

Contents

Us	e Pepper Spray Like a Pro	3
	History of chili as a weapon	3
	What is Pepper Spray	3
	This all sounds rather extreme, is it safe?	4
	So how does it actually work?	5
	How strong is the burn?	6
	Is pepper spray any different to bear spray?	6
	What about mace?	7
	The effects of Pepper Spray	7
	Different spray effects	8
	What to look for when buying Pepper Spray	9
	ls pepper spray even legal?	11
	The improper use of pepper spray	13
	Where to buy pepper spray	14
Be	fore using Pepper Spray	14
	Countering the effects of getting sprayed	14
	Using medicated wipes	16
	What if your dog is sprayed?	16
Us	ing Pepper Spray	17
	Know how to securely hold the canister	18
	Understand how your canister works	18
	Keep a relaxed stance	18
4	Aim for their eyes and mouth	18
	Don't stay in one place	19
	Keep your canister within reach	19
	Perform a few test sprays	20
Wł	nen Should I Actually Use Pepper Spray?	20
	Spraying an Attacker	20
	Testing your Pepper Spray	21
	Looking after your Pepper Spray	21
	Travelling with Pepper Spray	
Sta	lying safe with Pepper Spray	22

Use Pepper Spray Like a Pro

When you look at a chili pepper, there's not much to indicate the level of heat they actually contain. But we all know that when the juice comes in contact with your lips you will definitely feel the burn. Now imagine this scenario. You bite into a chili pepper that's just past your ability to handle. In a few seconds your mouth turns to fire, and soon it becomes unbearable, with no amount of water able help you.

Now imagine this same burning sensation across your entire face.

The stinging pain is tearing up your eyes, your nose burns with every breath, and you're almost choking because your throat hurts so much. This is what a good dose of pepper spray does to your target. Even the biggest and meanest criminals are turned into a helpless writing mess at your feet following a successful blast of pepper spray to their face, and that's not even the best part. Pepper spray is considered a non-lethal form of self defense. This means you can keep these handy canisters with you in your home, backpack, or even on a keychain and you never need to hesitate before using against an attacker.

History of chili as a weapon

The concept of using chemical sprays as a weapon was first developed in 1870 in Germany, and their initial product had a certain resemblance to the tear gas we know as mace. However the powerful use of chili in battle dates back to ancient Asia, where ground up peppers were wrapped and thrown into the faces of attackers on the battlefield, and the smoke from burning chili was also used to disorient attackers. The pepper spray we know today was first put into widespread use by mail carriers and the FBI in 1973, to help protect against dog attacks and humans respectively.



Towards the end of the 1980's pepper spray became a common weapon in the arsenal of most law enforcement agencies, and was also made available for civilian use. Today, it is one of the most common means of personal self defense.

What is Pepper Spray

Pepper spray is a product that's derived from chili peppers, and comes in a compressed canister which allows you to quickly and easily spray it into an attackers face. Its portability and ease of use makes it an ideal weapon for your self-defense arsenal. Pepper spray has an almost instantaneous effect when you spray it in your attackers face, taking just seconds to cause an extreme irritation to their skin, eyes, nose, mouth and throat. As a self defense tool, the strength of the attack pepper

spray delivers often completely incapacitates your attacker, giving you a window of opportunity to escape, call the police or regain control of a situation.

Advantages of Pepper Spray

- It's an inexpensive form of self-defense
- Generally it's legal to possess, but check your state/countries current regulations to be sure
- The small canister size makes it easy to conceal and carry
- It's been designed as a non-lethal alternative for self-defense
- Can be used on both human attacks, as well as animals
- It's biodegradable, and normally does not stain clothing or your skin
- The burning sensation will typically be gone in 4 to 6 hours

Disadvantages of Pepper Spray

- The concealed dispensers don't spray as far as a typical canister of pepper spray
- People with allergies to the ingredients, who have asthma or heart conditions may experience a stronger reaction to pepper spray, which (in some cases) leads to death
- Factor in a delay up to six seconds from when the spray hits their eyes and stops their vision
- Pepper spray doesn't stop your attacker from grabbing you, and the burning can make them even madder so make sure you're out of arms reach when you use it

This all sounds rather extreme, is it safe?

