
This is a reprint of my original article, that appeared in issue twelve of Valkyrie Magazine. The only snag with the magazine article, is that for reasons unknown, the stats for the weapons were left out!

I've since updated a couple of bits, through a bit more playtesting. SO. Here's the article in its' entirety, but minus the images that Valkyrie Magazine inserted!

Anti-Riot Weapons in Millenium's End

By Roger Stenning

Rationale behind this article

I recently wrote an adventure, initially set in the wake of an ongoing riot (about ten minutes after it started, actually), and the arguments eventually arose when an NPC riot policeman shot one of the player characters with a rubber bullet. So I wrote up the weapon stats after the session. The same thing happened at the next session, when an NPC Policeman used CS spray against another Player Character. So here, for the benefit (!) of other referees and players alike, are the fruits of the arguments!

CS gas has recently been covered in detail on the Chameleon Eclectic Entertainments website, in the document mefaq.html, which also covered a quite a few other areas in the rules of the game. Point your web browser there, and run (don't walk) to the site.... The excerpt below, in particular, prompted me to write up a few ideas...

What sort of Damage or stun do CS grenades and pepper-sprayers do?

Neither normally causes damage or stun. Instead, these devices disable through temporary blindness, respiratory distress, and pain. There are no official rules, but a guideline is to require a Willpower roll at -30 if someone exposed to CS or pepper spray wants to do something other than choke and gag (make that -40 if they want to stick around in a big dense cloud of CS gas), and then apply another -30 to whatever rolls the player makes. Once clear of the gas, it takes ten or fifteen minutes to recover--longer if the character can't wash out his or her eyes.

In terms of exposure, that's mostly up to the GM. Pepper sprayers are direct-fire weapons with a range of four or five meters. They should have an IA of about 30, due to the spread of the spray. CS gas grenades each produce enough gas to fill a ten by ten meter area at a depth of two meters, although gas that thins out beyond that may still be effective. Outdoors, of course, the gas is susceptible to wind and rain.

Background

CS gas was developed as a relatively harmless irritant agent, for use in controlling crowds in riots, by causing them to disperse. In low quantities, such as gaseous form, sweaty areas, mucus membranes, eyes, and throat will be attacked by the active agents in the CS material.

Symptoms of attack by CS agent are severe coughing, irritation and pain to the eyes, and general 'itchiness' and/or 'burning' sensation all over the areas prone to contact with air. It also sticks to clothing, causing a recurring non-lethal hazard if targets exposed to CS do not change their clothing. The effects do not tend to increase with dosage, merely take effect that much more quickly, and are not normally fatal, if the victim is able to avoid prolonged contact; i.e., is out in the open, since the gas disperses quickly in the open. If, however, the victim is in a sealed or enclosed area, and cannot gain access to clear air, there is a possibility that the resultant coughing could be positively harmful...

A more effective form of delivery is the defensive spray, also known as MACE in the USA, which atomizes the CS irritant in a solvent, and produces a wide area spray, like a hair spray in area affect. British Police use a version of this, using a different means of delivery, which produces a stream-like spray, designed to affect only one person, and is specifically aimable, accurate to about three metres.

Another delivery means for CS powder is the 'sting rag', used in 38mm and 40mm Baton Round launchers (noted below, for simplicity), which contains micropulverised CS powder in small hollow sacs in the fired munition, which is a small torus-like ring of rubber. On impact with the target, a measured dose of CS is released, designed to incapacitate specific targets by a combination of blunt trauma impact from the rubber ring, and CS powder attack to the person hit by the round, and those in his or her immediate area (1 metre area of affect).

As noted above, there are five main means of delivery of CS gas/powder to the target.

Bursting CS grenades	Act like a concussion grenade. They explode (NOTE: no fragmentation hazard), and spray micropulverised CS powder in a specific local area, normally about 10 metres in radius, but types tend to vary, especially with changing weather. For the purposes of this rules option, bursting CS grenades have a 10 metre radius of effect. They in ict concussion damage as for a concussion grenade, i.e., DF 10, in addition to the effects from the CS particles, as noted above.
CS Smoke grenades	Act like normal signal smoke grendades. They generate a 'hot' cloud of CS particles, suspended in a mist-like cloud, which will spread in whichever direction the wind is blowing, producing a rapidly widening arc of effect as you move downwind of where the grenade comes to rest. For the purpose of these rules, the arc is 5 metres wide at 10 metres range, widening in the same manner as range increases from the grenade; thus at 30 metres, the mist cloud will be 15 metres wide. Note that the hot cloud will also obscure thermal imagers until the cloud either thins out, or disperses below threshold values, so if you can't see it through normal vision, you can't see it with a thermal imager, either
Aerosol CS sprays	These sprays act like a hair spray, in that they scatter a cone-shaped cloud which reaches at most about 3 metres away from the spray nozzle (atomizer head), and about 3 metres wide at it's extreme edge. The spray uses a non-corrosive liquid suspension to spread the CS particles, which act in the normal manner on contact with the target. As the spray is a cloud, anyone caught in the area of the 'cone' will be affected, with the effects as noted above. Pepper sprays act in exactly the same manner, and have the same effect as CS sprays, but use pepper as the active ingredient, not CS particles.
Constant Stream CS Sprays	These sprays again use a non-corrosive liquid suspension agent, but instead of using an atomizer to create a cloud, use a nozzle to direct a stream of the liquid containing the CS particles at a specific target; instead of a press-on-top atomizer head, these sprays use a trigger to the front of the spray to send the liquid stream on its way. It's used by Police Forces in the main, who HAVE to be seen to be careful in who they use it on.As stated above, the spray is a direct fire weapon, as opposed to an area effect device, such as a cloud of CS gas. The weapon is detailed in the section below, entitled 'delivery system stats'.

