Bali to Bees Creek … Pakistan to Palumpa!

NATIONAL CRITICAL CARE AND TRAUMA RESPONSE CENTRE

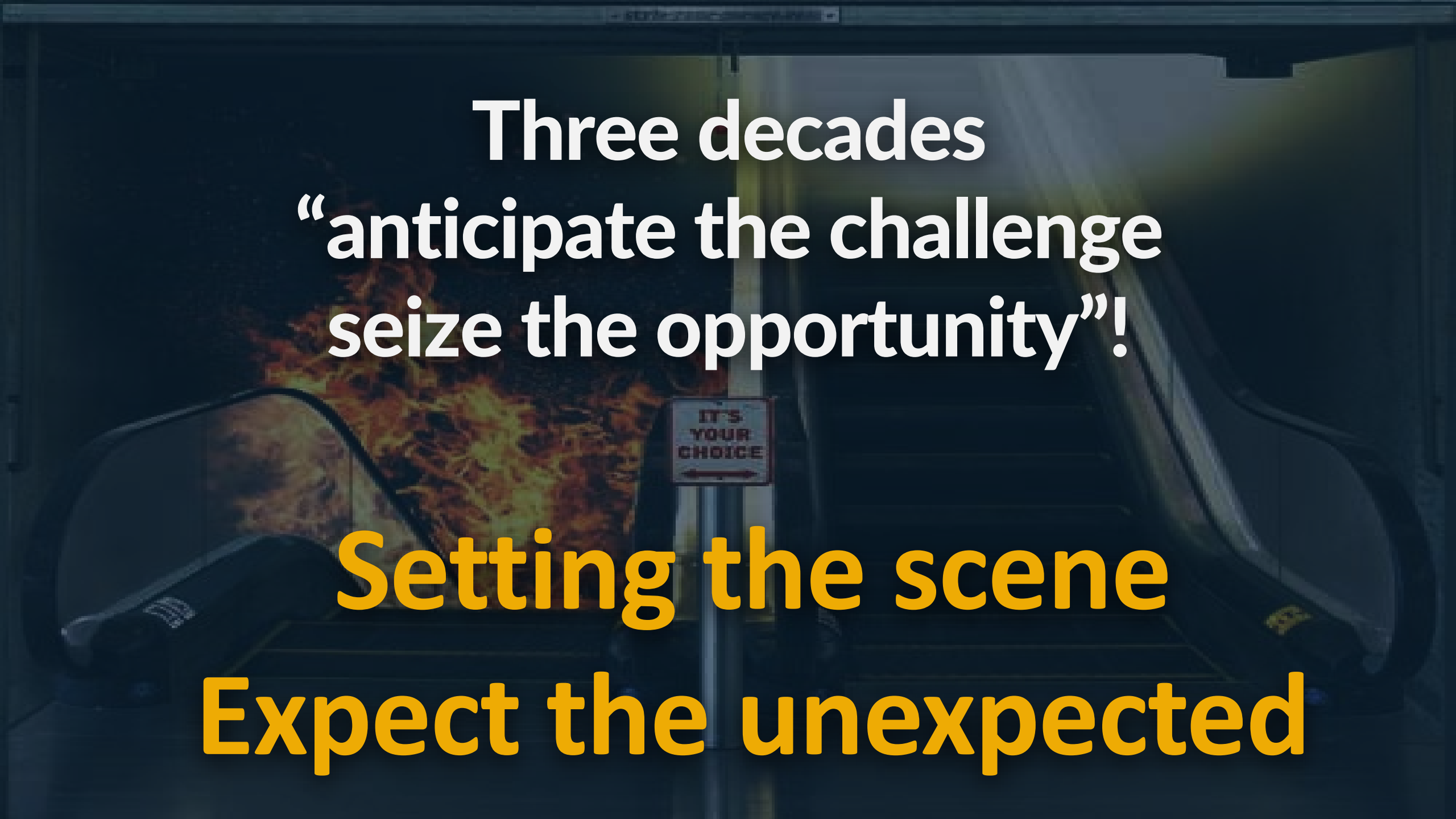












Three decades
“anticipate the challenge
seize the opportunity”!

Setting the scene

Expect the unexpected

Equipped Prepared Ready

Australia's National Critical Care and Trauma Response Centre (NCCTRC) maintains …

… a permanent Australian Medical Assistance Team (AUSMAT) response capability as a part of its role in Australian readiness capability for local, national and international disaster responses … and …

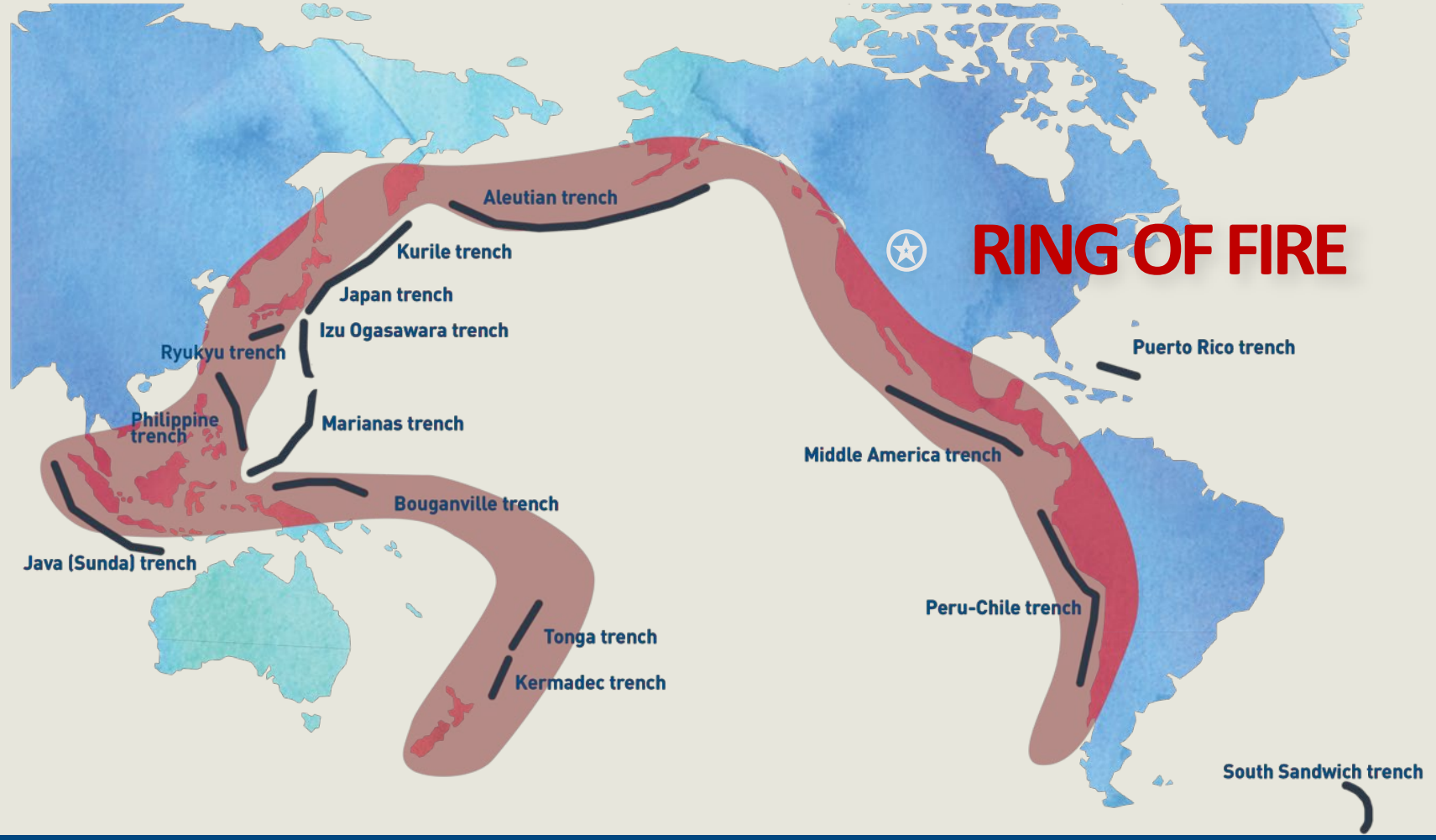
From February 2019 … >73 AUSMAT Deployments!

