

Policy Document

Healthcare in Humanitarian Crises and Disaster Management (2025)



Executive Summary

AMSA believes that:

1. All people affected by disasters have a right to receive the highest attainable quality of healthcare and assistance to ensure basic conditions for life with dignity.
2. Protection and safety of all humanitarian actors and noncombatants involved in humanitarian crises should be provided.
3. Humanitarian actors must uphold the ethical principles, codes of conduct and International Law when responding to a humanitarian crisis and providing healthcare services
4. Humanitarian action does not replace the importance of local preparedness and response, but rather serves to support an overwhelmed local response. As a result, it should commit to empower recipient populations through collaboration with a focus on increasing those communities' self-determination.
5. Comprehensive disaster risk reduction strategies should be a priority for international stakeholders, national, and local governments.
6. Disaster recovery efforts should prioritise long-term sustainability by integrating disaster risk reduction strategies into rebuilding efforts, following the "Build Back Better" framework.
7. Humanitarian health research should be prioritised to improve evidence-based interventions, with collaboration between humanitarian organisations, academic institutions, and local researchers.
8. Australian healthcare workers and medical students should have access to opportunities for meaningful engagement and quality training in the principles of International Humanitarian Law and humanitarian action, disaster management and global health education. Any engagement with a crisis should come with adequate security, protection, and mental health support.

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Policy Points

AMSA calls upon:



1. The Federal Government of Australia to:

- a. Promote the experience and expertise derived from Australia's history of responding to disasters, while recognising that different vulnerabilities, community needs, and governments in foreign nations require tailored disaster responses;
- b. Develop policies which demonstrate commitment, willingness, and the ability to enforce 'do no harm' approaches in humanitarian action (including, but not limited to, preventative protection, responsive protection, and remedial protection);
- c. Expand key humanitarian partnerships to include public health, veterinarian policies, and agricultural and environmental health specialists to reflect core principles of One Health and engagement of multidisciplinaires in disaster response and recovery;
- d. Continue to explore effective and evidence-based means of engaging and investing in foreign development and disaster prevention, mitigation, and preparedness in addition to direct financial transactions;
- e. Require transparent reporting and valid evidence that Australian foreign aid and humanitarian funding is contributing to, and enhancing, disaster prevention and mitigation to reduce the demand on disaster and humanitarian response;
- f. Address the differences in funding humanitarian actions in rapid onset disasters versus protracted disasters and crises by embedding relevant economic and funding standards in existing accountability frameworks that are driven towards ethical and sustainable aid investments;
- g. Require those receiving foreign aid and investments from the Australian Government to provide transparent and periodic reporting of community, animal and environmental impacts and sustainability to the best of their ability, recognising this can be difficult to achieve in acute humanitarian crises;
- h. Develop auditable, evidence-based and risk-informed standards of disaster preparedness and mitigation to guide and assess foreign funding and humanitarian action while considering common barriers to effective disaster preparedness;
- i. Demonstrate commitment to the Global Compact for Safe, Orderly and Regular Migration and to embed refugee assistance and resettlement into humanitarian response and recovery frameworks. In doing so, we also call upon the Australian Government to demonstrate an ongoing commitment to ensuring that the work of other governments to uphold this compact is not obstructed or impeded by Australian action;
- j. Establish and maintain a register of health professionals with the skills to assess and address the specific mental health needs of, and the wellbeing threats experienced by, first responders; and

- k. Prioritise research into understanding baseline levels of wellbeing threats faced by domestic first responders and how domestic disaster responses modify these risks.

2. The State Governments of Australia to:

- a. Prioritise ethical and sustainable disaster management practices and boost community resilience through targeted vulnerability and risk reduction;
- b. Implement collective trauma and mental health care throughout the disaster management strategy, with particular consideration and support provided for vulnerable and marginalised groups; and
- c. To develop culturally sensitive and robust mortuary and coronial management strategies, in conjunction with emergency management services, to minimise the impact of these disaster management activities on collective trauma.

3. The Federal and State Governments of Australia to:

- a. Increase efforts to address climate change in line with disaster risk reduction principles and in keeping with One Health principles;
- b. Prioritise investment in prevention and mitigation strategies based on hazard and vulnerability assessments to increase the cost-effectiveness of investments;
- c. Commit to restricting resilience discourse and strategies to protect the vulnerabilities of individuals whilst also holding communities accountable for the promotion and inclusion of individuals;
- d. Recognise the presence and burden of pervasive threats to first responder wellbeing and mental health which threatens Australia's capacity to respond to domestic disasters; and
- e. Develop an adequate workforce of humanitarian responders to reduce burden on the Australian Defence Force (ADF).

4. The international community to:

- a. Demonstrate commitment to Disaster Risk Reduction by:
 - i. Prioritising risk reduction approaches and activities through funding and action;
 - ii. Recognising and addressing the social determinants of health as pertinent modifiers of risk;
 - iii. Conducting evidence-based hazard and vulnerability assessments which use meaningful community engagement to establish and understand the relevant needs, strengths, and expectations of the relevant population;
 - iv. Undertaking mitigation and preparedness activities which demonstrate a reduction in the reliance on external assistance and the potential need for humanitarian action in the future; and
 - v. Ensuring strong supply chains for healthcare services to provide surge capacity;
- b. Adopt and embed the “Build Back Better” model in relevant disaster management and humanitarian response frameworks;

- c. Strengthen public health information systems as part of a disaster resilience strategy in order to facilitate the conduction of humanitarian research; and
- d. Formally recognise International Humanitarian Law in humanitarian frameworks and domestic law, including legislation at the State level to protect the Red Cross, Crescent, and Crystal emblems, and demonstrate a commitment to prosecute citizens who violate International Humanitarian Law in foreign nations, whether operating under the banner of humanitarian actors or otherwise.