Our team of weapons experts love pepper spray because it is generally considered non-lethal, and if you use it on an attacker there will not be any long-lasting effects. Of course, the immediate impact of the spray is intense, and will cause a massive amount of pain for the first 15-20 minutes, which will begin to noticeably subside after about 45 minutes. After 4 to 5 hours the effects should have worn off completely, and you'll feel relief similar to getting the feeling back in your mouth after a spicy meal.

From the beginning pepper spray has been designed as a non-lethal weapon, and the components of pepper spray are considered safe. However, there are a handful of cases where pepper spray has been used and has led to a fatal result. This is most commonly due to an allergic reaction, known as anaphylaxis, which results in fainting, shock and swelling



after you've been hit with a blast of pepper spray. If you're asthmatic, you need to be extra careful around pepper spray as it can affect your ability to breathe much more seriously than a non-asthmatic. It needs to be noted here that these fatal effects are only from a handful of cases, and while the pepper spray acted as a contributing factor, the deaths were not conclusively linked to the use of pepper spray.

Nevertheless, pepper spray is considered a more humane form of self-defense than a knife, a firearm or whatever it is you're planning to arm yourself with, as the chances you do cause a fatal accident with pepper spray are much lower than if you use any other weapon.

So how does it actually work?

The ingredient which makes pepper spray so effective is a chemical extracted from chili peppers, the very same peppers we use in our cooking. This chemical is known as oleoresin capsicum (OC), and it contains an active ingredient known as capsaicin which is extracted as an oil. It's this compound that is responsible for the spicy feeling in your mouth when you bite into a chili. The OC chemical is flavorless, odorless, and colorless, but even one milligram (roughly 0.00003 ounces) of pure capsaicin will cause blisters if it comes in direct contact with your skin. Capsaicin is such a powerful active ingredient, that the heat it causes in your mouth can be detected even when it is mixed with water, and humans are actually able to detect one part in ten million of this spicy oil.

The OC oil is mixed with a solution, before being contained in a pressurized canister, typically 4-5 inches high and around 1.5 inches wide. The canister will have a trigger that allows you to release the spray, and also a safety mechanism to stop you accidentally spraying yourself. Pepper spray dispensers are relatively light, are convenient to carry in your handbag or a pocket, and can dispense anywhere from one burst to over 60. Just because pepper spray is often concealed in innocent housings, like a bright pink lipstick tube, the effects pepper spray generates are very serious.



A number of variables impact how well pepper spray will work in any given situation. It's much more effective inside than out, because rain, wind speed and direction can disperse the spray, but inside

there is also a much higher chance you will contaminate the entire room you spray it in. In addition, a direct hit to the face will be more severe, especially if your attackers eyes and mouth were open when you sprayed them. The distance will also affect the potency, as well as the shelf life, especially if you have left your pepper spray to expire. Normally the effects of pepper spray will be instantaneous, but it can take up to 6 or 7 seconds depending on how well you have managed to hit your target.

How strong is the burn?

The pharmacologist who created the standard measure for determining the "heat" of capsaicin was Wilbur Scoville, and in 1912 he created the Scoville Organoleptic Test to grade the heat of peppers. Ever pepper is rated between zero and 5,000,000 in a scale we now refer to as the Scoville Heat Units (SHU). These grades were first assigned following test subjects estimating the intensity of the heat particular peppers could induce. The level of heat present in a pepper is based on the amount of capsaicin it contains, with a jalapeño pepper rated anywhere from 8,000 to 10,000 SHU and a habanero coming in between 250,000 to 350,000 SHU.

