



# LETHAL IN DISGUISE 2

How Crowd-Control Weapons Impact Health and Human Rights





SMOKE RISES AS POLICE CLASH WITH PROTESTERS DURING A BLACK LIVES MATTER PROTEST NEAR THE SEATTLE POLICE EAST PRECINCT HEADQUARTERS ON JULY 25, 2020. TED S. WARREN | AP PHOTO

### Weapon profile

The UN considers "disorientation or distraction devices" as bomb-like instruments designed to daze or warn groups or individuals through some combination of noise, light, overpressure, or fragmentation. Common names for handheld weapons of this class include stun grenades, flash-bang grenades, blast balls, sting-ball grenades, stinger grenades, lasers, or concussion grenades.

Flash-bang explosive devices were initially developed by the British Special Air Service in the 1960s and have been used for military

combat training for decades.<sup>177</sup> The first documented use of these devices outside of training was at Entebbe, Uganda in 1976, when the Israeli army used them in efforts to rescue hostages.<sup>178</sup> They were used in 1977 in Mogadishu, Somalia, and at a siege of the Iranian embassy in London in 1980.<sup>179</sup> The transition from military operations to police use occurred slowly over time. Use in urban settings and on civilian populations altered how the weapons were used, as well as the resulting injuries. Specialised law enforcement agencies like Special Weapons and Tactics (SWAT) initially developed similar weapons to use in hostage situations.<sup>180</sup>

<sup>176</sup> UN Guidance on LLWs above n 6.

<sup>&</sup>quot;Flash Bang Stun Grenades and Their Use in Boston: What You Need to Know," accessed May 7, 2015, <a href="http://thebostonmarathonbombings.weebly.com/flash-bang-stun-grenades-and-their-use-in-boston-what-you-need-to-know.html">http://thebostonmarathonbombings.weebly.com/flash-bang-stun-grenades-and-their-use-in-boston-what-you-need-to-know.html</a>; Steve James, "Flash Bang 101," Sponsored by TASER INTERNATIONAL, *PoliceOne*, (October 21, 2005), <a href="http://www.policeone.com/police-products/tactical-entry/articles/120100-Flash-Bang-101/">http://www.policeone.com/police-products/tactical-entry/articles/120100-Flash-Bang-101/</a>

<sup>178</sup> Steve James id.

<sup>179</sup> *ld*.

Abbie Nehring et al., "'Less Lethal' Flash-Bangs Used in Ferguson Leave Some Feeling the Burn," *ProPublica*, accessed January 15, 2016, <a href="http://www.propublica.org/article/less-lethal-flash-bangs-used-in-ferguson-leave-some-feeling-the-burn">http://www.propublica.org/article/less-lethal-flash-bangs-used-in-ferguson-leave-some-feeling-the-burn</a>.

The use of stun grenades in crowd control has increased significantly over the past several years, and now these weapons are manufactured by dozens of companies worldwide. They are frequently used alongside other weapons, such as chemical irritants and/or projectiles. With poor regulation and almost no quality control, defective and misfiring stun grenades have been identified in several settings where there were limited regulations or guidelines on use.<sup>181</sup>

Mechanism of action

Flash-bang or stun grenades are usually constructed like a conventional grenade, with an explosive powder that ignites when struck by a fuse. These devices typically generate noise and a bright flash by the rapid oxidation of a pyrophoric metal, such as magnesium or aluminium; this process can generate temperatures in excess of 3,000 degrees Celsius. Some devices generate sound that has been measured in excess of 178 decibels (dB), at least ten times louder than most gunshots. Both the flash and the bang usually last less than one second, momentarily activating photoreceptor cells in the eye and causing blindness for about five seconds until the eye restores itself to its normal, unstimulated state. The loud blast causes temporary loss of hearing and of balance and generates a sense of disorientation. The concomitant blindness. hearing loss, and disorientation can result in falls. Moreover, groups of people simultaneously experiencing these symptoms can result in panic. With concomitant use of other weapons, stampedes have been reported.<sup>182</sup>

Dazzling lasers are a subset of distraction devices that are designed to use laser or LED lights at long-range distances (1000 metres in light, 3000 metres in the dark) to temporarily disrupt vision. Dazzling laser weapons can be rifle-shaped, baton-shaped, or mounted onto other weapons. Even brief exposures (especially at close range) can result in temporary blindness and, in some cases, long-term vision loss, headaches, blurred vision, and sensitivity to light.