5. Humanitarian organisations and actors to:

- a. Ensure that operators uphold the Protection Principles, Minimum Standards, and Core Humanitarian Standards, when undertaking humanitarian aid or action;
- b. Ensure that, at the organisational and individual level, the Principles of Conduct for International Red Cross and Red Crescent movement and Non-Governmental Organisations in Disaster Relief is enacted during humanitarian responses;
- c. Demonstrate commitment to self-autonomy and the empowerment of recipients of humanitarian action by, at a minimum:
 - i. Initiating humanitarian responses only if local healthcare systems and/or resources have been overcome, or are reasonably predicted to be overcome;
 - ii. Allowing affected communities to drive recovery activity planning and implementation;
 - iii. Providing support according to needs-based assessments, limiting the development of increased long-term reliance on external aid; and
 - iv. Ensure marginalised, disadvantaged groups and vulnerable populations are provided appropriate and equitable support and access to recovery services;
- d. Develop and deliver rigorous pre-departure training for personnel deployed to perform humanitarian action. Education, as a minimum, should include:
 - i. Protections and obligations under international humanitarian law, as relevant to the role of individuals and organisations;
 - ii. Cross-cultural awareness;
 - iii. Communal living and social skills; and
 - iv. Sensitivity regarding socio-political and environmental issues relevant to the region of deployment;
- e. Demonstrate commitment to humanitarian worker wellbeing by, at a minimum:
 - i. Ensuring protection of humanitarian workers in humanitarian crises areas and if humanitarian workers are targeted, calling on relevant parties for investigation and implementation of punitive measures if possible;
 - ii. Maintaining clear, open dialogue with workers, to involve them in decision making, give ways to voice concerns, and recognise personal and collective achievements;

- iii. Ensuring effective debriefing and adequate “down-time” occurs following return from deployment and prior to re-deployment to ensure continued welfare support;
- iv. Recognising the importance of debriefing in reducing the incidence of post-traumatic stress in aid workers and constructing policies that ensure high quality, timely debriefing;
- v. Providing humanitarian workers with regular and specific mental health counselling and support services regardless of the nature of deployment, perceived risk of trauma, and self-reported capacity to cope with stressors faced during deployment;
- vi. Routinely screening new and existing aid workers regarding baseline threats and supports of mental health, and developing programs to enhance resilience and plan proactively for potentially required supports; and
- vii. Training staff to detect and respond to both wellbeing threats and staff requiring assistance

f. Reject the commercialisation of humanitarian volunteering, rather integrating opportunities for volunteering into humanitarian response frameworks which consider, at a minimum:

- i. Obligations to host or recipient communities;
- ii. Respect for operational and economic transparency;
- iii. Acknowledgement of power imbalances;
- iv. Adherence to performance standards; and
- v. Appropriate follow-up opportunities;

g. Consult with local authorities and form strong, trusted relationships prior to engaging in humanitarian work, alongside combating the spread of misinformation; and

h. Commit protected funding towards humanitarian health research and to integrate research operations into their response strategies and, in doing so:

- i. Work with global academic institutions to establish frameworks and guidelines for humanitarian and crisis research; and
- ii. Work with and empower local research organisations in communities affected by humanitarian crises to facilitate humanitarian health research in a community-led way.

6. The International Red Cross and Red Crescent Movement to:

- a. Enhance regulations supporting protections in non-armed conflict and remedy international humanitarian law and the emerging responsibility to protect (R2P) concept to provide clear guidance to humanitarian and security actors;
- b. Expand the current international humanitarian law mandates and guidelines to directly and specifically address cyber warfare attacks and urbanisation of conflict; and
- c. Develop and provide access to education for key humanitarian actors and stakeholders, including the specific protections and obligations relevant for each group (e.g. armed forces, security protection, health workers, general public).

7. The United Nations to:

- a. Establish international standards for humanitarian governance, including proficiency and qualification standards in staff recruitment, training and supervision, as well as incident reporting and organisational response; and
- b. Empower governments receiving humanitarian assistance to monitor the impact of humanitarian actor engagement and service delivery in order to hold humanitarian actors accountable for deleterious effects to established health systems and public health.

8. Australian medical schools to:

- a. Educate medical students on disaster management principles, international humanitarian law (particularly as it applies to health workers), and ethical humanitarian practices as well as the broad teaching areas of Global Health outlined in AMSA's Global Health and the medical curriculum policy;
- b. Highlight opportunities for employment or engagement in disaster and humanitarian medicine while ensuring benefits to both students and the host community with adequate student support including high-quality pre-departure and post departure-briefings as outlined in AMSA's Global Health and the Medical Curriculum Policy;
- c. Provide education regarding disaster vulnerability and community capacity as well as promotion of opportunities to become accredited mental health first aid providers to enhance community resilience and assist colleagues in distress; and
- d. Create a supportive environment where students can advocate for countries experiencing humanitarian crises without being penalised if within the code of conduct of doctors and their university.