Today, we have much more sophisticated means of estimating the SHU. Using high-pressure liquid chromatography, computerized models now accurately determine both the total capsaicin (OC) percentage as well as the SHU rating. Typically, a standard pepper spray canister will have a strength of 15% OC active ingredients, as well as a rating above 2 million SHU. Sprays with at least 1 million SHU are more than strong enough to stop an attacker in their tracks.

Is pepper spray any different to bear spray?

Pepper spray can be used on animals, and all U.S. Postal Service carriers actually have a pepper spray

canister in their toolkit in order to protect themselves against dog attacks. Bear spray is a different product but follows the same fundamental principles, using capsaicin to deter any aggressive animals from attacking hikers or hunters.

The main advantages of bear spray are:

- A larger range up to 30 feet
- A fogger spray pattern to help you hit the bear's face
- A different OC composition to be more effective on animals

Against humans, bear spray is considered inferior because pepper spray is usually a higher SHU, resulting in a more severe burning sensation. Generally, if you are in an area where your greatest threat is large and aggressive wildlife, choose bear spray. If you live in an area where your biggest threats are human, opt for pepper spray, which can still be used against angry animals in a pinch.



What about mace?

There is some confusion here, as many Americans use the terms for mace and pepper spray interchangeably. Mace actually refers to two things. The first is a type of spray, that uses a toxic irritant to induce pain, much like tear gas. The second is as a brand name, from Mace Security International, as their self-defense spray products are branded as Mace, and they carry both tear gas as well as pepper sprays. The way that mace works has seen it lose its place in the market, as it is generally less effective than pepper spray. Criminals who have a higher pain tolerance or are tweaking on drugs or alcohol can push through the effects of mace without being stunned. Pepper spray on the other hand is inflammatory, and results in an involuntary response which means your attacker has no choice but to succumb to the pain.

The effects of Pepper Spray

Using pepper spray against an attacker is a very effective way to repel almost anyone, as well as any aggressive animals that may be causing you grief. As soon as the spray comes in contact with their face, your attacker will being to feel a world of pain, as their eyes fuse shut, they start coughing uncontrollably and they cannot overcome the pain so they simply succumb to it. The combination of these effects often sends your attacker into a panic, which enables you to regain control of the situation. Again, we would like to stress that pepper spray, despite the following extreme effects, remains a legal and non-lethal form of self defense.

The severity of the pepper spray's effects are directly related to the amount you use, how strong it is, and the area of your attacker where you concentrate the spray. If you're looking for fast and immediate results, target their eyes and mouth, and your spray will result in:

- Their eyes. The spray dilates the capillaries in the eye, resulting in them instantly tearing up, involuntarily closing, followed by temporarily blindness as well as severe burning sensations. It becomes physically impossible for your attacker to open their eyes without assistance. Imagine how your eyes water when you slice a raw onion. This feeling is similar, however about a thousand times more painful, as your eyes seem to be boiling, with some people likening the feeling to pouring burning coals into their eye sockets. After being sprayed the attackers eyes will be red for the following 1-2 hours, and pepper spray is still very effective, even if your attacker is wearing glasses or contact lenses.
- Their nose. The burning sensation rapidly hits their sinuses kicking their nose into gear, and they've instantly got a runny nose more painful than the worst cold you've ever experienced in your life. The mucus will start running out the front of their nose, and dripping down the back of their throat, adding a drowning sensation to help you further subdue your attacker.
- Their breath. Almost instantly your attackers throat will swell and become inflamed, making it difficult to properly breathe. Their airways will not close entirely, and they will be able to draw wheezing breaths that allow sufficient oxygen to pass to stay alive, but their ability to fight back will now be severely limited. This can also lead to uncontrollable bouts of violent coughing as they gasp for air, with their ability to breathe properly returning in anywhere from 10 to 45 minutes.

