



Interdisciplinary End of Life Symposium

Natural Disasters & End of Life Care

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Disclosures

- I do not have any relevant financial relationships.

This presentation and/or comments will provide a balanced, non-promotional, and evidence-based approach to all diagnostic, therapeutic and/or research related content.

Cultural Linguistic Competency (CLC) & Implicit Bias (IB)

STATE LAW:

The California legislature has passed [Assembly Bill \(AB\) 1195](#), which states that as of July 1, 2006, all Category 1 CME activities that relate to patient care must include a cultural diversity/linguistics component. It has also passed [AB 241](#), which states that as of January 1, 2022, all continuing education courses for a physician and surgeon **must** contain curriculum that includes specified instruction in the understanding of implicit bias in medical treatment.

The cultural and linguistic competency (CLC) and implicit bias (IB) definitions reiterate how patients' diverse backgrounds may impact their access to care.

EXEMPTION:

Business and Professions Code 2190.1 exempts activities which are dedicated solely to research or other issues that do not contain a direct patient care component.

The following CLC & IB components will be addressed in this presentation:

- *What cultural and bioethical differences exist between countries that impact end-of-life options provided during international disasters?*
- *How does a country's geopolitical and development status impact the care its population receives during an international disaster?*



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AK PULSİ MÜHÜRÜ & EĞİTİMİ

KARAYI HARBİYYİ

STRIKE 1

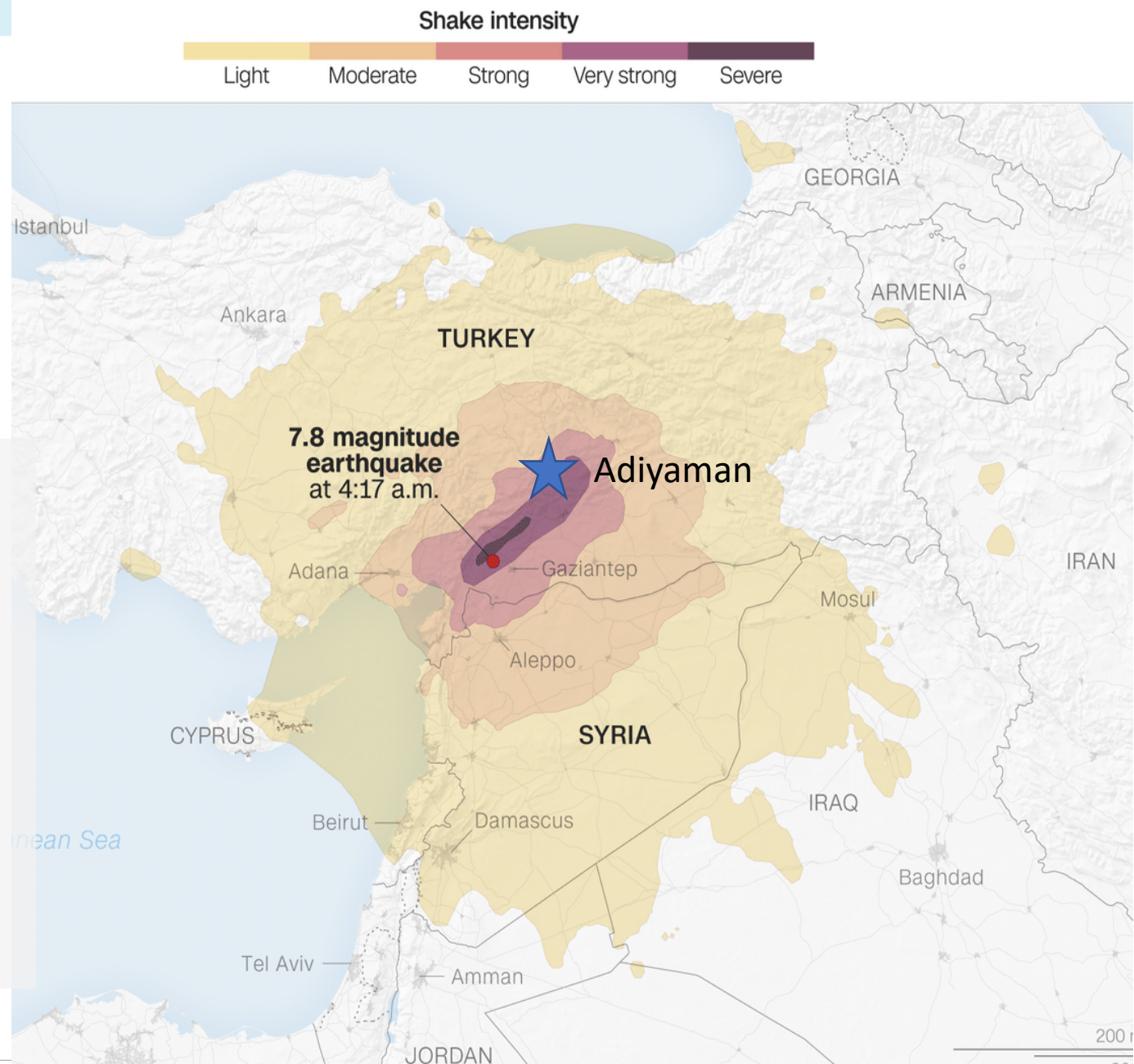
6 FEB 2023

0417 am (TST) – Mw 7.8 EQ S/C Turkey, N Syria
20 mi NW of Gaziantep
20°F

11 mins (83 aftershocks) later: Mw 6.7 EQ

1 hour later – Team leadership convenes at HQ

USAID BHA Prepares to respond



STRIKE 2

6 FEB 2023

~9hrs later – Mw 7.5 EQ (epicenter 60 mi from first)

