

INCENDIARY WEAPONS AND LIMITS OF INTERNATIONAL LAW

INCENDIARY WEAPONS AND THE HARM THEY CAUSE

Incendiary weapons produce heat and fire through the chemical reaction of a flammable substance. They can be used to burn people, set fire to materiel, or penetrate plate metal. Any military advantages, however, are outweighed by the extreme human suffering they cause.

Incendiary weapons inflict excruciating burns, sometimes to the bone, and can cause respiratory damage, infection, shock, and organ failure. Over time, contractures—the permanent tightening of muscles and other tissue—impede mobility, while the trauma of the initial attack, painful treatments, and appearance-changing scars lead to psychological harm and social exclusion. The fires caused by incendiary weapons can also destroy civilian structures and property, damage crops, and kill livestock. Furthermore, the inadequate resources available to medical providers in armed conflict settings exacerbate the already challenging process of treating serious burns.

SHORTCOMINGS OF INTERNATIONAL LAW

Protocol III to the Convention on Conventional Weapons (CCW), an international treaty adopted in 1980, seeks to regulate the use of incendiary weapons, but it has two major loopholes. First, its design-based definition arguably excludes multipurpose munitions with incendiary effects, notably those containing white phosphorus. Second, the protocol has weaker restrictions for ground-launched incendiary weapons than airdropped versions, even though they cause the same harm. To better protect civilians from these cruel weapons, the protocol should be amended to have an effects-based definition and to prohibit the use of all incendiary weapons in concentrations of civilians.

USE OF INCENDIARY WEAPONS

In the past fifteen years, Human Rights Watch has documented the use of incendiary weapons in [Afghanistan](#), [Gaza](#), [Iraq](#), [Syria](#), [Ukraine](#), and [Yemen](#).



At least four incendiary submunitions burn on the ground in the al-Mashhad neighborhood of opposition-held east Aleppo city, Syria, immediately after an incendiary weapon attack on August 7, 2016. © 2016 Malek Tarboush



An incendiary weapon attack burned farmland in Badma, Idlib, Syria, in July 2018. © 2018 Syria Civil Defense

THE HUMAN COST OF INCENDIARY WEAPONS

IMMEDIATE EFFECTS

- Extensive and excruciating burns that require painful treatment. White phosphorus inflicts particularly deep burns and can reignite when bandages are removed.
- Respiratory damage from inflamed airways and toxic fumes
- Infection, extreme dehydration, and organ failure
- Psychological trauma from injuries and treatment

“Everything caught fire. My husband and four of my children burned alive in front of my eyes; my baby girl ... my only girl, melted in my arms. How can a mother have to see her children burn alive? I couldn’t save them. I couldn’t help them.”

- Sabah Abu Halima, survivor of 2009 white phosphorus attack in Gaza

LONG-TERM HARM

- Intense, chronic pain
- Severe scarring and loss of mobility
- Hypersensitivity to temperature, excessive skin dryness, and dead nerve endings
- Brain damage from shock or hypoxia
- Stunted growth in children
- Post-traumatic stress disorder, anxiety, and depression
- Detachment from society and inability to work
- Need for lifelong physical and psychological treatment

“The hard part is my little nephew is scared to come near me, my other nephew who always used to hug me is scared to play with me. I’ll be walking in the street and someone will stop me and say, ‘Why do you look like that?’”

- Muhammed Assi, survivor of 2013 attack on a school in Urum al-Kubra, Syria

“With those types of weapons, there has to be some kind of control. Absolutely, 100 percent. They’re unacceptable.”

- Christine Collins, former US Air Force nurse who treated Afghan girl burned in 2009 white phosphorus attack

CHALLENGES TO TREATMENT

- Difficulty of treating burn injuries, which is exacerbated in armed conflict
- Inadequate supplies and equipment
- Shortage of medical personnel and burn experts
- Lack of knowledge about how to treat incendiary weapon injuries
- Few professional ambulances for transfers to better facilities
- Gaps in continuity of long-term care
- Deprioritization of psychological support
- Trauma to medical personnel

“Incendiary weapons create deep, ongoing disabilities, and the medical system [in a conflict zone] is not equipped to deal with that.... [Survivors] live with greater disability than their counterparts in other places.”

- Dr. Rola Hallam, British doctor who treated incendiary weapon victims in Syria in 2013

ADDITIONAL HRW AND IHRC RESOURCES

- Report: [“They Burn Through Everything”: The Human Cost of Incendiary Weapons and the Limits of International Law](#) (November 2020)
- Briefing Paper: [“Standing Firm against Incendiary Weapons”](#) (November 2019)
- Briefing Paper: [“Myths and Realities about Incendiary Weapons”](#) (November 2018)