Critical First Aid in the Streets

New York City Action Medical

nycactionmedical@riseup.net

@nycactionmedical

Scope of This Training

This workshop is designed to give you the training to respond when someone near you has a life-threatening injury, or an injury likely to cause permanent disability.

- **This training will NOT substitute for any sort of professional medical care.**
- **This training will NOT <u>certify</u> you in First Aid or qualify as any other formal medical certification.**
- We will NOT be teaching the CPR/Heartsaver course. Please contact the American Heart Association or a local provider for this training.

The ongoing assumption throughout this training will be that you saw a person get injured or are with people who saw the injury occur.

- We will be focusing on **treating** injuries, rather than **checking for** injuries.

Scope of This Training

This is not a street medic training!

- Street medic training for non-medical professionals is a 20-28 hour course.
- Street medics often have additional training and certifications beyond that.
- Street medics are “marked” with patches or red duct tape crosses/stars.
- Street medics ALWAYS operate (“run”) in pairs.
- Our next 20-hour training will be in late April, with priority registration for BIPOC!

We encourage you to let your comrades know you have some first aid training and may be carrying supplies, but ask that you only mark up as a medic in the streets after completing a formal street medic training.

- This is to avoid misrepresenting the scope of care which you can provide for patients and the general terms under which you will be providing it.
- Even though you won’t be street medics at the end of this training, much of the same history, values, organizing structures, and philosophies applies to radical first aid providers.

Action Medical Operations

The Buddy Pair

The foundation of our organizational structure in street operations is the **buddy pair**. All other structures function as support structures for on-duty buddy pairs.

Buddies provide a second pair of eyes, a second perspective on any situation, and an extra pair of hands.

Buddies do scene assessment and crowd control, keep photographers away from patients, help with lifts and carries, call for backup, and keep in touch with dispatch.

Aim to have complementary skills and presentations.

Sharena Thomas and Lesley Phillips of People's Community Medics in Oakland, CA (2013)

Situational Awareness

First aid providers need to be aware of their surroundings at all times. It's important to avoid distractions to the extent possible and keep our eyes on the crowd.

- What are the protesters doing?
- What are the police doing?
- Who looks hot, cold, or tired?
- What risks are around you?

If the crowd isn't moving, try to stake out a location where you can see what's going on all around you, and where others can find you easily if they have a medical concern.

Scene Safety in 1 2 3 4 5!

1. **“Look out for #1”**
   - Keep our own safety and buddy safety in mind
   - Limits effectiveness if you/buddy get hurt
   - If patient also poses a danger, you are not obligated to help them.
2. **"What happened 2 you?"**
   - Brief look for any obvious mechanism that could have caused injury/ extreme weather conditions/ surrounding people, etc. Is the MOI still an active threat?
3. **"None on me!"**
   - Body Substance Isolation (PPE) to keep self and treated as sterile as possible.
   - New materials for each patient. Make sure not to contaminate people with any bodily fluids.
4. **"Are there any more?" (Triage)**
   - Who are the priority patients? When seeing multiple people injured, who needs help most urgently?
5. **“Now we arrive” / "Let's help you thrive."**
   - Initiate treatment.

The Human Barricade / Privacy Circle

Organizers at Capitol Hill Autonomous Zone/Capitol Hill Occupied Protest form a barricade

People at protests tend to view each other as allies and are almost always happy to help when asked.

If you need a scene secured, ask people facing out in a tight circle in order to protect your patient while you provide care.

NOTE: Please be mindful of masking when forming a barricade. If needed, innovate and use signs, umbrellas, fabrics, etc. to help shield the patient instead.

The Human Barricade

It’s not uncommon for journalists and livestreamers to try and film people who are receiving treatment. When this happens, politely request that they respect the privacy of your patient.

If that doesn’t work, don’t get in arguments with them or demand that they stop filming (that never works). Instead, ask other protesters to form a wall around you with signs.