5,000 dead

21,000 injured

6,000 buildings destroyed

500 km (310 mi) EQ diameter

USAID sends both search & rescue teams



Source: INGV





HOW WE RESPOND

Search & Rescue team activation

CHALLENGES

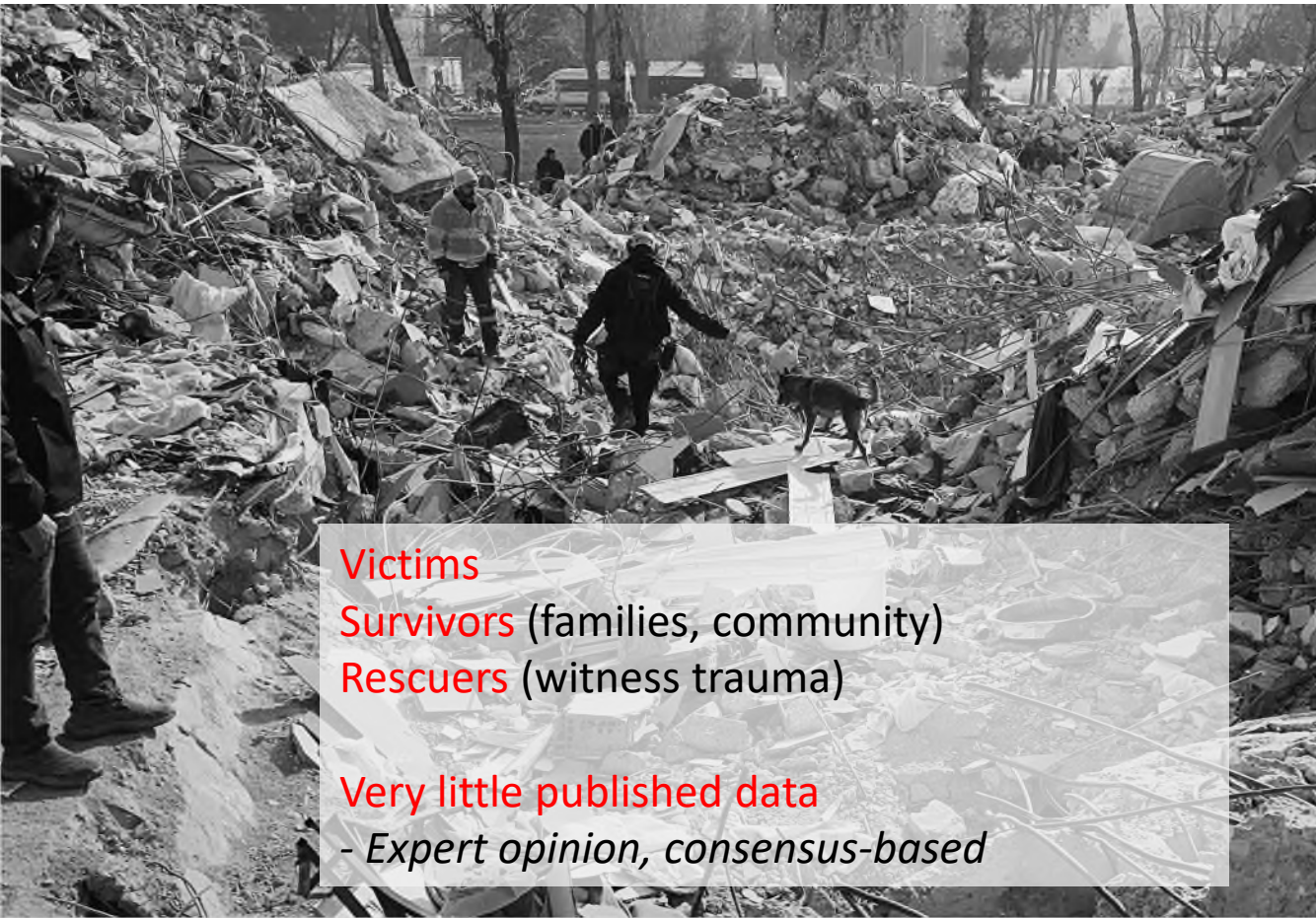
Medical

Geopolitical

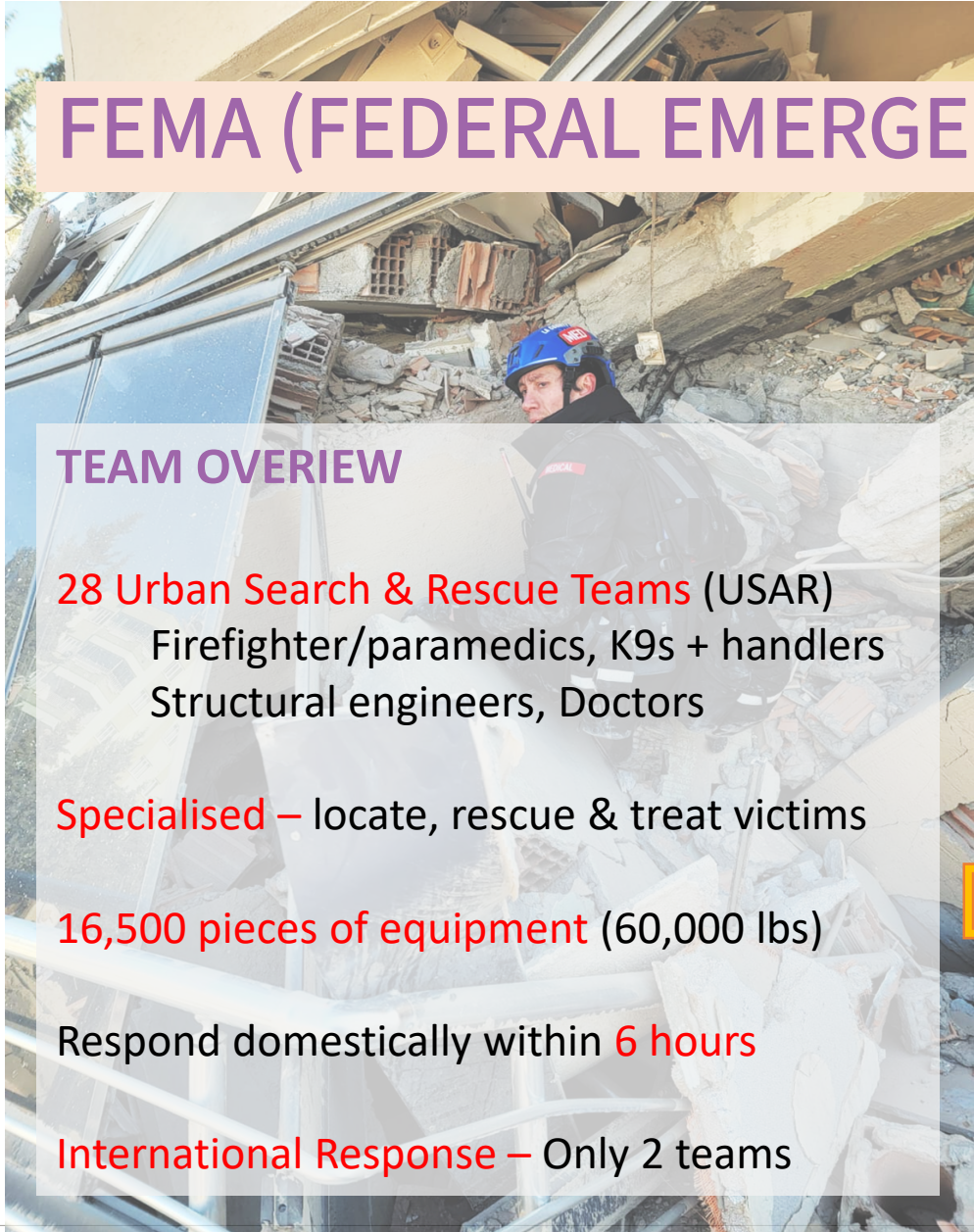
Cultural

Ethical

END OF LIFE CARE GAPS



FEMA (FEDERAL EMERGENCY MANAGEMENT AGENCY)