NATIONAL CRITICAL CARE AND TRAUMA RESPONSE CENTRE

Challenge #1

Location

Cyclone - Floods - Fire - Earthquakes - Public health



Challenge #2

Poly-Crisis and Uncertain World

- **Sudden onset events** – natural, man-made, combination;
- **War and conflict** – Gaza, Crimea, Sudan, Ethiopia, Armenia, Georgia, Iran … and so on …;
- **Refugee movements**, displacement, poverty, tensions …;
- **Public health and communicable disease** outbreaks and pandemics;
- **Fiscal and geo-political challenges** and “National” agendas;
- **The Fourth/Fifth Industrial Revolution AI** … the Cognitive Age;
- **Climate change** – Indo-Pacific impact COP (Tuvalu, Nepal …..!);

Challenge #3

Royal Darwin Hospital (RDH) 1994

2 FT anaesthetists

1 FT surgeon

Orthopaedic registrar

0.25 ophthalmologist

0 intensivist

0 ENT specialist

0 renal physician

0 ED consultant

0 rehabilitation specialist

0 cardiologist

0 neurologist

0 microbiologist

Fly-in obstetrics & gynaecology (O & G)

Photography & Artwork - Peter Farkas

Challenge #4

Unique NT environment

Climate

Remote, disparate-unforgiving terrain, vast distances

"*Professional wilderness perception*"

Small but often "*highly vulnerable*" population

Workforce often transient

Recruitment and retention issues

Community expectations

Capacity to deliver (fiscal environment – at times obscure visions)

Challenge #5

A drive to recruit

Build a matrix to identify needs and guide recruitment efforts

Keys

Sell the (clinical) opportunity
Address the concern of "…a professional wilderness" … Academic opportunity/recognition
Provide security – consider family, accommodation, relocation, remuneration

Celebrate

A rich clinical environment … an opportunity to make a real difference … First Nations health, rural and remote practice … proximity to Southeast Asia … Flinders Clinical School … Menzies School …Northern Territory (Charles Darwin) University

"It is not the strongest or fittest who survive but the ones with the least resistance to change"

Charles Darwin

"… The real meaning of the spoken word has to be demonstrated by practical deeds"

Nelson Mandela, June 1990

"… if you don't like change … you will like irrelevance even less"

General Shinsek, USA

Be vigilant, plan and prepare … mindful of maintaining Core Business!

Expect the unexpected!

"… An activation or response is not the time to forge relationships or exchange business cards … its' too late!"

Challenge #6

12 October 2002

A “BLACK SWAN“ STRIKES!!!

“AND”

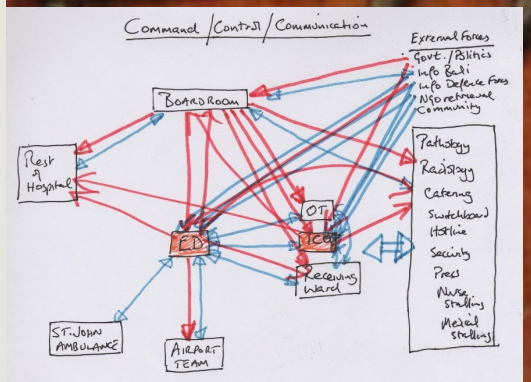
“*DECISIONS*” ARE MADE!

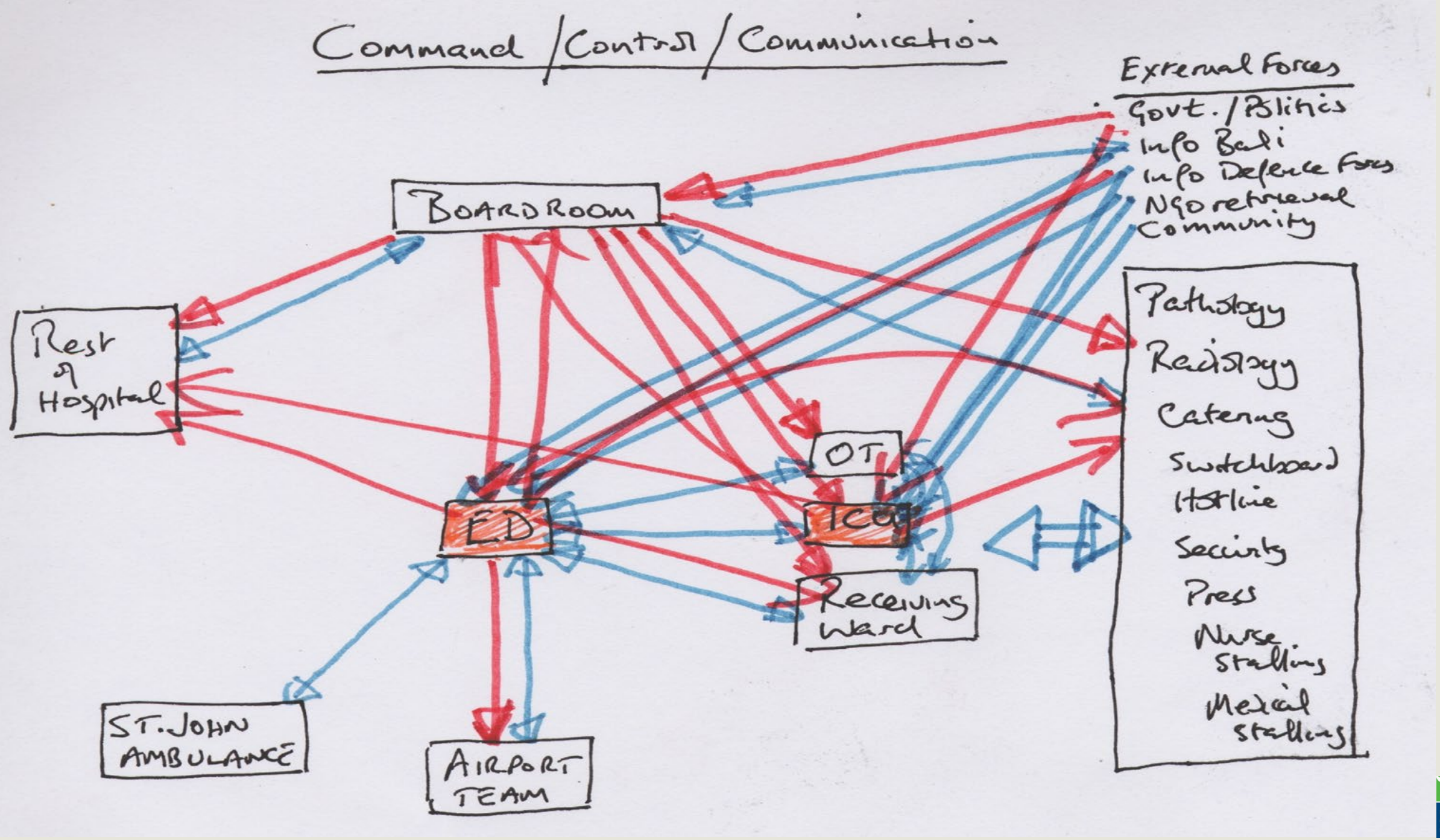
The critical value of preparedness, relationships and network!