Action Medical Values

Anti-Oppression

- We do not tolerate bias or criticism based on race, ethnicity, color, religion, gender, sex, sexuality, age, income, education, relationship to the means of production, body size, ability, ideology, immigration or documentation status, or any other axis of oppression.
- **NYCAM does not support treating white nationalists, fascists, or cops while on duty as part of our street medic philosophy.**
- **We consider treating dangerous individuals who mean to do harm against marginalized communities as a violation of our "Do No Harm" stance as leftist medical providers.**

Radical Consent & Patient Autonomy

First aid providers get consent for **<u>everything</u>**.

How we get consent:

- Approach calmly and cautiously.
- Introduce yourself confidently and swiftly.
- Example: *“Hello, my name is Inigo Montoya and I know first aid. I can help you. Would that be okay?”*

Discussion

What are some reasons people decline medical care at protests or other street situations?

(2 minute)

Common Reasons for Refusing Care

- The caregiver’s perceived race or gender
- Worries that medics are cops
- Financial concerns / being uninsured
- Modesty / fear of exposure
- Fear of attracting attention
- Doubting injury is "that bad"
- Perceiving another patient as doing worse and needing care first
- Fear of contagion (you or them)

Consent is a **CONTINUOUS** process. Always ask whether you can do something to a person and describe what you are doing. Treating someone who has not consented is **assault**.

Ways to Encourage Consent

Be persistent, but not pushy.

- “Your wound looks really bad, and I’m concerned about you. What would make you more comfortable in getting support?”

Validate and address the patient’s concerns and offer alternatives.

- “I can understand why this might be scary.”
- “Would you prefer if my partner takes care of you and I mostly keep watch?”
- “Healthcare is really expensive, especially if you don’t have health insurance. Would you consider a public hospital?”

Establish privacy barriers and innovate!

Always take “no” for an answer!

Special Circumstances

Minors

- Minors cannot legally consent. Seek a parent or guardian to provide consent if possible. However, you may provide treatment if a guardian is not available and treatment is in the best interest of the patient.

Implied Consent

- If a patient is unable to give consent, we can assume that the patient would want life-saving treatment were they able to give consent but we DO NOT call 911 on people who are intoxicated or experiencing crises or altered realities.

Radical Consent is Required

Even if we have legal consent through a guardian or through implied consent, we always require that our patient agrees to our plan of treatment (unless our patient is incapable of expressing a preference one way or the other).

Radical first aid providers always adhere to patient consent, even if we suspect a patient is under the influence.

Legal Risk, Good Samaritan Laws, & Scope of Practice

Legality: You may perform interventions if you act **within your training & knowledge**, with intent to save a life. Check the local city & state Good Samaritan laws (GSL) before going to an action (varies by state).

Drug or alcohol overdose:

- GSL allow people to call 911 without fear of arrest if they are having a drug or alcohol overdose that requires emergency medical care or if they witness someone overdosing

Use of defibrillators or CPR:

- GSL protect those who perform CPR or use an AED in the case of a sudden heart attack or heart-stopping injury

Patient Care & Transfer of Care

No Abandonment: You must stay with someone once you start helping them, until you hand them off to someone with higher training or your own life is threatened. Your goal should be to transfer ASAP, with good communication.

DO NOT leave your patient until:

- They confirm care is completed or say they do not want further treatment.
- You transfer them to a higher level of care (more experienced medics, EMS, hospital, etc).

To leave the patient otherwise is considered **ABANDONMENT**. Action medical providers **<u>do not</u>** abandon their patients!

Calling 9-1-1

Should you?