TEAM OVERVIEW

28 Urban Search & Rescue Teams (USAR)

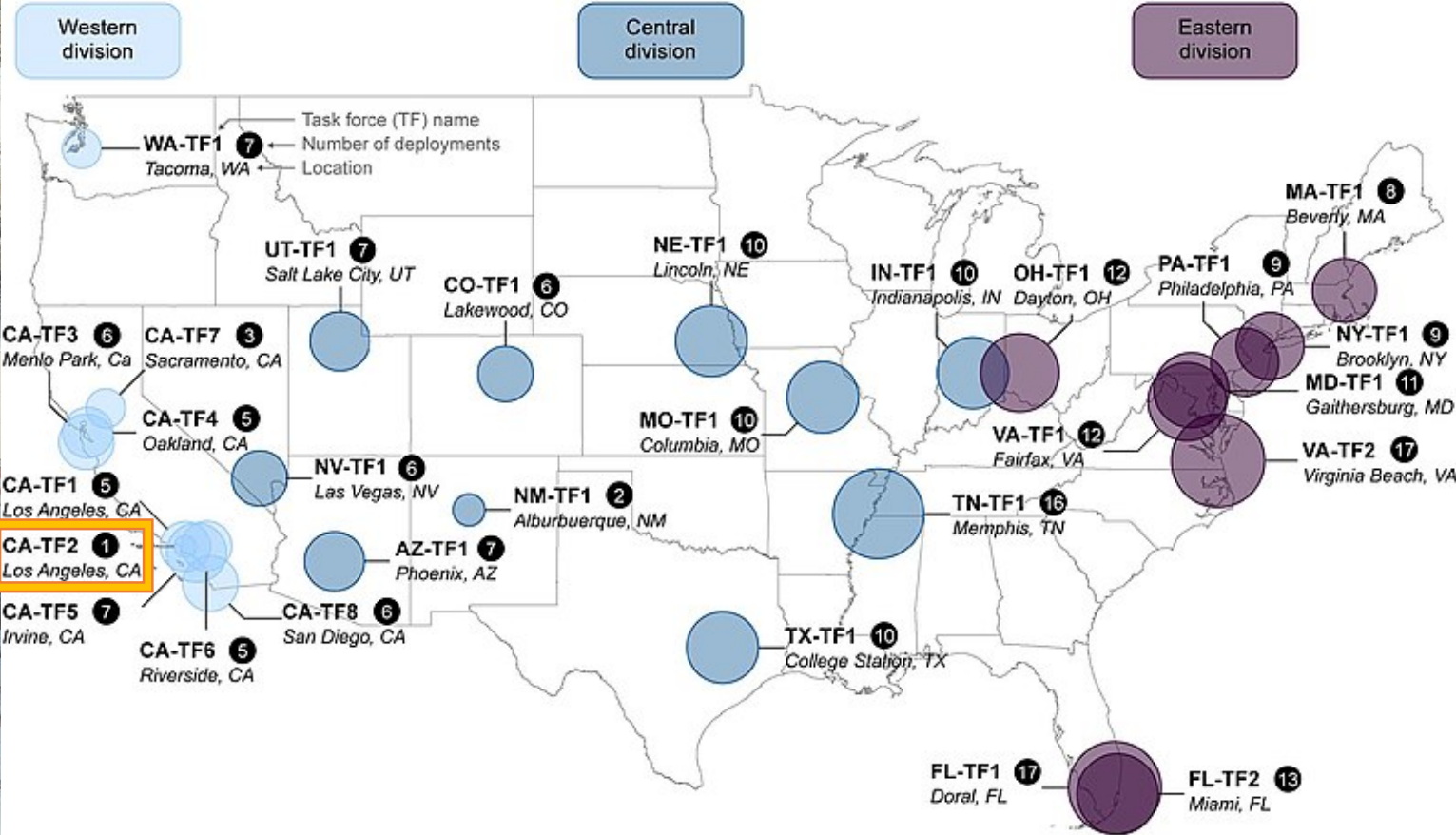
Firefighter/paramedics, K9s + handlers
Structural engineers, Doctors

Specialised – locate, rescue & treat victims

16,500 pieces of equipment (60,000 lbs)