- Their skin. Where the pepper spray has made contact with their skin it will begin to burn, and can range in level of pain from a really bad sunburn to a severe sensation akin to scalding yourself with boiling water. The skin will become inflamed and turn a blotchy red color.
- Their coordination. The overwhelming pain often disorients and confuses your attacker, and they can lose balance, feel lightheaded and experience a period of brief general confusion as they succumb to the pain. Often, even the largest most aggressive attackers wind up in a fetal position on the floor, giving you the chance to escape.

You can expect these effects to kick in within about 5 to 6 seconds of a successful spray into your attackers face. It doesn't seem like much now, but in a street fight these few seconds can be more than enough time for your attacker to pull the trigger on their gun, lunge forward and stab you with a knife, or to simply grab you and start hitting you while you cannot escape their grip. Keep this in mind when you do use your pepper spray against an attacker, and depending on the situation these effects may even take longer to manifest. If you're relying on pepper spray for self defense, you need to also have an immediate plan to escape should you not get the intended result with your spray. Generally, most people will be incapacitated following a successful pepper spray to their face, but in order to ensure your survival, you should practice making alternate plans to get you out of any situation you may find yourself in.

Different spray effects

Typically, pepper spray will be delivered as a spray from an aerosol canister. To make it easier to direct the spray, the OC oil is usually mixed with a water or oil-based solution, along with a propellant in order to give you a greater range against an attacker. This entire solution is then

pressurized inside the canister. Based on the different needs of users, a variety of different spray patterns have been developed, which allow you to deliver a blast of pepper spray in four main ways.

The most common are:

 Fog. The "fogger" pepper sprays have a very wide range, which makes them an effective weapon if you will potentially be facing multiple attackers. Police often use these types of pepper spray



for crowd control because of this fact, and they're normally effective at a range of 4 to 8 feet. The downside is that the fine mist the fog spray pattern utilizes makes this weapon ineffective in windy conditions, and if you're facing the wrong direction you can actually cop blowback from the spray cloud yourself when you use it. Of course, your attacker will have taken the full force of the spray and will be in a much worse state than you are, but it's a point to keep in mind as you're evaluating the different types.

- Stream. In these spray patterns a concentrated blast of the OC solution is aimed in a narrow stream of liquid, and can cover a distance of up to 15 to 20 feet, depending on how big the canister is and the propellant which it uses. The effect is much like that of a water gun, but thanks to the concentrated blast it will drain your canister much faster than the other types of spray patterns. In windy situations, the higher force makes it a more effective type than fog pepper sprays, but there is a risk that you may have the droplets splash back onto yourself if the attacker is close to you when you spray them.
- **Gel**. In close quarters this type of pepper spray is very effective. There is no splash-back because it sticks to your attacker when they are hit, and gel based sprays normally cover a range up to 25 feet.
- Foam. The last type of spray is very similar to the gel, making it great for indoor use or in close quarters because the effective range is 6 to 8 feet. In addition, the foam cannot be blown back onto you, though a potential weakness was found when using this type of pepper spray in inmates. They discovered they could scrape the foam off their face and use this to retaliate against their guards. Even so, wiping away the foam results in painful effect, much like a thick, sticky version of shaving cream that burns on impact.

What to look for when buying Pepper Spray

Law enforcement officers have been carrying some form of defensive spray since the 1980's, thanks to its ability to deter and immobilize a criminal without lethal consequences. We recommend that every American takes adequate steps to protect themselves, and buying pepper spray is one way you can ensure you've got a little trick up your sleeve should you ever need it.

Here's the main factors to consider when you're buying pepper spray:

- Range. You don't want your attacker to be able to get close to you, and we recommend finding a pepper spray with an effective range of at least 10 feet. This helps you keep a safe amount of space between the attacker and you.
- **Number of shots**. The more shots the better, but you want to at least have a canister that can hold 5-6 shots, so you can fire again if you miss or are facing multiple targets.
- **Constitution**. Personally, our team of weapons experts recommends finding an oil-based pepper spray, as the ones which are mixed with water can sometimes have a problem with separation, and the final blend will separate inside the canister with the oil rising to the top. This can make it less effective when you need to use it in a self defense situation.