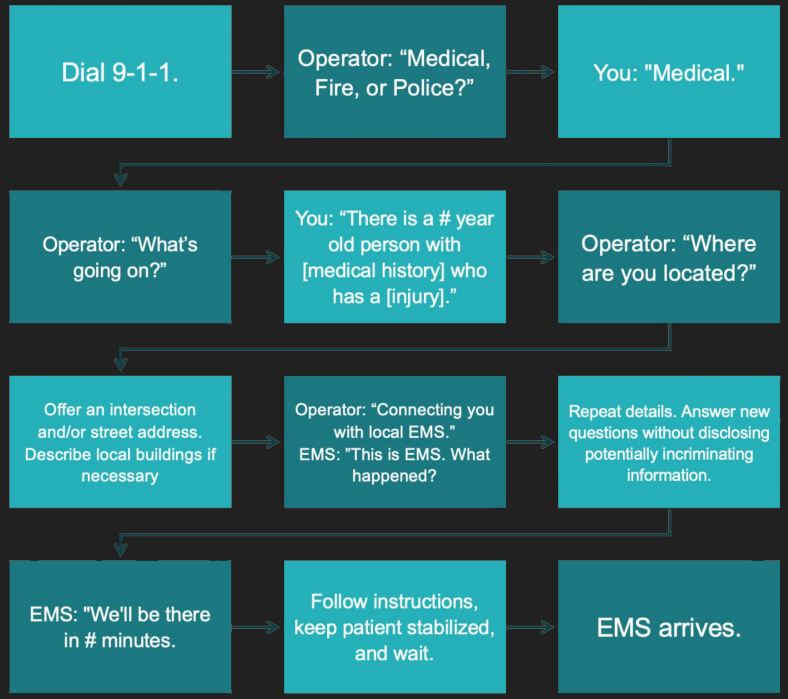
- We are assuming that the person in question could die without EMS.
- Respect that there are reasons people might not want EMS called.

If you must:

- Direct a bystander to call 911 by pointing at them:
  - "*You, [PERSON + DESCRIPTION], call 911, tell them we need an ambulance, tell them this person [SIGNS/SYMPTOMS], then come back and tell me what they said.*"
- Focus on the injury, as opposed to what happened to avoid police involvement:
  - "*There is a large wound in their chest*," rather than "*They were in a fight and got stabbed.*"
  - "*I don't know*" is always an acceptable answer!
- Key language:
  - "*They are not breathing*," or "*They are unresponsive*."
- Designate a bystander to deal with the police when they undoubtedly arrive
- Direct other bystanders create a privacy circle and enforce privacy asks
- Give other folks around you a heads up that you are activating 911 so they can leave if necessary

Red Flags: Signs to Activate & Communicate to 9-1-1

- Any amputations
- Any impaled objects
- Bleeding you cannot control
- Any arterial bleeding
- Any sign of shock
- Head injuries
- Any penetrating abdominal wound
- Any spinal injury



Critical First Aid

Body Substance Isolation (BSI)

BSI protects both you and the patient!

Rules of choosing gloves

- Material (vinyl vs. latex vs. nitrile)
- Light vs. dark
- Size

Other PPE:

- Goggles
- Outerwear
- Masks

DEMO: Removing exam gloves

Exercise

Practice Putting On and Removing Gloves

(5 minutes)

Assessment Order

When treating injuries that do not constitute an **immediate life threat**:

A - B - C

Airway: Is the airway clear?

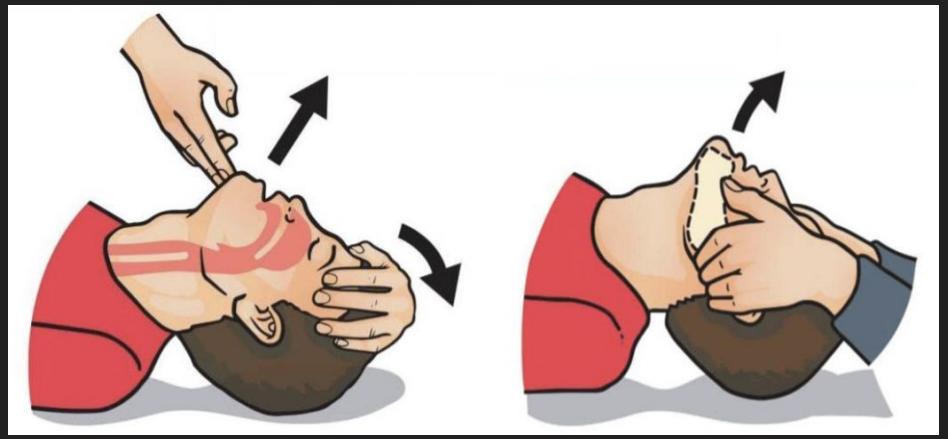
Breathing: Can the patient maintain their breathing on their own?

