 research projects.

The 8 PHAC-Funded Applied Research Projects

- Project # 1:
  Advancing Peer Support Programming to Address PTSD and Trauma among Canadian Public Safety Personnel and Veterans
- Project #2:
  The **Training and Development Program for Public Safety Personnel**
- Project #3:
  Healthcare Salute: An Ongoing Surveillance and Knowledge Mobilization Plan for HCP's
- Project #4:
  Resilient Minds: Building the Psychological Strength of Fire Fighters

REMAINING PROJECTS ⟶

The 8 PHAC-Funded Applied Research Projects

- Project #5:
  PSPNET-Families: An Ecosystem of Prevention Resources and Supports
- Project #6:
  Beyond Silence: E-Mental Health Solutions to Support Canadian Healthcare Workers
- Project #7:
  Expansion and Evaluation of the Before Operational Stress Project
- Project #8:
  Promoting Resilience and Mental Health: Adapting DND's Road to Mental Readiness (R2MR) Program to Support Canadian Healthcare Workers

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Thank-you