When distraction devices detonate, the case ruptures with significant force, so individuals standing near an explosion may suffer traumatic injury from the resulting pressure. The case can also rupture in such a way that high-velocity metal or plastic fragments are



Examples of disorientation devices. Robin Ballantyne | Omega Research Foundation

<sup>181</sup> Kaye Beach, "Stun Grenades," *AxXiom for Liberty*, September 15, 2009, <a href="https://axiomamuse.wordpress.com/tag/stungrenades/">https://axiomamuse.wordpress.com/tag/stungrenades/</a>.

<sup>182</sup> Steve James, "Flash Bang 101" above n 177.

sent in multiple directions. These fragments are often unevenly distributed in size, shape, and direction and can pose a generalised hazard to anyone nearby. In addition to the shrapnel risk posed by fragmentation of the device casing, some devices are designed to deliberately scatter highvelocity rubber or plastic projectiles around the blast radius. Finally, projectiles with disorienting characteristics can be direct-fired at individuals, carrying with them similar risks as KIPs.

Given the lack of regulation of these weapons internationally, defective or poorquality weapons are reported frequently. These weapons can explode spontaneously or have more dangerous components that can spark fires and cause severe injuries.

#### Health effects

Stun grenades are—as explosive devices—by nature indiscriminate. When they are used either as distraction devices to facilitate entry or as means of crowd dispersal, the limited control users have over their placement may expose unintended targets to the risk of serious injury. A 2015 report documented more than 50 cases of severe injuries and deaths from the use of stun grenades since 2000 in the U.S.<sup>184</sup> When used indoors or in dense crowds, these risks are amplified and can create additional hazards through fires as well as psychological panic they may provoke.

As with all explosives, stun grenades carry the risk of blast injury. These injuries are complex and result from pressure waves created by

Type of Blast Injury	Cause	Outcome
Primary blast injury	Supersonic pressure shock waves from the blast.	Internal injuries, especially of delicate membranes like the eardrum and the lung membranes.
Secondary blast injury	Explosion and fragmentation of objects.	Blunt and penetrating trauma from explosive devices.
Tertiary blast injury	Displacement of air causes blast wind that can push people into solid objects.	Blunt and penetrating trauma, including fractures and head trauma.
Quaternary blast injury	Miscellaneous injuries caused by other parts of the explosion.	Burns, respiratory injuries from flames and smoke, crush injuries, eye injuries, psychiatric trauma (PTSD).

Figure 11: Blast injury.

<sup>183</sup> Charlie Mesloh et al., "An Exploratory Study of Stingball Grenades," *Florida Gulf Coast University*, Report Number 2009-DI-BX-K008, 2011, <a href="https://www.researchgate.net/publication/263808368">https://www.researchgate.net/publication/263808368</a> An Exploratory Study of Stingball Grenades.

Julia Angwin, Abbie Nehring, and ProPublica, "Hotter Than Lava: Every Day, Cops Toss Flashbang Grenades With Little Oversight and Horrifying Results," *ProPublica*, accessed May 13, 2015, <a href="http://www.propublica.org/article/flashbangs">http://www.propublica.org/article/flashbangs</a>.