Circulation: Is any bleeding under control?

Airway

Why might someone not have an airway?

- Asthma
- **Anaphylaxis**
- Choking
- Jaw or neck injury



Unconscious and not breathing:

- Head tilt, chin lift
- Jaw thrust (only if C-spine injury suspected)

This is best covered in a CPR training

Assessment Order

When treating **IMMEDIATE, CRITICAL TRAUMA** injuries:

C - A - B

Circulation: Is any bleeding under control?

Airway: Is the airway clear?

Breathing: Can the patient maintain their breathing on their own?

Minor Wound Care - Abrasions & Lacerations

Abrasions (scrapes) and lacerations (cuts)

1. Wash hands and wear PPE
2. Stop the bleeding (direct pressure and raising limb above heart)
3. Wash wound/surrounding skin with mild soap and water
4. Gently remove any contaminants
5. Pat dry
6. Apply bandage
7. Remove PPE and wash hands again
8. Repeat daily until healed

Seek higher care if:

- Unable to stop bleeding
- Showing signs of infection
  - Redness
  - Itching
  - Persistent pain
  - Swelling
  - Pus or drainage
  - Warmth
- Dirt/foreign material in wound
- Tetanus vaccine >10 years ago
- Large or deep
- Bite (human or non-human animal)

Minor Wound Care - Contusions (Bruises)

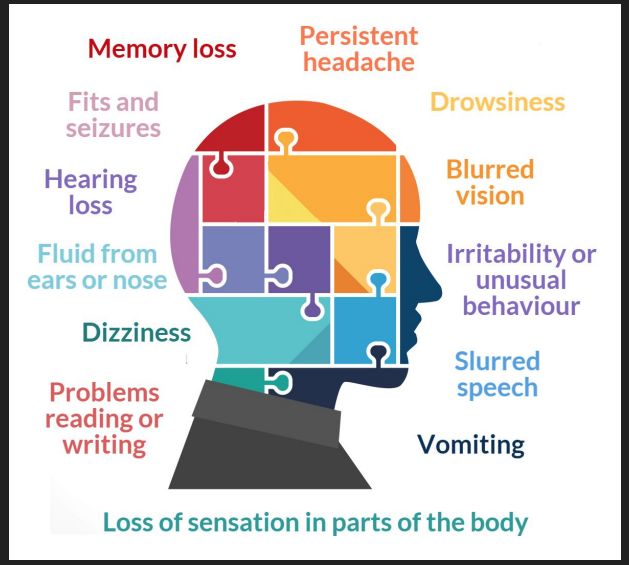
Main treatment: ICE and REST

If bruising is on the abdomen or near a joint, do a more thorough assessment

- Past medical history
- Mechanism of injury - what caused it?
- Assess range of motion - can they move it per usual (their baseline)?
- Palpate (gently push against) the area
- Check for referred pain
    - Referred pain example: You see a bruise on their gut and they say, “my shoulder is killing me.” **This is a sign you need to seek higher care!**

Head Injuries

Head Trauma



When should you go to the ER?

