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## Sample Card for Handing Out:

Shamelessly adapted from the Black Cross Radical Health Collective, [www.blackcrosscollective.org](http://www.blackcrosscollective.org)

(your logo here)

### Useful Numbers:

Medical Emergency:	<b>911</b>
Copwatch:	123-4560
Convergence Ctr Aid Station:	123-4567
Aftercare Clinic:	123-4568
Legal Team:	123-4565
Public Defenders:	123-4569
Indymedia Center:	123-4566

This Medic's ID#/ForestName: \_\_\_\_\_

**If your condition is worsening, go to an emergency room.**

Basic preparations: Stick with your buddy. Work with an affinity group. Bring water. Vulnerable people like asthmatics may want to avoid chemical weapons. You must remove small children from the area **BEFORE** chemical weapons are used. Check out our website <[www.---.org](http://www.---.org)> for lots more info on how to prepare.

Serious injuries: If you don't know how to treat an injury, get a medic, or call 911. Don't treat someone if you don't know how. If you are injured by the police, get to a nurse practitioner, physician's assistant, or doctor immediately and have your injury documented in case you decide to sue. **Later will be too late.**

Fight the power. — Do no harm.

(front&back)

### CHEMICAL WEAPONS:

Both tear gas and pepper spray make breathing difficult, which makes us more likely to panic. After a chemical weapons attack, spread calm. We are strong and this is temporary.

**TEAR GAS:** Stay calm. Breathe slowly and remember it is only temporary. If you are tear gassed, the best cure is to remove yourself from the area. Symptoms usually go away after no more than 30 minutes.

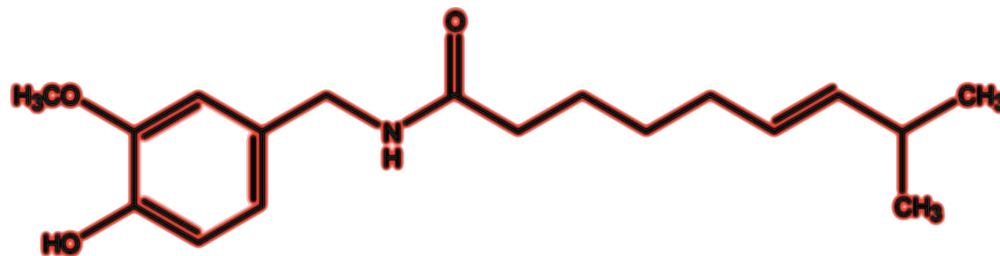
**PEPPER SPRAY:** Stay calm. Breathe slowly and remember it is only temporary. The worst effects usually disappear after 20 minutes. Flush the eyes with several good squirts from a sport bottle, filled with half liquid antacid (Maalox) and half water. Irrigate from the inside corner of the eye towards the outside, with head tilted back and slightly to the side being rinsed. It needs to get into the eye to help. You may need to help open the victim's eye for her. She most likely won't be able/willing to open it herself, and opening will cause a temporary increase in pain, but it does help. If you don't have any Maalox, use water. Blow your nose, rinse your mouth, cough and spit. Don't swallow.

**AFTERWARDS:** Chemical weapons continually (re)contaminate you, everyone and everything around you until you get rid of them. Avoid touching anything. Remove contaminated clothes and wash them. Take a shower in water cool enough that it won't open your pores. Your liver is busy processing toxins so avoid alcohol and drugs.

**LEGAL:** Use your right to remain silent. Talking to police *never* helps you, but can seriously harm you or others.

You might want to include:

- Info for contacting the National Lawyer's Guild "nlg.org" or related legal resources.
- It is useful to write medics' forest names on cards for handing out, because victims might need witnesses for lawsuits against police, or so other medics, aid stations staff, etc., can ask a medic what happened to a specific victim if she presents again later.



Pepperspray, CS, & Other  
"Less-Lethal" Weapons  
Used by Rioting Police to Suppress Dissent  
when Politricks & Television fail to do so.

v3.3



**SELF AID:** If you've been hit with any rioting agent:

- Stay calm!
- Move to safety as best you can.
- Blow your nose!
- Don't touch or rub your eyes, nose, skin!
- Call out for a medic.
- Flush your eyes, nose, mouth & skin with water.

**Patient's consent!** You absolutely must ask a person if they want your help before you treat them (unless they're unconscious)! It's ok to be assertive in a serious situation, but avoid making a habit of it. Absolutely avoid becoming the obnoxious authoritarian "helper" at a demo that literally pushes people around,

\*This 'zine uses more science words than usual: this is meant to assist and stimulate people to do further research and find their own answers and hopefully not scare anyone away...

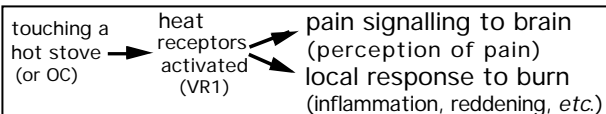
[autonomedecine@riseup.net](mailto:autonomedecine@riseup.net)  
autonomedical collective

**MEDIC**



# Pepperspray

**Active Ingredient:** Oleoresin Capsicum “OC,” containing **5-20% capsaicin** (trans-8-methyl-N-vanillyl-6-nonenamide) & **dihydrocapsaicin**: the same stuff that puts the hot in **hot peppers**. OC causes localized release of Substance P (**pain neurotransmitter**), neurokinin A, and tachykinin, thus “tricking” nerves into reporting **intense burning sensation** at sites of contact (esp. **mucous membranes** such as **eyes**, nose, etc.). OC simulates the physical stimulus (fire, etc.) of a burn to activate the same pain receptor pathway as a sunburn or touching a hot stove would:



Capsaicin activates skin VR1 receptors which respond to temperatures above 43°C and acidic pH (under 4.0). This creates the illusion that you are being burned, and **eyes**, skin and airway react accordingly:

**Eyes:** Acute burning pain, eyelids clamp shut.  
**Copious secretion** of tears & mucous.

**Airway:** Inflammation, constriction & spasm, causing difficulty breathing and respiratory arrest in extreme cases.

**Circulation:** Acute blood pressure increase, risk of stroke or cardiac arrest (in extreme cases or with preexisting illness). Prolongs bleeding time after injury (prevents clotting more potently than even aspirin, see p.9).

**Skin** becomes reddened, inflamed, hypersensitive to heat & touch, but OC does not normally cause blistering (unlike CS/CN) at the concentrations usually used by police (under one million scoville heat units, SHU).

**Nervous System:** Nausea, fear & disorientation. Increases risk of hypothermia on cold days. New research suggests it kills nerve cells by programmed cell death (apoptosis) and by overstimulating them (lasting VR1 activation raises intracellular calcium level to toxic levels). This is probably how capsaicin cream and patches work to relieve chronic pain.

**Genetic:** Capsaicin is a weak mutagen (Ames test) / carcinogen (7).

**Inactive Ingredients:** Solvents & propellants: various alcohols & other organic solvents, freon, 2-propanol, butanol, tetrachloroethylene, DuPont 134A, *methylene chloride* (paint stripper, which is itself an irritant and *highly toxic* to the liver, nervous system, and DNA). These are often carcinogens and can cause acute adverse respiratory, cardiac (arrhythmia) and neurologic effects (usually central nervous system depression).

**Delivery:** OC products can spray an oily liquid or a foam (like shaving cream), which has a similar range. OC can also come in paintballs, foggers, water cannons, or concussion grenades (but not burning grenades).

**Dyes:** OC sprays sometimes contain a visible or invisible fluorescent dye which marks the person sprayed. A small, handheld UV lamp, like the kind used at night clubs and banks to check for fake IDs or bills, can help localize droplets in the eyes or clothes (find out beforehand whether local police are using invisible dye).

**OC leaves an oily clear, yellow, or reddish residue smelling of chili peppers.**

**Onset: < 1-15 minutes,**  
**Duration: 30-120 min.**

## References:

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4. **FM 8-9. Medical Aspects of NBC Defensive Operations**. U.S. Army.
5. **Street Medicine brochure** online (in German) at nadir.org: [www.nadir.org/nadir/initiativ/sanis/hilfe/online/kap\\_09.htm](http://www.nadir.org/nadir/initiativ/sanis/hilfe/online/kap_09.htm)
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14. Analytical Reference Laboratories. Newsletter Vol. 2. [arlaus.com.au](http://arlaus.com.au)
15. Patapoutian, et al., *Nature Neuroscience*. 4: 529-539. July 2003.
16. [www.strategicstudiesinstitute.army.mil/pdf/PUB890.pdf](http://www.strategicstudiesinstitute.army.mil/pdf/PUB890.pdf)

Special thanks to input from:  
 C (MANY)

They've killed a man.  
 Great is our sadness and great is our rage.  
 He was a common boy, like so many, like us.  
 The one who shot him was armed, but he wasn't, he was like us.

They are rich, they are powerful, we are not.  
 They are afraid, we are not.  
 They have to hide themselves, we don't.  
 They have to defend themselves, we don't.

We don't, we're not like them.  
 They can order us, we'll never obey.  
 They can shoot us, we'll never die.  
 They can jail us, we'll always be free.

We believe in peace, they believe in war.  
 We want the good for all, they want riches for the few.  
 We love nature, they destroy her.  
 We think of a starry sky, they think of profits.

They are eight, we are six billion.  
 We will always exist, they will not.

**Carlo Marsino, Genoa, July 20th, 2001.**



This 'zine is dedicated to Carlo Giuliani, to the Argentinians killed in rebellion December 19 & 20, 2001, to the hundreds of Zapatistas who — “dreams in their eyes and hearts in their throats” — lost their lives and yet changed the world, to the excluded, and to the many injured, tortured, and suffering humans that we never hear about, but who are there all the same, struggling to make life more humane on this planet. These are the day to day battles of the fourth world war.

This 'zine is dedicated to all that dream that the end of repression is not far away, and will be the ones to walk the road that gets us there.



What was that nasty shit??

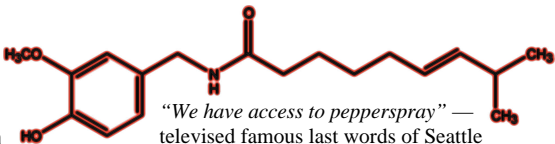
Trying to figure out what chemicals those fuckwit Riot Piglets used on your friends? Talk to your medical team, they can often tell from people’s symptoms. Otherwise, carefully collect munitions and residues (in a clean glass jar or plastic container). These handy facts will help radical science geeks in college chemistry identify what was used:

Properties	CS	CN	DM	CR	CA	OC
CAS#:	2698-41-1	532-27-4		257-07-8	5798-79-8	8023-77-6 (CAS# 404-86-4 for pure capsaicin)
Formula:	$\text{ClC}_6\text{H}_4\text{CH}=\text{C}(\text{CN})_2$	$\text{C}_6\text{H}_5\text{COCH}_2\text{Cl}$				$\text{C}_{18}\text{H}_{27}\text{NO}_3$
MW (g/mol):	189	154				305.4
Melting Point (°C):	92.7	54-58.9	195	73	25	65
Boiling point (°C):	310	247.8	410*		227-242	210-220
Specific Gravity:		1.68			1.52	
Vapor pressure/mmHg@20°C:	0.00034	0.0041	4.5x10 <sup>-11</sup> (25°C)			
Density:						
Vapor:						
Liquid:						
Solid (g/cm <sup>3</sup> ):	0.24-0.26	1.318	<1			
bulk:						
crystal:	0.71(25°C)	34.3(20°C)	1.65 (20°C)		130(30°C)	
Volatility (mg/m <sup>3</sup> ):						
Appearance:	white crystalline powder	apple blossoms	—	pale yellow-green crystalline powders	yellow powder	clear, yellow, or reddish oil
Odor:	pepper		polish			peppery/none
Aerosol Concentrations (mg/min/m <sup>3</sup> ) Producing incapacitation of 50% of exposed population:	3-5	20-40	22-150, vomiting 370			
Death of 50% of exposed population:	60,000	7,000-14,000	11,000-35,000			
Solubility:						
In water:			low: 0.0064g/100g (25°C)			
Other solvents:	insol organic various	insol organic short	low: acetone: 13.05 g/100g (15°C)		low organic	insol organic
Persistence:			persistent			