# The use of stun grenades for crowd control is an example of the inappropriate, inadequately regulated use of military weapons for crowd management.

the blast. Blast injuries from close proximity explosions can lead to internal haemorrhage, eardrum rupture, lung injury, amputation, fractures, and degloving injuries (extensive skin removal that exposes underlying tissue). In 2011, a U.S. SWAT officer died of internal bleeding when a stun grenade exploded in his hand while he was checking it.185 A French activist was killed in 2014 by an OF-F1 "blast-ball" style grenade-a weapon now prohibited in France-when it detonated after becoming lodged between his jacket and backpack.<sup>186</sup> During the George Floyd protests in Seattle, United States, a woman went into cardiac arrest after being hit in the chest with a "blast-ball" style hybrid projectile that combined a concussive detonation with chemical irritants. 187

In addition to injuries caused directly by the primary blast wave, such as ear-drum rupture or lung injury, secondary and tertiary injuries can also occur as a result of these explosive devices. All weapons are made of both metal

and plastic parts that may fragment during the explosion and act as shrapnel. Some weapons, such as "sting-ball" grenades, are specifically designed to fragment and forcefully eject shrapnel across the blast area. These weapons behave as KIPs in terms of ballistics but are incapable of being aimed, resulting in weapons that are both completely indiscriminate and impossibly imprecise. Serious injuries have been documented from these unaimed impact projectiles.<sup>188</sup> These include penetrating injury, skull fracture, severe ocular trauma, and enucleation.<sup>189</sup> Tertiary injuries occur from being thrown on the ground by their force, and quaternary injuries result from fires and other results of the blast.

Stun grenades burn extremely hot and can cause life-threatening thermal injuries. A 2015 report by ProPublica, summarised in our first *Lethal in Disguise* report, identified more than 50 people seriously injured or killed by stun grenades since 2000, with

Daily Mail Reporter, "Veteran SWAT Officer Killed in His Home after Stun Grenade He Was Safety-Checking Explodes," *Daily Mail*, February 26, 2011, <a href="http://www.dailymail.co.uk/news/article-1361010/Veteran-SWAT-officer-killed-home-stun-grenade-safety-checking-explodes.html">http://www.dailymail.co.uk/news/article-1361010/Veteran-SWAT-officer-killed-home-stun-grenade-safety-checking-explodes.html</a>.

AFP, "Mort de Rémi Fraisse: la Cour de cassation confirme le non-lieu en faveur du gendarme," *Le Point*, March 23, 2021, <a href="https://www.lepoint.fr/societe/mort-de-remi-fraisse-la-cour-de-cassation-confirme-le-non-lieu-en-faveur-du-gendarme-23-03-2021-2419009\_23.php">https://www.lepoint.fr/societe/mort-de-remi-fraisse-la-cour-de-cassation-confirme-le-non-lieu-en-faveur-du-gendarme-23-03-2021-2419009\_23.php</a>.

Liz Jones and Isolde Raftery, "This woman 'died three times' after Seattle Police hit her with a blast ball," *KUOW*, June 10, 2020, <a href="https://www.kuow.org/stories/this-26-year-old-died-three-times-after-police-hit-her-with-a-blast-ball">https://www.kuow.org/stories/this-26-year-old-died-three-times-after-police-hit-her-with-a-blast-ball</a>.

Aurore Chauvin et al., "Ocular injuries caused by less-lethal weapons in France," *The Lancet* 394, no. 10209 (November 2019): 1616-1617 <a href="https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)31807-0/fulltext">https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)31807-0/fulltext</a>.

V Scolan et al., "Risks of non-lethal weapon use: case studies of three French victims of stinger grenades," *Forensic Science International* 223, (212): e18-21 <a href="https://pubmed.ncbi.nlm.nih.gov/22981215/">https://pubmed.ncbi.nlm.nih.gov/22981215/</a>.

# Stun grenades are—as explosive devices—by nature indiscriminate.

thermal injury being the primary mechanism of injury. Furthermore, stun grenades can cause fires in structures; these fires have led to fatalities. Defective and poorly designed weapons may play a role in injury severity. Paragraph In one notable case from 2014 that illustrates the complexity of injuries arising from stun grenades: after a stun grenade was thrown into his crib during a raid of his home, an 18-month-old boy sustained a chest wound so deep it exposed his ribs. He also suffered third-degree burns that required him to be placed in a medically induced coma, endure weeks of ICU-level care, and undergo numerous skin grafting surgeries.