Challenge #7

The *Briefings*


Challenge #8
Accuracy (inaccuracy) of intel.
13 October 2002!


Command / Control / Communication
External Forces
Govt. / Politics
Info Radi
Info Defence Forces
NGO retrieval
Community
Board Room
Rest
Hospital
Pathology
Radiology
Catering
Switchboard
Hotline
Security
Press
Nurse staffing
Medical staffing
OT
ED
ICU
Receiving ward
ST. JOHN AMBULANCE
AIRPORT TEAM


Command / Control / Communication
External Forces
Govt. / Politics
Info Bali
Info Defence Forces
NGO retrieval
Community
BOARDROOM
Rest of Hospital
ED
OT
ICU
Receiving Ward
Pathology
Radiology
Catering
Switchboard
Hotline
Security
Press
Nurse Staffing
Medical staffing
ST. JOHN AMBULANCE
AIRPORT TEAM

Challenge #9

75 critical presentations

burns (55) /blast (20)/walk in victims (15)

core business maintained!!

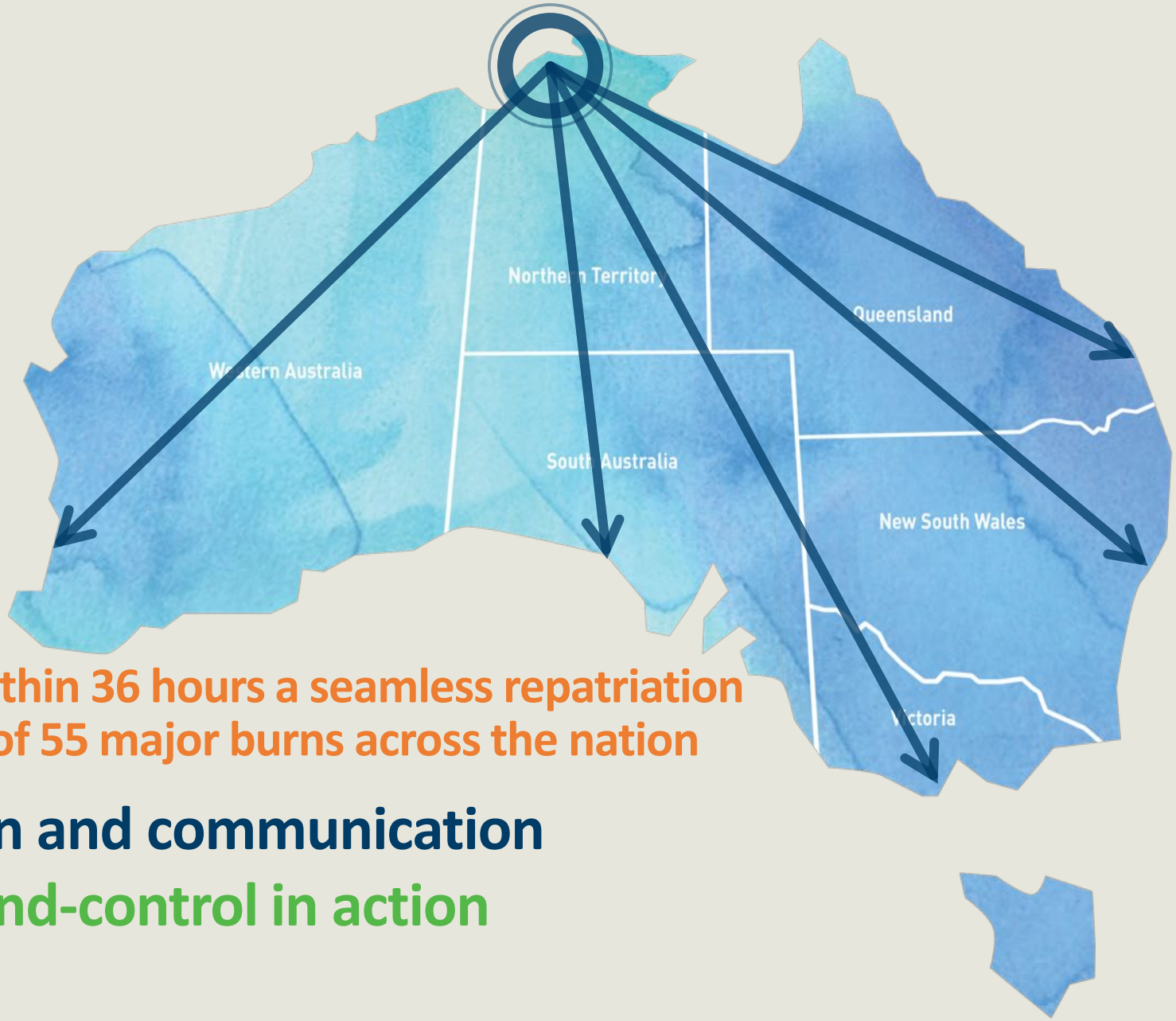


Royal Darwin Hospital - 297 beds - generalist services – no tertiary by-pass.

Critical support DPH - (5 OT, 8 ICU, 4 burns beds, poorly designed ED, 2 Resus Bays)

RESCUE – RETRIEVE – RESUSCITATE – REPATRIATE

NATIONAL CRITICAL CARE AND TRAUMA RESPONSE CENTRE



Within 36 hours a seamless repatriation of 55 major burns across the nation

Collaboration and communication

Command-and-control in action

Challenge #10

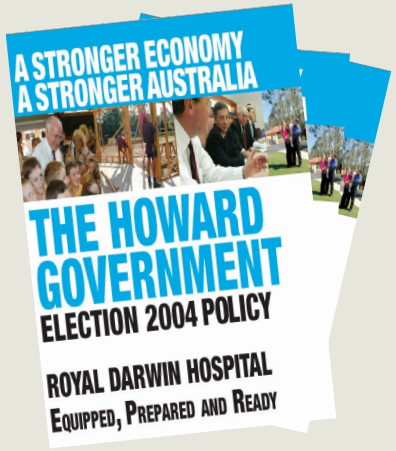
Twenty-four months later
Saturday 30 October 2004
A “*steamy*” 05:00hr call

A positive outcome arising from the ashes of Bali 2002

PM announces in 2004

the establishment of Australia's

National Critical Care and Trauma Response Centre (NCCTRC) and its vision



Challenge #11

EQUIPPED - PREPARED - READY

Positive … But… What and How?

