Mitigating First
Responder
Occupational Stress
during a Hurricane
Response

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## Why Worry about First Responder Mental Wellness?

- Answer the call 24/7
- Accumulation of these incidents in their daily communities and other daily stressors can affect the first responder immediately, or later in life.
- In addition, first responders are called upon to respond to local, statewide or national disasters.
- In the past, we would send resources to help the impacted areas but would not always send resources to look after the mental wellbeing of the responders.
- We have seen many first responders return from deployments with lasting impacts from what they experienced.





## Conceptualizing a New Plan

 In December 2018, the Florida Fire Chiefs Association (FFCA), Florida Professional Firefighters (FPF), State Fire Marshal's Office, and the Florida Firefighters Safety and Health Collaborative (FFSHC), which represented all stakeholders in the area of Safety, Health, and Wellness, convened to form the First Responder Mental Wellness Response Subcommittee under the Florida Joint Council of Fire and Emergency Services. This team recognized the need for an ad hoc working group to ensure every agency has access to mental wellness resources when needed.



# Behavioral Health Access Programs (BHAP)

- Behavioral Health Access Programs (BHAP) are comprehensive, integrated, multi-component, systematic programs for employee mental health/wellness and crisis intervention.
- BHAP aims to provide education, support, assessment, and intervention for employees who may be exposed to and/or affected by behavioral health issues.
- A comprehensive BHAP includes prevention, early intervention, treatment, postvention, and crisis intervention.



## **Examples of BHAP Components**





## **Debilitating Critical Incident (DCI)**

Debilitating Critical Incident(s) can be a single acute incident or the cumulative effect of multiple traumatic incidents that may be a contributing factor to the first responders' transition from the acute stress injury phase to functional decline.



## Request for Mental Wellness Resources

Organizations that lack sufficient resources or need additional resources may request deployable mental wellness typed assets via their fire chief or designee by accessing the Statewide Emergency Response Plan (SERP) through their SERP Regional Coordinator or referring to the FFCA Statewide Emergency Response Plan.

https://www.ffca.org/assets/docs/SERP/ SERP%20Plan%20Approved%207-16-2021.pdf





## Request for Mental Wellness Resources

Requests should go through the County Emergency Manager to the State Emergency Operations Center (SEOC) to the SERP Chair/State Coordinator. At the time of publication of this document, this information is as follows:

TJ Lyon | OPS Governmental Analyst II

FFCA SERP-Emergency Response Committee Chair

Bureau of Fire Standards & Training

Florida State Fire College

11655 N.W. Gainesville Road Ocala, Florida 34482-1486

USNG: 17R LN 84075 44020

tjlyon@me.com



## Request Hierarchy

- Access resources within the organization
- Access resources within the County
- Request the local Emergency Management Agency to make a request through WebEOC - Resource Requests/Task Assignments template to the State Emergency Operations Center (SEOC).
- The SEOC Operations Section and Emergency Services
   Branch will task to State ESF 4&9 for coordination through the FFCA SERP.



## **Once Requested**

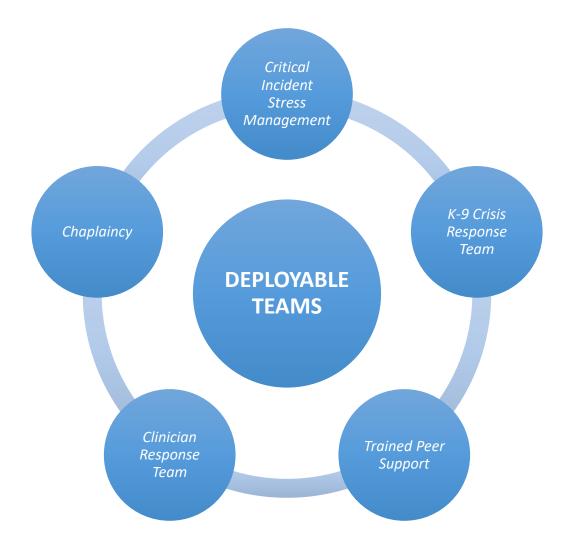
- The agency deploying the requested resources may contact the requesting agency to complete a needs assessment to determine the organization's size, members affected, the effectiveness of existing wellness programs, the type of incident encountered, and possible resources needed.
- The Team Leader (if deployed) will coordinate any logistical needs and establish a schedule for the requested deployed resources. No mental wellness resources will be deployed without the request and approval of the requesting Chief, Designee, State ESF 4&9 ECO, or SERT Chief in the SEOC.