In addition to the risks associated with their blast, some distraction devices are designed to be fired from grenade launchers or similar platforms. When aimed (inappropriately) at individuals, the blast risk is compounded by the kinetic risk of what is essentially an improvised KIP. In Portland, US, two individuals were severely injured in 2018 by "airborne warning/signalling munitions" fired by police directly at protesters. One suffered a traumatic brain injury after being shot in the back of the head with such a round, 194 while another suffered third-degree burns and impact wounds after being shot in the chest and arm. 195 Concerns about direct-fire injuries also have been raised following numerous reported accounts from Colombia of the Venom system being used in a direct-fire capacity with stun grenades. 196

The use of stun grenades for crowd control is an example of the inappropriate, inadequately regulated use of military weapons for crowd management. While the stated objective of stun grenades is to cause disorientation and a temporary sense of panic, the potential for severe blast injuries and even death caused by the pressure of the blast or by shrapnel from the fragmentation of plastic and metal constituents of the grenade is disproportionately high. The blinding light and deafening sound they produce can also cause injuries indiscriminately.

Julia Angwin, Abbie Nehring, and ProPublica, "Hotter Than Lava: Every Day, Cops Toss Flashbang Grenades With Little Oversight and Horrifying Results," *ProPublica*, accessed May 13, 2015, <a href="http://www.propublica.org/article/flashbangs">http://www.propublica.org/article/flashbangs</a>.

KSBW, "Monterey County to pay Greenfield family \$2.6 million for father's flash-bang death," *KSBW*, August 19, 2013, <a href="https://www.ksbw.com/article/monterey-county-to-pay-greenfield-family-2-6-million-for-father-s-flash-bang-death/1052306#">https://www.ksbw.com/article/monterey-county-to-pay-greenfield-family-2-6-million-for-father-s-flash-bang-death/1052306#</a>.

Julia Angwin, Abbie Nehring, and ProPublica, "Hotter Than Lava: Every Day, Cops Toss Flashbang Grenades With Little Oversight and Horrifying Results," *ProPublica*, accessed May 13, 2015, <a href="http://www.propublica.org/article/flashbangs">http://www.propublica.org/article/flashbangs</a>.

Alison Lynn and Matthew Gutman, "Family of Boy Injured by 'Grenade' Has \$1M in Medical Bills," *ABC News*, December 22, 2014, <a href="http://abcnews.go.com/US/family-toddler-injured-swat-grenade-faces-1m-medical/story?id=27671521">http://abcnews.go.com/US/family-toddler-injured-swat-grenade-faces-1m-medical/story?id=27671521</a>.

Shane Dixon Kavanaugh, "'It felt like a war zone': Portland protester hit in head by police flash-bang speaks," *Oregon Live*, August 11, 2018, <a href="https://www.oregonlive.com/portland/2018/08/it\_felt\_like\_a\_war\_zone\_portla.html">https://www.oregonlive.com/portland/2018/08/it\_felt\_like\_a\_war\_zone\_portla.html</a>.

J Wilson, "Woman says she was permanently disfigured by Portland police at protest," *The Guardian*, August 5, 2019, <a href="https://www.theguardian.com/us-news/2019/aug/05/portland-police-protests-woman-claims-disfigured">https://www.theguardian.com/us-news/2019/aug/05/portland-police-protests-woman-claims-disfigured</a>.

<sup>196</sup> Chloé Lauvergnier, "Protests in Colombia: Videos show 'dangerous' use of grenade launchers by police," *France 24*, May 24, 2021 https://observers.france24.com/en/americas/20210526-colombia-police-protests-venom-grenade-launchers.