Hot Factoids:

- Sprays containing more than 1,000,000 Scoville Heat Units (SHU), often boosted with synthetic capsaicin, are likely to cause lasting damage and burn skin.
- While pepperspray is **allegedly** designed for use against violent individuals: “subjects who are highly aggressive, agitated, intoxicated, or suffering from mental illness may have altered perception of and response to pain, and consequently may not be affected by—or may even become enraged after—being sprayed.” (I).
- Unlike CS/CN, which are primary irritant chemicals, OC is also a neurogenic inflammatory agent.
- In 1995, FBI agent Thomas Ward, who promoted the bureau’s adoption of pepperspray, spent some time in prison for taking \$57,500 in **kickbacks** from pepperspray manufacturer Cap-Stun (I).
- In 1996, the NC Dept of Health and Human Services & NC OSHA investigated police training practices involving intentional exposure to OC spray: “...they concluded that exposure to OC spray during training constituted an unacceptable health risk. A review of reported injuries found that **61 of approximately 6000 officers** directly exposed to OC spray during training experienced **adverse effects** (eye irritation, eye burns and abrasions, dyspnea, asthma attacks, nasal irritation, acute hypertension, severe headaches, chest pain and loss of consciousness) sufficiently severe to **require medical attention**. In 9 cases, effects (headaches, corneal abrasions and asthma) **lasted for more than a week.**” (I).
- **NONE** of the commercially available “pepperspray remedies” have proven useful in trials.
- G8 in Russia? In Eastern Europe, and presumably elsewhere as well, the synthetic capsaicin analogue “pelargonic acid morpholide” (made from geraniums!) is used, which may differ slightly in its effects from natural capsaicin described here.
- Time is of the essence! Treatment needs to happen promptly after capsaicin exposure, or it becomes futile as capsaicin sinks into the skin. Medics need to be close to the frontline and pass out LAW (see p. 4) and instruct others in its use (to multiply their team’s effect).



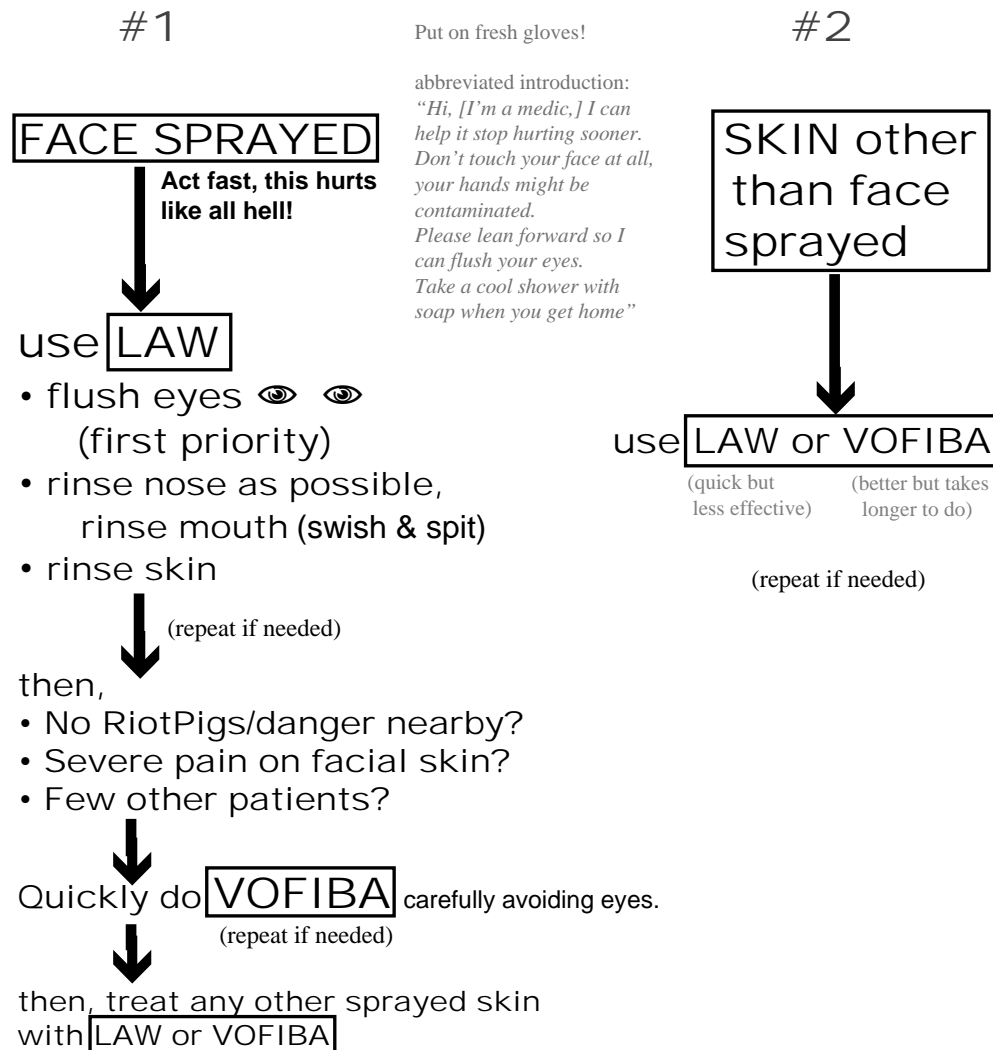
“We have access to pepperspray” — televised famous last words of Seattle police spokesperson prior to the WTO demonstrations there in 1999.

Maalox

Different remedies for eyes & skin! EYES: LAW (Liquid Antacid & Water, see p.6) SKIN: LAW or VOFIBA (see p.7)



# General Treatment Flow Chart:



**Evac:** If patients are not feeling better after this gross level decontamination, and frontline medics are overwhelmed, send the patients with escorts (medics or friends) to a safer location (forward medic stations, vans, or convergence center if it is accessible) where medics can spend more time treating them (VOFIBA, cooling packs / cold water, analgesics, etc.).

## What Now???

- Go get more training (**Wilderness First Responder** "WFR" courses are excellent).
- Take a **CPR** course (e.g., from your local Fire Dept.) and refresh often.
- Build an **affinity group** (see rantcollective.org, resources → affinity groups).
- Make an emergency **kit** that you can take onto the streets with you. Save/collect plastic squirt bottles so you'll have plenty on hand to pass out to people during protests and the turbulent times ahead.
- Draft some emergency **plans** with your affinity group ranging from natural disaster to martial law.
- Each one teach one: **share** the skills you have with others.


## Medic Links:

WEST US: blackcrosscollective.org (now defunct, but still able to give advice/training)  
 EAST US: nycmedics@lists.riseup.net takethestreets.org Medical Activists of New York  
 stormnyc@stealthisemail.com Star of Resistance Medics, New York  
 bostoncoop.net/balm bostonmedics@riseup.net the BALM Squad  
 barhc.w2c.net Bay Area Radical Health Collective  
 Cascadia Health Educators (CHE) che@wildrockies.org  
 action-medical.net & neama.org  
 Europe: actionmedical.co.uk (UK)  
 autonomedicine@riseup.net  
 premiersecours@no-log.org (France)

## Further Reading:

**Bodyhammer:** shields & tactics "for the modern protestor."

www.devo.com/sarin/shieldbook.pdf

**Security Guide:** security.resist.ca 

**RANT:** Consensus decisionmaking, anti-oppression, AGs  
 rantcollective.org

**Recipes for Disaster & Irrepressible Anarchists:** crimethinc.com

**WTO Seattle Logistics 'Zine:** How it was done. Activist communication, clinics, etc.

**Ruckus.org:** Guides and courses on climbing, communications, media work, etc., etc.

**Activist's Guide to Basic First Aid:** what to bring, medical conditions that might occur, CS/OC, aftercare, etc.)  
 blackcrosscollective.org

**Manual de Primeros Auxilios — En Situación de Emergencia.** 1. ed. Mexico, 1997.

Wartime medical concepts and techniques made easy to understand with lots of graphics. Spanish only. Equipo de Apoyo en Salud y Educación Comunitaria (EASEC), Francisco León núm. 76, Barrio de Guadalupe, San Cristobal de las Casas, Chiapas, México.

**The Wilderness First Responder.** Buck Tilton. Globe Pequot, 1998. ISBN 0-7627-0392-X or eBook.

**USN Emergency War Surgery** (.pdfs online).

*from the flip side :*

Dept. of "Justice"/DoD **Nonlethal Weapons & Equipment Review:** A Research Guide for Civil Law Enforcement and Corrections. Special Report, Oct. 2004. www.ojp.usdoj.gov/nij

**KUBARK Counterintelligence Interrogation**, July, 1963 (CIA Torture & Interrogation Manual). From Vietnam to Abu Ghraib to... Peoria?

**Human Resource Exploitation Training Manual**, 1983 (CIA Torture & Interrogation Manual).





## TACTICAL GOALS of the Kkkops for Rioting Agent Use:

- Harass
- Obtain distance between piggie lines and the people
- Save themselves future work by **intimidating people into staying home**
- Straight up sadism, personal insecurities, racism (since used more often against minorities), *etc.*
- Sometimes goals are more pragmatic: in Geneva 2003, police clearly provoked pedestrians (largely unassociated with the G8 protest) by hitting them with enough rubber bullets and concussion grenades that they started smashing things up in response. Why? Because the Swiss federal government would only reimburse the state govt for police costs if a riot occurred...

## STRATEGIC GOALS of the Bosses:

- A little spray looks better on TV than cracking skulls with batons. Home viewing audience cannot as easily identify with the pain an OC-sprayed person feels as with someone hit with batons.
- Instill fear, enhance culture of fear where people react on primitive instincts of self-preservation, preempting solidarity and collective organization.
- Reduce outlets for popular resistance, since street demos “don’t succeed.”
- **Intimidate people into staying home, shutting up, & giving up.**
- Get home viewing audience to automatically associate alternative opinions with flickering televised chaotic street scenes.

# Excuses straight out of the can!

## Typical Government, PoPo & Media Redefinition Ploys:

GOAL: Damage control by the government to convince their constituency\* that their use of less-lethal weapons was: \* which may or may not be the voters!

- (1) not inhumane. (2) legal. (3) morally justified, even necessary to protect “order” or property.  
(4) “the minimum necessary for the safety of the officers involved.” (5) *etc.*

You’ll hear that the officials responsible (mayor, police chief, shooters, *etc.*) are really great people, god-fearin’, active in their church, love animals, spend time with their grandkids, coach little league, collect porcelain, *etc.* The media will bring lots of conspicuously timed stories to make them seem more human and friendly — like the grandma next door — while at the same time demonizing, vilifying, and slandering the victims. Is this info really relevant to the deeds being considered?

**They fear:** resolute demands of real, independent investigation of the incident, poignant video evidence (get it to the IMCs and stations *fast* if it doesn’t incriminate any activist or compromise any activist’s identity), public outrage among the people and/or voters (sometimes). **Some tactics they use:**

- **Blame the victim:** “He had it coming, because he was [poor, black, drinking, homeless, sometimes uses drugs although not that night, *etc.*].”
- **Character smearing:** They’ll find hostile ex-boyfriends, ex-husbands, employers, *etc.*, for negative character reference soundbites.
- **Misnaming campaigns:** “They’re not rubber bullets, they’re rubber pellets” (Fmr PDX Mayor Vera Katz).
- **Nonsequiturs:** “*If you’re against taser use on unarmed handicapped grandmothers, then you’re anti-cop!*”
- Would lethal force have been “legal” in this situation? Often **the mere availability of less-lethal weapons** (esp. tasers) **lowers the threshold at which police use any kind of violence**. Consider: would a jury consider bullets or baton blows justified in this case?
- Expect official **promises** in the media circus tent to explain away the use of less-lethal weapons. A media-effective neutralization campaign was accomplished by means of printed “lies” signs held by most of the audience at one such event in Portland after Mayday 2000.
- **Coverups** of the circumstances and range at which the weapons were used by govt & obedient media. E.g., KATU TV edited out scenes of activists’ video showing police brutality and aired the unintelligible rest. See “Li2U News” & “Eye of the Storm” videos by Videos From the Revolution on portland.indymedia.org

\* There are several good websites out there to help you recognize and examine **propaganda**. Other resources: [Manufacturing Consent](#) by Noam Chomsky and books by Norman Solomon.