There have been one or two notorious usage errors with CS sprays, however - like the Police Instructor who somehow got the spray head aimed in the wrong direction in a basic usage class, and attacked himself at point-blank range....

'STING RAG' 38mm & 40mm riot rounds

The STING RAG system of baton type rounds is based on the Round Aerofoil Grenade baton round, which delivers less damage, but is just as accurate, and more efficient.

In use, it is a ring of soft rubber, impregnated with a measured dose of CS micropulverised powder. The rounds are designed to be non-lethal at impact, much like the anti-riot rubber baton round.

The difference is the effect on impact. Where a baton round imparts only blunt trauma (impact) damage, the STING RAG imparts about half the impact damage (thus pleasing Civil Rights groups!), as well as delivering a CS powder attack on the target. The impact splits open the sacs containing the powder, which then forms a very localized cloud of powder around the target. This has the effect of incapacitating the target for long enough for 'snatch squads' to grab the target, for instance, in defusing a riot. An added bonus is that the cloud will also affect those in the immediate vicinity - about 1 to 1-and-a-half metres around the target - with the effects of a CS powder attack.

CS gas, as stated above, is an irritant. It was designed to be NON-lethal, and the effects display this. To accurately model the effects in Millenium's End is impractical (and a little foolhardy!), so the rules'll be generic. If you want to add to 'em, feel free.....

An example of use is shown below...

*Fred, a rioter, with a Damage rating of 2, is hit by a 40mm STING RAG round aimed at him. This hits him in the upper right torso, and since he has no armour, gives the full DD of 3; the Trauma Modifier for this is 1.4; Fred has a Damage rating of 2, so the Trauma level = 8.4 (3*1.4*2), which rounds to 8. This results in him staggering a couple of paces backwards from the impact, and taking an initial impairment of -6 to the Torso, giving him some serious bruising, which is definitely going to hurt.*

At the same time as he was hit with the RAG round, the STING in the powder sacs delivered a measured dose of CS powder to him.

Since he initially wanted to throw rocks at the Police, and wants to continue to do so, he has to roll against his Willpower to do so. This results in a roll of 54. The referee adds a modifier of -40 (he's in the CS powder cloud, coughing and gagging like crazy), and the impairment he's already suffered to his torso (-6), which brings the total to 100. The referee then adds the additional -30 modifier, and the resulting roll winds up at 130. Well over Fred's Willpower attribute (currently at 36).

Fred's rock lands at his feet, as he tries to wave the cloud away. Just as the Police Snatch Squad grabs him. By the time he recovers from the Sting-RAG and CS attack, he will be the proud occupier of a nice, warm, air-conditioned cell.....

Delivery System Statistics

38mm & 40mm baton round stats			
Ammunition Type	Damage Type	Delivered Damage	Special Effects
38mm Baton Round	Impact	3.5	none
40mm Baton Round	Impact	3.8	none
38mm & 40mm STING RAG round stats			
38mm STING RAG	Impact	2.7	CS Powder Cloud Attack
40mm STING RAG	Impact	3	CS Powder Cloud Attack

38mm Riot Gun (generic)

Speed	IA	Fire Rate	Hand Req'd	Eff. Range	Action	Mag	Ammo
+4	+13	2	2	75	Break Open	n/a	38mm BATON
+4	+13	2	2	50	Break Open	n/a	38mm STING RAG

The generic ranged anti-riot hand-held weapon in use with police forces the world over, the 38mm baton round launcher can also fire the STING RAG system of ammunition. The weapons resembles a very large Very Pistol (are launcher) with a foresight post and rearsight aperture sighting system. The weapon breaks open like a double-barrel shotgun for reloading. The 2 fire rate relates to the time it takes to reload the weapon by a trained user - twelve to sixteen seconds is typical, due to the size of the rounds, and the time it takes

to break open, extract to expended round, load the fresh round, close the action, and bring it up into the aim.
NOTE: Stats are with this ammunition ONLY.

H&K 69A1 40mm Grenade Launcher

Speed	IA	Fire Rate	Hand Req'd	Eff. Range	Action	Mag	Ammo
+2	+17	2	2	100	Break-Open	n/a	40mm BATON
+2	+17	2	2	75	Break-Open	n/a	40mm STING RAG

Baton Round/CS Gas launchers generally tend to look like grenade launchers. The H&K 69A1 is just such a weapon, and as well as firing 40mm grenade munitions, it can also fire rubber baton rounds and STING RAG munitions. Other ammunition is available for this weapon, but since grenades are the ammunition, they aren't reproduced here (wait for another article!!!). NOTE: Stats are with this ammunition ONLY.

With luck, this article should have helped you figure out a few ways of getting your player characters either into a whole mess of trouble (if you're the game master), or conversely, out of trouble (if you're the player!). Either way, riot guns and munitions are a facet of modern crowd control, and most police forces in the Millennium's End world'll have them. Whether they get a chance to use them on your players is your own problem!

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