Quantifying use of lethal $ZnCl_2$ on Black Lives Matter demonstrators by United States Homeland Security

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Video S1

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TABLES

Table S1. Date, classifications, and locations for all 25 HC grenades recorded (Figs. S1-24).

id	date	observed	recovered	detonated	location
1	2020-07-16	0	1	0	madison closer to 3rd than 4th
2	2020-07-16	0	1	1	3rd btwn madison and jefferson
3	2020-07-16	1	0	0	wyatt
4	2020-07-16	1	0	1	wyatt and down 3rd towards main
5	2020-07-17	1	1	0	3rd btwn madison and jefferson
6	2020-07-17	1	1	1	3rd btwn madison and jefferson
7	2020-07-17	1	1	1	3rd btwn madison and jefferson
8	2020-07-19	0	1	0	near side of the parks
9	2020-07-19	0	1	1	Unknown
10	2020-07-20	0	1	1	main and 3rd
11	2020-07-20	0	1	1	lownsdale
12	2020-07-21	0	1	1	salmon and 3rd
13	2020-07-23	1	0	1	4th near salmon
14	2020-07-25	0	1	0	around courthouse (fence was torn down)
15	2020-07-25	0	1	1	around courthouse (fence was torn down)
16	2020-07-28	1	1	1	2nd and salmon
17	2020-07-28	1	1	1	salmon between 3rd and 4th
18	2020-07-28	1	1	1	salmon between 3rd and 4th
19	2020-07-28	1	1	1	salmon and 3rd
20	2020-07-28	1	0	1	salmon and 3rd
21	2020-07-29	1	1	1	3rd between salmon and main
22	2020-07-29	0	1	1	4th and main
23	2020-07-29	0	1	1	unknown
24	2020-07-29	0	1	1	unknown
25	2020-07-29	1	0	1	main between 4th and 5th

FIGURES

Fig. S1. Deployed hexachloroethane grenade 1: 16 July 2020**,** SW Madison closer to 3rd than 4th, not detonated, deployment not observed, recovered[1].

Fig. S2. Deployed hexachloroethane grenade 2: 16 July 2020**,** SW 3rd between Madison and Jefferson, detonated, not observed deployed, recovered[2,3].

Fig. S3. Deployed hexachloroethane grenade 3: 16 July 2020**,** Wyatt Federal Building, not detonated, observed deployed, not recovered[4].

Fig. S4. Deployed hexachloroethane grenade 4: 16 July 2020**,** Wyatt Federal Building and down SW 3rd towards Main, detonated, observed deployed, not recovered[5,6].

Fig. S5. Deployed hexachloroethane grenade 5: 17 July 2020**,** SW 3rd between Madison and Jefferson, not detonated, observed deployed, recovered. Photos by the author.

Fig. S6. Deployed hexachloroethane grenade 6: 17 July 2020**,** SW 3rd between Madison and Jefferson, detonated, observed deployed, recovered. Photos by the author.

Fig. S7. Deployed hexachloroethane grenade 7: 17 July 2020**,** SW 3rd between Madison and Jefferson, detonated, observed deployed, recovered. Photos by the author.

Fig. S8. Deployed hexachloroethane grenade 8: 19 July 2020, SW 3rd between Salmon and Main, not detonated, not observed deployed, recovered[7].

Fig. S9. Deployed hexachloroethane grenade 9: 19 July 2020, unknown location, detonated, not observed deployed, recovered. Note the coloration and dimensions of the can (e.g., the rim shape and size) are distinct from the standard HC Military Style Maximum smoke whether unexploded (Fig. S1) or exploded (Fig. S7), suggesting perhaps a different run of product or a partial detonation[8].

Fig. S10. Deployed hexachloroethane grenade 10: 20 July 2020, SW Main and 3rd, detonated, not observed deployed, recovered. Photos by @JesykaNoellex3, used with permission.

Fig. S11. Deployed hexachloroethane grenade 11: 20 July 2020, Lownsdale Square, detonated, not observed deployed, recovered[9].