Background

Humanitarian crises occur when widespread threats to human life, safety, health and well-being result from a range of different precipitating, exacerbating, and perpetuating factors.⁽¹⁾ The United Nations (UN) defines a complex humanitarian emergency (CHE) as a humanitarian crisis in a region (whether geographically, politically, or socioeconomically defined) in which human suffering results from the consequences of total or considerable breakdown of authority due to conflict.⁽²⁾ A CHE typically requires a targeted and coordinated international response extending beyond the mandate, capacity, or jurisdiction of any single and/or ongoing UN country program.⁽²⁾

On the other hand, disasters are defined as adverse or extreme events which cause such serious disruption of community or societal function that widespread human, material, economic, and environmental losses result.⁽³⁾ Disasters also overwhelm the community's ability to manage the impacts that follow. Broadly, disasters can be classified as either man-made (which can be further divided into socio-technological disasters or warfare) or natural (which can be further divided into climatological disasters, geophysical disasters, hydrological disasters, extraterrestrial disasters and biological disasters).

The increasing frequency and severity of natural disasters which, in part, is attributed to climate change⁽⁷⁾ introduces the concept of One Health to disaster and humanitarian crisis management. One Health describes a philosophy and approach that recognises that human health, animal health and environmental health are interconnected and that successful management of one sector is dependent upon the others.⁽⁸⁾ One Health therefore involves applying a coordinated, collaborative, multidisciplinary and cross-sectoral approach to address potential or existing risks that originate at the animal-human-ecosystems interface.⁽⁸⁾

Disasters are diverse in their nature and often require targeted management approaches and interventions. Disaster management is an integrated process of planning, organising, coordinating and implementing measures that are needed for effectively dealing with its impact on people.⁽⁹⁾ This comprises four phases: prevention, preparedness, response and recovery (PPRR) to ensure a balance between the reduction of risk and enhancing community resilience, whilst ensuring effective response and recovery capabilities.⁽¹⁰⁾ This policy document aims to use this framework to approach how to best deliver healthcare in areas of humanitarian need.

The Australian Context.

In Australia, humanitarian action and foreign aid funding is led by the Department of Foreign Affairs and Trade in partnership with several existing partnerships with government and non-government actors.⁽¹¹⁻¹³⁾ The core function of Australia's humanitarian aid is to promote its national interests and regional stability through targeted approaches promoting sustainability, encouraging economic growth, and reducing the impact of poverty.⁽¹²⁾ Significant portions of aid funding and investment

occurs within the Indo-Pacific region due to its strategic importance, geographical relevance, dense population, and vulnerability to natural and other disasters.(12) However, key bodies reinforce that these strategic interests should not limit Australia's investment or capacity to undertake humanitarian action beyond this geographically refined region.(14) This briefly provides the essential background prior to discussing Australia's approach to disaster and humanitarian crises management globally.

PREVENTION & MITIGATION

Humanitarian crises are becoming more frequent and complex, particularly in relation to climate change, but still often arise following a triggering disaster or event.(15) Globally, between 1991-2005, 3.5 million people were affected by disasters, with economic losses totalling US\$1,193 billion.(16) Communities and populations experience a disaster when they experience human suffering due to underlying vulnerability and poorly managed hazards.(16) To counteract this, populations and communities should try to undertake prevention and mitigation activities within their means. This includes all activities which collectively prevent disasters from occurring.(17) Mitigation, by comparison, consists of activities and measures undertaken to minimise or limit the impact of disasters if, or when, they occur.(17) Therefore, although prevention and mitigation have different impacts on disaster impacts both are important protective measures in the context of disasters.

Evidence-Based Prevention & Mitigation.

Of the four major phases within the disaster management cycle, governments have disproportionately focused the majority of disaster funding and action on response.(18) In Australia and the US respectively, only 3% and 4% of disaster spending is allocated towards disaster mitigation.(19) Despite this trend, effective prevention significantly reduces costs of rebuilding infrastructure, as 4 US Dollars (USD) is saved with every 1 USD spent on risk reduction. This demonstrates the increased importance of governments taking into consideration the sustainability benefits of effective disaster risk reduction, and integrating disaster risk reduction into national legislation, policy and planning frameworks.(18, 20)

A critical activity when undertaking disaster risk reduction is identifying and examining key hazards and population vulnerabilities to establish priorities.(21) Community participation is critical in this process to ensure all stakeholders have input, community strengths and expectations are evaluated and all the key social determinants of health are considered.(21)

However, this is challenging as risk mitigation requires a collaborative effort across social sciences, humanities, natural sciences, health and public health sectors, and civil engineering(18) and thus may require extensive infrastructure and skills that many low-income countries lack. Therefore, the United Nations (UN), World Health Organisation (WHO), international communities and other relevant bodies will also be required to help strengthen global risk mitigation and prevention.

Australia's Contribution to Prevention and Mitigation.

