

# Minimizing DNA Traces During Riotous Moments

2023

13. The ATF SA/CFI advised me that fire investigators collected a glass container with an attached fabric cloth, containing an unknown, clear liquid, consistent with the appearance and components of a Molotov cocktail, a breakable container, which contains a flammable/combustible liquid, and a wick. The devices are known to investigators to have initiated fires. The contents were sent to the ATF laboratory for further analysis.

14. Preliminary ATF laboratory results from a forensic biologist show that the forensic biologist discovered DNA on multiple pieces of evidence suitable for further testing. The forensic biologist obtained DNA profiles from three different individuals.

In our experience, most of us in North America aren't in the habit of thinking very much about DNA traces. Information about how DNA traces are created or prevented is limited to several myths that are passed around. That said, you can be pretty certain that whenever arson is involved, a DNA forensics team will be involved too. For example, an arrest was made recently for a Jane's Revenge arson after DNA was recovered at the crime scene. We want to briefly summarize some practical considerations. By arming ourselves with some preparation and an accurate understanding of how DNA is transferred, it is possible to drastically limit the amount of DNA we leave behind. Although DNA is something we should always keep in mind when planning our participation in a riotous moment, we don't want people to feel overwhelmed by this information. Actionable knowledge empowers us to avoid the dual traps of recklessness (acting as if DNA doesn't exist) and immobilization (as if leaving traces and their analysis in a laboratory is inevitable).

As noted by DNA minimization protocols<sup>1</sup> in the CSRC Threat Library:

“We are constantly shedding DNA in various forms; skin cells, hair, saliva, blood, and sweat are all sources of DNA, and unlike fingerprints they can never be reliably removed from an object once contaminated. DNA minimization protocols are intended to enable the manipulation of objects without leaving DNA traces on them. As you would expect, these protocols aim to eliminate skin cells, hair, air-borne saliva particles, blood and sweat making contact with the objects. The chemical destruction of DNA is often also involved.”

To prevent or at least significantly limit leaving DNA traces, it is necessary to wear new gloves, a face mask, a hair net or, even better, closed headgear (e.g. a swimming cap) and washed clothes with long sleeves and pant legs to cover as much skin as possible.

In the context of a riotous moment, there are several things to prepare for:

- Either smash it or burn it – not both. Smashing something can sometimes involve a lot of contact with the object, which risks transferring DNA traces to the object in question (especially if you have to climb onto it). Sustained fire will destroy DNA traces, but for an object that is first smashed and then burned this is no guarantee; the parts of the object that have been touched may not be sufficiently heated by the flames to destroy all traces. In the context of a riot, this means that people with incendiary intentions should try to take initiative early, before people with smashy intentions hit up a given target. A scenario that is less than ideal: a crowd smashes up a car, perhaps someone touches the car with gloves that have been worn many times (and so have accumulated DNA on them) or cuts themselves on the broken window, then a few minutes later someone torches the car. An ideal scenario: the car is burned first, which requires no smashing – either an accelerant bottle is placed under the front tire (faster, under a minute) or firestarter cubes are placed on the front tire<sup>2</sup> (slower, about five minutes). It is sometimes necessary to break either a window or a door to gain access to a building, but machinery and vehicles can be burned without any smashing by positioning accelerant in the right location.
- Wear new impermeable gloves<sup>3</sup> which you've never previously touched, and put them on last once you've already changed into black bloc. This is because you want to avoid any skin, hair or sweat on the outside of the gloves, which could then be transferred to any objects

---

<sup>1</sup><https://csrc.link/threat-library/mitigations/dna-minimization-protocols.html>

<sup>2</sup><https://kolektiva.media/w/q9KWWiQzaiCWADWNGWEhNm>

<sup>3</sup><https://csrc.link/threat-library/mitigations/gloves.html>

you touch. Always handle tools that you are bringing with such a new pair of gloves, even if you don't plan on ditching the tools. Take care that the tools you are using, and especially the projectiles you are leaving at the site, have been free of your DNA from the beginning, and transport them carefully. Dishwashing gloves are excellent for preparing for the action (when standing out doesn't matter). For during a riot, you can use work gloves that have a thick impermeable coating on the palms and fingers. Have an extra pair that you can change into in case you mistakenly touch your face or something similar.

- If you'll be using a hammer, practice breaking windows in a controlled environment before the heat of the moment. Blood is a very obvious source of DNA to even the most incompetent investigator. The main thing is to make sure that your hand or arm never passes beyond the window, which requires that you generate force from the wrist rather than the elbow or shoulder. A quick wrist flick generates sufficient force with a properly weighted hammer.
- Be careful to not have anything that can fall out during the ruckus – closed zippers are your friend. Be especially cautious if rummaging through bags or backpacks.
- Any clothing used during the riot should not be recovered by the forensics team if it can be avoided. The days of leaving a giant heap of black hoodies in the middle of the street should come to an end – clothing will generally have DNA traces on it. Ideally, you would take clothing far enough away to be able to dispose of it properly (either burn it or put it somewhere where if it is found, it won't be considered as related to the riot). A judgement call will be required when deciding whether to try to carry the clothing far away or whether to hide it somewhere on your dispersal route. If searched, black clothing may be enough to lay charges but is unlikely to result in a conviction by itself. Any identifiable clothing or other items in the bag could be more incriminating, so you'll need to assess the risk of a bag search and weigh it against the goal of keeping your rioting clothing out of the hands of the police. Objects that cannot be concealed in a backpack (like large shields) can be hidden, or coated with bleach (which has around 10% sodium hypochlorite – see further reading) or burned with accelerant that is placed on the exit route ahead of time (in plastic bottles that will burn, not in a jerry can).
- Don't use tape to construct firework molotovs<sup>1</sup>. Tape is a magnet for DNA. Rather, use plastic zip-ties to secure the firework to the bottle. Ideally there should be two fireworks for redundancy, to minimize the likelihood of an unexploded molotov being recovered. Moreover, take DNA minimization precautions when constructing and transporting the molotovs (again, see further reading). This is especially important if they have to be ditched before being used. Fireworks on their own will likely be equally effective at keeping police at bay without risking the same level of repression that molotovs entail – care should also be taken to not leave DNA traces on firework casings. Traditional molotovs (using a glass bottle) need to hit a hard surface to shatter and so are unreliable when thrown inside of buildings. For example, at the site of the first Jane's Revenge arson, DNA of three individuals was found on an unexploded molotov, the window glass, and a lighter (criminal complaint available here<sup>2</sup>, use Tor Browser).

---

<sup>1</sup><https://scenes.noblogs.org/post/2023/03/07/the-forest-fights-back-march-5th-action-report>

<sup>2</sup><https://storage.courtlistener.com/recap/gov.uscourts.wiwd.50670/gov.uscourts.wiwd.50670.1.0.pdf>

For further reading, see [Strategies for Countering Police Access to DNA Data<sup>1</sup>](#), and the DNA topic<sup>2</sup> at CSRC.

---

<sup>1</sup><https://csrc.link/read/strategies-for-countering-police-access-to-dna-data.html>

<sup>2</sup><https://csrc.link/#topic=dna>

“In our experience, most of us in North America aren’t in the habit of thinking very much about DNA traces. [...] [Y]ou can be pretty certain that whenever arson is involved, a DNA forensics team will be involved too. [...] We want to briefly summarize some practical considerations. By arming ourselves with some preparation and an accurate understanding of how DNA is transferred, it is possible to drastically limit the amount of DNA we leave behind.”



*Layout by the Counter-Surveillance Resource Center ([csrc.link](#))*