Challenge #12

Small holes, big problems - opportunity





The journey now begins

… with *a sign

*a single hospital office

*a *“borrowed”* shipping container

and

*A VISION!

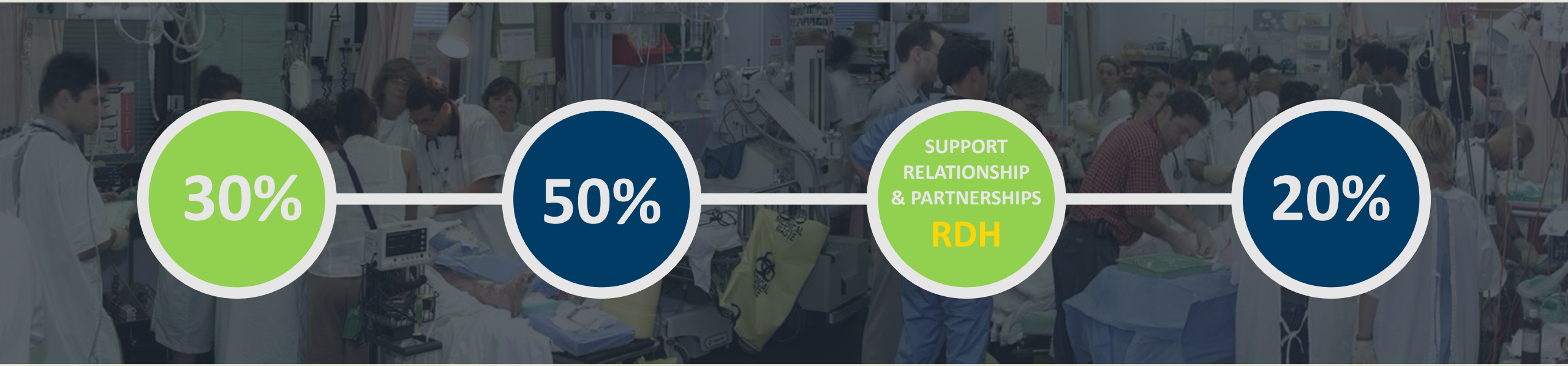


Realisation

Uncertain times and uncharted territory require the certainty of A **preparedness** that is:-

- Contemporary
- Capable with capacity
- Consistent
- Credible
- Compassionate

MISSION PREPARED



INVESTMENT

Teaching, education, exercising, strategic relationships, Asia-Pacific, WHO/EMT mentors and ADF

RESPONSE

*Reconnaissance, respond, rescue, resuscitate, relieve/retrieve, repatriate

PARTNERSHIP

RDH: Infrastructure
SURGE SUPPORT: Staffing, Specialist Trauma Nursing Service

RESEARCH AND INNOVATION

Menzies School
Charles Darwin University
WHO
GOARN

NATIONAL CRITICAL CARE AND TRAUMA RESPONSE CENTRE



The NCCTRC becomes a nationally deployable asset - providing personnel and resources.

Equipped to WHO/EMT verification standard and ACHS accreditation

Prepared by providing extensive AUSMAT training as well as hosting and managing the National AUSMAT database

Ready to Respond as requested – innovating and building relationships and partnerships

NATIONAL CRITICAL CARE AND TRAUMA RESPONSE CENTRE



Members must be

(C) Keen
Competent
Communicative
Credentialled
Collaborative
Compassionate
Credible


EMT TYPE 2
WATER AND PLUMBING
AUSMAT
11 February – 19 March 2008

Pakistan 2010

AUSMAT/DFAT/EMA/ADF

First Civ-Mil AUSMAT

11,000 treated by AUSMAT over ten weeks with ADF wrap-around support



"As opposed to Haiti"

Lessons from Haiti that informed AUSMAT and EMT development:

"… we thought the plan was a good one … we were incredibly naïve … disaster management on the ground was nonexistent … we had no clue the medical infrastructure of the country was so poor."

"… currently there is no one obviously running the show and care is in chaotic at best. MD's are coming in country with no plan of what the are going to do … surgeons that expect to just show up and operate are delusional."