## What on Earth is Maalox??

### Maalox\*

active ingredients: 4g magnesium hydroxide, 3.5g aluminum hydroxide per 100mL. pH = 8.5-8.62.

inactive ingredients: hydrochloric acid, citric acid monohydrate, mint essential oil, D-mannitol, methylparahydroxybenzoate, propylparahydroxybenzoate, sodium saccharine, sorbitol, purified water.

\* This is the formulation sold in Europe, which still contains mint oil. Maalox sold in the US no longer contains mint and has the additional anti-fart ingredient simethicone (appears to be harmless).

## Washing up with wash tubs



### Washing Tubs for mass casualty situations:

For anticipated mass chemical casualty situations (such as a line of people protecting locked-down individuals or whenever tear gas *grenade* use is anticipated), a DIY & “buddy aid” approach is a practical adjunct to decontamination by scarce medics. At the Seattle WTO (N30), large tubs of cold soapy water (dish soap or baby shampoo) filled with clean rags (torn sheets, towels & shirts) were brought to intersections when standoffs started. Rags circulated to and fro through the lines, and some people went over to the tub to wash. It is a ONE WAY street: tell people to **discard rags after one use**. This is to prevent excessive soiling of the water with CS/OC. Keep a dry backup stock nearby in a plastic trash bag.

This worked fine in late November in the cold city of Seattle, but still we should consider the risk of people getting really cold when doing this. Do not use water warmer than body temperature, though, as it may open the pores and allow more OC/CS into the skin.

### RiotKop Tactics:

In a scenario as seen in this picture, local yokel police often fog the area with CS grenades under the incorrect assumption that locked-down individuals will also leave. This produces masses of people contaminated with the shorter-acting tear gas CS. Washing tubs make sense here. When Federales are running the show, they instead suggest a two phase approach: **get mobile/standing individuals to leave** (ideally, no one should be standing when you’re trying to hold ground) using OC spray against individuals (and/or concussion grenades), **followed by isolation and arrest of locked-down people** (waiting them out or making the area safe for technical teams to arrive with their saws). There is less of a role for wash tubs in the latter situation.

## Treatments: Eyes, Nose, Mouth, Skin

LAW

### LAW: "Liquid Antacid in Water."

**Materials:** 1 part Maalox diluted with 1 part drinking/distilled water.

**Method:** Shake LAW well before each use.

• Promptly after exposure to pepperspray, advise person to avoid rubbing/touching face, & have them kneel leaning forward and turn their head to the side. Use LAW to flush the eye closest to the ground (outward, away from the nose!). A peppersprayed person has uncontrollably clenched eyelids, so you need to use a non-contaminated, freshly gloved hand to hold open their eyelids while rinsing. Have the person turn their head the other way and repeat for other eye.

*Don't squirt too hard into the eye, you'll trigger more eye-clenching and could scratch the cornea.*

• If the person is too panicked to cooperate, it is often easier to lay them on the ground. In this case, rest a few fingers of your gloved hand with which you're holding the bottle on the person's forehead — this allows more control over the bottle, keeping it out of the person's eye in case the person moves suddenly, or you are pushed from behind unexpectedly.

• After rinsing, ask the patient to roll their eyes, swish with LAW and spit, and blow their nose.

Follow with a water or 0.9% sterile saline eye wash (15 min recommended) if time allows.

• Rinse face with LAW. Rinse exposed skin as well if there's no time or materials to perform VOFIBA.

• Avoid wetting the patient (spreads the contamination to hair, clothes), especially if it is cold outside (hypothermia)!

**Concept:** Maalox's active ingredients: 4g  $Mg(OH)_2$  and 3.5g  $Al(OH)_3$  per 100mL, pH 8.5-8.62 (pH is lower in 50% solution & depending on the pH of the local water you dilute it with). It either works by inactivating capsaicin (with the OH) or making it unable to seep into the skin (again, with the OH group) or by a receptor/membrane interaction (with the high pH or Mg). It has been tested on a large number of volunteers in Portland by the Black Cross Health Collective and was found to be effective. Use mint flavored Maalox without the anti-fart ingredient simethicone, if possible. If you're in a region that doesn't have Maalox, test another liquid antacid that contains magnesium hydroxide & aluminum hydroxide (preferably no other active ingredient) and has as little additional ingredients as possible, and *especially not alcohol* of any kind.

**Never apply alcohol or alcohol-containing liquid antacids into the eyes.**

- ★ Calm the person down! This hurts, but is not the end of the world.
- ★ Remove contact lenses as soon as possible! Carry a suction-cup contact removal tool.
- ★ If nothing else is available on scene, wash with soap & cool water!
- ★ Suggest a cool shower with soap ASAP and changing clothes.
- ★ Flush wounds only with sterile/the cleanest water/saline solution available & call a medic!
- ★ After decon, consider other measures for continuing pain: cold, analgesics, etc.



### Military Filters:

**"NATO" C2 (Standard) or C2A2 (Chromium-free):** Nuclear, Biological, Chemical ("NBC") & Riot Agent. 40mm (NATO) threading: interchangeable with all NATO-country masks, masks from many other nations (Israel), and some commercial masks. These filters contain a near-P100 quality filter against riot agents and biological agents, as well as zinc-catalyst impregnated activated charcoal (ASZ) to neutralize CW agents, as well as many other organic chemicals. They sometimes also contain additional agents to neutralize CW agents, such as chromium VI (classified as a carcinogen by the CDC) in the older C2 filters, but it is unclear if this enters the airstream you breathe. Substances not filtered include ammonia, carbon monoxide, nitric oxide, and carbon dioxide. Phosgene rapidly degrades all filters.

**M13A2 Filters** with green/dark rings (for M17-series mask only): Similar (slightly lower) protection as C2-series. Also contain chromium VI. Much harder to replace in contaminated environment. Not NATO compatible. East German M10M filters (marked "VSK") are not M17 compatible, even though they look similar.

### Commercial Filters:

**3M FR64:** Recommended filter for any NATO-threaded mask, appears to have the highest and broadest protective indices. \$47.

**Scott NBC22, CF32, M95, and M98:** Similar to FR64. \$30

Numerous Manufacturers (MSA, North, 3M, Scott, Dräger, Laerdal) make filters, but they often only work on that manufacturer's masks.

Combination filter "stacks" are available with the following **properties** (pick what you need):

- Sufficient for Rioting Agents & their Solvents {
- **P100/HEPA [FFP3 in Europe]:** Riot agents, biological agents (full face mask required).
  - **Activated Charcoal (Organic Vapor-Pesticide):** Filters out solvents used for riot agent delivery (methylene chloride, etc.), and theoretically provides only a small degree of CW protection, because the activated charcoal is sometimes not impregnated with a metal such as zinc, unless the filters are specifically rated for pesticides or "NBC."
  - **Radionuclide:** Only if filters are rated to remove radioactive particles will they also provide coverage for some possible nuclear contaminants (For peace activists working in Iraq, Afghanistan, Yugoslavia & Kosovo, etc.: DU dust is several microns in size and so should be easily filtered out by all P100 masks).
  - **"NBC"** printed on the filter indicates that a filter meets military, NIOSH, or OSHA specifications for nuclear, biological, chemical exposures. Consists of special kinds of activated carbon (e.g., ASZ).

NOTE: Filters degrade in effectiveness once exposed to air. They are usually packaged air tight (in bags or with sealed caps in the case of canister filters). The main problem is that the activated charcoal absorbs organic molecules from normal room air, thus using up its filtering capacity. Break the sealed caps the day before an action (but not AT THE ACTION, because they can sometimes be tricky). Once open, the life of filters varies. READ ALL ENCLOSED INSTRUCTIONS.

NOTE: All filters lose effectiveness as they absorb agents!! Chemicals, biological agents, and normal dust and pollen will result in increased resistance to breathing. As with all equipment (climbing gear, etc.), it is a judgment call when to replace yours. P100/HEPA/FFP3 filters can probably be used as long as you can easily breathe through them. When they've absorbed a lot of Rioting Agents or dust, they slowly clog, and it will become gradually harder to breathe through them. They do not let Rioting Agents through as they clog. P100/HEPA/FFP3 "half-masks" should be replaced if they are sprayed at directly, since solvents may break down the filtering material.

Chemical agents will also affect the activated charcoal component of a filter canister, which is NOT easy to recognize. Users may start to smell chemicals after the activated carbon is depleted, at which time it may be too late considering the lethality of some chemical agents (G agents, etc.). Change filter immediately if breakthrough is noticed! Essential oils can also be used to test the seal of the mask and as a rough test for effectiveness of filters: the military uses a cotton swab dipped in isoamyl acetate (banana essence) held near the seals with the skin and briefly near the filters. If you smell banana, either your mask fits poorly or your filters are dead. Users must keep track of time of exposure to deadly chemicals to judge whether the filter will still provide protection. The FR-64 canister, for example, filters a sarin testing surrogate (DMMP) for 59 minutes, phosgene for only 25 minutes, and CS/CN for at least 480 minutes (see 3M Tech Data Bulletin 153 - FR64). During the US military siege against a religious sect at Waco, Texas, **gallons** (possibly hundreds) of CS gas (and solvent!) were pumped into an inhabited enclosed space, which would overload filters sooner than 480 minutes. Activists could face similar situations in this rapidly deteriorating world.



## Protective Measures:

- **Gloves:** in order of usefulness: **nitrile** (recommended) > vinyl > latex. Nitrile gloves are recommended because they offer the best chemical protection and do not cause latex allergy in the wearer or patients. Latex offers no protection against solvents such as methylene chloride. Butyl gloves (5mm or greater) have the absolute best protection against all chemical agents, but are awkward and not disposable. All of these gloves will melt, so avoid contact with hot tear gas canisters, etc.
- **Safety Glasses:** For biohazard & ballistic protection. OSHA Spec. # “Z87” or “Z87.1” must be stamped somewhere on the glasses. Lab-, machinist’s- or EMT-style. US Army makes cheap “sand/dust” goggles costing about \$4 with an optional hard polycarbonate ballistic lens (engraved: “ballistic,” sold in a cloth baggie), and if you duct tape/plug the air vents, you’ve got basic all-round protection. The highest military specification is MIL V-43511C.
- **Respiratory Protection:**

**Level 1:** Bandana & Vinegar (kept wet in a ziplock bag until needed), Surgical/dust mask  
(US: **N95**, EU: **FFP2**; ~\$2/€2 each). This is not enough if you’re planning direct action, are going to be doing video work on the frontlines, want to run with a medical team, etc.

**Level 2:** Toxic Particulate Respirator — looks like a thick, baggy surgical mask with a valve  
(US: **P100**; EU: **FFP3**, ~\$8/€12).

**Level 3:** Gas Masks (*see below*)

[brand names, nations, and organizations  
not meant as endorsements —  
steal the shit wherever possible!]

**Commercial:** Mine Safety Appliances, North, 3M, Scott, Dräger, etc.

### Military:

\* US military gas masks will get cheaper over time as more are produced and issued for US imperial quagmires.

US: M40-series [\$60]

MCU-2/P (single large flexible lens; comfortable; use only with hard polycarbonate ballistic lens cover) [\$\$\$]

M17-series (use with hard polycarbonate ballistic lens covers; filters are hard to change) [\$30]

NATO: Canada, Germany, Britain, all produce very good gas masks [\$-\$\$].