Disaster risk reduction is reported as a key objective of humanitarian action undertaken by Australia.(11) Australia's foreign aid policy reflects the belief that supporting growth within private sectors stimulates overall economic growth enhances the capacity for engagement in disaster prevention, mitigation, and preparedness.(12) Importantly, funding should address vulnerable groups within the population, with Australian policy outlining commitments to ensuring aid funding increase employment and empowerment of women.(12) In aiming to use foreign aid as a means of enhancing disaster preparedness and impact disaster mitigation internationally, Australian priorities include: building infrastructure; facilitating international trade; prioritising key industries including agriculture, fisheries, and water; education and health; and addressing gender and other inequalities.(12)

Development assistance and aid funding can assist foreign governments to increase their disaster prevention and mitigation strategies, including enhanced capacity to protect their population.(23) Additionally, Australia's humanitarian aid, funding, and action should account for the provision of protection to citizens in which the principles of preventive protection are deployed to minimise physical threats or harm.(23) Overall, humanitarian action should increase the capacity for the recipient populations and governments to engage in meaningful mitigation and preparedness activities, reducing the potential requirement for further humanitarian action in the future.(24)

PREPAREDNESS

Disaster preparedness is a set of activities undertaken prior to a disaster or crisis which enable a government or population to respond effectively. This may include the development of evacuation plans, emergency, rescue and relief operation plans, forecasting, and warning systems.(10,21). It also involves maintaining a strong supply chain capable of providing significant surge capacity, and delivering essential medicines, adequately trained healthcare professions, and suitable facilities in an emergency (10,11)

Disaster preparedness is an essential part of risk mitigation and requires the specific needs, cultural considerations and preferences of communities to be taken into account (26). However communities that undertake this process demonstrate increased capacity to address the vulnerabilities of their population and minimise morbidity and mortality impacts arising from disasters and crises.(25)

Many barriers to facilitating effective disaster preparedness exist among health facilities. These include system and process rigidity, optimism bias, poor communication pathways, conflicting messages, and reliance on health systems that are potentially flawed in standard operation to perform in crisis contexts.(27) Risk perception may also be inadequate, as impact severity, rather than likelihood, remains the strongest predictor to efforts to improve community preparedness.(27)

RESPONSE

Responding to a disaster requires key stakeholders to undertake appropriate actions in immediate anticipation of, and in direct response to disasters with the ultimate goal of saving lives, reducing morbidity and protecting critical infrastructure.(10) Disaster response may include the provision of food, water, sanitation, health services, shelter and the protection of civilians.(24)

The ultimate responsibility to respond to a disaster lies with the affected local or regional government, and only when local emergency response capacity is exceeded should external assistance be requested.(29) Thus, any external aid provided must assist the community in managing its own recovery and building their disaster resilience.(26) Hence, humanitarian action must address the root causes and exacerbating factors of the crisis.(14) Part of this includes ensuring that, where possible, economic support for humanitarian responses to a new crisis does not impair existing funding for underlying long-term humanitarian crises and that resources from the healthcare system are not entirely re-directed to the new crisis.(24, 26) Doing this is essential as it demonstrates cost-effectiveness and improves the quality of the national response.(30)

Humanitarian Healthcare Governance.

The efficacy of organisational governance, contributed to by international bodies including, but not limited to, the International Federation of the Red Cross (ICRC), Medicins San Frontieres (MSF), and World Vision, are debatable. Deficits have been identified relating to de-prioritisation of care quality when faced with limited resources, detrimental organisational culture, implementation limitations, lacking evidence to inform crisis standards, and lacking distinction regarding accountability and oversight. Other factors that undermine organisational governance include a culture of underreporting, deficits in systemic quality assurance, narrow and inflexible auditing processes, the absence of training prioritisation and resultant deficits in expertise and competence, and a lack of effective and meaningful feedback uptake.(31) These challenges highlight the need for clearer regulations to address protection gaps, as humanitarian and security actors often lack clarity on accountability, oversight, and implementation.

Australian Humanitarian Response.

The aim of humanitarian action undertaken by Australia is to increase international disaster preparedness and response, especially within the Indo-Pacific region, while simultaneously advocating for adherence to International Humanitarian Law.(11) Once the decision to undertake humanitarian action is made, the Australian Government calls upon existing relationships with a wide range of partners. These include the Australian Defence Force (ADF), Australian Federal Police (AFP), State and Territory governments, humanitarian specialists, Australian Red Cross, UN organisations and several other government and non-government organisations.(11)

Voluntourism in Disaster and Humanitarian Responses.

Voluntourism is assistance rendered by tourists or temporary visitors to a region affected by a disaster, crisis or systemic issue with a stay of less than one year.(32)

In the context of disaster management, voluntourism should promote the construction of tourist spaces and recovery efforts that generate benefits for all stakeholders. Commercialised volunteer tourism has received criticism surrounding its ethical validity as it often fails to pursue the relevant needs of the community and can bring greater disadvantage than benefit and carries the risk of remaining insensitive to local needs and customs, reduction in local knowledge, promotion of community dependency, and irreparable damage to local economies, often criticised for frequent failures to protect dignity, and exploiting vulnerable communities.(32) Voluntourism frequently fails to address systemic problems predisposing community vulnerability, and the short-term timeframe of the work can perpetuate local oppression and reduce community self-sufficiency.(32)

Programs are also highly susceptible to exploitation where external aid paradoxically contributes to the magnification of community inequality and marginalisation.(32) Best-practice guidelines for short-term volunteer opportunities focus on pre-implementation consultation with host communities, proactively addressing power imbalances, respecting agency and reciprocity, establishing systems to maintain transparency, and developing media agreements. Volunteer experiences should ideally maintain a focus on community benefit, volunteer-community interaction and the learning process inherent in the programs, as well providing opportunities for participant reflection.(32)

Humanitarian Action and Standards.