• **Size**. Pepper spray comes in a variety of different sizes, from industrial sized canisters intended for security guards, we well as concealed forms that can clip onto key-rings or come disguised as lipstick. Pick a size that is convenient for you to carry with you at all times. Concealed versions of pepper spray come as lipstick tubes, pens and even a ring you can wear to give you a little operational security by not making it obvious you are carrying a

potent means of self-defense. These smaller sizes often contain only one or two shots, but their real beauty is in their ability to surprise your attacker and catch them off guard with a more effective initial spray.

 Simplicity. Your pepper spray should be straightforward to operate, because if you ever do need to defend yourself you're likely going to be in a panic and won't have time to read complicated



instructions. Look for a model that has a simple safety feature (to prevent any accidental discharges), and get comfortable spraying your pepper spray.

- Strength. If you're purchasing a self defense weapon, you want it to be effective if you ever need it. Find a pepper spray with at least 2,000,000 SHU. In addition, you may also see some pepper sprays list a MC (major capsaicinoid) rating, which is an indicator of how effective a pepper spray will be when used on a human. You want this to be as high as possible (the range is typically 0.18% to 1.33%), in addition to the CRC rating being above 1%.
- **Spray**. For beginners, we recommend the fogger or stream spray's, as they require less accuracy to land a successful hit on your target.
- **Identification**. Some brands of pepper spray also contain UV dyes, which can unknowingly stain the skin of your attacker, and assist police in finding them in the aftermath of an encounter. Just be careful here, and verify first that your state allows UV dyes to be used in pepper spray, this is not the case in every state.
- Asthmatics. If you do suffer from asthma but would like to carry pepper spray for self defense, look into the options you have for formulations that do not contain oleoresin capsicum (OC). There are a range of different chemical mixtures that are safer for asthmatics, or you could also purchase a foam or gel version of the spray, and avoid any risk from airborne particles. Of course, if your attacker manages to get your pepper spray from you you'll be in trouble, just remember that you should only ever use pepper spray in situations where there is no other choice.
- **Cost**. Pepper spray ranges in price from \$10 to \$50 for a small portable dispenser, though the majority retail for under \$20. The size of the canister, the number of sprays it can deliver as well as the spray pattern all have an impact on the cost.

Now before you spend hours agonizing over every detail, just remember the key is to be able to access your pepper spray at all times, and have enough in the canister to eliminate a threat. Most of the pepper sprays on the market have more than enough potency to take down a threat.

Is pepper spray even legal?

At present, pepper spray is legal in every U.S. state, although there may be specific regulations in your particular area, so always make sure to confirm the any local restrictions with your local police department before making a purchase. As follows is an overview of the legality of pepper spray in the United States and internationally, and whilst this information is correct at time of print, please reconfirm with your local authorities before buying pepper spray yourself.

These states currently have no restrictions on pepper spray:

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- Arizona
- Colorado
- Connecticut
- Georgia
- Idaho
- Indiana
- lowa
- Kansas
- Kentucky
- Louisiana

- Maine
- Maryland
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- New Hampshire
- New Mexico
- North Dakota
- Ohio

- Oklahoma
- Oregon
- Pennsylvania
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- West Virginia
- Wyoming

States that do have restrictions can be classified into one of these three areas:

- Canister size, how much it can weigh and the amount of pepper spray it can contain.
- The type and amount of ingredients. Some states require the capsaicin percentage to be below a certain figure, and some prohibit the use of UV dyes and other active ingredients.
- The places you can buy pepper spray, age restrictions, as well as in some states requiring a firearms license for you to be able to legally carry pepper spray on your person.

As follows are the restrictions in these particular states:

Alaska

- Need to be 18 years and older to possess pepper spray.
- Cannot be possessed on school grounds without permission from the school and being over the age of 21.