Israel: *Civil Model*: the round, glass eyepieces are *NOT shatterproof*, as people learned at N30 when police targeted and shot through their eyepieces with rubber bullets [\$20].

*Army Model* (large triangular lenses): as good as US/NATO masks [\$60 new/surplus].

Russian: Avoid USSR masks! They can contain unsafe filter materials (e.g. asbestos), are uncomfortable, & lenses can shatter. They’re the gray-green Aardvark-masks in the photo below.

Former East Germany: M10M mask (clone of US M17, so filters are hard to change) and a better mask with 40mm filter. [as cheap as 7€!]

Other Former East Bloc: Case by case, some good, some terrible.

WW2 SURPLUS = JUNK!! — *leave ‘em on the mannequin at the store...*

**NOTE:** Wash newly obtained surplus gas masks before use in warm, soapy water (remove filters beforehand!).

You never know what they were used for before they got to the surplus store. Also wash them after returning home from an action if you’ve been exposed.



**Mask Clearance:** 1. Hold your breath. 2. Put mask on. 3. Pull straps tight. 4. Cover the filter air inlet with your hand and exhale. This forces any contaminated air in the mask out through the outlet valve. 5. Check the mask’s seal on your face by inhaling with the inlet valve still covered. A properly fitting mask should be sucked onto your face if you cover the inlet valve, and you should feel no air rushing in around your hairline, chin, etc.

## Treatments: *S k i n* O n l y :

# VOFIBA

### VOFIBA: “Vegetable Oil Followed Immediately By Alcohol.”

**DO NOT USE IN EYES, MOUTH, OR ON ANY MUCOUS MEMBRANES!!**

#### Materials:

- One squirt bottle or refillable kitchen oil mister containing **vegetable oil** (canola, olive oil, etc.). Label this bottle with gray duct tape.
- One squirt bottle isopropyl (rubbing) **alcohol**. In Prague, medics used vodka (ethyl alcohol), because it was cheaper and worked fine, but beware of U.S. liquor laws! Label with red duct tape.
- Bulk **gauze pads** (4x4”, don’t need to be sterile) or similar sized pieces of cloth, rag, old towels, etc.

**Method:** (more time consuming than LAW, so do it a safe distance away from Riot Piglets)

- Lightly apply gauze to the exposed skin. **DO NOT PRESS OR RUB!** This soaks up any extra pepperspray that hasn’t yet been absorbed into the skin. Discard gauze.
- Apply oil to another, clean piece of gauze and wipe this onto the exposed skin. Discard gauze. Alternately, spray oil thickly onto skin with a refillable kitchen oil mister.
- Apply alcohol to another, clean piece of gauze, and wipe away the oil.

#### POSSIBLE FUCK-UPS that make things worse:

#1: **Alcohol will burn eyes, nose, mouth so never use it to decontaminate those areas!!** Use LAW instead.

Be careful decontaminating skin near mucous membranes.

#2: NEVER APPLY ALCOHOL FIRST!! v-o-f-i-b-A! Practice, practice & say the mantra!

#3: If you start VOFIBA, and have applied oil to an exposed person, you must remove the oil with alcohol.

**Concept:** Since capsaicin is oil-soluble, it soaks rapidly into your skin (all cell membranes are made of a fat-like substance, called phospholipid). The more oil-soluble a chemical is, the more easily it passes through your skin. *Promptly performed*, VOFIBA can absorb capsaicin that has not yet dissolved into the skin. The capsaicin dissolves into the oil, instead. If you’re doing VOFIBA right, you then remove the oil with alcohol, and the capsaicin with it! Toxicologists recommend a similar method clear skin of solvents, and VOFIBA/MOFIBA seem effective from field experience, but benefit has not yet been established by double-blind placebo-controlled trials.

#### HINTS:

VOFIBA is a physical method of removing capsaicin and the irritating organic solvents it is dissolved in. You may find that a few drops of mint oil (menthol) added to the mineral oil may accelerate relief (try 10 drops per liter or quart). See page 9 for an explanation of why we think this is useful.

Mineral oil is *allegedly* better than vegetable oils (canola, corn, olive) because it does not soak into the skin as fast as other oils (probably a trivial detail). Some persons may find vegetable oil more acceptable on their skin than mineral oil (a petroleum product).



# RED FLAGS

associated with Riot Kops' weapons

Signs that something is wrong, and that emergency medical care is needed, even if it doesn't seem like it right now — to avoid a preventable lasting injury or worse. If you see these signs, notify a trained street medic or doctor promptly, or — if they are getting worse — notify EMS promptly and perform Cardiopulmonary Resuscitation (CPR) if needed according to AHA guidelines.

## Pepperspray, “Tear Gas” (CS/CN/etc.):

- (1) Long-lasting (over 60minutes post-exposure) or severe shortness of breath that won't subside, including an asthma attack.
- (2) Shortness of breath which begins 6 - 12 hours after significant exposure [possible pulmonary edema]. Coughing/spitting up foamy sputum?

## Taser:

- (1) Is the person breathing?
- (2) Is the person complaining of an irregular heartbeat or does the person have a history of heart trouble?
- (3) Did the person hit their head when they fell upon being tasered?
- (4) Was the person tased multiple time or tased with officers kneeling on their back, restricting their ability to breathe?

## Rubber Bullets:

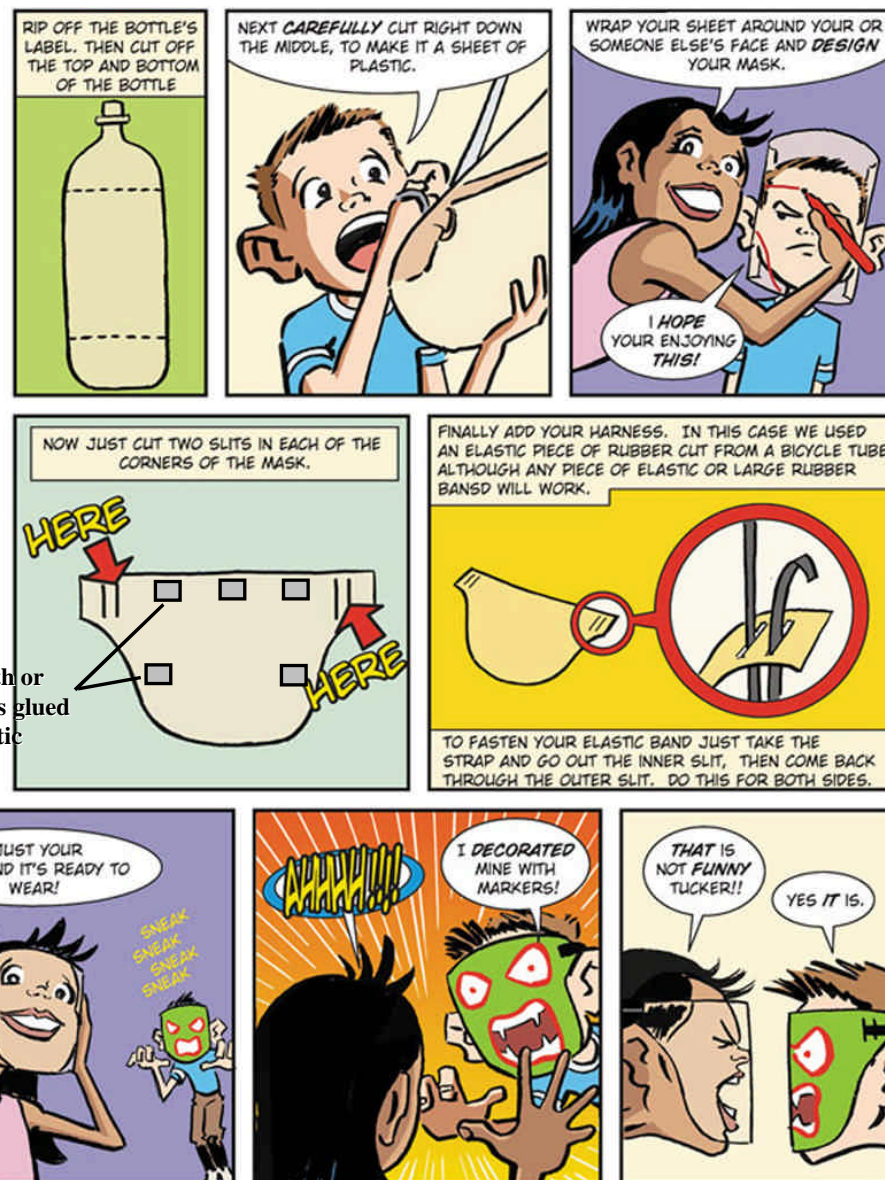
- (1) Was the person hit in the upper abdomen? Are there large bruises visible there? Is the person's abdomen stiffer than usual (compared to your own)?
- (2) Is the person experiencing signs of clinical shock (*see below*)?

## Shock (by which we mean clinical circulatory shock, not “psychological” shock):

- (1) Faintheadedness, confusion, anxiety.
- (2) Faint and rapid pulse (over 100/minute).
- (3) Cool, pale, sweaty skin.

## D.I.Y. “goggles” against sprays & video cameras...

Obviously, this won't protect against projectiles of any sort (unless cops start throwing marshmallows), but it can make for a very creative costume and protect against getting sprayed in the face. You'll need a plastic (“PET”) water bottle (2 liters or larger), something elastic to bind it to your head, & perhaps a rolled cloth or foam “bumper” glued to the top to keep the “goggles” at a distance from your face. Serious protection is discussed on the next page!



Rolled cloth or foam strips glued to the plastic



# Fear

can be a potent weapon against us for as long as we allow it. Historically, fear used strategically to break the will of the population is called terrorism, and was coined to describe the reign of fear of France's Louis XIV against the French population — by government against its population. We know how that ended... In the 1980s in El Salvador, fear in the form of US-armed and organized death squads traumatized that civilian population into giving up its dreams for a better living conditions — living in constant fear, you have nightmares and not constructive visions, self-preservation replaces solidarity, and you eventually “turn off” into apathy to protect yourself. Today, the same form of government-orchestrated fear is called “shock and awe” when used abroad to break the will of “enemy” civilian populations, and “domestic security” when aimed at us.

Fear of arrest, irritating gases, concussion grenades, and the advancing line of black-clad, armored riot cops are all meant to intimidate us back into our homes and in front of the television, preferably without a fight, without police having to carry you, and without spending nonexistent resources locking you up for a few days, and preferably without too much spilled blood, which would expose the system for what it is. So instead we get gas and rubber bullets whenever the media fails to keep us subdued.

It starts with a media blitz about “the terrorists coming to the demonstration, which will probably turn violent, but the cops are ready [cut to scene of Rioting Cops in training]...”

Then the local police-FBI “Joint Terror Task Force” (“JTTF,” yup, they’re really *that honest*) calls neighbors around a planned protest site (e.g. Carpenter’s Union), and tell ‘em Osama himself is coming, and there’s gonna be carnage.

The Rioting Cops bang their nightsticks on their shields or leg armor and march in cadence like other fascists of yesteryear. It’s all designed to scare you, to get you to move before they are physically near you. Frightened people cannot plan a response, and cannot stand their ground. Recognizing this will remind you that it’s the same ossifer behind that foolish outfit that tried to ticket you last thursday for alleged jaywalking, whose badge number you got, whom you reminded of your rights, and whom you didn’t particularly fear but maintained adequate distance from (like any other wild animal). So, looking at things in context, **who is really afraid??**

The police show up heavily armed at demonstrations wearing a \$5000 protective outfit to brutalize unarmed students, workers, homeless veterans, grandmothers, and infants.

And the PoPo is only the armed servant of the ruling class, and there’s less and less individuals as you go up the steep income curve. It is scary to be up there in that rarified, lonely atmosphere. They think everyone just wants the material shit they’ve got (usually because they stole it from us in the first place), and they get even more scared... But we are on the side of right, of humanity, we have the numbers, and this whole system wouldn’t work for a day without our involuntary compliance. The rulers know all this, and they have ample reason to be **afraid**.