For international operations, there are a series of standards and guidelines that ensure humanitarian aid is ethical, appropriate and effective. The Principles of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief outlines principles humanitarian workers should follow during any humanitarian response which ensure healthcare is provided free of discrimination, builds local capacities and provides accountability. It also emphasises the need to treat people with dignity, be culturally respectful and not use humanitarian action as a tool for personal, religious or political gain.(33) The Sphere Handbook has a comprehensive section on healthcare humanitarianism action standards with a relevant section on Protection Principles which support the right to dignity, humanitarian assistance, protection and security, outlining the role and duty humanitarian actors play in protecting people and providing safety and assistance.(26)

The Core Humanitarian Standards ensure that any humanitarian response is appropriate, relevant, effective and timely. Action must avoid negative effects, particularly having communities become dependent on foreign aid in the long-term. The standards ensure that responses strengthen local capacities and build community resilience to mitigate this. It promotes an evolving and continuously adapting humanitarian response via inclusive feedback systems. The standards require that staff receive appropriate support and are provided with equitable training, and ensure that resources are managed and used only for their intended purpose which can be coordinated by central bodies and stakeholders to ensure equitable distribution and coverage.(26)

The Sphere handbook provides the 'Minimum Standards' that should be achieved in a humanitarian response.

International Humanitarian Law (IHL).

The Internal Committee of the Red Cross (ICRC) was developed for most states to limit the effects of armed conflict on individuals who are not or no longer directly involved in the hostilities of war.(34) The ICRC extends further to restrict the means and methods of warfare and functions to monitor, deliver and protect IHL. To help put these ideas into action, the International Red Cross and Red Crescent Movement developed emblems as protective markings for healthcare workers.(35)

IHL in Disaster Response.

The protection of humanitarian workers under IHL covers medical personnel and extends to individuals involved in administration and transport of patients, medicines or supplies and in the delivery of humanitarian aid as well as religious personnel and civilians not involved/no longer involved in the hostilities of the conflict.(34, 35) In addition to other protections, humanitarian healthcare workers captured by the enemy are not considered prisoners of war and must be released in order to continue carrying out their duties.(34,36). Moreover, under IHL, if during an armed conflict, the civilian population lacks the essentials needed for survival, the party is obligated to facilitate the provision of humanitarian assistance.(37)

Medical Personnel Responsibilities.

Respecting and acting in accordance with International Humanitarian Law while undertaking humanitarian action is a key measure of good humanitarian donorship.(24) Humanitarian workers are obligated to act in accordance with IHL by treating all the wounded and sick humanely, without discrimination, and refuse to engage in the hostilities of the armed conflict.(38) Additionally, they are encouraged to educate authorities of their obligations under IHL to protect healthcare personnel, infrastructure and civilians.(38)

Responsibility to Protect Doctrine.

The Responsibility to Protect (R2P) Doctrine, adopted in 2005 by Member states of the UN, is intended to protect populations against genocide, war crimes, ethnic cleansing and crimes against humanity.(40) While it calls for diplomatic, humanitarian and peaceful measures (40), the use of force may come to be justified to ensure these protections as a last resort.(41) However, R2P, while universally applicable, is not a legally binding principle, lacks clear guidelines on state responsibilities and remains un-established in humanitarian emergencies and disasters. This absence of concrete standard underscores the need for internationally recognised humanitarian governance frameworks (41), including staff proficiency requirements, structured training, and recipient government oversight to prevent harm to health systems and public infrastructure.

Urbanisation of Armed Conflicts.

Armed conflicts are increasingly extending into urban areas, disrupting essential services even when cities are not directly targeted (42). Displacement of people and insufficient food, water, shelter, and medical services are impacting the welfare of civilians and workers.(42) IHL prohibits attacks on civilians, civilian objects and indiscriminate targets as harm may incidentally impact civilians.(42) However, criticisms arise in relation to psychological harm and disease that may occur from an attack.(42) Though foreseeable harm is prohibited, the full extent of these effects is difficult to anticipate. The ICRC emphasises the need for evolving research on combat practices in urban areas to better address mental health and psychosocial consequences and to strengthen harm mitigation strategies.(42) Expanding IHL mandates is essential to ensure clearer guidelines on urban warfare, particularly in protecting civilian infrastructure and holding actors accountable for its destruction. (42)

Cyber Warfare.

IHL prohibits cyber warfare only in the context of armed conflict, aiming to prevent disruption to critical infrastructure and services that support civilian populations. This includes restrictions on the misuse of data by warring parties and spread of misinformation.(43) Expanding IHL mandates to address cyber warfare is crucial to closing legal gaps, ensuring protections extend to the evolving nature of conflict in the digital age.

Other Criticisms of IHL.

Criticisms of IHL have called for the expansion of the IHL framework to cover domestic conflict and non-armed conflict including the consideration of the war on terror and cyber warfare.(37, 39, 44)

Additionally, while most states are bound to the legal obligations outlined in IHL, the implementation is difficult during times of extreme violence because IHL relies heavily on parties upholding their obligations. Since, it has no capacity to enforce any party in breach of IHL to remedy their actions and thus relies heavily on retrospective judicial review and condemnation of actions.

Thus, there are increasing needs for effective teaching of IHL to armed forces and the public, for all parties to act in accordance with IHL and ideally act in the implementation of IHL, and for punishment/enforcement against those in violation of IHL.(34)

RECOVERY

The United Nations International Strategy on Disaster Reduction (UNISDR) defines recovery as the "restoration [and improvement] of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors".(17) Importantly, recovery represents a transition from the provision of immediate relief to ensuring more long-term sustainability, not only through the reconstruction of essential services, but also by increasing capacity to respond to future Crises.(43) This should also include holding responsible parties accountable

for their actions. Engaging with local governments to create recovery plans ensures that communities that are already susceptible to political or economic instability are strengthened, therefore mitigating the cumulative impact of subsequent crisis events. In other words, while recovery may take months or years, it is vital because it precedes, informs and reinforces prevention strategies.