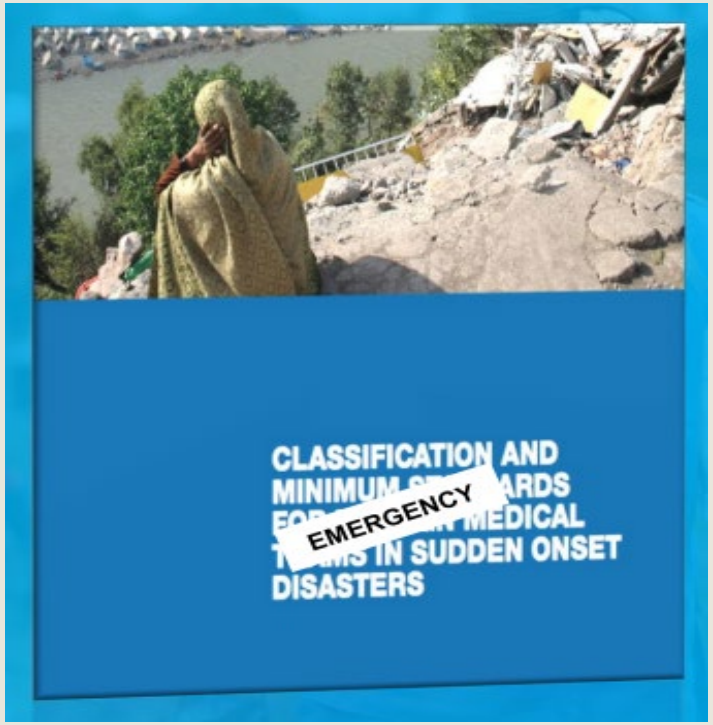
Haiti 30 January 2010

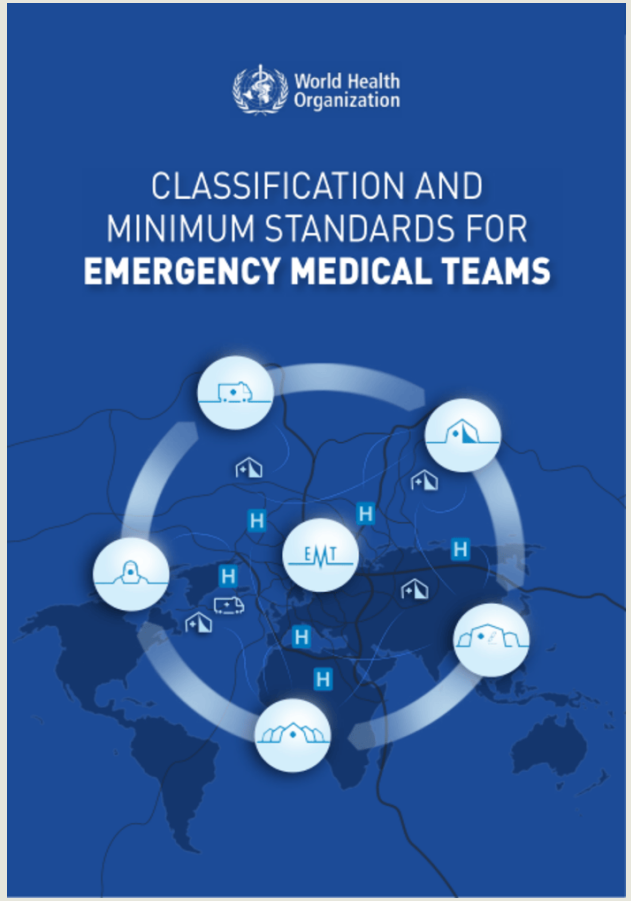


TYPHOON HAIYAN RESPONSE 2013

Updates on the WHO EMT Initiative

- In clinical care and health responses “good intentions” are not enough.
- Principles, standards and quality count, even in “mega-disasters” and complex emergencies.
- Operations support and logistics are as important as technical skill.
- National leadership and coordination is key but may need our support.
- A global governance system was required.





AUSMAT deployments

2004	BANDA ACHE, TSUNAMI
2006	YOGYAKARTA, EARTHQUAKE
2009	SAMOA, PACIFIC TSUNAMI
2009	ASHMORE REEF, EXPLOSION
2010	PAKISTAN, FLOODS
2011	CHRISTCHURCH, EARTHQUAKE
2013	SOLOMON ISLANDS, DENGUE OUTBREAK
2013	PHILIPPINES, TYPHOON HAIYAN
2015	VANUATU, CYCLONE PAM
2015	NEPAL, EARTHQUAKE
2016	FIJI, CYCLONE WINSTON
2017	BANGLADESH, DIPTHERIA OUTBREAK
2018	TONGA, CYCLONE GITA
2018	PNG HIGHLANDS, EARTHQUAKE
2018	THAILAND, CAVE RESCUE
2018	SULAWESI, EARTHQUAKE
2019	SAMOA, MEASLES OUTBREAK

Challenge #10

First: Samoan 2019-2020 Measles Outbreak
Second: COVID-19 Pandemic

Response

demonstrable flexibility and adaptation:

3 years plus duration

Retrievals (China and Japan 2020)

Responses - International and domestic

Residential Quarantine - Howard Springs gold standard facility

Resilience - Mentoring and Support

Research



AUSMAT

Christmas Island

30 January — 24 February 2020

- AUSMAT tasked to support Australians Aero-retrieval (QANTAS) repatriated from Wuhan China
- 25 AUSMAT personnel deployed
- First cohort: 242 people (QANTAS)
- Second cohort: 36 people (Air NZ/QANTAS)
- Laboratory specialist deployed to support COVID-19 testing among the quarantined cohort.



AUSMAT

Howard Springs

9 February — 5 March 2020

- 268 Australians repatriated from Wuhan China on 9 February 2020
- 171 Australians repatriated from the Diamond Princess cruise ship in Japan arrived at the Howard Springs Quarantine Facility on 20 February 2020, remaining quarantined until 5 March 2020.

AUMAT MISSIONS

1 July 2024 to current

Vanuatu - Earthquake Response

December 2024 – January 2025



197 Expressions of interest

27 deployment roles

- Nurse
- Medical/Doctor
- Logistician
- Allied Health

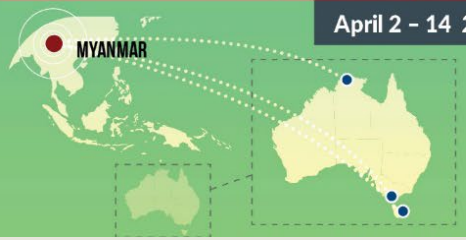
3 Teams deployed





Myanmar - Earthquake Response

April 2 – 14 2025



5 Team members

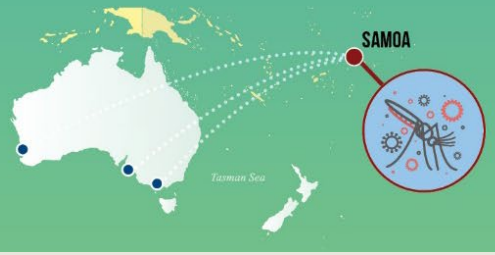


4 deployment roles

- Nurse and Midwife
- Medical
- Logistician
- Allied Health

Samoa - Dengue Outbreak

27 August – 13 September 2025



4 Team members

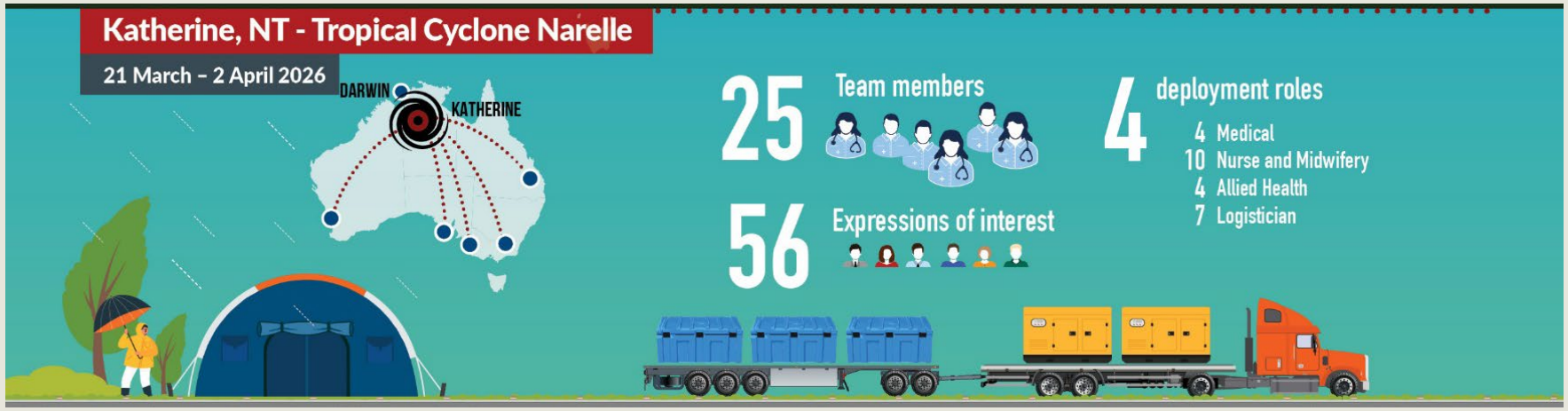


3 deployment roles

- Infectious Disease, Public Health and Epidemiology Specialist
- Paediatrician
- Emergency Specialists



NZMAT deployed a total of 31 personnel across two rotations bringing expertise in emergency medicine, paediatrics, public health and clinical logistics (New Zealand Ministry of Health 2025). AUSMAT's contribution included four specialists.