Respond domestically within **6 hours**

International Response – Only 2 teams



Source: GAO analysis of FEMA data; MapInfo (map). | GAO-16-87

USAR CAPABILITIES



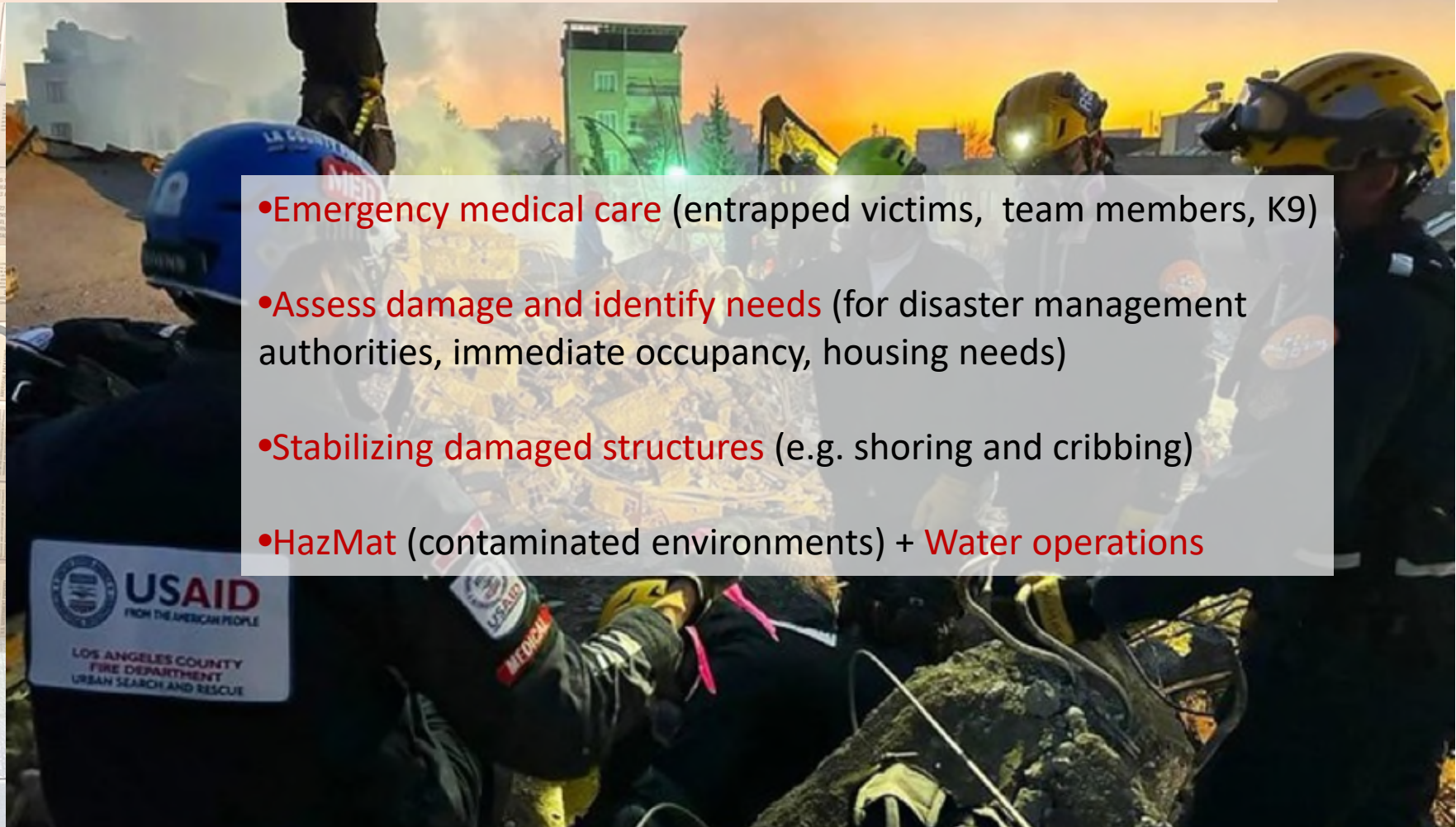
SELF-SUFFICIENT OPERATIONS:

2 sites

24 hours

10 days

Without burdening affected country

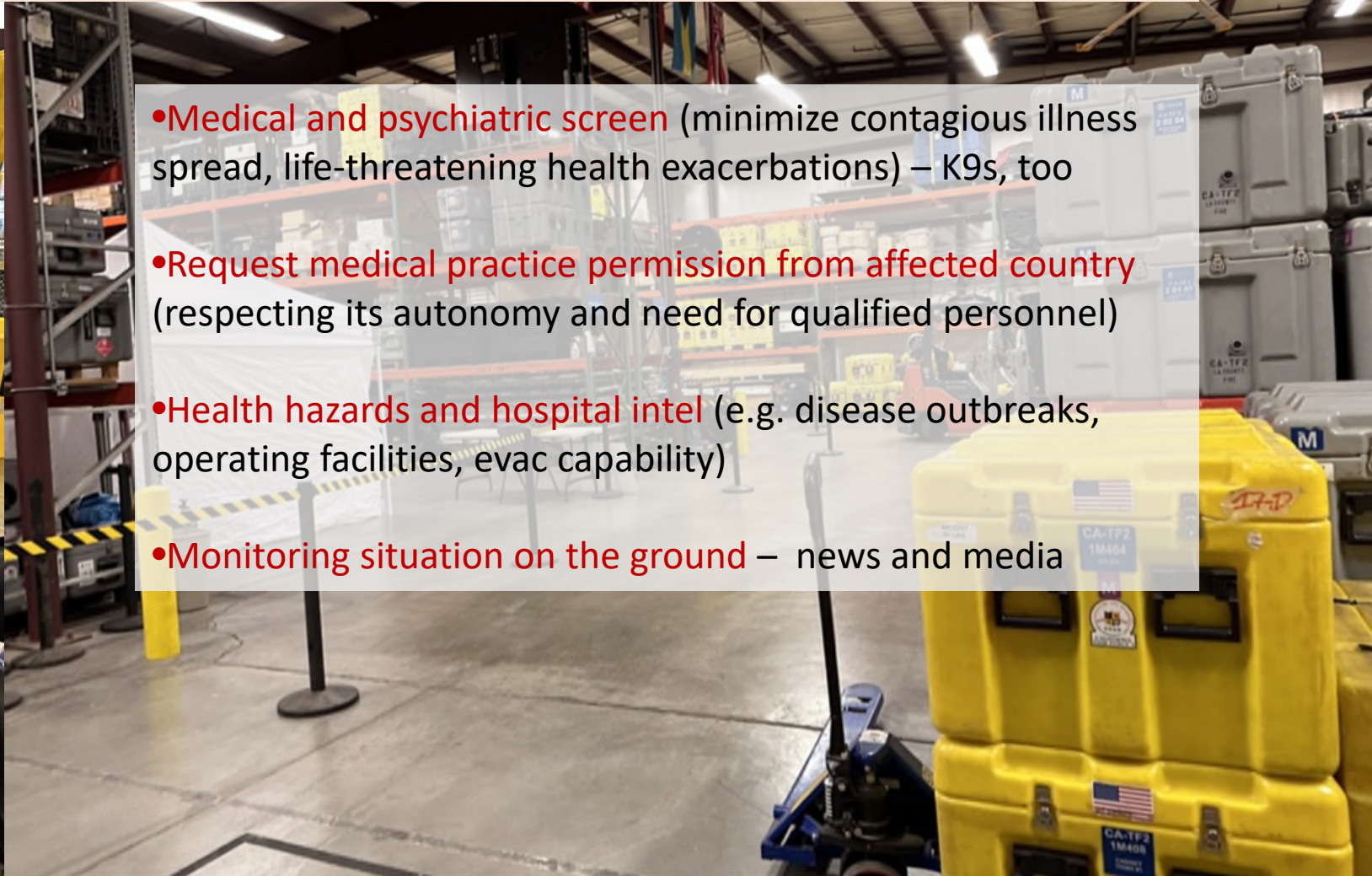


- **Emergency medical care** (entrapped victims, team members, K9)
- **Assess damage and identify needs** (for disaster management authorities, immediate occupancy, housing needs)
- **Stabilizing damaged structures** (e.g. shoring and cribbing)
- **HazMat** (contaminated environments) + **Water operations**

TEAM MOBILIZATION



- **Medical and psychiatric screen** (minimize contagious illness spread, life-threatening health exacerbations) – K9s, too
- **Request medical practice permission from affected country** (respecting its autonomy and need for qualified personnel)
- **Health hazards and hospital intel** (e.g. disease outbreaks, operating facilities, evac capability)
- **Monitoring situation on the ground** – news and media