## Mental Wellness Response Team (MWRT) and Mental Wellness Typed Resources

- The organization having jurisdiction should evaluate the need for the deployment of resources after a DCI occurs. If the determination is made that BHAP components are needed, the recommendations for deployment levels below may serve as guidance and may be adjusted based on the needs assessment.
- An MWR will be classified by different levels depending on the number of responders, identified needs, and, if necessary, the geographical location of the event. A forward MWRT may be deployed to help determine the level of resources needed.







Clinician Response Team Trained Clinician Response Team (CRT): Interagency team trained through a cultural awareness program. The CRT, when requested, provides assessment, treatment, and educational services when an employee is experiencing crisis symptoms that may put them at significant risk for mental health issues. Members assigned to the CRT shall be State of Florida licensed mental health professionals. The following are examples: Marriage & Family Therapist (MFT), Licensed Mental Health Counselor (LMHC), Licensed Clinical Social Worker (LCSW), Psychologist, and **Psychiatrist** 

Support



Chaplaincy

Millicum

Chaplaincy: Chaplaincy is a significant part of the BHAP. The chaplain's primary purpose is not limited to helping in the event of an injured or deceased member. Chaplains lend an ear to those who need to talk about something concerning them, such as physical or emotional stress. A chaplain's goal is to aid, comfort, and help employees and their families as well as to refer to vetted resources to assist in the recovery cycle.

esponse Peer Team Support



Trained Peer Support Peer Support Team: One of the most heavily used components of BHAP, it commonly refers to an initiative consisting of trained supporters and can take several forms such as peer mentoring, reflective and active listening, and referral to professional counseling services where appropriate.

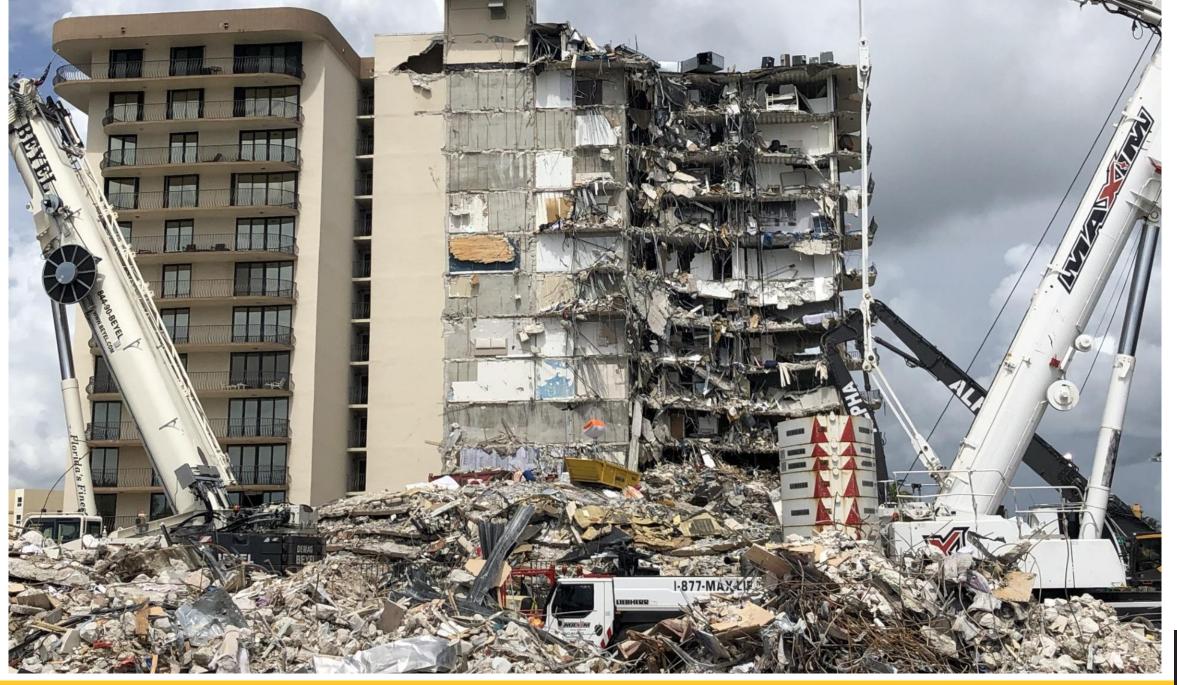
response Team



K-9 Crisis Response Team Critical Incident

K-9 Therapy Services: Therapy dogs and their handlers are highly-trained, registered, and certified. Therapy Dogs and Crisis Response Canines are dogs trained to serve people other than their owners and are appropriate for use in Peer Support.