- Confusion/loss of memory
- Loss of consciousness at any point
- Bruising on the head or face in locations other than the impact (especially behind the ears and around the eyes)
- Changes in speech, mobility, or sensation compared to baseline

*Unless it's a tooth! For dental injuries: go to a dentist, not the ER

Place the tooth in a container with the patient's saliva or gently place it back in the socket (after rinsing off with patient's saliva)

Aftercare for Head Injuries/Concussions

A doctor is required to formally diagnose / document, but you may be able to recognize when someone is not at their baseline cognitive level after being hit in the head.

- Be aware of sensory changes (loss of vision, blurred vision, floaters, light sensitivity, ringing in the ears, hearing loss, tingling/numbness, etc.)
- Nausea/vomiting is another common, but overlooked sign.
- People who have had concussions before are usually able to self-diagnose.

Generally, if a concussion is suspected, they should seek higher care. If they won't, advise low/no screens, quiet/calm environment, and take time off school and work if possible.

- Return to activity slowly and stop if symptoms worsen.
- Avoid medications or substances that thin blood or prevent clotting (e.g. aspirin and alcohol)
- Avoid things that cause confusion or dizziness - can mask concussion symptoms
- Have a buddy to monitor symptoms and offer care.
- **Avoid further head injuries.**

Head Trauma + Bleeding

Direct pressure can cause serious harm!

- There may be very dangerous injury aside from bleeding
- Skull may be compromised/fractured or the brain may need to drain fluids
- It is nearly impossible to diagnose a life-threatening head injury in the field

Bleeding can look bad, but almost no one dies from a head bleed.

- Skip bleed control or only place bandage to prevent blood getting in the eyes

Get the person to higher care ASAP

- If someone has a bleeding head injury and is alert and aware enough to refuse transport or care, at least try to get them somewhere that they won’t get more hurt

Spinal Precautions

If someone is:

- Struck in the head or neck with great force
- Thrown
- Fallen a long distance (e.g. twice their height)
- Fallen in a weird, “unnatural” position

Assume that their cervical spine (neck vertebrae) is compromised.

Moving this person without stabilizing their neck risks severing the spinal cord (the nerves that keeps them breathing and moving), leading to **paralysis, other long-term disability, or death**.

DO NOT MOVE THEM.

Bleed Control & Gunshot Wounds

Bleed Control & Wounds

For this part of the training, we will discuss live-shooter safety and interventions for wounds that constitute **a life threat**.

In a (physical) trauma situation (knife, gun, car, explosion, etc.), **treat bleeds first**.

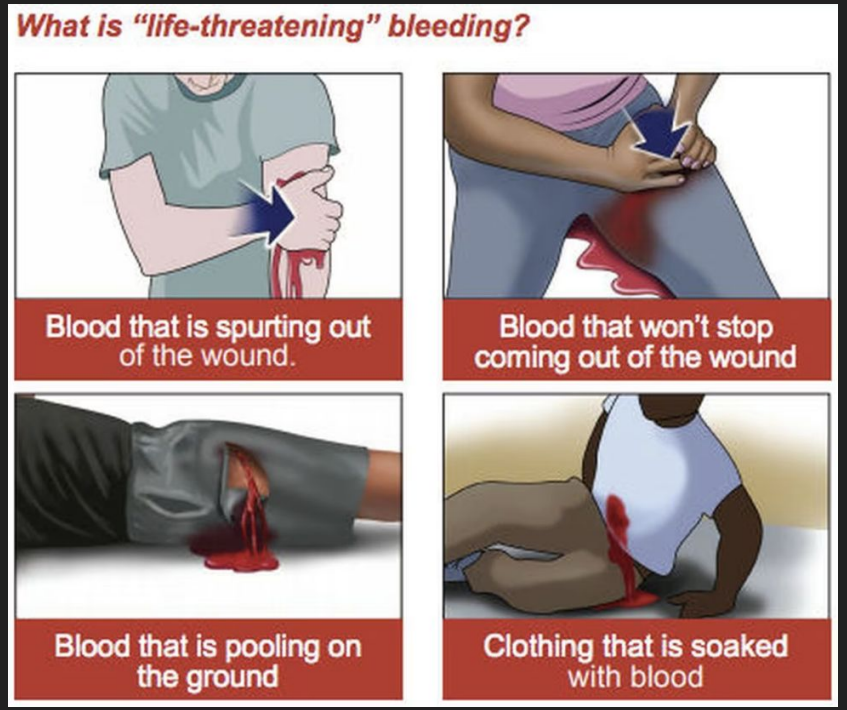
We highly recommend you complete a **Stop the Bleed** training.