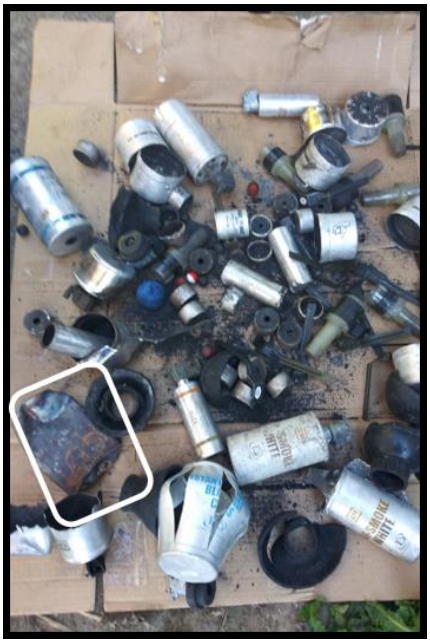

Fig. S12. Deployed hexachloroethane grenade 12: 20 July 2020, Lownsdale Square, detonated, not observed deployed, recovered[10].

Fig. S13. Deployed hexachloroethane grenade 13: 23 July 2020, SW 4th near Salmon, detonated, observed deployed, not recovered[11].

Fig. S14. Deployed hexachloroethane grenade 14: 25 July 2020, Hatfield Courthouse, not detonated, not observed deployed, recovered. Photos by anonymous recoverer. Used with permission.

Fig. S15. Deployed hexachloroethane grenade 15: 25 July 2020, Hatfield Courthouse, detonated, not observed deployed, recovered[12].

Fig. S16. Deployed hexachloroethane grenade 16: 28 July 2020, SW 2nd and Salmon, detonated, not observed deployed, recovered[13].

Fig. S17. Deployed hexachloroethane grenades 17 and 18: 28 July 2020, SW Salmon near 3rd, detonated, observed deployed, recovered[14-16].

Fig. S18. Deployed hexachloroethane grenade 19: 28 July 2020, SW 3rd and Salmon, detonated, observed deployed, recovered[17,18].

Fig. S19. Deployed hexachloroethane grenade 20: 28 July 2020, SW 3rd and Salmon, detonated, observed deployed, not recovered[19].

Fig. S20. Deployed hexachloroethane grenade 21: 29 July 2020, SW 3rd near Salmon and Main, detonated, observed deployed, recovered[20,21].

Fig. S21. Deployed hexachloroethane grenade 22: 29 July 2020, SW 4th and Main, detonated, not observed deployed, recovered. Photos by the author.

Fig. S22. Deployed hexachloroethane grenade 23: 29 July 2020, specific location unknown, detonated, not observed deployed, recovered. Photos by Nicholas Lee, used with permission.

Fig. S23. Deployed hexachloroethane grenade 24: 29 July 2020, specific location unknown, detonated, not observed deployed, recovered. Photo by anonymous collector. Used with permission.

Fig. S24. Deployed hexachloroethane grenade 25: 29 July 2020, SW Main near 4th, detonated, observed deployed, not recovered[22].