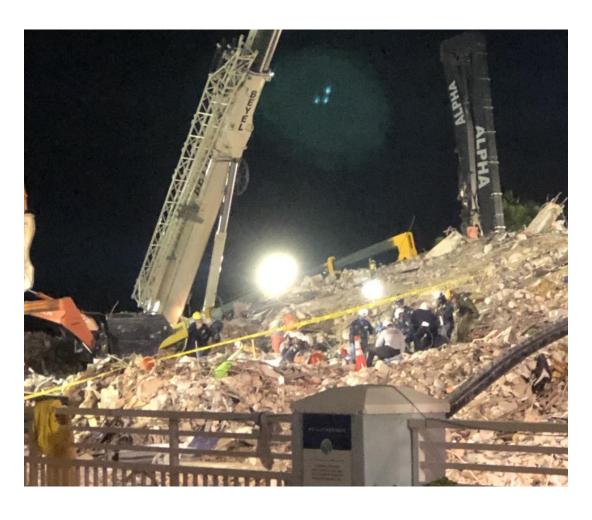


## Champlain Towers Collapse

- June 24, 2021
  - 12 story tower collapsed/pancaked
  - 136 people in the tower
    - 98 perished all recovered
  - 3<sup>rd</sup> higher death count in U.S. history, excluding terrorist attacks
  - 22 million pounds of debris removed by hand in 29 days.
- 394 members of urban search and rescue (USAR) teams participated in recovery
- First time mental wellness resources were deployed in an organized fashion



## Need for Mental Wellness Support



- Unique event
- Enormity of destruction
- Recovery of deceased would
  - take weeks
  - occur in extreme heat, humidity, daily thunderstorms and threat of a hurricane
  - exert significant physical and mental stress

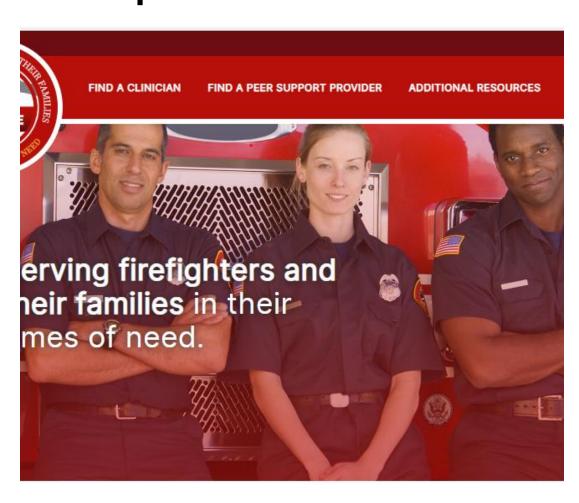


# Champlain Tower Collapse Immediate Response - Mitigation

- Psychological First Aid (24/7)
  - Peer support
  - Chaplains
  - Clinicians
  - Comfort Dogs
  - Palm cards with relaxation instructions and websites for further help
- Challenge onsite but did not have a private working space for conversations when needed.
- Solution found quiet spaces



## Champlain Tower Collapse Immediate Response



- Challenge Culturally Competent therapists
  - Fielded many call/emails from therapists wanting to help but no expertise

#### Solution

- Redline Rescue
- Created a spreadsheet with vetted clinicians in each USAR area
  - Given to task force leaders prior to demobilization
  - Therapists available no wait list



### Demobilization

- A Mental Wellness Demobilization Plan sets forth the process and documentation required to be submitted prior to release from operations. The concept is for Mental Wellness to remain in operations until all response operations are completed, and the overall Incident Commander and the Mental Wellness Incident Management Team concur on a certain date and time.
- Once the deployed Task Force(s) have been released from operations and demobilized, the Peer Teams may conduct outreach to facilitate the mental wellness needs following their return home.