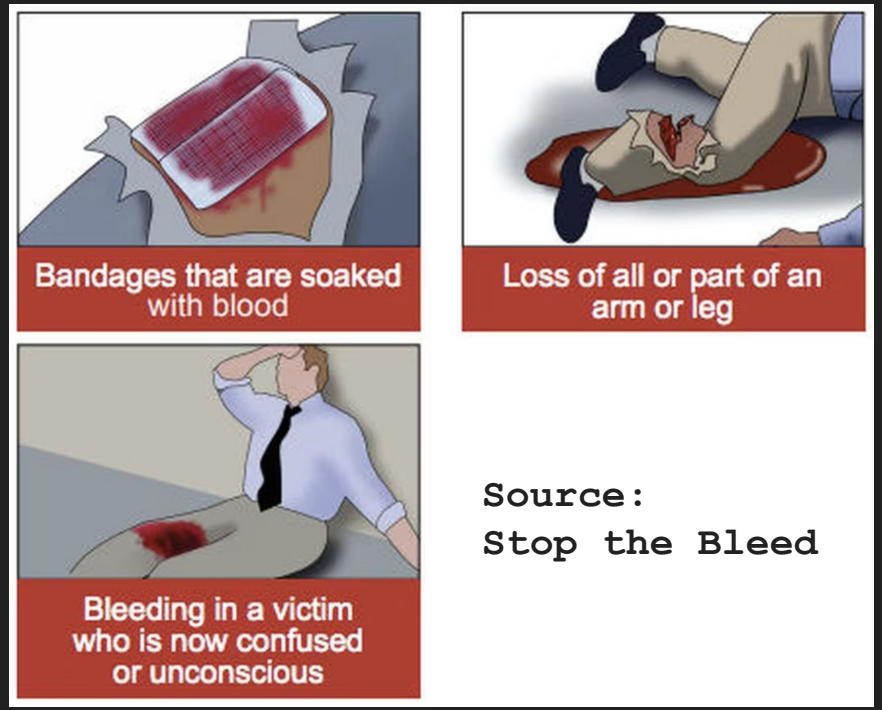
- https://www.stopthebleed.org/training/online-course/mobile-course/

We recognize that we live in an era when you or someone you know may have experienced or survived gun violence and mass shootings.

- You know yourself best. Step out if you need to. Take care of yourself!

What are Life-Threatening Bleeds?





Source:
Stop the Bleed

Venous vs. Arterial Bleed

Venous

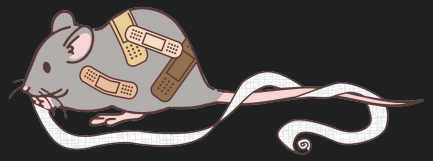
- Dark Red
- Leaking
- Oozing
- Flowing
- Moving toward the heart

Arterial

- Bright Red
- Pulsing
- Gushing
- Spurting
- Forceful
- Moving away from the heart