Recovery and Essential Recovery Activity.

Outcomes are better when the affected community can express a high level of autonomy and actively contribute to recovery activities.(45) Humanitarian standards reinforce the importance of recovery led by local institutions, with foreign actors only taking significant steps if national capacity is insufficient.(26) When international agencies are involved, recovery should be based on need, wherein excessive or unnecessary provision of resources is avoided through early planning, ensuring that resources are not used counterproductively, with instead a greater emphasis on community-led solutions to avoid over-reliance on external aid.(29) Essential recovery activities include restoration of healthcare infrastructure, temporary housing arrangements, psychosocial support programs, and health and safety education.

An evidence-based approach to increase post-disaster resilience is the UNs' Building Back Better strategy, which aims to integrate disaster risk reduction measures into "restoration of physical infrastructure and societal systems, and into the revitalisation of livelihoods, economics and the environment".(46) By focusing on three key phases of recovery, reconstruction, and rehabilitation, this framework has had marked success in preventing deaths, re-stimulating economies and reforming community mental healthcare in disasters.(48) Additionally, the Sphere Handbook recognises that special considerations should be allocated for marginalised and disadvantaged groups to ensure they are given equitable recovery support, especially in crises where inequities are magnified.(26) In particular, early and ongoing healthcare service involvement is necessary to ensure that community health needs continue to be met. It has been suggested that gradual multi-phased withdrawal of aid would be ideal.(21)

Humanitarian Actor Wellbeing.

In general, deployment into humanitarian crisis settings predisposes healthcare workers to severe psychosomatic distress, including increased anxiety, depression and burnout, alongside decreased life and job satisfaction.(49) These effects tend not to be self-limiting in a significant majority of repatriates, and can persist for several months post-deployment.(49) While the average worker will experience at least one acutely traumatic event during their deployment, routine exposure to sources of chronic stressors tends to have a more cumulative psychological effect. Workers with an established history of mental illness tend to be more prone to these effects.(49)

Aid workers tend to minimise their distress or resist support due to their perception of the 'culture' of humanitarian work, and organisations themselves do not provide counselling or support unless requested. Consequently, some workers engage in self-destructive, dissociative behaviours when working overseas.(50) Alongside occupational stressors, humanitarian aid workers' perception of the organisational

support they receive has correlates with mental wellbeing, with factors like under-supervision, lack of communication and lack of appreciation aggravating pre-existing anxiety.(51)

Attacks on healthcare workers are also numerous, with 808 total attack victims recorded from 1997 to 2019 who were either killed, kidnapped or wounded during their deployment.(52) In the highest incidence contexts, attacks ranged from aerial bombardment to bodily assault, kidnapping, rape or sexual assault, shooting and explosives, amongst others.(52)

Although pre-deployment debriefing (PDB) has been shown to reduce the incidence of posttraumatic stress experienced by healthcare workers(53), these programs are either absent or inappropriately implemented by many humanitarian aid organisations. Evidence show that PDBs enable workers to prepare for the anticipated stress of working in an environment with a lack of sociocultural support, especially with the addition of cross-cultural training modules.(54) However, NGOs tend to rely instead on aid workers having intrinsic motivation and initiative to read about their future host country and undertake independent preparation, such that only one-fifth of workers receive any PDB, and just 7% found it to be adequate.(54) Given the post-assignment to re-deployment period is where aid workers are most likely to 'fall through the cracks' in terms of health, wellbeing and preparedness(55), this is the time where systematic debriefings would be the most effective.

RESEARCH

Despite the recognition of humanitarian health research as a priority in lifting the quality of humanitarian aid, there remains a significant lack of evidence to inform public health interventions in humanitarian crises.(5) Available evidence is criticised for being methodologically flawed, derived from anecdotal evidence, or derived from stable and high-income settings that significantly differ from those seen in humanitarian crises.(5)

There are numerous barriers to the effective conduction of humanitarian research. Humanitarian actors are often overstretched and underfunded, leading to the de-prioritisation of research and public health systems are often disrupted and/or politically-biased, limiting opportunities for safe and satisfactory systematic data collection and analysis.(5) Additionally, low-resource, unstable, and often unsafe settings make the application of traditional research designs, obtaining informed consent, and collaborating with local and international actors exceptionally difficult.(5)

Overcoming these barriers requires productive partnerships between humanitarian organisations, academic institutions and local actors in health and research.(5) It also requires the empowering of local research institutions and experts to increase disaster preparedness, through the development of training programmes for specialised research skills and the strengthening public health information systems. (5)

DOMESTIC DISASTER MANAGEMENT IN AUSTRALIA

In Australia, state/territory governments and relevant local governments hold primary accountability and responsibility for the management of domestic disasters across the full disaster management cycle.(56) State and territory government responsibilities include: fostering and enhancing community resilience; performing risk assessments to drive preventative activities; ensuring compliance with national frameworks, legislation, and policies; planning for and coordinating evacuation and local disaster relief; ensuring adequate personnel and resources are available to respond to disasters; undertaking cost-effective mitigation and preparedness; and ensuring appropriate mechanisms for reviewing disaster response performance.(56) State and territory government regulations and legislation may also impart specific disaster management responsibilities on local governments in recognition of local familiarity and knowledge. In these circumstances, local governments become key participants in several responsibilities which may include promoting local resilience, conducting risk assessments and hazard risk reduction within local jurisdictions, and enhancing local preparedness and the availability of resources locally.(56)