## Champlain Tower Collapse Follow-up survey



- Three months after demobilization
  - 52.6% of USAR teams who recovered human remains in met cut-off criteria for a psychological disorder
    - 15.8% probable PTSD
    - 26.3% probable generalized anxiety disorder
    - 36.8% probable depression



### After Action Report

- Hurricane Michael, NAS-Pensacola, Pulse Nightclub, Stoneman Douglas High School, Surfside.
- Identified significant need for immediate and longer-term mental wellness resources for first responders impacted by incidents as well as everyday job and life stressors
- CRITICAL: role of "blue sky" work with public safety communities to establish relationships and build capacity for mental wellness resources available under grey sky conditions



















### Hurricane Ian Response

- Mental Wellness Deployment for First Responders
- Sept/Oct 2022



## Hurricane Ian Mission

Hurricane Ian made landfall in southwest FL on September 28, 2022

Mission Orders for first responder mental wellness issued same day

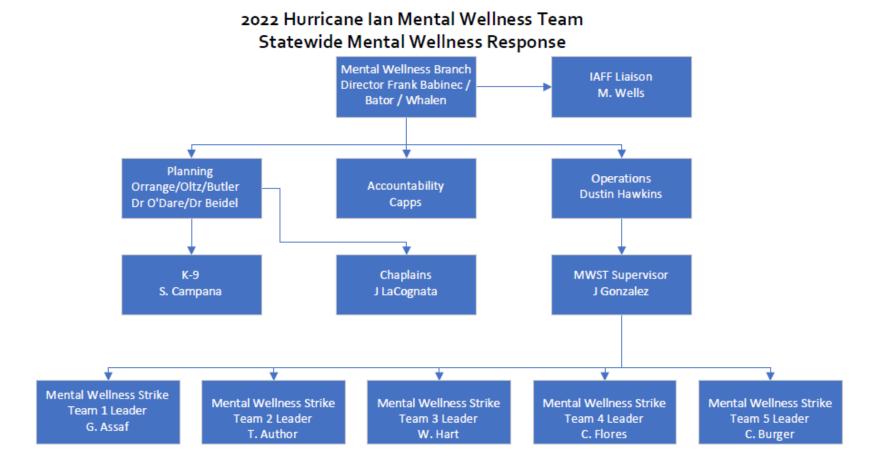
First Responder Mental Health Command team deployed to and arrived at Unified Command Structure situated in Orange County, Florida

Initial Mental Wellness strike teams deploy on September 30 to begin work in impacted areas





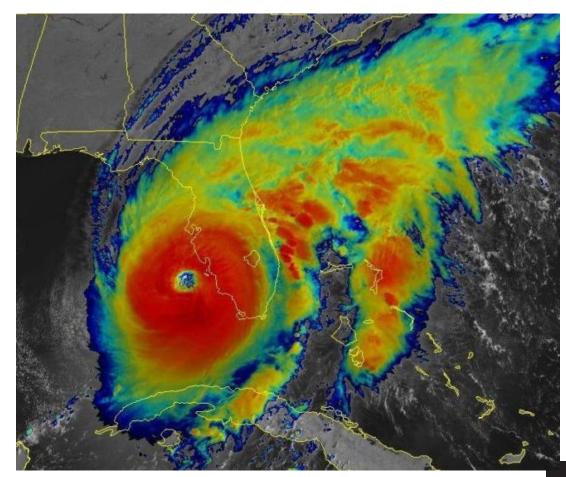
### Incident Command Structure (ICS) for Mental Wellness-Florida State Fire Marshal's Office