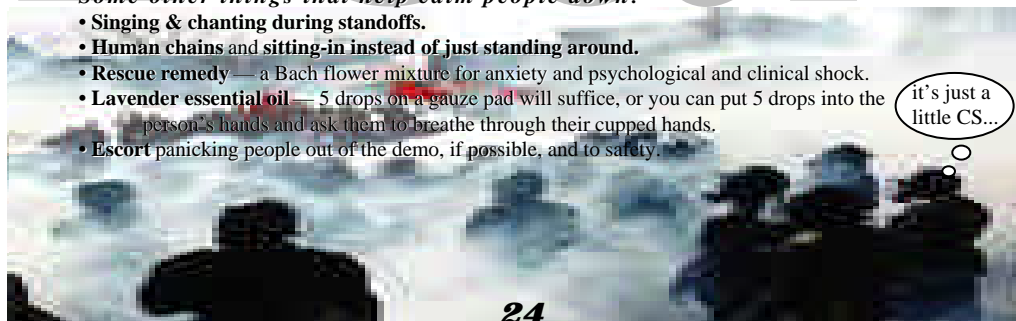
**So organize & rebel, because it’s just, and because we literally have the world to lose if we don’t.**

- If you see people at an action who’re getting scared of the situation, do your best to calm them down. This helps everyone stay calm, because panic can spread like wildfire.
- If you see people starting to run to flee, it is often useful to yell “**WALK!**!” to avoid a stampede starting. This usually works well and prevents more injuries.
- It is best to reassure frightened individuals in a calm manner **being careful not to add to the panic.** People will get more scared if they sense your apprehension: if you’re breathing fast, talking in a hectic way. A **hug** or a **held hand** can go a long way.

**Some other things that help calm people down:**

- **Singing & chanting during standoffs.**
- **Human chains and sitting-in instead of just standing around.**
- **Rescue remedy** — a Bach flower mixture for anxiety and psychological and clinical shock.
- **Lavender essential oil** — 5 drops on a gauze pad will suffice, or you can put 5 drops into the person’s hands and ask them to breathe through their cupped hands.
- **Escort panicking people out of the demo, if possible, and to safety.**

it’s just a little CS...



## Stay Cool:

- Remaining calm is extremely important to reducing the effects of all Rioting Agents!

## Get Cool:

- After LAW decontamination of eyes, and VOFIBA decontamination of skin (not eyes), cold water and ice packs will provide relief by activating CMR1 and numbing the area (but avoid hypothermia!).

## Analgesics:

- Ketoprofen, Solarcaine or similar analgesic **sprays** may provide additional relief to skin (NOT for EYES, nose, or mouth!).
- Aspirin — structurally related to menthol — also appears able to reduce VR1 receptors’ response to capsaicin *in vitro* (13). A “pretreatment” approach is probably not advisable because aspirin also delays blood clotting, potentially complicating the job of medics trying to stop a bleeding wound if the same person is injured in the following 2 weeks. Yes, capsaicin is a more potent inhibitor of blood clotting than aspirin, but it is not clear how much capsaicin will be absorbed into the blood from the skin under normal demo conditions (probably nowhere near the 365mg contained in one aspirin tablet). Another caveat: aspirin also increases the body’s inflammatory leukotrienes, which may aggravate the inflammatory response to capsaicin — tests must be done to see which effect predominates. In general, anyone who has been sprayed can take aspirin judiciously for pain as long as they: (1) do not have asthma (*leukotrienes!*), (2) do not have a bleeding disorder, (3) have not had trauma, surgery or stroke in the last 3-6 months, and (4) are not children sick with a cold virus (*Reye Syndrome*). Alternatively, ibuprofen or acetaminophen (a.k.a. tylenol, paracetamol) can be given, but these work less directly.

## Our experimental approaches, a.k.a., the X-files:

**CAUTION: THESE EFFECTS HAVE NOT YET BEEN CONCLUSIVELY TESTED.**

## Riot Ayurveda: Staying Cool Mentally & Mintilly.

- **It might be possible to block the perception of hot pain or capsaicin by applying cold or minty oils.** More than half of pain-detecting (nociceptor) nerve cells respond to numerous stimuli. They have CMR1 receptors that report cold (<17°C) or menthol as well as VR1 receptors that report heat (>42°C, capsaicin, or acidic pH) (10,15). Neurons might fail to report that you’ve been sprayed with capsaicin if they simultaneously sense minty oils (menthol, methyl salicylate, or maybe icilin and 4-methyl-3-(1-pyrrolidinyl)-2[5H]-furanone, at an EC50 of 80mM (10). This all depends on how these receptors (VR1 vs. CMR1) actually interact with each other: does activating CMR1 really cause neurons to ignore capsaicin activating their VR1 receptors; or do signals from cold-sensing neurons inhibit separate heat-sensing neurons from firing; or does a “gating” effect occur (like when you rub a stubbed toe) higher up in the nervous system? These questions remain largely unanswered, so go take some college neuroscience courses & join the grassroots research effort, but consult or enlist a health care provider prior to undertaking *any* tests. This represents one possible mechanism for the “Liquid Antacid in Water” treatment regimen, because Maalox sold in the US used to contain menthol up until around 2002.
- Another study found **reduced pain** resulting from **exposure to capsaicin 3.5 minutes after menthol, or simultaneous exposure to the two. Applying menthol 15 minutes before capsaicin increased the irritation (11), so forget about a “pretreatment” approach.** A safe concentration of menthol could speed relief if applied **during OC exposure**. You can probably use 0.1% menthol essential oil (roughly, that is 1mL of menthol in one liter of LAW). That’s 0.1%, or 1/10th of what’s in foods, shampoos, creams, *etc.* It has not yet been established what an eye-safe concentration of menthol is, and there may not be one. On the other hand, there have been no reported problems with the LAW solution in which mint (menthol) flavored Maalox was used.
- Menthol vapor reverses airway constriction caused by capsaicin [in animal studies] (12).

**Riot Ayurveda: Sweet Things** Another line of research has been sugary solutions, which appear to neutralize capsaicin. In the mouth after eating spicy food, this may work by a “gating” effect which does not necessarily also occur in eyes (we haven’t yet identified people who’s eyes have taste buds to detect the sweetness).

## Riot Ayurveda: Milk Proteins

The milk protein casein appears to bind capsaicin, thereby preventing it from binding to the VR1 receptor. Some testing has been done using various casein sources (powdered nonfat milk has a very high proportion of casein).

## Riot Neuroscience: Receptor Blockers

A wide range of receptors and mediators are sloppily involved in the pain and inflammatory response from capsaicin. Since we’re against animal testing and still haven’t bagged enough neocons to do statistically significant tests on, this line of research is proceeding slowly. I hope we get lucky soon — lurking around D.C. bars is getting lame.

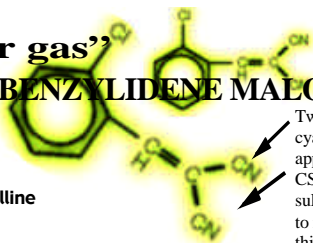
F.Y.I.



OC

## CS “tear gas” (*o*-CHLOROBENZYLIDENE MALONONITRILE)

Peppery odor.  
leaves a white crystalline  
powder residue.



Two CN groups form  
cyanide in the body which  
appears to be the cause of  
CS lethality. Increased  
sulphur in the body appears  
to reduce this lethality. But  
this is not what makes CS  
irritating...

Common Mechanism: Chemical irritation  
by SN2 alkylation at nucleophilic sites.

### Effects:

Burning sensation at mucous membranes, airway, and sometimes skin, along with *copious* secretion of tears & mucous. Dyspnea (difficulty breathing). Blepharospasm (inability to open eyelids). CN sometimes produces nausea. CS exposure for 12-24h can produce 2nd degree burns, esp. through massive or prolonged skin contact with contaminated clothes. These chemical burns heal within 10-14 d (3,6). Effects are worse in warmer weather, and CS residue on skin that has not been thoroughly decontaminated can prompt a reemergence of symptoms when individuals exercise, perspire, or ambient temperature rises.

Heart rates are lower immediately after exposure.  
Increases BP 20mm Hg systolic & 11mm diastolic.

**Onset:** Inhalation: Immediate  
**Skin:** 1-5 Minutes  
**Duration:** 15-30 Minutes

### Treatment:

Inactivate CS by applying an *eye-safe*, mildly alkaline solution and flush it away with large volumes of fluid (see page 8 for how to make these remedy solutions).

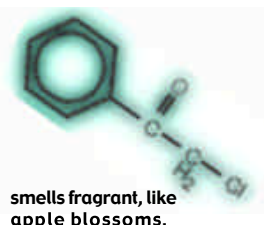
- **3% sodium carbonate (Na<sub>2</sub>CO<sub>3</sub>) & 6% sodium bicarbonate (baking soda, NaHCO<sub>3</sub>) in water for rinsing eyes, nose, mouth, & skin (3).** Use 10% baking soda in water alone if nothing else is available. Make sure there are no undissolved particles that can scratch eyes.
- **LAW solution** (pH 8.5 reduces CS's halflife to a few minutes, but is allegedly less effective against CS than sodium carbonate solution). Use LAW first if police use OC *and* CS in your city, or if you're a protest with lots of departments cooperating.
- 0.9% saline solution or long rinses with water also help. MOFIBA for skin.
- For chemical **burns** on skin: **Thorough decon** (NaHCO<sub>3</sub>, soap & water)!  
Dermatitis: topical steroids; itching: oral antihistamines; antibiotics for secondary infections.
- Flush contaminated wounds only with sterile saline (or the cleanest water available).

### Research what police use in your area!

Write an email/letter, ask or walk by a cop, ask other activists, have a lawyer file a request.

#### If they use:

OC only → Use **LAW** only. e.g., Portland, OR, most US cities.  
CS/CN only → **Sodium carbonate** solution. e.g., Some EU, Latin American countries.  
OC & CS/CN → Carry both. Try **LAW** first, then **sodium carbonate** solution  
e.g. mass protests with lots of different repressive organizations present; or when spray & grenades are used if patients show no improvement.



smells fragrant, like  
apple blossoms.

## CN “mace” (1-CHLOROACETOPHENONE)

Despite the name “CN,” this is not cyanide, and doesn't even contain any, unlike CS! It does seem to work the same way as CS, though. Silly weapons scientists are not only horribly immoral, they're stoopid!

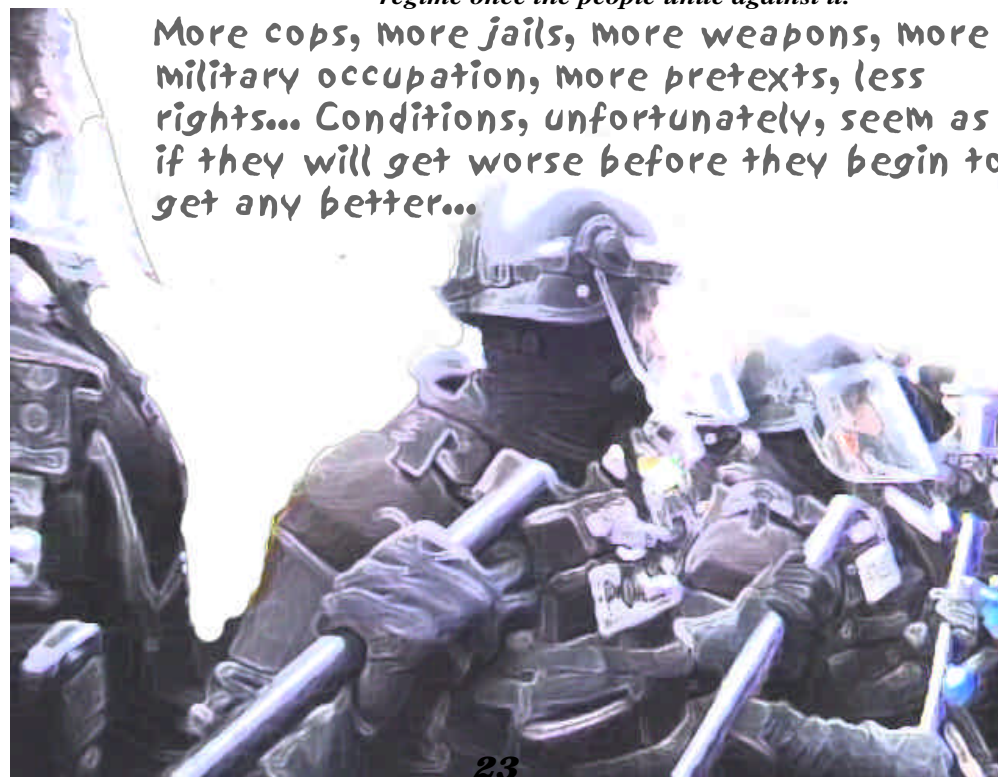
## As if that weren't enough anti-democracy...