Katherine, NT - Tropical Cyclone Narelle
21 March – 2 April 2026
DARWIN
KATHERINE
25
Team members
4
deployment roles
4 Medical
10 Nurse and Midwifery
4 Allied Health
7 Logistician
56
Expressions of interest



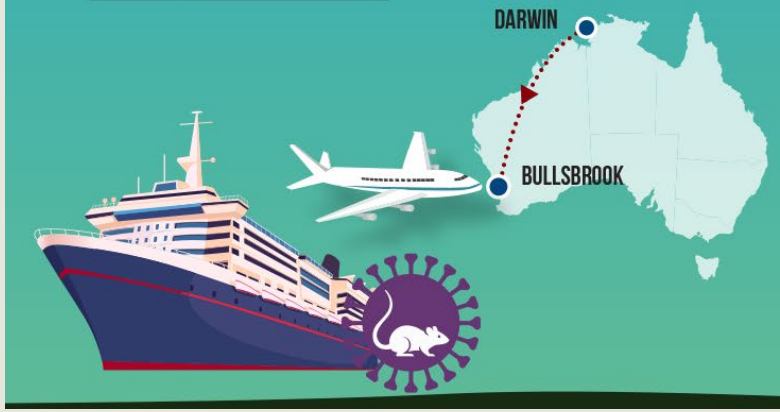

AUSMAT
NURSE
AUSMAT
LOGISTICS




NATIONAL CRITICAL
CARE AND TRAUMA
RESPONSE CENTRE

Bullsbrook, WA – Hantavirus Repatriation

12 May – 23 June 2026



8 team members

4 deployment roles

- Doctor
- Registered Nurse
- Logistician
- Operational Support

NCCTRC deployed 8 personnel over 42 days to manage the quarantine of 6 passengers from MV *Hondius*

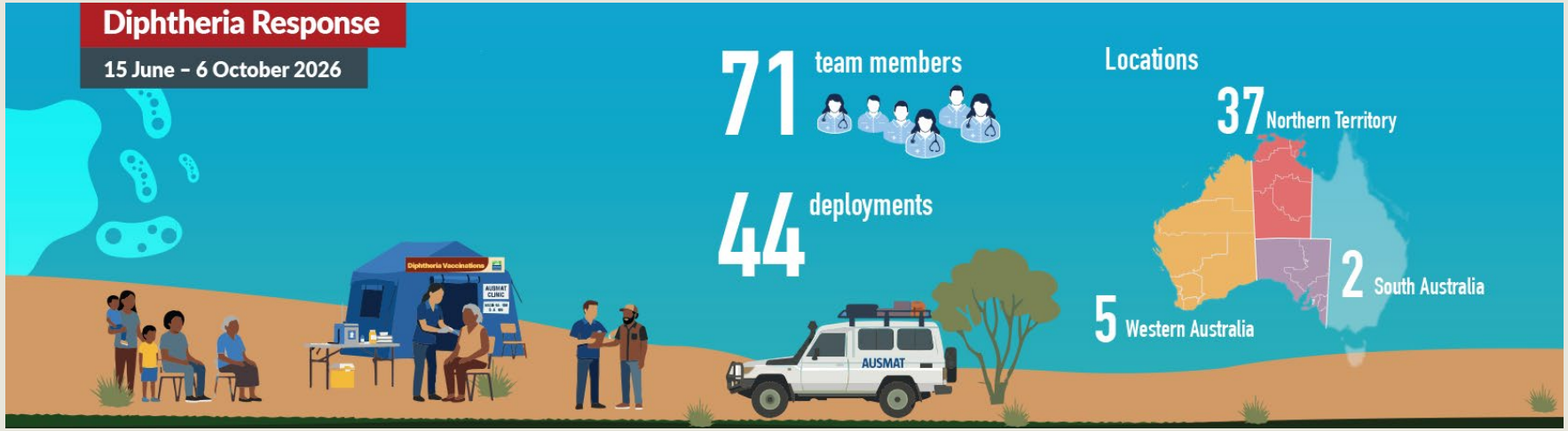











Diphtheria Response
15 June – 6 October 2026
71 team members
44 deployments
Locations
37 Northern Territory
2 South Australia
5 Western Australia
Diphtheria Vaccinations
AUSMAT CLINIC
AUSMAT


DIPHTHERIA


ENVIRONMENTAL HEALTH VEHICLES ONLY.
PLEASE DO NOT PARK IN FRONT OF THE SHED
THANK YOU!



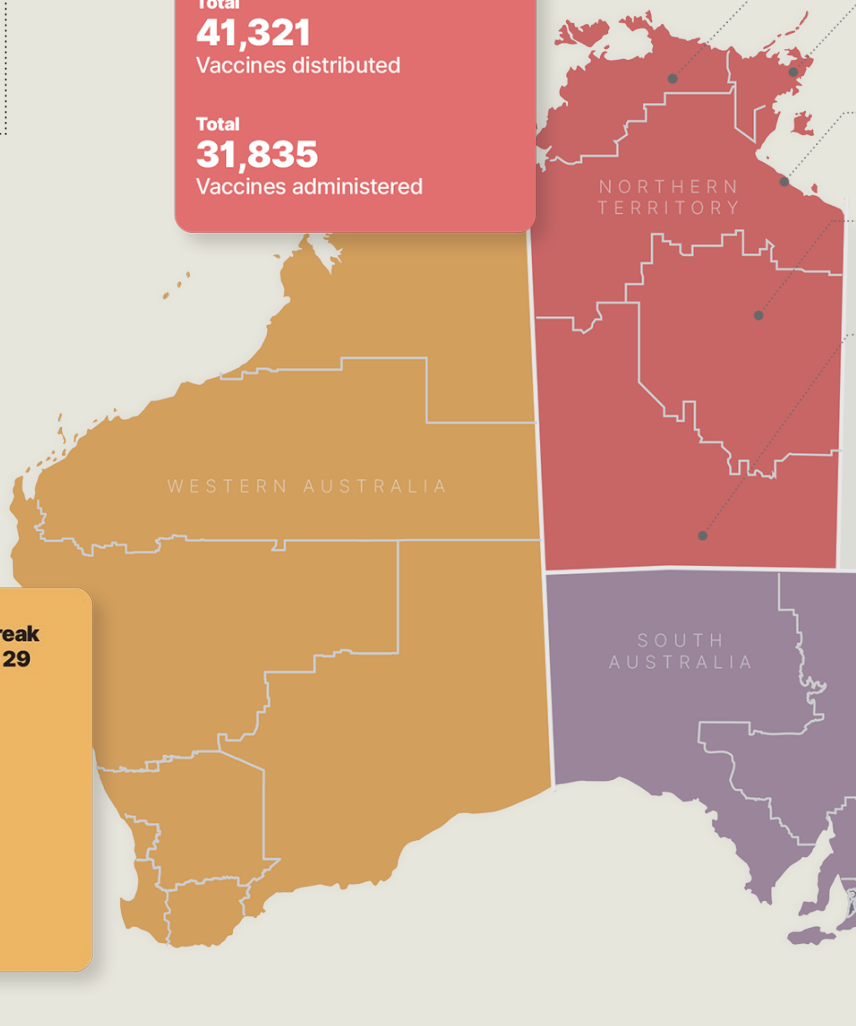
Diphtheria Outbreak Data

This data captures diphtheria vaccination distribution and administration for the population aged 10+ in regions with outbreaks