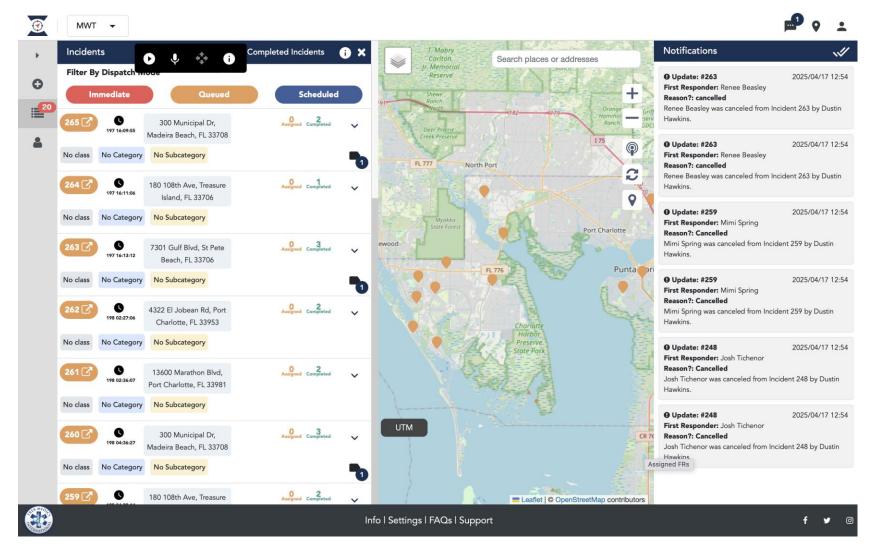
## Modifying Purpose-Built Technology to Address Needs and Efficacy Assessment

- Challenge Counties immediately targeted Lee, Charlotte, Sarasota, parts of Collier.
  - · How to keep track of everyone
- Solution Beacon Trekmedic App for Peer Providers in the Field
  - Enhances Safety: Real-time GPS tracking tracks peers in forward operating positions, especially in high-risk environments.
  - Confirms Coverage: Easily verify area assignments and confirm operational coverage even when cellular service is impacted in disaster areas.
  - Streamline Communication: Centralized dispatch improves coordination and reduces response delays.
  - Accountability & Support: Enables check-ins, incident reporting, and support allocation as needed for higher level of clinical care.





## Safety and Accountability

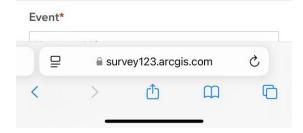








This survey is intended to support the mental health of first responders during and after disaster operations.



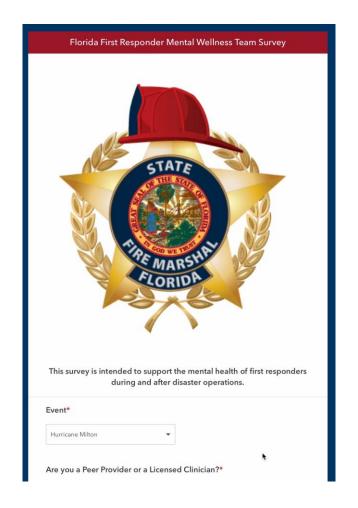
## Tracking utilization and efficacy of available resources (ARC-GIS)

- Challenge Identifying acute needs
  - Keeping track of number and type of mental wellness contacts
- Solution ARC-GIS
  - Documentation of high acuity calls with referral to appropriate service.
  - All communications are HIPAA compliant.
  - Dashboard used was constructed for our own purposes.
  - Geo-tagging included to track progress and coverage.



### Data Collection – from field to MW IMT

- From input to implementation to resource resolution
- In the back end is the input completed by peer support or clinicians in the field
- This platform offers a streamlined, reliable and smooth interface and provides secure, data rich information in real time to the data management team.





## Mental Health Services Provided during Hurricane Ian Deployment – Peer Teams

- Total of 12 fire service peer teams active throughout deployment.
  - Teams worked XX days
  - Consisted of peers, K-9, and chaplains
  - Approximately 5000 contacts –
    fire stations, dispatch centers,
    EOCs, base of operations,
    random contacts as peers were
    walking around



#### VST floridadisaster.org/mentalhealth

for Emotional Support and Assistance for Families, First Responders, and Community Members

#### For Immediate Emotional Support:

Disaster Distress Helpline 1-800-985-5990

Florida 211 Network Crisis Counselors National Suicide Prevention Lifeline Dial 9-8-8

Crisis Text Line Text HELLO to 741741



## Mental Health Services Provided during Hurricane Ian



Redline Rescue redlinerescue.org

**UCF RESTORES** (407) 823-1657

ucfrestores.com

2nd Alarm Project (850) 480-9314

2ndalarmproject.org

FL Veterans (844) 693-5838 Support Line

**Safe Call Now** (206) 459-3020

First Responder text BADGE to 741741

 Distribution of UCF's Single Session Consultation Line

- Thirty-five calls during the active deployment period
- Thirty-one were requesting stress management services.