### What has changed?

- > Fragmentation injuries: Since 2016, there has been a growing recognition of the hazards posed by the shower of fragmented pieces from distraction devices. Upon detonation, distraction devices may-unintentionally or by design-disperse dozens of metal or plastic shards as shrapnel in a spherical radius without any control of what they hit. Each fragment behaves, in effect, as a kinetic impact projectile, with one crucial difference: the user of the distraction device has no more than the most rudimentary control of the trajectory of these projectiles. These weapons are, therefore, fundamentally indiscriminate impact weapons when used in the context of crowd control.
  - » Severe kinetic injuries from distraction devices, including amputation and loss of sight, have been recorded in the medical literature over the last decade in France, 197 both before and

- after the Yellow Vests protests. Fragmentation injuries from stun grenades used to disperse the Gezi Park protests were also reported in the medical literature in Turkey.<sup>198</sup> During the Euromaidan protests in Ukraine, at least 133 individuals suffered traumatic injuries as a result of stun grenade usage, mostly because of the fragmentation of the weapons. 199 In the United States, stun grenades were widely used during the George Floyd protests, resulting in numerous injuries.<sup>200</sup>
- Multiple stun grenade launchers:
  A worrisome trend in weapons research and development is "areaeffect" stun grenades and delivery systems designed to project multiple bomblets across great distances. The commercial Venom multiple-launch system has already been restricted by a court<sup>201</sup> order in Popayán, Colombia, over concerns about the indiscriminate nature of the unaimed projectiles.<sup>202</sup>

<sup>197</sup> V Scolan et al., "Risks of non-lethal weapon use: case studies of three French victims of stinger grenades," *Forensic Science International* 223, (212): e18-21 <a href="https://pubmed.ncbi.nlm.nih.gov/22981215/">https://pubmed.ncbi.nlm.nih.gov/22981215/</a>.

<sup>198</sup> Umit Unuvar et al., "Usage of Riot Control Agents and other methods resulting in physical and psychological injuries sustained during civil unrest in Turkey in 2013," *Journal of Forensic and Legal Medicine* 45 (2017): 47-52 <a href="https://www.sciencedirect.com/science/article/abs/pii/S1752928X16301573">https://www.sciencedirect.com/science/article/abs/pii/S1752928X16301573</a>.

VD Mishalov et al., "Forensic assessment of gunshot injuries in Maidan Nezalezhnosti protesters," *World of Medicine and Biology* 69, no. 3 (2019): 118-122, <a href="https://womab.com.ua/en/smb-2019-03/8015">https://womab.com.ua/en/smb-2019-03/8015</a>.

Sonoma County Commission on Human Rights, "Human Right Violations in Santa Rosa California Policing the Black Lives Matter Protests," *Sonoma County Commission on Human Rights*, July 2020, <a href="https://srcity.org/DocumentCenter/View/32184/Report-BLM-Human-Rights-Abuses-July2020">https://srcity.org/DocumentCenter/View/32184/Report-BLM-Human-Rights-Abuses-July2020</a>; and Lewis Kamb, "Seattle police continue to use 'flash-bang' grenades during protests, despite recommendations," *The Seattle Times*, August 12, 2020, <a href="https://www.seattletimes.com/seattle-news/seattle-police-continue-to-use-flash-bang-grenades-during-protests-despite-recommendations/">https://www.seattletimes.com/seattle-news/seattle-police-continue-to-use-flash-bang-grenades-during-protests-despite-recommendations/</a>.

<sup>201</sup> Juzgado Décimo Administrativo Mixto de Oralidad Circuito de Popayán No. 065 de 2021, file 19001-33-33-010-2021-00085-00 ACUMULADO AL PROCESO 1900133-33-010-2021-000089-00, 2 June 2021, pp. 35 and 36.

MF Romoleroux, "Juez ordena al Esmad no hacer uso del arma Venom en Popayán," *El Tiempo*, June 4, 2021, <a href="https://www.eltiempo.com/colombia/otras-ciudades/juez-ordena-a-esmad-no-usar-arma-venom-en-popayan-593528">https://www.eltiempo.com/colombia/otras-ciudades/juez-ordena-a-esmad-no-usar-arma-venom-en-popayan-593528</a>.