... government and industry work tirelessly testing new methods to make us wince and weep for standing up for our rights. Some recent examples of “less-than-lethal” technologies include:

- **BZ** (“QNB,” 3-quinuclidinyl benzilate, “agent buzz”): Muscarinic acetylcholine receptor antagonist. Incapacitating agent producing delirium, confusion, memory lapses, pupillary dilation, hallucinations & potentially lethal increases in heart rate, as well as hot, dry, flushed red skin. Treatment: supportive plus benzodiazepines; Antidote: physostigmine (risky!).
- **Alfentanyl, lofentanyl, et al.:** Opiate incapacitating agent depressing all nervous system functions including respiration! Killed many theater-goers when security forces raided a Moscow theater held by rebels. Decreases breathing & bowel sounds and causes constricted pupils. Antidote: naloxone.
- **Substance P**, aerosolized or dissolved in DMSO: rapid blood pressure drop causing unconsciousness. Long used by CIA goon squads.
- **Acoustic** weapons (e.g., Magneto Acoustic Device made by HPV Technologies <getmad.us> and Long/Medium Range Acoustic Device LRAD, MRAD). Project magnetic/microwaves that cause people up to a mile away to hear sounds (music, gunfire, orders spoken into the device) or experience acoustic pain. Deployed for use against civilians in New Orleans and Iraq.
- **Microwave** projectors (incapacitate by raising body temp.) are being used on civilians in Iraq.
- Intolerable **odors**, shockwave weapons, **lasers**, etc., etc.

— *but no weapon is invincible.  
no amount of weaponry or terror can save a  
regime once the people unite against it.*

More cops, more jails, more weapons, more  
military occupation, more pretexts, less  
rights... Conditions, unfortunately, seem as  
if they will get worse before they begin to  
get any better...







*“If you knew that you were living in a huge conspiracy,  
Would you leave your suburbs,  
Get out of your SUV,  
Would you hit the streets,  
And fight for all our lives,  
Would you hold your ground when the storm troopers arrive?  
If you knew that the whole planet, depended on what you do now?”*

— David Rovics

## Concussion Grenades a.k.a. “Flash Bang,” “Stun Grenade,” “ThunderFlash,” etc.

These are military-grade grenades lacking the outer fragmentation layer. They’re designed to kill troops at close ranges without harming the thrower. They’re loud as a thunderclap, cause surprise and brief disorientation and — in all but the habituated hard core — almost reflexively cause people to turn and run, triggering dangerous panic reflexes. They’ve also caused injury and death. The blast injuries they create should be treated as burns, but are compounded by trauma and blast wave damage to underlying organs, especially hollow organs such as the intestine and lungs.

Photographer Guy Smallman was hit by at least one of five concussion grenades fired directly at him (against police’s own rules) at the G8 demonstration in Geneva, June 2003 (*below*).

They can be fired by a grenade launcher (over people’s heads, as per commonly-ignored regulations), but they can also be hand-thrown. The metal fuse can detach and become a projectile during the blast and can kill.

The only defense against them is thick, sturdy clothing, shields, and moving to avoid them when their use is imminent.

They are most likely to be lethal if fired directly at a person, or if they land between a person and an object (wall/ground) before detonating.



(illegal use of concussion grenades)

## How CS/CN are used:

**Sprayed:** Just like Pepperspray. (See *SOLVENTS* discussion on pepperspray page).

**Grenade Launcher** (37 or 40mm): Range: 150-200m. The grenades are like hand grenades described below.

**Water Cannon:** ~65m.

**CS Hand Grenades:** Range: A stone’s throw... ~40m. **HOT!** Wear a heat-resistant glove if you want to pick these up. Most just burn (*hot!*), but some have little explosive charges to let the grenade “skip” around on the ground to make throwing back harder (can **explode in your hand!**). The Swiss use a “cluster bomb” system: a large projectile disperses 6-10 plastic CS bomblets. Others are concussion grenades that explode releasing CS. Smart swine put on their gas masks before using CS grenades (wind can change and grenades get thrown back), so do the same when you see them gear up.

## Irritating CS/CN Factoids:

**“GAS! Stay Calm!”** Army studies revealed that CS **tolerance** increases with intelligence and **decreases with anxiety** — try to calm people who are exposed. Diazepam (valium) increases the CS tolerance of anxious individuals, further suggesting that a person’s fear plays an important role. *Stay calm!!*

People of **Oaxaca**, Mexico, used **cola** (yes, the soft drink) to flush their eyes of CS during their mass uprising that started in 2005. We are investigating whether this is safe and effective. Very large numbers of people were treated.

CN is less irritating and 3 to 10x more toxic than CS.

Persistence on clothing: CS: variable, CN: short.

**It is still disputed whether pure CS is mutagenic** (only 1 study says it is, but proper studies are still lacking), but its solvents often are (methylene chloride, etc.). The solvents also produce a burning sensation on their own, and the best method for **solvent removal from skin is MOFIBA**. “Toxicological **data are deficient** as to the potential of tear gas agents to cause **long-term pulmonary, carcinogenic, and reproductive effects.**” (1)

CS & CN are sensitizers and can **cause allergic contact dermatitis**, which is the result of a delayed hypersensitivity reaction. Differentiate from acute reaction using patch allergy testing. (3, 5).

Especially CN often causes a **headache** lasting days.

Eyes (these bastards did studies exposing animals to higher doses than humans are exposed to, higher than possible in most protest settings unless you don’t flush your eyes): **CS caused damage to the eye membranes, cornea and iris lasting about a week.** [Conjunctivitis, iritis, chemosis, keratitis, and corneal vascularization. Histological effects include patchy denudation of corneal epithelium and a neutrophilic infiltration of the cornea. CN caused iritis, conjunctivitis (resolving within 7d) and corneal opacity]

**“International Law:”** In 1969, 80 countries (the US excluded, of course) voted to include tear gas agents among chemical weapons banned under the Geneva Protocol. CS and CN are illegal for use on the battlefield, as per the 1972 UN treaty prohibiting chemical weapons. But all nations reserved themselves the right to use them on their domestic population, on the internal battlefield against the main enemy of every nation.

**“Law”** A lawsuit to ban the use of pepperspray on peaceful protesters (after another torture case where cops swabbed locked down activists’ eyes with OC) was declared a “mistrial” in 2004 because most of the jury agreed with the activists, except for two, who always sided with the cops no matter what.



OC/CS dispersal by “Foggers” — ineffective and rarely seen.





## Other Names You Might See on Used Canisters:

CS1/CS2: There are **more irritating**, more persistent, hydrophobic formulations of CS such as:

**CS1 (micronized powder with 5% hydrophobic silica aerogel)**

**CS2 (siliconized, microencapsulated form of CS1). (3)**

**CA (Bromobenzyl cyanide) and BA (Bromoacetone).** Eye irritant.

Bromobenzyl cyanide (CA) and bromoacetone (BA) are older tear gases. It is too toxic for use as riot agents and must be considered obsolete. (4)

**CR (Dibenz(b,f)-1:4-oxazepine):** Skin & eye irritant. A relatively new agent, CR has similar effects to CS, but is **more potent**, less toxic, and more persistent. It is mainly a skin irritant and causes **no respiratory tract effects** but irritates eyes at concentrations of 0.0025% or less. Pepper-like odor. It is used only in a sprayed form containing 0.1% CR in 80 parts propylene glycol and 20 parts water.

**DM (Diphenylaminearsine) “adamsite”:** Eye & respiratory irritant, vomiting agent. DM contains **arsenic** and is **more toxic** but less persistent than other riot agents. **Prolonged** effects including **headache, mental depression, chills, nausea, abdominal cramps, vomiting and diarrhea**. Effects occur **several minutes after exposure**, meaning people won't recognize the exposure and not put on respirators until they've absorbed enough of a dose to make them vomit. Related agents are: DA (diphenylchlorarsine) and DC (diphenylcyanoarsine). (3)

## Particle Size

The **particle size** of, e.g., CS affects the clinical result: small particles (1-5  $\mu\text{m}$ ) affect the eyes and respiratory tract more rapidly than larger ones (20-30  $\mu\text{m}$ ) but recovery after exposure to small particles is more rapid. Very large particles (50  $\mu\text{m}$ ) affect the eyes more than the respiratory tract, while recovery is slower. (4) Also, smaller inhaled particles travel farther into the lungs than larger particles, which affect mainly the nose and mouth.

This means the **same irritant could produce slightly different symptoms** coming from a grenade than from a spray can. The smallest particles come from burning grenades.



“Enough Talk —  
(grab your gas mask)  
let's go save the  
world before they  
ruin it completely!”

etc.

Shot per drum magazine: 15

Velocity: 330 km/h

Range: **100m** (range at which it can be aimed,  
total projectile travel is much farther)

Force upon leaving muzzle: 40kN (??) (3 times that of a paintball)



On October 23rd, 2004, Boston, MA, police shot journalism student Victoria Snelgrove, who took to the streets to celebrate a baseball victory in the eye, killing her. The weapon used was the Belgian-made Fabrique Nationale FN 303, a CO2-powered semiautomatic rifle firing a .68 caliber "paintball" that contains very little paint, about 5% pepperspray, and the kidney-toxic heavy metal bismuth — the main ingredient. Thrilled, Portland, OR, police adopted the rifle in 2004, believing there can never be too much brutality, or too many lawsuits against the city. In 2007, lawsuits forced Boston Police to quit using the FN303 and destroy ammo stockpiles. This weapon previously caused damage to facial nerves when used against a union leader in Switzerland who objected verbally as the police beat down her son. Bismuth was imbedded all over the muscle and fat of her face, so close to nerves that it couldn't be safely removed by surgeons. Her doctor called the police, asking what this metal was, and they denied knowledge of this weapon and responded that it must have been something thrown by a demonstrator.

**Consistently ignored regulations:** Lethal range is 10m, but in the photo below taken at the same incident, does the police officer keep a 10m distance between himself and his potential targets? He's designed a situation where if the person (marked \*) or those behind move suddenly, he going to shoot them at a lethal range. A voluntary (for the police officer) situation, where his armed presence would provoke response from any informed person, but yet any sound or movement will lead to him killing someone. The effect is that people *learn* to shut up and act docile whenever



**Above Left:** Police aim FN303 at sports fans. **Above Right:** Female journalism student shot in the eye and killed. Both photos: Boston, Oct 23rd, 2004



(illegally close range)



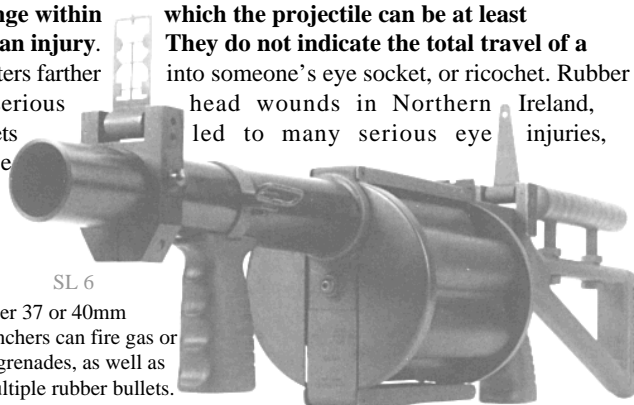
(illegally close range)

**Left:** Aiming at a woman lying on the ground at ~1 meter. **Below:** Aiming at a videographer standing ~3 meters away (within lethal range). Both photos: March 20th, 2003, 45,000 Portlanders react to outbreak of Iraq war.