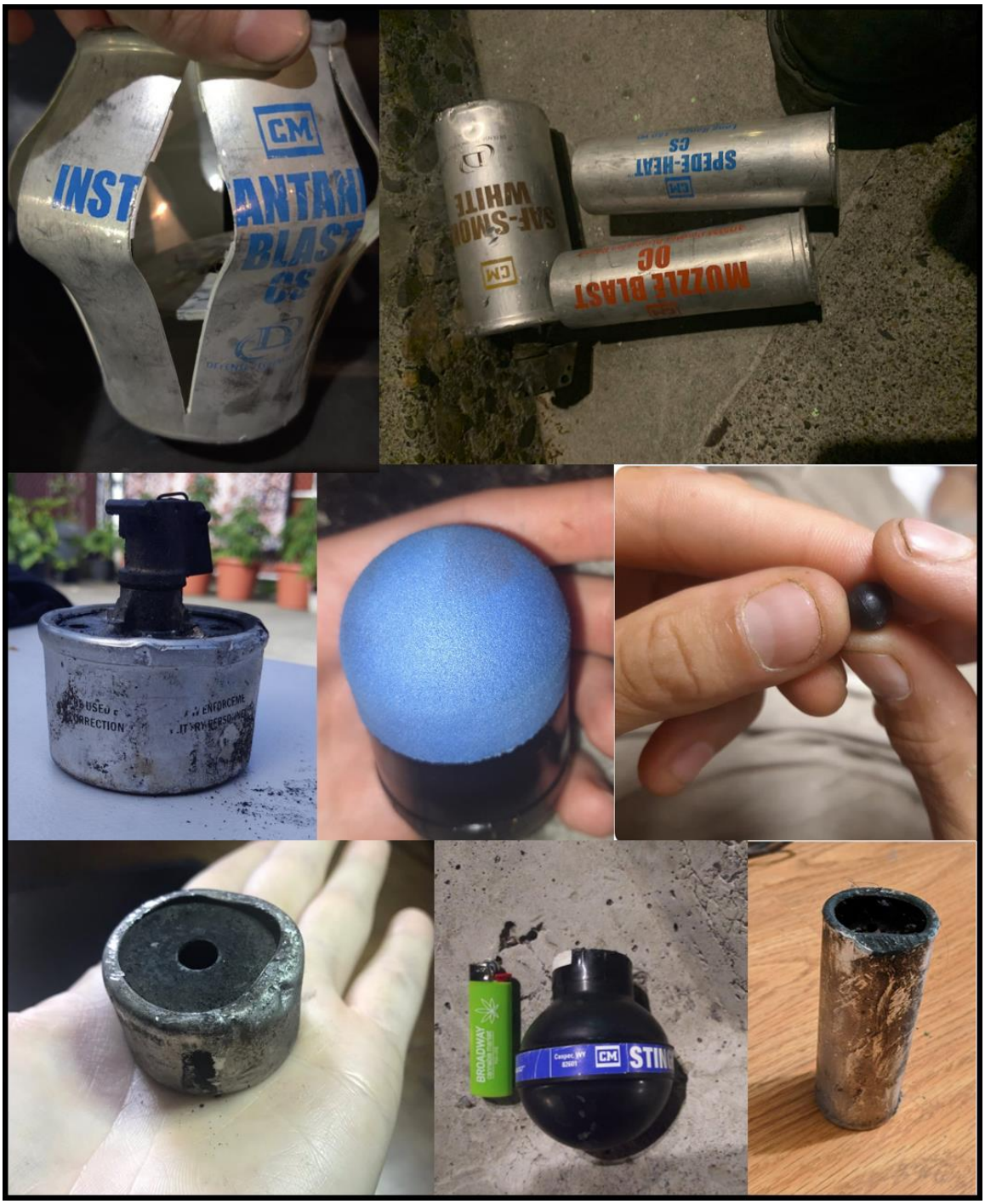

Fig. S25. Photos from a tweet thread collection of munitions prior to HC usage[23].

Fig. S26. Product photo and specification sheet for Defense Technology Military-Style Maximum Smoke HC Grenade[24].

VIDEOS

Video S1 (videoS1.MOV). Raw video showing context and deployment of Hexachloroethane Smoke grenade by US Department of Homeland Security and evaluation of the munition by press and protesters documenting its use. This grenade was sampled for chemical analyses (Dataset S2).

DATASETS

Dataset S1 (summary_data.csv). Collated daily data used in the analyses.

Dataset S2 (analytical_chemistry.pdf). Full analytical chemistry report of samples (Fig. 4) from private lab: Specialty Analytical in Clackamas, OR.

Dataset S3 (fed_presence.xlsx). Jaunt-by-jaunt time stamps and total time out for each instance where the federal agents left their buildings during July 2020.

Dataset S4 (population_sizes.csv). City population size estimates used in main text Figure 1, derived from the US Census Bureau[25].

Dataset S5 (functions.R). Custom R functions used in analyses.

Dataset S6 (analyses.R). R code used to conduct analyses and full session information.

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