Meanwhile, the United States Defense Department is developing a "non-lethal indirect fire munition" fired from an 81-mm mortar that would disperse multiple flash-bang bomblets over a kilometre away.<sup>203</sup> Similar to outlawed cluster munitions, the flash-bang mortar represents a disturbing trend towards greater and more indiscriminate use of these weapons, in spite of mounting evidence of their potential harm.

Growth of combined weapons: Blast balls are a type of hybrid stun grenade combining bright lights and loud sounds with chemical irritants. Blast ball grenades are similar to so-called "sting-ball" or "stinger" grenades that combine a flash-bang capability with a load of pellets designed to disperse randomly from the point of deflagration. Blast balls, however, replace the pellets with CS agents. Unlike many distraction devices, which function primarily through the ignition of a pyrotechnic metal and are not designed to fragment, these grenades, by nature, are designed to explode to release the irritant or KIPs. Stinger grenades and blast balls, therefore, carry an inherent risk of generating shrapnel upon deflagration, possibly dispersing a shower of sharp, irregular projectiles around the detonation site. This hybrid weaponry poses specific health risks: chemical burns and traumatic injuries combined with explosive injuries can be painful, debilitating, and challenging to treat.

Kyle Rempfer, "Marines 'hang' flash-bang mortar rounds for first time," *Marine Corps Times*, July 18, 2018, <a href="https://www.marinecorpstimes.com/news/your-military/2018/07/18/marines-hang-flash-bang-mortar-rounds-for-first-time/">https://www.marinecorpstimes.com/news/your-military/2018/07/18/marines-hang-flash-bang-mortar-rounds-for-first-time/</a>.

#### Case study

## Deaths and maimings from explosive stun grenades



#### France

The French police and gendarmerie (military police) frequently use explosive grenades for crowd control. Unlike many "flash-bang" grenades, which generate light and noise without rupturing the grenade case, these grenades carry an explosive charge that creates a violent blast upon deflagration. Numerous cases of severe injuries associated with these grenades have led to a reconsideration of their use in crowd control.

The "OF-F1" offensive stun grenade was first deployed in the 1970s,204 and as early as 1977 the grenade, which contains TNT, was implicated in the death of a protester.<sup>205</sup> Its use was brought to national attention in 2014, when one such grenade fired by a gendarme killed an environmental protester

at the proposed Sivens dam site.<sup>206</sup> Their use, as well as the use of other high-explosive "offensive grenades," was subsequently banned in France.<sup>207</sup>

However, similar weapons remain in use under the moniker of "defensive" grenades. The GLI-F4 exploding tear gas grenade was extensively used during the Yellow Vests protests of 2018 and 2019. This "hybrid" weapon combines a concussive blast produced by TNT with a payload of CS agent. It is allegedly responsible for at least 30 injuries (including five disabling hand injuries) during the Yellow Vests protests.<sup>208</sup> The GLI-F4 was withdrawn from use in early 2020,<sup>209</sup> although concerns persist about its successor<sup>210</sup> (the GM2L defensive grenade), which substitutes

Jean-Louis Courtois, "Le retrait de la grenade OF F1: Bonne ou mauvaise idée?" *L'Essor de la Gendarmerie Nationale,* 2017, https://web.archive.org/web/20181208132326/https://lessor.org/wp-content/uploads/2017/07/grenade-OF-F1.pdf.

Louise Fessard, "Grenades offensives: enquête sur le précédent de Creys-Malville en 1977," *Mediapart*,17 December 2014, <a href="https://www.mediapart.fr/journal/france/171214/grenades-offensives-enquete-sur-le-precedent-de-creys-malville-en-1977">https://www.mediapart.fr/journal/france/171214/grenades-offensives-enquete-sur-le-precedent-de-creys-malville-en-1977</a>.

Le Monde, "Mort de Rémi Fraisse: six ans après, le non-lieu confirmé pour le gendarme qui a tiré la grenade," *Le Monde*, 23 March 2021, <a href="https://www.lemonde.fr/societe/article/2021/03/23/mort-de-remi-fraisse-la-cour-de-cassation-confirme-le-non-lieu-en-faveur-du-gendarme 6074170">https://www.lemonde.fr/societe/article/2021/03/23/mort-de-remi-fraisse-la-cour-de-cassation-confirme-le-non-lieu-en-faveur-du-gendarme 6074170</a> 3224.html.