### Other Clinical Activities during Hurricane lan

- Peer(s) contacted the licensed clinician at the Incident Command Center to contact first responder(s) in distress
  - Clinician conducted risk assessment and provide follow-up
- Impromptu debriefings at Incident Command Center
  - Provided Psychological First Aid to USAR teams when needed
- Psychological back-up when requested by FEMA medical teams

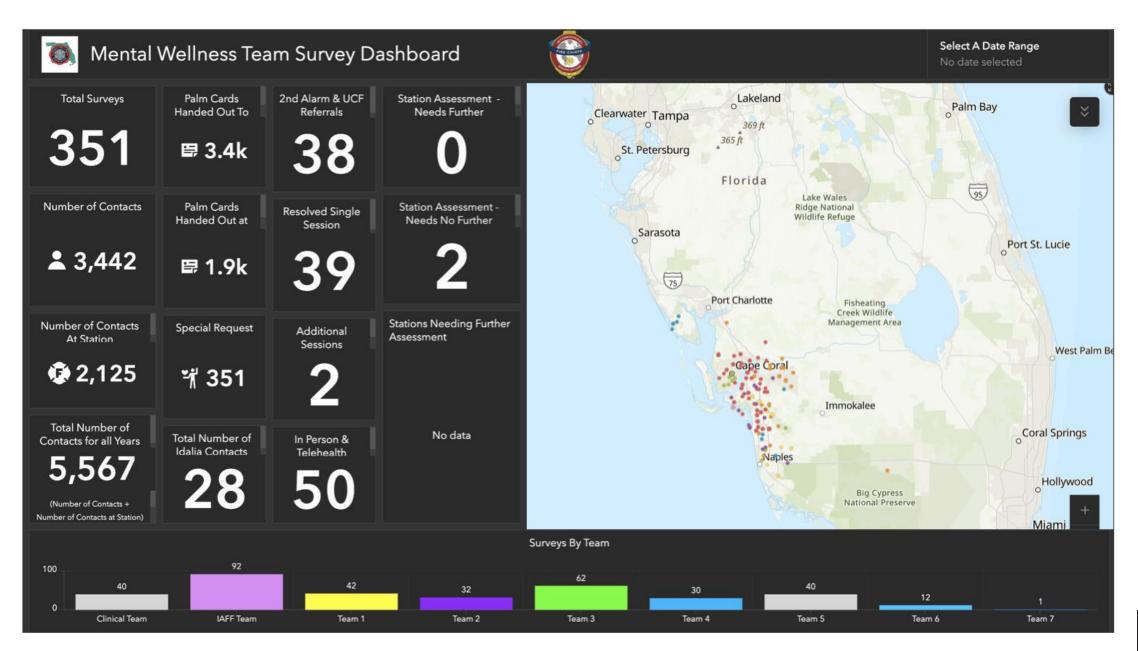


### More Clinical Activities during Hurricane Ian

- Provided clinical consultation to FEMA medical team
  - Member in affected area in need of mental health contact
  - Arranged for local clinician to conduct risk assessment
    - and provide crisis plan
  - Provided feedback to FEMA medical team
- "Placed on call" culturally competent therapists in each region of the state
  - When USAR demobilized, given list of clinicians available for follow-up
  - Verified that first responders would not be turned away or put on a waiting list