Arkansas

• Canisters cannot contain more than 4 ounces.

California

• Canisters cannot contain more than 2.5 ounces

- Must be used for self-defense purposes only
- Misuse carries a fine of \$1,000, potentially 3 years in prison and a felony conviction

Delaware

- Need to be 18 years and older to possess pepper spray.
- Must be used for self-defense purposes only

Florida

Canisters cannot contain more than 2 ounces

Hawaii

- You can only purchase pepper spray through a licensed dealer
- Canisters cannot contain more than 0.5 ounces
- Need to be 18 years and older to possess pepper spray.

Massachusetts

- You can only purchase pepper spray through a licensed dealer
- You must hold a valid firearms ID or license to carry in order to buy pepper spray (you can get this from your local police station)

Michigan

- Concentration cannot be more than 10% OC
- Canisters cannot contain more than 1.2 ounces
- Pepper spray containing UV dye is not permitted

Nevada

- Need to be 18 years and older to possess pepper spray.
- Felons cannot possess pepper spray
- Canisters cannot contain more than 2 ounces

New Jersey

- Need to be 18 years and older to possess pepper spray.
- Felons cannot possess pepper spray
- Canisters cannot contain more than 0.75 ounces

New York

- Need to be 18 years and older to possess pepper spray
- You can only purchase pepper spray through a pharmacy or licensed dealer

New Jersey

- Need to be 18 years and older to possess pepper spray.
- Felons cannot possess pepper spray

North Carolina

- Felons cannot possess pepper spray
- Canisters cannot contain more than 4 ounces

Rhode Island

- Need to be 18 years and older to possess pepper spray.
- Must be used for self-defense purposes only

South Carolina

Canisters cannot contain more than 1.69 ounces

Washington DC (District of Columbia)

- Residents must register with local law enforcement if they possess pepper spray
- Residents must be 18 years or older, however anyone above 14 can possess pepper spray with parental permission

Washington State

 Need to be 18 years and older to possess pepper spray, however anyone above 14 can possess pepper spray with parental permission

Wisconsin

- Canisters cannot contain more than 2 ounces
- Pepper spray containing UV dye is not permitted
- Concentration cannot be more than 10% OC
- Canisters must have a safety feature to prevent accidental discharge
- Manufacturers must list their phone number on the product
- Pepper spray cannot be sold to anyone under the age of 18

If you live outside of the United States, there will probably be applicable local laws for you to follow when it comes to pepper spray ownership. As an example, restrictions in Belgium, Canada and Denmark make it illegal for private citizens to possess pepper spray, while it is legal in Hong Kong and Finland so long as you have the appropriate permit. In the Netherlands, special training is required before a police officer can be issued pepper spray, while in the Czech Republic, Philippines and Russia pepper spray is readily available for anyone to purchase.

The improper use of pepper spray

To ensure you do not get yourself into trouble with your new canister of pepper spray, remember that it is for self defense purposes ONLY. You cannot use it as an offensive weapon, even if you are protecting your property or simply getting payback on an individual you dislike. Let me repeat this again, spraying an innocent victim with pepper spray can incur criminal and civil liability, as it is considered to be assault or battery in most jurisdictions, much like a punch in their face would be.

For you to adequately justify the use of pepper spray in an altercation, you need to determine that you used it for self defense purposes, and the extent of the force you retaliated with is in line with

the circumstances. If someone swears at you, you cannot lawfully pepper spray them in the face because you didn't like the way they spoke and looked at you. There needs to be a clear physical threat, it is illegal to simply intentionally hurt another person.

In general, you cannot claim it was self defense if you provoked or started the attack. The only exception here is if you've been threatened with a weapon, or you suspect they have a hidden weapon, as you often have a much better chance to survive an attack if you throw the first blow. Using pepper spray in this situation would put yourself in a much better position legality-wise because there is a very low risk there will be lethal consequences following its use. That means you can be more decisive when it comes to dealing with an attacker, as you will have no hesitation using pepper spray, unlike if you had armed yourself with a firearm.