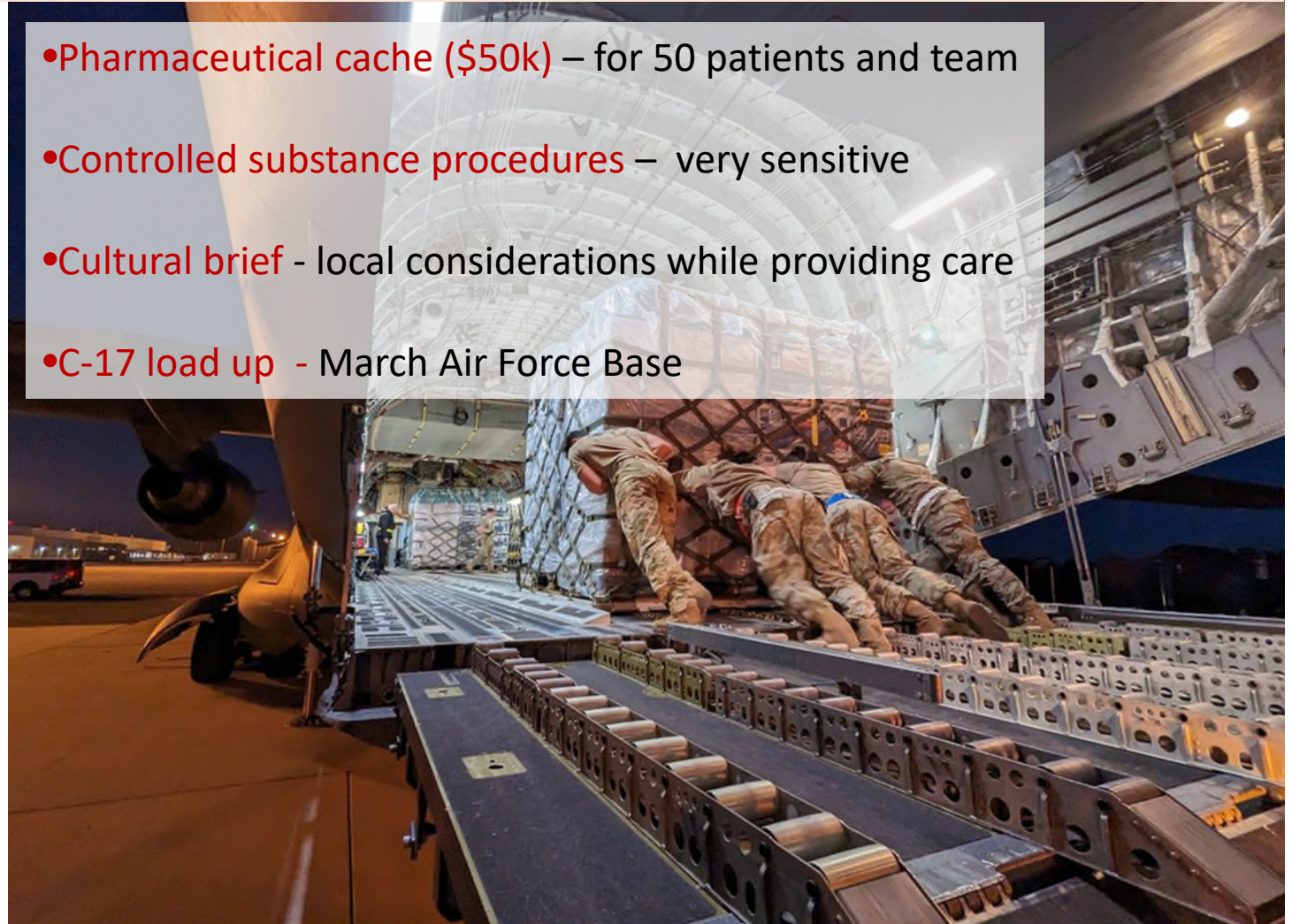
ONGOING BUILDING COLLAPSE



ACTIVATION



- **Pharmaceutical cache (\$50k)** – for 50 patients and team
- **Controlled substance procedures** – very sensitive
- **Cultural brief** - local considerations while providing care
- **C-17 load up** - March Air Force Base





- 25 Hour flight – rest, comfort, circadian rhythm.
- Circadian rhythm management – flight plan intel
- International USAR team coordination – who's responsible?



INTERNATIONAL SEARCH & RESCUE ADVISORY GROUP



- **UN** – coordinates international disaster response
- **INSARAG qualification** – evaluation; ensures minimum standards
- **Mentorship** - so more countries develop response capability
- **Standardized procedures** – teams work under affected country

ARRIVAL

- **Incerlik Air Force Base** – assisted by US Ambassador
- **Repeat cultural/mission briefing**– security challenges
- **10 hour journey** – 7 hours of standstill (road collapses)