Current disaster management arrangements also identify several stakeholders in the management of domestic disasters. These key stakeholders include individuals and families, communities, schools, emergency management volunteers, owners and operators of critical infrastructure, businesses and primary industries, local businesses, building and construction industries, insurance companies, non-government organisations (NGOs), communications and information technology industries, and scientific and research industries.(56) Importantly, engagement and active participation in the disaster management cycle is not currently mandated and thus relies on support, encouragement and incentives from local and state governments. Governments are therefore well positioned to shape disaster response.

Healthcare Governance in Australia.

The responsibility of healthcare governance for funding and governing the Australian healthcare system is distributed between federal, state/territory, and local governments. Each has regulatory and funding responsibilities that are relevant in ensuring the continuation of healthcare services during a disaster. The federal government is responsible for funding and regulating Medicare, the Pharmaceutical Benefits Scheme (PBS), vaccinations under the National Immunisation Program, the aged care sector, Primary Health Networks to provide primary healthcare, therapeutic drugs and devices via the Therapeutic Goods Administration, the My Health Record digital platform, and providing coordination and leadership during health emergencies.(57) The relevant state or territory government is responsible for funding and managing public hospitals, preventative services, community mental health services, ambulance and emergency services, food safety regulation, and the process of licensing and monitoring health facilities.(57) Finally, local governments are responsible for environment health services (including water and waste management), food safety compliance auditing, some community and home services, and health promotion activities.(58)

Importantly, each government level retains responsibility for their assigned services or programs throughout the disaster management cycle, including health system and service preparedness and response. Such responsibilities extend to ensuring adequate control of supply chains and access to adequate staffing and skill mixes.(59) This is an important consideration as, although health services are critical in all disasters, health services may be required to lead disaster management in certain disasters (such as heat waves, thunderstorm asthma, infectious disease outbreaks).(59) However, even when health services are not charged with leading the management of a domestic disaster, state governments remain responsible for funding, regulating, and managing:(57-59)

- Emergency services and the way in which they are utilised to manage the domestic disaster, including state ambulance, firefighting, and police services;
- Public hospitals (including emergency and inpatient services), which includes maintaining adequate and responsive surge capacity across staff (personnel with appropriate skills and experience), staff (appropriate resources and assets), and space (appropriate physical assets and environmental considerations);
- Community mental health services (with support from the federal government in the interest of suicide prevention per existing arrangements); and
- The involvement of health, and upholding health principles, in the provision of emergency shelters, relief, and evacuation centers and services.

Managing disaster health is complex because it requires governments and health systems to be proactive and adopt a risk-driven, all-hazard, and whole-of-society approach.(60) It is critical to consider the complex interactions between hazards and risks that are relevant to communities and therefore threaten community health throughout the disaster management cycle.(60) Specific activities required to undertake effective health emergency and disaster risk management include ensuring comprehensive policy and legislation, planning and coordination, securing human and financial resources, ensuring information is gathered and communicated effectively, securing health infrastructure and logistics, capitalising on community capacity, and integrated all health services and other services that support health goals.(60) These efforts are supported by comprehensive health risk assessments, understanding local capacities to support and maintain community health during disasters, and engaging in multi-sectoral preparedness.(60)

Domestic Disaster Response and Recovery Considerations.

One principal aim of disaster management in Australia is the cultivation of system and community resilience. Resilience represents the ability of a system to overcome or eliminate stress through either direct opposition, mitigation of stress, or complex modulation.(61) It has been suggested that there are four specific components to resilience: strength, flexibility, adaptability, and responsiveness (62), but interventions that reduce systemic and community vulnerability have been shown to build system and community resilience.(60) Overall, resilience protects against the complex web of

stressors, emotions, and challenges that is triggered by a given disaster: a trait particularly useful for mental health.(64,65)

Unfortunately, discussions of resilience at high levels (such as organisational, governmental, or community levels) can result in the phenomenon of responsibilisation.(66,67) Responsibilisation is a process by which demanding that communities or systems be resilient comes to demand that individuals remain unaffected by disasters, indirectly excusing communities or systems from addressing vulnerabilities.(66,67) The inevitable challenges and unrealistic expectations associated with demanding that individuals remain unaffected by disasters can compound trauma as well as triggering the emergence and worsening of mental illnesses.(65,66,67) This means that calls for communities and individuals to 'keep on being resilient' and comments asserting 'Australian's are resilient people' do not encourage a positive response to disasters but can prove to be both directly and indirectly harmful. It is therefore critical that the concept of resilience must be protected from holding individuals accountable for response and recovery, but hold communities accountable for promoting the empowerment and inclusion of individuals to support individual resilience without relying on it.(66)

Collective Trauma and Disaster Recovery.