Where to buy pepper spray

Because pepper spray is legal in most states, it is easy enough to purchase in both traditional retail stores and online. If you're looking for the best prices and a wide selection of products head online, but pharmacies and local retail stores also stock it which is fantastic when you need it fast. In some states you can only buy pepper spray through pharmacies and licensed firearm dealers.

The most common places our readers buy pepper spray are:

- Amazon. The range can't be beat, alongside the convenience delivered to your door.
- **eBay**. There's also a wide range of pepper spray products on this platform.
- Military Surplus Stores and general Sporting Goods outlets.
- Pharmacies and licensed firearm dealers
- Department stores like Wal-Mart and Walgreen's
- Pawn shops
- Direct from the manufacturer via online specialty stores.

Before using Pepper Spray

There is no set of standard requirements to train yourself to use pepper spray, however to ensure you use it effectively we advise to enroll in a program to get comfortable using this self defense weapon. Your police station or local gun-shop will be able to advise the best local courses in your area, or you can follow our practice steps to ensure you're well prepared if you ever do need to use pepper spray against an attacker. But before we get started using this new weapon, you need to understand what it takes to counteract the effects - just in case.

Countering the effects of getting sprayed

Before you start spraying your new canister of pepper spray all over your backyard, it pays to know

how to stop the burning sensation, just in case the spray gets blown back onto you, or you accidentally spray yourself. Knowing how to effectively treat the pain is vital, because trust me, getting pepper spray in your eyes results in a world of pain.

The first thing you need to remember is that the burning element, the OC, is actually an oil, and water is not the best way to eliminate the fiery sensation tearing through your eyes, nose and mouth. It's like cleaning a greasy frying pan with water alone, you'll never be able to remove all the oil simply by running water over it. Nevertheless, running cold water on your face will provide an measure of relief, but it's not going to be able to remove the capsaicin oil and stop the effects altogether. If you have no other option, continually immersing the affected area in water (for up to an hour) can help relieve the pain. But this isn't the best route to getting your face back to normal.



As a trainer who has been doused with pepper spray multiple times, here's what to do:

- STOP! Do not rub your face. It will burn, sting and feel terrible, but refrain from doing this at all costs. Your hands will push the oil deeper into your skin which intensifies the pain, and you will then cross-contaminate everything your hands come in contact with. It will seem almost impossible to resist, but do your best to keep your hands off your face (for now).
- Start blinking rapidly so your eyes tear up, which helps to flush any spray that has gone into your eyes.
- Apply milk on all of your affected areas. This will help to counteract the burning sensation, and you can apply it with a spray bottle, directly splashing the milk on your face, or soak a towel with it lightly cover the affected area. This process will not remove any of the oils from your skin, but it will take the intensity of the burn down a couple of notches.
- If you're experiencing severe effects, mix up a gallon of soapy of water in a bucket deep enough for you to take a breath and immerse your face into, just like you're bobbing for apples. The detergent at this stage of the process will begin breaking down the capsaicin oils that are contaminating your face.
- Do not use your hands or a cloth to rub your face, just let the soap break up the oils.

- After a few rounds dunking your head, lightly use your hands and the soapy water to wash
 your skin, which will help to break-up and remove the oil particles clinging to your face. This
 may cause the burning feeling to intensify momentarily, as the motion activates your
 capillaries and rubs the pepper spray deeper. This is to be expected, so just stay calm.
- Once you can touch your face without too much pain, use hand soap, shampoo or even dishwashing soap and a little more pressure to cleanse and remove the oil.
- Repeat this process seven to eight times, regularly changing your soap water solution that may contain trace elements of the pepper spray oil.
- If your eyes are still burning, baby shampoo with the "no tears" effect can help to break up any of the oil that may be affecting sensitive areas without irritating them further
- If you wear contacts remove them as soon as you're able, and flush your eyes with your saline solution. Your contacts are best thrown away, it's almost impossible to get the capsaicin oil out of them once they've been contaminated.
- Run your contaminated clothes through the wash (separately) to avoid any contact or cross contamination with your other clothing. I like to run them through two cycles just to be sure.
- If the pepper spray was released indoors, ventilate the room immediately.
- If you've followed all these steps and more than a half hour has passed without the pain subsiding, go and see your physician to examine the exposed areas to check for any allergic reactions you may be having to the pepper spray.