TRAVEL TO ADIYAMAN - CHALLENGES

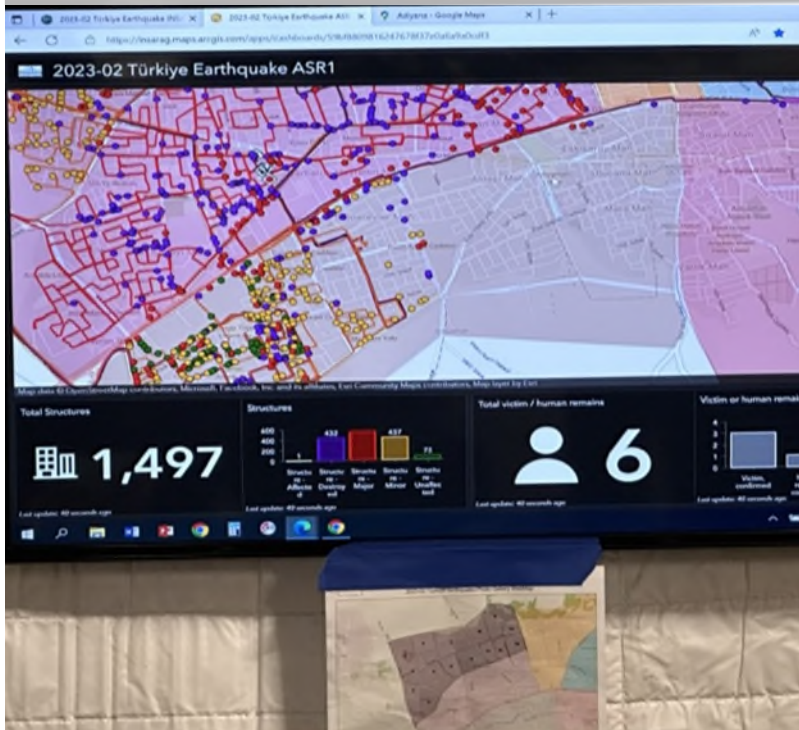


INITIAL SURVEY



REVISITING PRIORITIES

- No local disaster coordination
- Hospital survey to assess local capability
- Sites with signs of life



END OF LIFE CHALLENGES – CASE STUDIES

CASE 1 – Survivor Resources

CASE 2 – Decedent
management

CASE 3 – Secondary Trauma
Witnesses



END OF LIFE - CASE 1

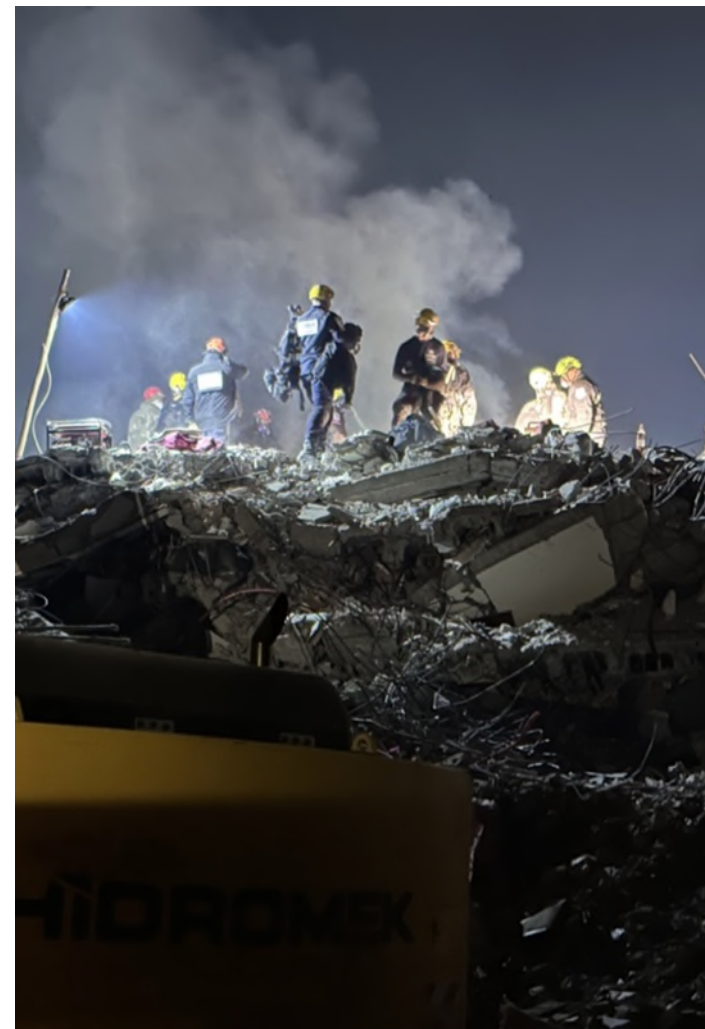


CASE 1 – No survivors. Limited capacity to console.

END OF LIFE - CASE 2



CASE 2 – Decedent Management



END OF LIFE - CASE 3



CASE 3 – Secondary Trauma Witnesses

Management of Crush-Related Injuries after Disasters, Mehmet et al., N Engl J Med 2006;354:1052-1063

END OF LIFE - CASE 3



CASE 3 – Secondary Trauma Witnesses

END OF LIFE GAPS / OPPORTUNITIES

Medical futility – withholding interventions

Community Resilience Training – Psych First Aid



WHEN WE LEAVE



Makeshift shelters – unsafe, inadequate



Food insecurity – foodborne illnesses

THE TURKISH PEOPLE





USAID
FROM THE AMERICAN PEOPLE



USAID USA-02 – Adiyaman, Türkiye