ALWAYS A LIFE THREAT

Bleeding Control



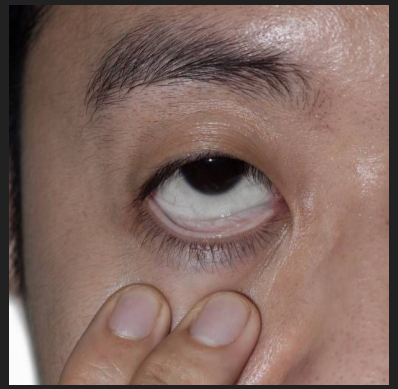
- **Apply firm, direct pressure** (heel of palm, kneel into the wound, or body weight) until the bleeding stops
- Layer gauze on top of the wound if it bleeds through
- Change out **top layer ONLY** if it bleeds through. **NEVER remove the first one on the wound** (may disrupt clotting).
- Keep track of the quantity of material used. It can be used to estimate the quantity of bleeding.
  - e.g. “The patient bled through ten 4x4s, two abdominal pads, etc.”
- Ask if the patient takes anticoagulants/blood thinners/platelet inhibitors (especially for older patients)
  - e.g. Eliquis (apixaban), Xarelto (rivaroxaban), Coumadin (warfarin), Lovenox (enoxaparin), heparin, Plavix (clopidogrel), daily aspirin, etc"

Signs of Shock

If you lose enough blood, you will develop **hemorrhagic shock**.

Signs of shock:

- Tachycardia (heart rate above 100 bpm)
- Thirst
- Nausea/vomiting
- Agitation, restlessness, anxiety
- Pallor, ashen or cyanotic skin
- Diaphoresis/profuse sweating
- Weak, thready, or absent peripheral pulses
- Rapid, labored, or irregular breathing
- Decreased body temperature
- Decreased mental status
- Decreased blood pressure



TRANSPORT THEM QUICKLY TO HIGHER CARE

- Continue to control bleeding
- Keep them still and lying down if possible
- Keep them warm, using mylar blanket or other coverings
- Continue monitoring them and assess the need for rescue breaths and CPR

Special Types of Wounds

Punctures

- High risk of infection, especially with bites
- Update tetanus vaccines (>10 years)
- Risk of sucking chest wound and tension pneumothorax → occlusive bandage

Impalements

- Leave the object in!
  - Unless it is interfering with breathing
- Immobilize it with a **donut bandage**
- If in the eye, cover both eyes (they move together)

Knife Wounds

- Most dramatic ≠ most life-threatening
  - Long and shallow vs. small but deep
- People who have been stabbed often do not realize it. They only know they have been struck.

donut bandage

Special Types of Wounds

Burns

- The most dangerous burns are on the face, hands, or genitals; encircling limbs; or covering large surface areas of the body
- Smother fire, remove heat
- Use damp dressing and treat for shock
- **NO ICE. Cool water.**
- Flush acid/chemicals with water

Amputations

- Hospital ASAP
- Wrap the body part and place it near (not on!) ice (e.g. inside a bag, inside a bag of ice)
- Keep the person and part together
- Address bleeding; tourniquet if larger than finger

Crush, fracture, avulsion, etc. → depends on severity

Chemical Weapons

Chemical Weapons

Pepper Spray
- Contains OC (Oleoresin capsicum)

Tear Gas
- Contains CN (Chloroacetophenone) or CS (2-chlorobenzylidene malononitrile)

Both are not actually gasses–they are lipid-based aerosolized particulates.
- Oil droplets do not remain airborne for long periods of time.
- Heavy greasy splatter that does not remain airborne for more than a few seconds
- Masks and bandanas provide protection. Reducing the degree of exposure has a significant impact.

Note: Tear gas is not used in NYC.