Regulations and manufacturer's guidelines almost invariably state that projectiles are to be fired only below the waist, but in practice, **police rarely abide by the very laws they're supposed to enforce**. "Rubber" bullets and their many cousins cause contusions, break ribs and bones, and are **especially dangerous for the eyes**, since most fit perfectly in the eye socket. Protect these with high impact resistant goggles ("Z87.1" is the U.S. safety standard that should be stamped somewhere on the goggles). Also consider sturdy clothes and a helmet (hard-shell type used for stunt bicycles). Rubber bullets can damage underlying organs, which can lead to internal bleeding. All such impact weapons can **kill at close ranges**. Furthermore, "effective" ranges given by police and their lawyers after an incident indicate only the **range within which the projectile can be at least somewhat precisely aimed & cause an injury**. **They do not indicate the total travel of a projectile**, which can often fly 30 meters farther into someone's eye socket, or ricochet. Rubber bullets produced many extremely serious head wounds in Northern Ireland, while Swiss use of smaller rubber bullets led to many serious eye injuries, even when the eye remained in the socket (such as torn or detached retinas).(8)

Medics: remember that the energy of a projectile to the head has to go *somewhere*: clear/protect the C-spine and check for fractures before moving a person hit on the head.

SL 6  
Multichamber 37 or 40mm grenade launchers can fire gas or concussion grenades, as well as single or multiple rubber bullets.



In the opening shots of a reprisal against the people of San Salvador Atenco in early May 2006, the Mexican police violently expelled flower vendors (involved with successful campaign against a new airport on their lands) from a part of the town square that they had always used and had written official permission to use. Alexis Benhumea, a 20 year old student of economics, was **hit in the head by a tear gas grenade** in the first few minutes, which cracked his skull in two places exposing brain tissue. The 5000-strong **besieging police force prevented an ambulance from reaching him and delayed his evacuation to a hospital for 12 hours**. He was finally transported clandestinely to a hospital in a taxi but died there of his wounds.



Minimum range shot: 20m  
3 hits.  
Standard force.



"Illegal" shot, range <20m  
Many hits.  
**Higher force.**

The amount of damage done by rubber bullets is dependent on the number of hits but also the **distance** (range) at which the hits occur. In general, multiple hits on a person indicates that s/he was closer to the shooter because (1) shotgun-style rubber bullet projectors such as those used by the Swiss or the US SL6 (*see above*) fire projectiles in a cone expanding outward and (2) using semiautomatic weapons it is simply easier to hit a person closer to you (numerous hits one after the other). Since rubber bullets are generally very non-aerodynamic, velocity and therefore force decreases rapidly with each meter flown. Persons hit at close range in the chest and abdomen should be examined for damage to the spleen and liver.

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## Homebrewing — how to make remedy solutions described in this 'zine:

All recipes are for making one liter of solution to simplify calculations. To make greater quantities, scale it up — multiply everything by the number of liters you need.

Using this rough, unadjusted method ("%" by weight/volume"), these solutions (except LAW) will be slightly *but trivially* more diluted than the stated concentration. More precise concentrations can be attained using the method described below, but it is more complicated and really not necessary for the purposes we're using these solutions for.

### Liquid Antacid in Water (LAW):

You'll need to dilute the Maalox 50%, so find a suitable bottle with squirt top. Pour the contents of two Maalox bottles (mint-flavor is best) into the one liter plastic squirt bottle. Then, refill the now-empty Maalox bottles with clean boiled tap water and then pour these into the plastic squirt bottle as well. Voila! You can add 5 drops of mint essential oil (menthol) if you have it. Shake well.

### For Tear Gas only (sodium carbonate & bicarbonate solution):

3% sodium carbonate ( $\text{Na}_2\text{CO}_3$ , "washing soda") & 6% sodium bicarbonate ( $\text{NaHCO}_3$ , baking soda) in water for rinsing eyes, nose, mouth, & skin (3). Pour 30g  $\text{Na}_2\text{CO}_3$  into a clean pot containing one liter of water, followed by 60g  $\text{NaHCO}_3$ , and stir until dissolved. Filter through a coffee filter or several layers of clean cloth/bandana to make sure there are no undissolved particles that can scratch eyes. Pour into your bottle.

### For Tear Gas only (sodium bicarbonate solution):

Use 10% baking soda ( $\text{NaHCO}_3$ ) in water alone if no sodium carbonate is available. Pour 100g baking soda into a clean pot containing one liter of water and stir until dissolved. Filter through a coffee filter or several layers of clean cloth/bandana to make sure there are no undissolved particles that can scratch eyes. Pour into your bottle.

### Saline solution (~0.9%):

Boil one liter of water, add 10g NaCl (table salt *without iodide or fluoride or other ingredients, try not to use sea salt*). Stir until completely dissolved. Pour into your bottle as soon as its cool enough not to melt the plastic. This is normal "physiological" saline widely used in medicine. Eye doctors use 10% saline (so 100g NaCl) which *may* be more suitable for rinsing eyes — ask an eye doctor. This is not for injection — to make it sterile you'll need to fill into glass containers and autoclave/pressure cook.

### The more precise, more time-consuming method:

Using a scientific balance or commercial/grocery scale, weigh five or so of the same type/brand of bottle while empty and dry and take the average and write it down somewhere. This is the amount you'll need to subtract from each weighing later on to find out how much fluid is *really* in your bottle: 1 L water (1000mL which weigh 1000g) minus, for instance, 50g for the bottle means you'll have to fill the bottles on the scale to a final weight of 1050g to reach exactly the proper concentrations.

Suitable bottles: cleaned with warm soapy water & free of all residues, do not use bottles that previously contained any substances you wouldn't want in your eyes!



8



• **Pulmonary Edema:** 🏠

Possibly the most serious complication that can arise from CS/CN/OC and other agents in healthy individuals is pulmonary edema. It is a true emergency situation, arises **6-24 hours after** heavy exposure. Victims have difficulty breathing and faint “Rice Krispies” popping sounds over the lungs when breathing. **Victims need to be evacuated to an Emergency Room immediately!** Under siege conditions, sit/transport the person upright, give 100% oxygen, diuretics (e.g., lasix), NTG & inhaled beclomethasone.

• **That Nagging Cough Afterward...**

Everyone seems to get respiratory symptoms after CS/CN/OC exposure, ranging from a wet cough to fever and pneumonia. This is because these chemicals damage the respiratory tract, allowing microorganisms to enter through the damaged tissue of the respiratory tract and lungs. Protect yourself from/during exposure. If you’ve been exposed, take care of yourself: plenty of hot tea, citrus fruits, vitamin C & echinacea (zinc?), dress appropriately for the weather, try to rest, let your friends know to take care of you and visit the medical team for antibiotics if things get worse. Take extra care to avoid exposure if you are already sick — respiratory infection worsens reactions to CS/CN/OC.

• **Asthma:**

Asthmatics are especially affected by rioting agents, which can trigger attacks. It has been recommended that asthmatics NOT use their  $\beta_2$ -agonist (e.g. albuterol/salbutamol) or anticholinergic (e.g., ipratropium) inhalers as a “pretreatment” against rioting agent exposure (but DO keep to your regular schedule of use). It is feared that extra preexposure use widens air passageways in the lungs, possibly letting more agent be absorbed. In contrast, it may be wise to use glucocorticoid inhalers (beclomethasone, budesonide) before anticipated, unescapable irritant exposure, as these will reduce airway inflammation. **Keep inhaler(s) in a ZipLock bag in your front right (coat) pocket, so medics know where to look if needed. If needed after exposure, use the inhaler as you normally would.**

• **Smoking:**

As with every aspect of health, smoking also worsens the effects of rioting agents. The preexisting irritation of the lung from smoke particulates and reduced functional lung surface area (in longer term smokers) contribute to decreased oxygen uptake. Smoking-caused pneumothorax (prior or undiagnosed) can also cause problems. ➔ Plus, you support asshole multinationals, so quit while you’re ahead! 🚭



Portland ossifers Lee, Hanousek, and Kruger — and former police chief & christian fundamentalist Mark Kroeker — got a richly deserved lawsuit for their **sadistic, point-blank pepperspray torture** of this peaceful, trapped demonstrator (March 25, 2003). Hanousek & Kruger, commanding officer at this scene and vintage Nazi uniform buff, both love their jobs, and are heard laughing on videotape. QUIZ: Is she being sprayed at the legal minimum range of 3 meters (10 feet)?

## Other issues



Peaceful antiwar protest dispersed with concussion grenades and wood projectiles. Oakland, USA, April 7th, 2003. Hitting the spine, 2 inches left or right, could have caused paraplegia.

## “Rubber” Bullets / Projectiles

Projectiles made of hard & heavy “rubber” (sometimes containing metal dust for added mass), wood dowel, or plastic fired from a range of weapons and in a range of calibers from .68 caliber “bismuth paintballs” to solid 40mm cylinders.

Single “rubber” pellets or 0.68 caliber balls are often fired from **compressed CO<sub>2</sub> “paintball” rifles** (range: 100m). Pressure is cranked up and the balls are hard so it hurts much more than the paintball gun you had as a kid. 40mm **grenade launchers** can fire many ball, cylindrical, or angular projectiles at once (effective range: 35-50m), or a large, single projectile (solid rubber or gas/concussion grenade, range: 100-150m).

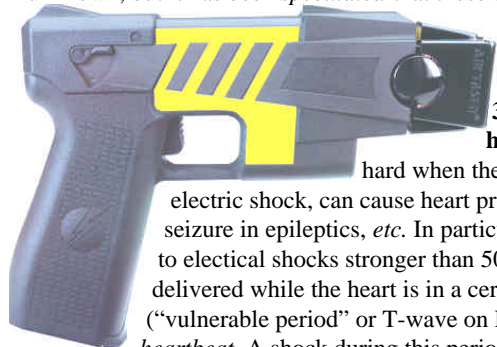
Israel’s infamous **rubber-coated metal bullets** are very often lethal, often penetrating skulls. Another variation is the **“bean” bag**: basically shotgun shot packed into a nylon bag, usually preventing it from penetrating flesh but knocking a person down & breaking ribs or limbs. These bags sometimes tear, releasing the lead shot at high velocity. Shotguns are also used to launch **“skip shot”** rubber projectiles, which are aimed at the ground before a person and skip upward at them. These are very imprecise.



“Bean” Bag:  
Lead shot in nylon bag  
fired from a shotgun.



**“Taser” stun guns** are becoming more and more widespread. Portland police lead the nation at shocking people with these new torture devices for as little as talking back. Demonstrators at the Miami FTAA summit were cruelly shocked at close range (indymedia has video of the event) for no reason. Tasers are pistol-shaped devices, usually with a red laser-pointer sight, that, when activated, use a compressed gas (usually CO<sub>2</sub>) charge to **propel several sharp-pointed “darts” trailing thin wire**. The darts penetrate clothes and hang in the skin, allowing the taser user to deliver **50,000 volt, 162 mA, 26 watt shocks** at will. During the usual set of 5 rapid shocks per trigger pull, a fast clicking or chattering noise is heard. The total number of shocks is limited only by the taser’s battery supply. Tasers usually have a maximum range around **7 meters** (21 feet) limited by the thin wires that conduct the electric shock. If the darts don’t make skin contact (*e.g.* if they land in your foam padding or your plexiglass shield), you don’t get shocked. However, they might shock another person trying to pull them out. Also consider that these are barbed like fish-hooks and must be removed carefully to avoid causing more skin damage. There is also a “touch stun” option, with which the pistol holder can shock victims by direct contact with the pistol. The effect of shocking a person in the rain, standing in water or on a metal surface is unknown, but it has been *speculated* that these situations could actually increase the effects.