<sup>207</sup> MINISTÈRE DE L'INTÉRIEUR, "Décret no 2017-1029," *Journal officiel de la République Français,* 10 May 2017, no. 0110, <a href="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbQ9XWraqEbQhRg="https://www.legifrance.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbq.gouv.fr/download/pdf?id=q7JUH89szWx.8vz2eKWlaxePHm3gxbq.gouv.fr/download/pdf?id=q7JUH89s

Amnesty International, "France: Call for suspending the use of rubber bullets fired with the LBD40 and for banning grenades GLI-F4 in the context of policing protests," *Amnesty International*, 3 May 2019, <a href="https://www.amnesty.org/en/wp-content/uploads/2021/05/EUR2103042019ENGLISH.pdf">https://www.amnesty.org/en/wp-content/uploads/2021/05/EUR2103042019ENGLISH.pdf</a>.

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RÉMI FRAISSE AT THE PROTEST AGAINST THE SIVENS DAM PROJECT ON OCTOBER 25, 2014, FRANCE. CREATIVE COMMONS/WIKIPEDIA



TNT for black powder yet still operates as an explosive device.<sup>211</sup> Within a year of being put into use, serious injuries have already been reported from the GM2L.<sup>212</sup>

In regular use throughout this time period have been so-called "de-encirclement" grenades, known as "DBD" or "DMP," which are explicitly designed to explode and project small rubber fragments across its blast radius.<sup>213</sup> These fragments act as multi-projectile KIPs that cannot be aimed,

resulting in a highly indiscriminate weapon. In 2016, one civilian suffered severe head trauma<sup>214</sup> and another lost an eye<sup>215</sup> to injuries with a de-encirclement grenade thrown by Paris police. Further reports of injuries from "sting-ball" grenades during the Yellow Vests protests–including a demonstrator who lost four fingers<sup>216</sup>–are consistent with this weapon profile.

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Case study

# Dangers of shrapnel from blast-balls in Seattle



#### United States

Police in Seattle, Washington, US, have made extensive use of "blast balls." These are a type of hybrid distraction device that combines the explosive lights and sounds of flash-bang grenades with tear gas grenades.<sup>218</sup> While these grenades are not explicitly advertised as fragmentation devices, shrapnel generated by their detonation has been implicated in a number of injuries dating back to 2016, including a journalist struck in the face<sup>219</sup> and several other persons injured during the George Floyd protests of 2020.<sup>220</sup>

In June of 2020, the Seattle City Council voted unanimously to prohibit the use of many CCWs for protest, including blast balls.<sup>221</sup> A court ruling later found the Seattle Police Department in contempt of court for violating the prohibition.<sup>222</sup> In the order, U.S. District Judge Richard Jones expressed special concern over the indiscriminate and imprecise nature of blast balls and the risk they pose to peaceful demonstrators, noting that several violations of the prohibition represented use that was either indiscriminate or disproportional.<sup>223</sup>



DEMONSTRATORS CLASH WITH POLICE NEAR THE SEATTLE POLICE DEPARTMENTS EAST PRECINCT ON JUNE 7, 2020 IN SEATTLE, WASHINGTON. EARLIER IN THE EVENING, A SUSPECT DROVE INTO THE CROWD OF PROTESTERS AND SHOT ONE PERSON, WHICH HAPPENED AFTER A DAY OF PEACEFUL PROTESTS ACROSS THE CITY. LATER, POLICE AND PROTESTERS CLASHED VIOLENTLY. DAVID RYDER | GETTY IMAGES

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<sup>221</sup> https://council.seattle.gov/2021/01/22/faq-ban-on-seattle-police-use-of-tear-gas-pepper-spray-blast-ball-other-crowd-controlweapons/.

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