Northern Territory outbreak response since 1 May – 29 September 2026

Total
41,321
Vaccines distributed

Total
31,835
Vaccines administered



Top End
17,605 Distributed | 16,914 Administered | 51%* of 90% target

East Arnhem
3,891 Distributed | 1,979 Administered | 37%* of 90% target

Big Rivers
5,819 Distributed | 3,455 Administered | 56%* of 90% target

Barkly
3,002 Distributed | 1,129 Administered | 45%* of 90% target

Central Australia
9,589 Distributed | 8,358 Administered | 63%* of 90% target

Vaccines distributed by NT Health

SA 770
WA 645

* Percentage of Indigenous people aged 10+ considered up to date with diphtheria immunisation.

Western Australia outbreak response since 4 June – 29 September 2026

Total
17,803
Vaccines distributed

Total
12,287
Vaccines administered

South Australia outbreak response since 5 June – 29 September 2026

Total
5,708
Vaccines distributed

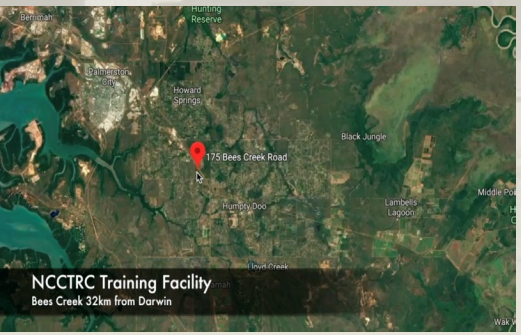
Total
13,277
Vaccines administered

Bees Creek
Training Facility

AUSMAT training, while nationally coordinated, is housed at the NCCTRC Headquarters. It includes participants and faculty with a mix of professions, skills, and jurisdictions.

Training has been delivered in the NT since 2010, and at Bees Creek since 2017, facilitated by the NCCTRC and a national AUSMAT faculty.

The 50-acre austere environment simulates deployment and is fully equipped to residentially accommodate, train, exercise, and simulate.











Bali to Bees Creek

AUSMAT Training (sweat & tears)

- Selection, training, evaluation and education are key priorities for the NCCTRC
- The training program offers many diverse opportunities across a broad range of specialties and represents a major investment in trauma and disaster (and now public health) training for clinicians across Australia and the Asia-Pacific
- Our aim is to enhance preparedness through the provision and delivery of teaching, training and practice throughout the region





Capability

WHO-verified and ACHS EQuIP6-accredited
A self-sufficient healthcare campus

AUSMAT is an official Australian Government multidisciplinary healthcare team, that may be formally deployed in response to domestic or international incidents where assistance is requested by the impacted government or jurisdiction … and approved through the Australian Government and AHPC authority.

NATIONAL CRITICAL CARE AND TRAUMA RESPONSE CENTRE

AUSMAT

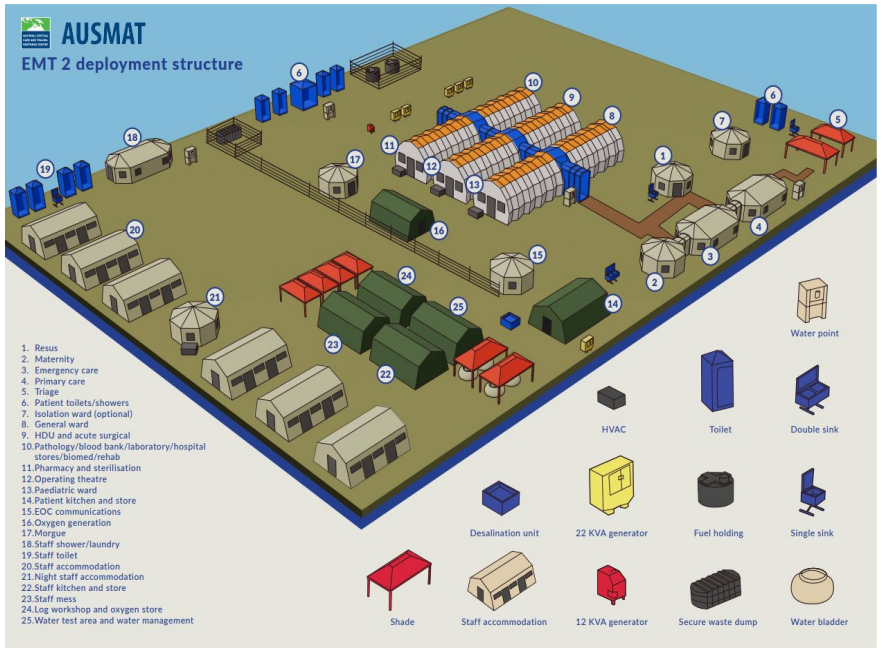


Deployable capabilities

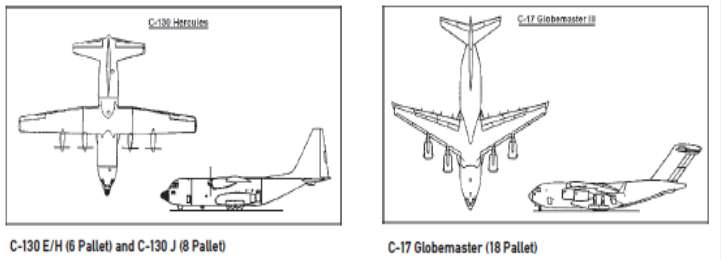
- Needs assessment: 4-6 hours
- Type 1 Mobile Primary and Emergency Care: 12 hours
- Type 1 Fixed/Rapid Response Team: 12 hours
- Type 2 Full Emergency Surgical Field Hospital: 24 hours
- Specialist Care Cells: 6 hours