When shocked, **victims lose control of muscles, collapsing to the ground instantly and experience a seizure-like rapid series of muscle contractions.** **3 big things** to consider: First, look for evidence of **head injury** because people usually hit their head

hard when they collapse while tased. Second, tasers, like any electric shock, can cause heart problems, paralyze breathing muscles, unleash a seizure in epileptics, *etc.* In particular, the risk of causing **heart problems** is *inherent* to electrical shocks stronger than 50 mA. It is just a matter of whether the shock is delivered while the heart is in a certain electrical phase vulnerable to disturbances (“vulnerable period” or T-wave on EKG) which occurs in **everyone** during *each heartbeat*. A shock during this period could cause a lasting electrical disturbance that prevents the heart muscle from pumping blood (ventricular fibrillation). Patients will show no pulse. Call medics *and* **EMS**, **start CPR**, have a buddy get an automatic defibrillator (“AED”) and someone trained to use it: some businesses, government offices, and most US police cars have AEDs. Third, tasers can **stop the muscles we depend on to breathe from working** (diaphragm, accessory), causing asphyxia in what the manufacturer, Taser International, calls “potential impairment of full ability to breathe,” even when there are not the usual three ossifers kneeling on your back. Neither the heart- nor the breathing-related deaths are likely to show any taser-specific findings upon autopsy, making for a lot of lame “the victim had a preexisting condition or was on drugs/*etc.*” arguments by attorneys defending the cops. Also, as of 2005, dozens of cops injured by tasers in training are now suing Taser (we’re crying crocodile tears here for both parties). For whatever it’s worth, Amnesty Int’l condemns electric weapon use in the US as torture. Riot shields that deliver electric shocks also exist, designed for repressing prison populations (who have nowhere to run to). They were used at the Miami FTAA protests — against such violent criminals as an individual kneeling in prayer. Shock shields are pretty useless: miniscule



range & propensity to melt makes them little match for the firebug European, Korean, Latin American, *etc.* crowd.



## with OC, CS & CN

PLEASE always *consult your local medical team* if you have any *special health conditions* feel odd after exposure to rioting agents, feel stressed out by traumatic events, or just to say hi.



### • All Respiratory Disorders: ☒

Anyone with a respiratory disorder (or people who’ve had a serious respiratory disorder in the past such as pulmonary edema, pneumothorax, emphysema) should take extra precautions: avoidance, Medic-Alert bracelet, carrying medications, carrying a P100 (FFP3 in EU) “half mask” respirator “just in case.”

### • High Risk Groups: ☒

The **young** (0-14 years), **elderly** (60+), people with **respiratory or cardiovascular illnesses**, and **pregnant women**. Army toxicologists warn: “adverse effects may be seen in individuals with hypertension, cardiovascular disease, or an aneurysm.” The Army has found **hypertension** resulting from riot agent use, but suspects it is the result of the **stress** of the event, and not the effect of the agent itself. CS caused spontaneous abortion & early delivery in one Israeli study (again, probably because of the acute stress, and probably goes for all rioting agents). **Diabetics** may want to avoid heavy OC exposure—capsaicin can inhibit cellular glucose uptake (probably irrelevant for protest setting OC doses, but could be a factor in jail).

• **CS/CN/OC Deaths:** ☠ Too many people have died from CS and OC. However, it’s rarely in protest settings. Most often, the cause of death is the total saturation of an inmate’s jail cell with gas, or the 200 pound uniformed gorilla standing on your back after he sprayed and hog-tied you (positional asphyxia in government apologists’ parlance). However, a friend of Carlo Giuliani’s died in Zurich apparently after heavy exposure to unknown gases (the Swiss are known for their use of vomiting agents) during Genova solidarity demonstrations in July 2001. These weapons can be lethal.

• **Corneal Abrasion:** Pepperspray and CS-spray droplets, as well as tiny fragments from gas or concussion grenades, travel at high speed at can cause pitting and abrasion of the cornea. It is painful (like sand in your eye) for a few days and damage lasted at least a week in one study using CS, but could also cause lasting problems. If a spray victim complains of “sand in the eye” persisting after careful irrigations and after burning subsides, it could be corneal abrasion, which can be impossible to see in a tactical setting. Do a final, careful 0.9% saline irrigation of the recesses around the eyeball, and send the person home to rest (don’t rub eye) and follow up with a eye doctor (asking for a fluorescein stain test to check for corneal damage).

• **Remove contact lenses** before an action. They trap chemicals. Carry a suction cup contact remover.

• They produce severe **emotional reactions** in many people, including rage.

• The more you inhale, the worse off you are. Don’t make it easy for Kkkops to gas you in **enclosed spaces**.

• **Avoid swallowing**, if possible. Swallowing agents causes nausea and diarrhea.

• Do **not** apply vaseline, *etc.*, as a “barrier.” This is counterproductive.

• Certain types of sunscreen (non-water-based) might trap rioting agents. A wide-brim hat keeps sun & rioting agents away, *and* keeps you out of the red squad’s video archive.

• Wear **appropriate clothing** (you can use cheap rain gear to keep spray off if its not too warm outside).

• **“Offgassing”:** Remove contaminated clothing before entering public/living spaces (convergence center, home, *etc.*), or you’ll **spread contamination** around and may **endanger high-risk groups**.

• Eye doctors say that flushing your eyes with milk to get rid of irritants might be a bad idea, since milk’s “lipid-loving” character “loosens” eye tissues and might allow irritants access into the eye itself (a bad thing). Still, it depends on the situation, and whether the benefits outweigh the costs: a few flushes of milk that remove lots of CS. Use your judgment.

• They’re **extremely flammable** and release even more toxic chemicals when burned!



Canadian police pepperspraying a restrained person (locked-down during a sit-in) at point-blank range. Cops will be cops, anywhere in the world...

## Eat your veggies!

broccoli, brussel sprouts, cabbage, etc., contain: sulfur, glutathione, indole-3-carbinol, aryl isothiocyanates, etc!

— The protein **glutathione** is one of the major “scavengers” of dangerous, oxidizing chemicals in the body and is involved in the body’s detoxification of rioting agents. Since **sulfur** is required for the formation of the amino acid cysteine, which is in turn required to make glutathione, I hope everyone is **eating their veggies**, especially **sulfur-containing foods such as garlic, onion, eggs, chives, leeks, asparagus, cabbage, broccoli, brussels sprouts, cauliflower, and turnips**. This will **boost detoxification processes in your body, reducing damage from CS, but it is not clear whether it also reduces the acute, irritating pain from CS**. “*The cabbage family is a noted source of GSH and elevated levels after vegetable supplementation have been observed repeatedly*” (14) These same veggies also contain aryl isothiocyanates, which directly stimulate glutathione production. All this as well as various other substances in these veggies also prevent cancer!

— Vitamin C and whey protein also stimulate glutathione production.

— **Foods high in sulfur may also help improve tolerance to CS** by increasing the rate at which the cyanide (released by CS in the body) is transformed into thiocyanate (which the body can then eliminate by excreting it into the urine). Finally, but least well-established and least-applicable to protest settings, some scientists suspect that sulfur reduces deaths from CS by helping deactivate the cyanide that CS releases when it is taken up into the body. Such needs are best covered by a balanced diet (including the veggies mentioned above), which is much better than taking vitamin pills.

## Going to the Emergency Room:

Doctors **DO NOT** receive training about pigs’ rioting agents, and usually have to extrapolate from things they know about (industrial contaminants) to your condition after a demo. If your friend has been exposed and is still having trouble breathing and the doctors look perplexed, ask if they’ve ruled out pulmonary edema from the toxic particulates and solvents, etc.

(0) Seriously injured patients arriving with EMS/paramedics *will be seen faster* at the hospital than if driven by car. Go to the highest-level care hospital (usually university). For minor cuts, bruises, sprains and breaks in otherwise healthy and alert patients, you may benefit from going to an outlying hospital outside the fray See #7, below).

(1) Go with a friend!

(2) Tell the doc what you were exposed to: gas or spray, etc. Rioting agents delivered as gases & sprays are toxic particulates, while pepperspray is a toxic oily aerosol. All also contain organic solvents that damage lung, nervous system, liver, etc.

(3) Ask your doctor to *specifically document* all your injuries and the mechanism of injury (e.g., “patients reports being beaten with a baton by police” and “head wound from blunt object consistent with impact of a baton”), writing them into the progress note, chart or computerized report.

(4) Arrange for the hospital, lawyers, or a friend to photograph your injuries as soon as possible.

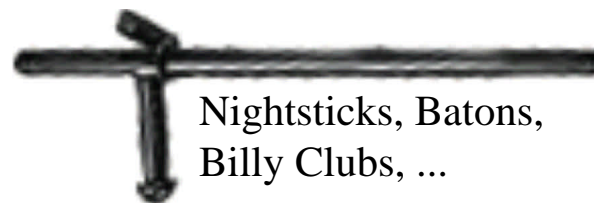
(5) If your doc shows that s/he doesn’t like your clothes, politics, or hairstyle: don’t argue, just *ask for another doctor*. If you get any lip, send a friend to phone your medical and legal teams.\*

(6) In an emergency threatening life or limb, hospitals are obliged to provide service regardless of your medical insurance status.

(7) Keep a low profile and don’t discuss the demo in the hospital: cops often prowl there to arrest people who’ve been injured by their pack-mates, especially university hospitals. Cops are routinely present at hospital ERs, escorting shackled inmates they’ve injured to the doctor.

(8) Write down the doctor’s name and *nicely* ask the doctor for a copy of the progress note (where they write down your vitals signs, findings, test results, etc.), as well any X-Ray/CT results written up by a radiologist (may take days). They are unfortunately *not* required to give this to you unless your lawyer requests it before a trial (“discovery”), but if you ask nicely, you may get it... If that doesn’t work, try asking a nurse or the staff at check-out if it didn’t work the first time.

More on High Risk Groups (this really happened in Portland!):



## Nightsticks, Batons, Billy Clubs, ...

pictures, video, or in a presentation to the jury — is one of the reasons that batons are less and less commonly the weapons of choice by police at demonstrations. It is less obvious to audiences that a cop is being cruel if he’s spraying people in the face with pepperspray at close range than when pounding down with full body weight on a trapped victim in fetal position. Imagine the television coverage (if any): the effects of pepperspray begin to appear 10 seconds later, too late for the 5-second long TV “news footage” which has already moved on to a commercial break, but a baton blow to the head sends a clear, immediate message and causes an emotional reaction in the viewer.

Batons also cause delayed damage: blows to the head can cause a concussion or potentially lethal bleeding within the skull (epidural or subdural hematomas). Those hit on the head should be monitored for 12 hours, if possible. If not possible, make sure a reliable, sober companion will look after them and notify Emergency Medical Services if they deteriorate. Bleeding from the scalp, as long as the skull is not fractured below, usually looks worse than it is (bleeds copiously). Blows or jabs to the abdomen, like rubber bullets (p.19), can cause internal bleeding that even professionals have difficulty recognizing (rigid abdomen, signs of cardiovascular shock). The spleen and liver (along the lower edge of the ribs on the left and right) are especially often damaged.

Antidote: sturdy clothes, avoidance, learning how to block baton blows. As a certain reverend so eloquently said at a demonstration in Washington, D.C. while cops disrupted the event “if they hit you with their sticks, *take them from them* and shove them up their asses!”

We don’t really have to explain this one, do we?? Everyone can imagine that it sucks to be hit repeatedly on the head, jabbed in the gut with the short stub, etc., by one of these batons wielded by a kid that grew up getting picked on throughout high school. The fact that this is so easily understood by audiences — be it by