

# Mass Casualty Weapons and Public Health Impacts

## Policy Position Statement

<b>Key messages:</b>	Preparedness in response to the potential use of landmines and cluster munitions, as well as chemical, biological, radiological and nuclear (CBRN) agents, as weapons is vital. The use of CBRN agents significantly impact public health infrastructure and can instigate communicable disease outbreaks. These CBRN agents remain a public health problem through incidental and deliberate dissemination as weapons. Similarly, the use of landmines (anti-personnel mines, anti-vehicle mines), explosive remnants of war (ERWs) and cluster munitions have a substantial impact on loss of life, including among conflicting parties and civilians, even decades after the end of the hostilities. These indiscriminate weapons constitute a serious risk for major human catastrophe.
<b>Key policy positions:</b>	<ol style="list-style-type: none"><li>1. Call to the Australian government to advocate internationally to end the use of landmines, cluster munitions, and CBRN agents.</li><li>2. Call for the Australian government to better fund and support countries impacted by these mass casualty weapons.</li><li>3. Call to the Australian government and international bodies to review and update their policies and preparedness towards the potential use of landmines, cluster munitions, CBRN agents as mass casualty weapons.</li><li>4. Call to the international community to utilise medical advances to treat people affected by the use of CBRN agents as weapons.</li></ol>
<b>Audience:</b>	Federal, State and Territory Governments, policymakers and program managers, PHAA members, media.
<b>Responsibility:</b>	PHAA International Health Special Interest Group
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# Mass Casualty Weapons and Public Health Impacts

## Policy position statement

PHAA affirms the following principles and notes the evidence:

1. Preparedness in response to the potential use of mass casualty weapons, including landmines and cluster munitions as well as chemical, biological, radiological and nuclear (CBRN) agents, can be effectively enhanced by strengthening national and international governance and establishing better public health infrastructure.
2. Landmines (anti-personnel mines, anti-vehicle mines), explosive remnants of war (ERWs) including unexploded ordnances, improvised explosive devices (IEDs) and cluster ammunition (weapons that release hundreds of small bomblets over a wide area) are abhorrent and indiscriminate weapons. These are all considered mass casualty weapons.<sup>1</sup>
  - Land mine use constitutes a major humanitarian catastrophe and continues to claim victims long after the conflict has ended. As well as causing thousands of deaths and injury annually, the continued presence of landmines and cluster munition restricts access to basic services, productive land and sustainable livelihoods.<sup>1,2</sup> Over the past 80 years, anti-personnel mines have become widespread, with an estimated 85 countries believed to have landmine contaminated land.<sup>3</sup>
  - Anti-vehicle mines have the same injurious effects on people and land, as do anti-personnel mines; and are more likely to kill rather than maim. Anti-vehicle mines interrupt humanitarian aid, thus increasing the cost of aid and the number of people who suffer and die in humanitarian crises. Anti-vehicle mines can be triggered by pressures as light as children, and can be fitted with anti-handling devices, making them dangerous to mine clearance personnel.<sup>4</sup>
  - The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (The Ottawa Convention or simply, the Mine Ban Treaty) was adopted by the United Nations (UN) in 1997. However, as of 2023, 33 countries have yet to sign the Mine Ban Treaty, including Russia, China, Israel, North Korea, United Arab Emirates, and United States.<sup>3</sup> There is also still no international agreement to ban or limit the destructive potential of anti-vehicle mines.<sup>3</sup>
  - In contemporary wars, landmines and cluster ammunition have been indiscriminately used by conflicting parties.<sup>1</sup> There is also evidence that in 2022 Ukraine, who is a State Party to the Mine Ban Treaty, utilised landmines during the ongoing conflict with Russia. Russia has also been evidenced to have utilised landmines during this conflict, however they are not currently a State Party to the Mine Ban Treaty.<sup>3</sup>
  - In 2022, globally there were around 4,710 deaths and injuries recorded due to mines or ERWs, mostly in conflict-affected countries. Countries including Syria, Ukraine, Yemen, Myanmar, Nigeria and Afghanistan recorded over 100 casualties in 2022. Additionally, civilians are disproportionately affected, with an estimated 85% of the recorded casualties being civilians, and at least 49% of these civilians identified as children. States Parties to the Mine Ban Treaty accounted for around two-thirds of all the 2022 casualties.<sup>3</sup>