The Health Campus



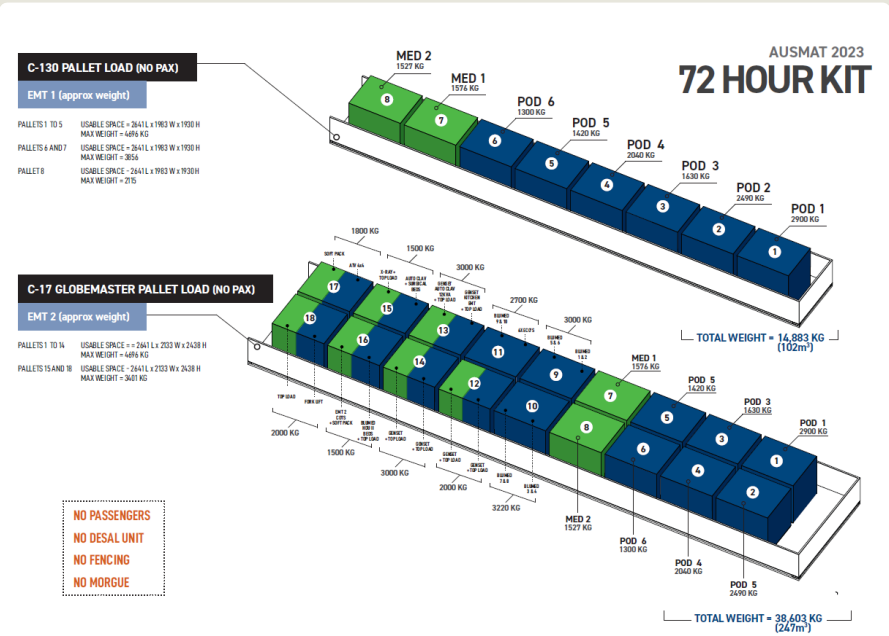




C-130 E/H (6 Pallet) and C-130 J (8 Pallet)

C-17 Globemaster (18 Pallet)





SELF SUFFICIENT HEALTH CAMPUS

AUSMAT EMT

EMT TYPE 1

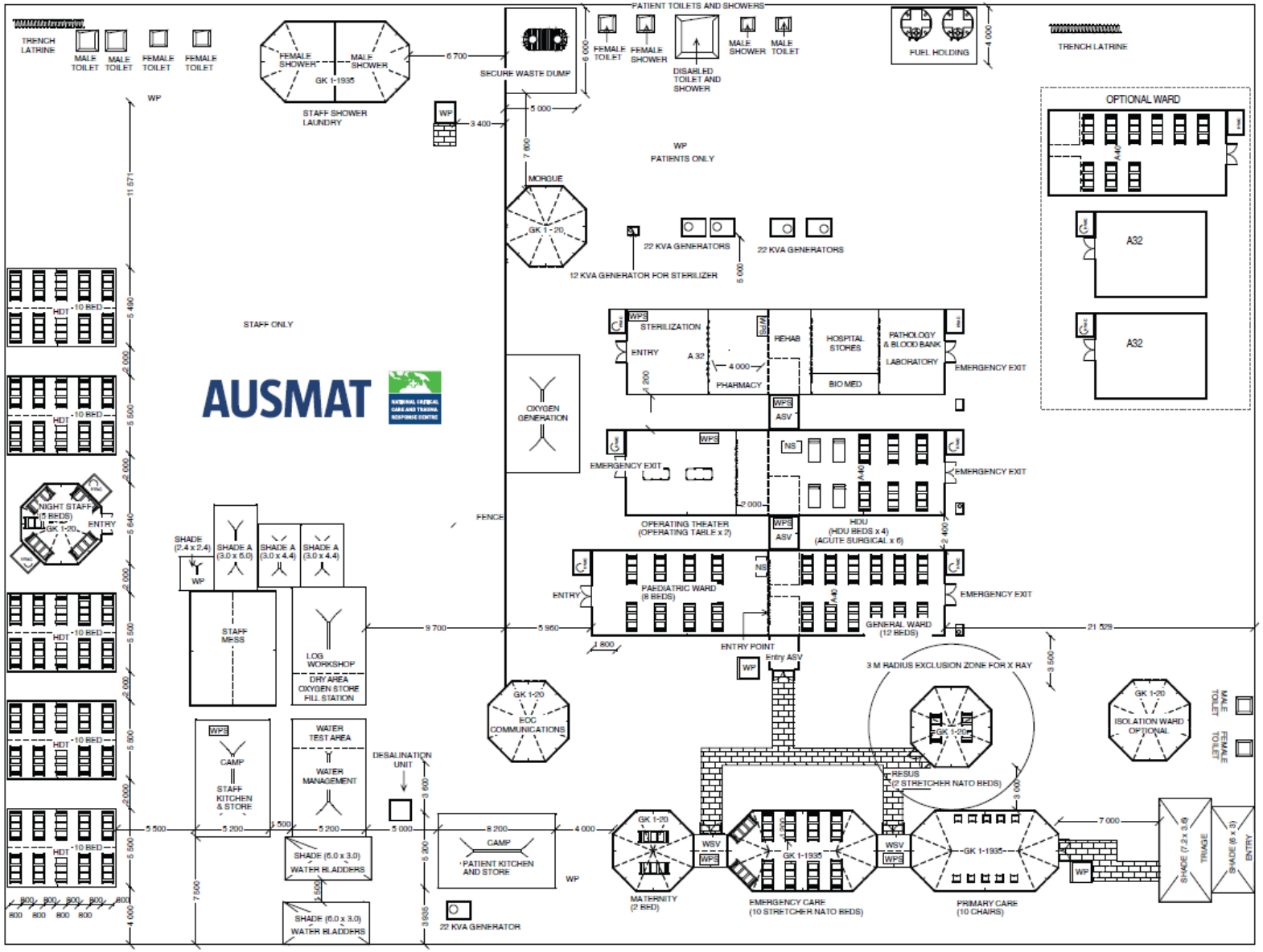
Team Leader	= 1
Medical	= 5
Nursing	= 9
Paramedic	= 2
Radiographer	= 1
Pharmacist	= 1
Logistician	= 5
Rehabilitation	= 1
Health information surveillance system	= 1

TEAM TOTAL = up to 26

EMT TYPE 2

Team Leader	= 1
Medical	= 12
Nursing	= 28
Paramedic	= 2
Radiographer	= 1
Pharmacist	= 1
Lab tech	= 1
Logistician	= 7
Rehabilitation	= up to 3
Health information surveillance system	= 1

TEAM TOTAL = up to 57



RDH Trauma Service

173 trauma patients were seen between 1 July 2026 – 19 Aug 2026

- Trauma Calls = 79 patients
- Trauma Alerts = 53 patients
- ICU = 22 patients
- Wards = 135 patients



RDH Trauma Service

Ongoing learning and self-improvement

Building sound and sustainable networks

Communicate: always listen and respect

Mentors and mentoring

Comply appropriately

Innovate

Self-management

Defining the way forward
Realising the vision
Relationships

($420,000,000 until 2027 plus >$600,000,000
COVID-19 – Howard Springs/DFAT**)**

Equipped – Prepared – Ready

World Health Organization (WHO) verified
The Australian Council on Healthcare Standards (ACHS) accredited
AUSMAT HUB

Relationships **and** Partnerships
nationally and internationally

NATIONAL CRITICAL CARE AND TRAUMA RESPONSE CENTRE

Our Strategic goals:

- Deploy for sudden onset disaster and medical emergency responses in austere and resource poor settings
- Build Northern Australia's surge capacity for trauma and disaster events of significance
- Leverage relationships locally, nationally and internationally to enhance medical disaster and health emergency response capabilities
- Exceed and engage in Continuous Quality Improvement practices for internal and external systems and processes
- Drive and lead professional standards
- Create opportunities arising from unique training, research methodologies and content expertise
- Build a highly skilled and culturally sensitive workforce
- Safeguard ongoing future viability


LEN MOBILE



nationaltraumacentre.gov.au