Many people will experience intense stress reactions following a disaster, most of which are normal rather than pathological, of whom most return to healthy function without professional interventions.(68) However, there is a proportion who suffer significant psychological distress which may progress to formal mental health disorders such as post-traumatic stress disorders, anxiety, depression, substance dependence and abuse disorders, somatic ill-health, and sleep disturbances.(68) Certain groups in communities are more vulnerable and prone to complicated grief and trauma reactions, including women, children, marginalised groups, those with poor social support networks, and those with previous mental health conditions.(68) Therefore, it is critical that mental health care is embedded throughout the disaster management cycle.(68)

Managing the collective trauma that can result from disasters requires a structured evidence-informed approach, commencing long before the disaster impact.(69) These include:

- Early engagement between emergency management and community stakeholders which result in the development of business and support service continuity plans (69);
- Community leaders should prepare and ensure capability to provide communication during disasters and potential collective trauma events (69); and
- Preparation of community services to deliver services that are sensitive to the specific needs of communities across a broad geographic distribution, supported by ensuring community members and stakeholders are trained to provide physical and psychological first aid.(69)

It is also critical to consider the nature of communication and support provided during disaster response. Psychological debriefing, while an intuitive approach to minimise

acute emotional distress, has been shown to not be beneficial in the long-term and may even be harmful.(68) Instead, current guidelines recommend psychological first aid. Psychological first-aid is a humane, caring approach to helping people based upon the principles of safety, calm, connection, self-efficacy and hope.(69) It is imperative that all stakeholders (including health services and community-based clinicians) concern themselves with training staff in psychological first-aid prior to disasters. Additionally, in alignment with the ethos of psychological first-aid, disaster responses should also include the attentive management of mortuary affairs, funerals, memorials, and coronial processes that result from disasters.(69)

Domestic Frontline Responder and Volunteer Wellbeing.

Frontline responders and volunteers are particularly at high risk to trauma and its downstream consequences on mental health due to repeated exposure.(70) There is also a growing understanding of how moral injury can implicate psychological well being, of which there are three types (71): moral pollution, resulting from witnessing catastrophic scenes and human suffering; moral betrayal, resulting from systemic failures or injustices; and moral compromise, resulting from conflict between personal values and actions or inactions due to constraints of the role. In response, responders and volunteers may suppress their trauma to appease work cultures, cope by abusing substances, face personal conflict, or resort to physical violence.(72) Mental wellbeing concerns not just the individuals but also the continued availability of an able first responder workforce for future disasters.(72,73)

The prevention, mitigation and management of responder trauma begins with an informed workforce. As early as first responder recruitment, recruits should be briefed on the challenges and mental health threats inherent in their desired role.(72) Followingly, it is recommended that all first responders undertake mental health awareness training, including support in generating safety plans and accessing available services.(72,73) This can be supported by calls that the Commonwealth Government should establish and maintain a national register of health professionals who possess the skills to assess and address the specific mental health needs and threats experienced by first responders.(73) Such skills should include: understanding and recognising how occupational factors and pressures faced by first responders may alter the emergence and presentation of mental health disorders; awareness of occupational requirements and what would constitute a relevant functional assessment; the ability to establish meaningful and appropriate goals for treatment; and, either the appropriate competence to deliver evidence-based treatment, or the ability and willingness to make necessary referrals to provide first responders with access to evidence-based treatments.(74)

There are several organisational interventions that should be implemented by first responder organisations, including regular scheduled ‘down time’, ensuring managers are appropriately trained to detect and respond to wellbeing threats, ensure clear protocols for sensitive and appropriate management of staff requiring assistance, and engaging workers in industry-wide support and advocacy services.(72) There are also formal recommendations that mental health services for first responders be extended to all volunteers who work in a first responder capacity and anyone who has ever worked in such a capacity regardless of leaving their

organisation or retiring.(71,73) Additionally, a recent review identified that there is no rigorous research into the impact of these events and experiences on the families of first responders (74); however, it is considered in the best interest of first responders and their families that families receive education and support surrounding risks, symptoms, and interventions related to trauma-related stress and the potential emergence of formal mental health disorders.(72)

Working with Indigenous Communities in Recovery from Disasters.

Indigenous communities possess distinct risk factors that need to be considered during disaster prevention and management planning. The combination of poor quality housing, a lack of access to health services, a lack of appropriate infrastructure, a lack of access to transport and poor access to roads for evacuation compound together during disasters, leading to disproportionate outcomes between Indigenous and non-Indigenous peoples. Consideration also needs to be afforded to the cultural and spiritual implications of a disaster on Country.(75)

To facilitate equitable recovery responses, First Nations people need to be thoroughly involved in disaster prevention and management planning. Current local and state disaster frameworks fail to appropriately account for Indigenous populations. In practice, this includes mobilising community controlled and representative Indigenous organisations as assets in disaster recovery plans. These organisations are uniquely positioned to provide information about local populations, visitors, health of local people, the number and location of Elders, mobility and avoidance relationships. Additionally, Indigenous people may be inclined to rely on these organisations before others as a function of greater trust built through familiarity, and a greater sense of cultural safety. However, these organisations are also impacted by disasters. As a result, recovery committees should consider how to ensure these organisations can continue to provide their services to local communities as soon as possible following disaster.(75)

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Policy Details:

Name: Healthcare in Humanitarian Crises and Disaster Management (2025)

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Category: G - Global Health

History: Combined policies and adopted, Council 2, 2021

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Healthcare in Conflict Zones

Reviewed and Adopted, Council 2, 2017

T Tan, A Keen, V Pillutla, C Lee, A Rottler, P Walker

Adopted, Council 2, 2015

Disaster and Emergency Medicine

Adopted at Council 3, 2019

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