- In 2022, 169,276 antipersonnel mines were safely cleared and destroyed. However, the Mine Ban Treaty's goal "to clear all mined areas as soon as possible, to the fullest extent by 2025" is unlikely to be met. Countries including Afghanistan, Bosnia and Herzegovina, Cambodia, Croatia, Ethiopia, Iraq, Turkey, and Ukraine still have an estimated landmine contamination of more than 100km.<sup>2,3</sup>
  - As of 2023, 12 states not party to the Treaty (Armenia, China, Cuba, India, Iran, Myanmar, North Korea, Pakistan, Russia, Singapore, South Korea, and Vietnam) are on the list of countries producing anti-personnel landmines. Among those countries, India, Iran, Myanmar, Pakistan, and Russia are believed to be actively producing landmines.<sup>3</sup>
  - Australia signed the Mine Ban Treaty in 1997 and national ratification occurred in 1999. Australia also signed the Convention on Cluster Munitions in 2008 and national ratification occurred in 2012.<sup>5</sup> Australia has shown international support for the universalisation of the Convention on Cluster Munitions and the Mine Ban Treaty and has provided funding for global mine action. Australia specifically supports countries in the Asia-Pacific region, including Cambodia, Sri Lanka, Philippines and Iraq.<sup>6</sup> However, Australia's funding contribution to mine action has been rapidly decreasing each year since 2019, and the 2022 contribution decreased by 28% from 2021, placing Australia 19<sup>th</sup> on the funding contribution list globally.<sup>3</sup>
3. CBRN agents are "hazardous materials in the form of: nuclear or radiological materials; biological materials, such as viruses, bacteria, or other microorganisms; and toxic chemicals."<sup>7</sup> These agents are not confined by borders and they are considered mass casualty weapons, as they can cause significant harm to the health and safety of humans, animals and the environment. Specifically, biological and toxin weapons are spread by disease-causing organisms and/or toxins and they can quickly spread globally, causing serious illness, death, food shortage, economic losses, public fear and environmental disaster.<sup>8,9</sup>
- There are 185 States Parties and four Signatory States to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, or simply Biological Weapons Convention (BWC). The BWC states that: *Under all circumstances the use of bacteriological (biological) and toxin weapons and their development, production and stockpiling are effectively prohibited under article I.* The Convention entered into force in 1975 and it is a key element towards international efforts to ban mass casualty weapons.<sup>8,9</sup> Australia signed the BWC in 1972 and ratified the convention in 1977.<sup>10</sup>
  - The UN recognises the importance of ongoing efforts by States Parties to enhance international cooperation, assistance and exchange of equipment, materials and scientific and technological information for the use of bacteriological agents and toxins for peaceful purposes.<sup>9</sup>
  - While the world has been declared free of smallpox on 8 May 1980,<sup>11</sup> the smallpox virus remains a possible public health problem through incidental and deliberate use as a biological weapon.<sup>12</sup>
  - The most frequent mode of smallpox transmission is person-to-person via infective droplets to the respiratory system.<sup>13</sup> Smallpox virus and related infectious materials are held at two authorised World Health Organization (WHO) Collaborating Centers: the State Research Centre for Virology and Biotechnology (Koltsovo, Russian Federation) and the Centers for Disease Control and Prevention (Atlanta, Georgia, USA).<sup>11, 14</sup>

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- Although considered to be near-impossible to synthesise a pox virus in a laboratory setting, scientists at the University of Alberta have recently manufactured the horsepox virus which is closely related to the smallpox virus, without research transparency and appropriate supervision. This research presented a significant pandemic risk, and stronger national and international guidance and supervision in these types of research needs to occur.<sup>15</sup>
  - In 2001, the deliberate dissemination of the biological toxin anthrax in the US through contaminated letters, and subsequent scientific advances in biotechnology, makes the threat and use of a biological toxin a realistic possibility due to the increased affordability and accessibility.<sup>16, 17</sup>
  - The Eighth Review Conference of the Convention on the BWC was held in Geneva in November 2016. The convention, as the reigning body for regulating biological weapons, continues to ensure that new biotechnologies are used for peaceful purposes only.<sup>18</sup>
4. Implementing this policy would contribute towards the achievement of [UN Sustainable Development Goal 3 – Good Health and Wellbeing](#) and [Goal 16 – Peace, Justice and Strong Institutions](#).

### PHAA seeks the following actions:

5. Australian foreign policy priority should be given to funding Humanitarian Mine Action programmes internationally in regions, such as Cambodia, Laos, Afghanistan, Iraq, Mozambique and Vietnam.
6. The Australian Government should continue to support programmes of assistance and training, in the treatment and rehabilitation of survivors and mine-affected communities.
7. The Australian Government should continue to update its policies and public health infrastructure to better prepare for the potential use of mass casualty weapons.

### PHAA resolves to:

8. Advocate for the above steps to be taken based on the principles in this position statement.
9. Urge the Australian Government to ban anti-personnel mines under the existing Ottawa Convention (1997); and the production and use of anti-vehicle mines and anti-personnel mines.
10. Urge the Australian Government to continue to engage in efforts to ban the production, use and trade of landmines as a priority foreign policy initiative and to lobby nations which have not done so to ratify the Ottawa Convention (1997) and the Convention on Cluster Munitions (2008).
11. Urge the Australian Government to continue to foster Australian capabilities in landmine clearing and to fund and develop indigenous capacities to implement Mine Action programmes in countries such as Cambodia, Laos, Vietnam and Iraq.
12. Urge the Australian Government to cease its practice of protecting combatants who lay and use landmines as protection for Australian Defence Force personnel.
13. Urge the Australian Government to shift the cost of mine, ERWs and cluster munition clearance operations from the overseas aid budget to the defence budget.
14. Encourage the Australian Government to continue to support programs of assistance and training, in the treatment and rehabilitation of landmine and cluster munition survivors and mine-affected communities.

15. Urge the Australian Government to review and update its current policies on response and preparedness to the potential use of biological and toxin weapons including Smallpox. This is in light of: progress being achieved in the application of the Biological Weapons Convention<sup>9</sup> and the latest WHO review on the smallpox virus; progress in the development and in-vitro testing of new antiretroviral drugs; and the development of diagnostic tests and new vaccines.<sup>19</sup>
16. Lobby the Australian Society for Infectious Diseases to update its 2002 policy on Biological and Toxin Weapons.
17. Support bilateral and multilateral discussions on diverging issues under the BWC, to break down the existing divisions among States with the common goal of strengthening the BWC and thereby upholding the established norm against biological weapons.
18. Lobby the WHO, governments and development partners to provide continued and committed investment in ensuring capacity to implement and enforce International Health Regulation.

**(Adopted 2024; a merged policy: Biological and Toxin Weapons, adopted 2008 and Landmines and Cluster Ammunition, adopted 2005)**

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