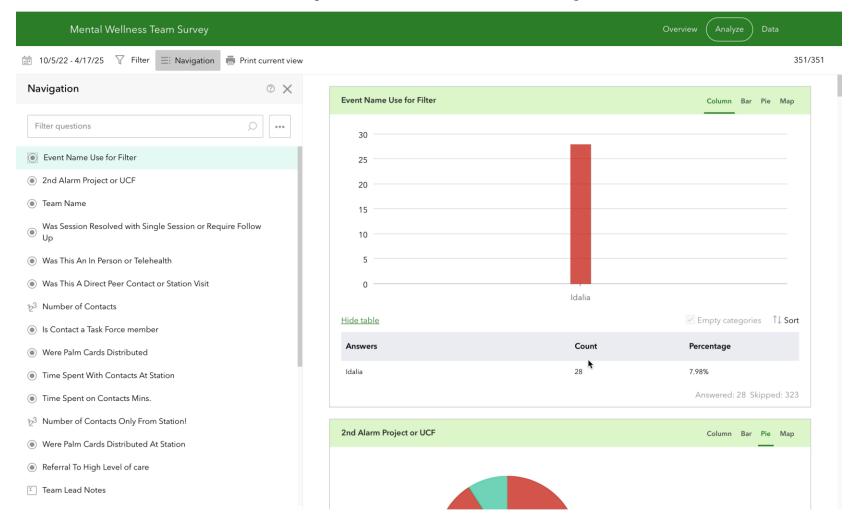








## Data Collected (Back End)





#### **Lessons Learned**

- This deployment took tremendous effort, coordination, and a reliance on integrated resources and partnerships.
- Peer support is a powerful force multiplier for good.
- First responders love our K9 peer team members!
- Importance of continuous local community-based capacity building for long term needs and resource availability.
- Need for Improvement
- Better training for peers on how to count encounters
- Better coordination with what we do to allow for earlier integration into BOOs. Peers were sleeping in their cars for a few nights.
- Ability to have at least one clinician in area of need
   so as not to rely solely on telehealth





## Hurricane Idalia Statistics





# Mitigating Stress During Operations - Walking in Nature

#### Initial Investigations – 15 min. walk

- Improves mood, sense of optimism, mental well-being
- Mitigates stress, anxiety, and negative rumination
- When compared with urban settings
  - Nature settings bring greater benefits in stress and anxiety reduction
- What about physiological response?2
- Natural environment decreases anxiety, depression, and lowers heart rate.
- Urban environment increases anxiety and does not change depression or heart rate





## Walking in Nature



- Walking in nature for 15-20 minutes decreases situational distress and enhancing cognitive functioning.<sup>3</sup>
- But what if your job does not allow you to go outside and walk in a natural setting?
- What if the natural setting is now a disaster zone?





## MITIGATING OCCUPATIONAL STRESS

# Can we use VR when nature is not available?

- must be durable
- not need the internet
- not need electricity





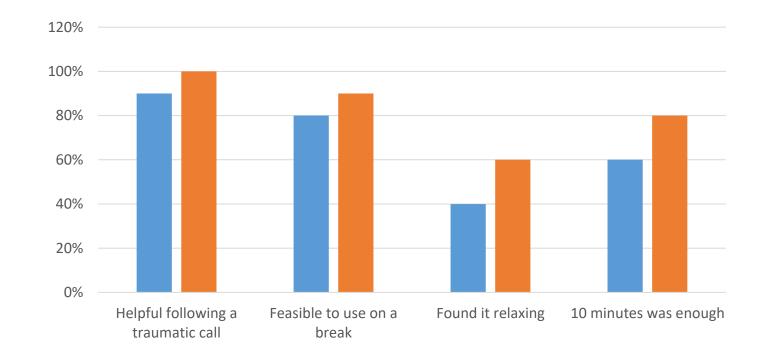




## Mitigating Occupational Stress

#### Thus far

- Two usability studies:
  - Lee County
     EMS/telecommunicators
  - Advent Health pediatric flight nurses
- Instructed to use the VR system after a stressful call/event. Collected data on
  - Feasibility
  - Usability
  - Initial efficacy



■ Lee Co. Telecommunicators

Advent Health Flight Nurses



# Hurricane Helene Mental Wellness Contacts

- 1600 peer support contacts over a one week period
- 7 first responders sought clinician support
- 449 palm cards were distributed
- 84 station visits



# VR to mitigate Hurricane Helene stress







## VR to mitigate Hurricane Helene Stress





### Hurricane Milton and Tornados



- 1752 peer contacts
- 5 clinician contacts
- 132 station visits
- 1000 palm cards distributed



## Success and Challenges

- Peer support teams are welcome and the number of calls from individual stations for a team to stop by is increasing
- Use of UCF's consultation line during the same time is increasing

- Difficult for peer teams to find lodging during some deployments
- Even more difficult for clinicians to find lodging
- MWT needs a base of operations
  - A boa constrictor is not a therapy animal



### Resiliency Command Center



# **UCF RESTORES**® +LIVES+ +FAMILIES+ COMMUNITIES

### Trauma Won't Win

UCF RESTORES
-Lives
-Families
-Communities