Police shoot pepper spray toward a protester during a demonstration over the death of George Floyd in Boston on May 31

⚠️ **Pepper spray used against protestors on next slide**

Pepper Spray (OC)

- Irritates skin and mucosal membranes to cause pain and temporary blindness
- Can cause chemical burns with prolonged contact
- Can cause bronchospasm and severe respiratory distress–especially in people with pre-existing cardiopulmonary illness, such as asthma/COPD
- Risk for loss of blink reflex within 5 days of prolonged exposure (Olajos & Stopford, 2004)

Skunk (aka “Skunk Water”)

Deployed as “yellow mist” in handheld canisters/grenades or fired from a water cannon

Smell compared to sewage, excrement, and rotting corpses

Health effects and treatment:

- Nausea, vomiting, gagging, coughing, difficulty breathing, headaches, and irritation of the skin and eyes
- Little data on how to treat or reduce the effect of Skunk (other than Odortec soap) or the long-term effects of exposure
- We **DO NOT** endorse home remedies (like hydrogen peroxide, olive oil, ketchup, etc.)
- Water eye flushes, water and soap/dish detergent for the skin, and disposal of contaminated clothing and materials.

Chemical Weapons Safety/Prevention

Goggles (without air vents, like swimming goggles), face shields, well-fitted high-quality masks (P100, N95, KN95, KF94), and bandanas can serve as a physical barrier.

- Apple cider vinegar-soaked bandanas can help with tear gas, but don't wear them all day. Carry them in a plastic baggie and pull one out when you need it.
- Showing up to a protest in goggles can also make you a police target. Be smart!

Avoid contacts. Chemical agents can get trapped under the lenses. Wear glasses if you can.

Avoid wearing oil-based or **comedogenic** makeup or skincare products. Opt for water-based or powder-based non-comedogenic products.

- They can trap chemical weapons in your pores and prolong their effects.

Pepper Spray Treatment

OC is an oil. It is not soluble in water and large volumes of water will not wash it off. Soap!

Pepper spray stops hurting when it dries and reactivates when it gets wet again.

Best practice on scene is to:

1. Move the patient to a safe and secure environment
2. Assess for airway complications
3. Offer reassurance and spread calm
4. Blot off excess chemical from the skin
5. Remove contact lenses before eye flush
6. Clean the eyes and mouth with water or saline
7. If possible, clean skin with soap and water.
   If not, allow the chemical on the skin to dry.
8. Educate patient about after-action decontamination.

Eye Flush Demo

1. Stop the spread

- Instruct patients to avoid touching contaminated areas and stop rubbing their eyes, face, or other soft/mucosal tissues.
- Have them sit on their hands or with their hands between their thighs and calves while kneeling. If they wear glasses, have them hold their glasses.

Hong Kong medic performing eye flush on patient in 2019

Eye Flush Demo

2. Get the chemical out of their eyes and off their face.

- Make sure contact lenses are removed with clean hands before flushing the eyes with water.
- Grab their eyebrow and lift up to keep their eye open.
- Using a newly-opened squirt bottle filled with water (or saline if you have pre-filled vials or syringes), sweep the stream away from the tear duct/nose toward the ear.
- Have them tilt their head so contaminated water runs off the edge of their face.
- Repeat process until they can blink and see. (They may still be in pain.)
- Rinse mouth. Wash glasses before putting them on again.

Eye Flush Demo

3. Use water and soap/detergent to wash the chemical off their skin.

Remove contaminated clothes/items and dispose of them in a garbage bag. Seal this bag in another garbage bag to prevent spread to sanitation workers.

4. Monitor breathing, especially for patients with asthma/COPD

Chemical Weapons Aftercare

Avoid entering **enclosed areas** (like apartments and subway cars) with contaminated clothing. Remove and bag everything you can beforehand.

Avoiding touching other people, animals, and soft surfaces before cleaning your hands.

Take a lukewarm or cool shower with soap.

- Wash your hair first by leaning backwards into the stream, so that the chemicals don’t run into your eyes and face again.

Wash clothes in a washing machine at least twice with strong detergent. Avoid public laundromats.

Your liver will be processing these chemical weapons in the coming days. Avoid substances like alcohol, which can slow down your liver metabolism.

Exposure to chemical weapons can be traumatic and disorienting. What feels supportive when you are processing grief, rage, or pain?