It can take up to an hour before you start feeling a relief from the symptoms of a pepper spray attack, and your recovery will depend on your skin type, and how high of a dosage you received. Washing your face will remove the majority of the OC oils, however it will not be possible to remove this oil completely, it's more to get it tolerable so you can ride out the next couple of hours until your face returns to normal.

Using medicated wipes

Emergency responders typically carry medicated wipes which are composed of a solution to effectively treat the effects of pepper spray. If you're considering carrying pepper spray with you for self defense, we recommend purchasing at least one pack of these medicated wipes which are specifically designed to reduce the effects of pepper spray exposure. Normally you'll find these medicated wipes stocked alongside the canisters of pepper spray, and if you do ever accidentally spray yourself, you'll be glad you invested in the wipes.

What if your dog is sprayed?

Pepper spray is not only used against humans, many joggers and even the postman carry pepper spray to ward off any overly aggressive dogs as they make their way through the neighborhood. It's a

great defensive weapon for this, and able to incapacitate a canine attacker just like it does a human.

But what if your dog gets out and someone sprays them?

Caring for a dog who is recovering from being pepper sprayed will follow a similar process to that of a person suffering the effects, and the symptoms will begin to abate after about 45 minutes.



If your dog has been loose and returns home in obvious discomfort, squinting and demonstrating a difficulty opening their eyes, there's a chance they've been a victim of pepper spray. Forget about who sprayed them for a minute, it's time now to care for your pet. Take a look at them, and you'll notice your dog is licking and rubbing their face in an effort to relieve the burning sensation, and is probably crying and whimpering from the pain.

Depending on the relationship you have with your dog, you may not even be able to get close enough to help. If they do let you close, try to flush their face, eyes and mouth with as much water as you can. It will provide some relief, even if you're just sitting with your dog and using the hose to flush their face. Within about 45 minutes the signs of discomfort should fade, and if this is the case you probably don't need to go to the vet. However, if there has been no improvement after the first 5 or 10 minutes of flushing their face, consider if you need to take your dog to animal care. A vet will be able to provide a topical ointment to relieve any pain in your dog's eyes, but generally the best bet is to wash the affected areas and give it a little time.

Remember the effects of pepper spray are also temporary on dogs, even though it is a painful experience for your best friend to suffer through. The best way to ensure this doesn't happen to your dog, is to keep them under close supervision if you're walking them outside of your home, or while you're at home ensure there is no way they can escape the yard, so there's no chance they will encounter someone who attacks them with pepper spray.

Using Pepper Spray

Pepper spray is such an effective means of protection because you do not have to physically touch your attacker for it to be used, and you can launch an attack before you're even in arms reach of your assailant. This is critical, and staying out of the clutches of an attacker who intends to do you harm is the first step to staying safe. Even if your attacker is abusing drugs or alcohol, the level of pain you inflict can stop them in their tracks. The key though is knowing how to use it.

Know how to securely hold the canister

One of the biggest concerns is using your can of pepper spray effectively. You want to hold it in a nice, firm grip to reduce the chances your attacker lunges forward and knocks it from your hand, or snatches it from your grip. Instead of controlling the spray with your index finger, use your thumb, as your four fingers wrapped around the canister is more secure, plus your hand is now in a fist position if you need to strike at your opponent. Get comfortable holding your pepper spray like this, and ensure you know how to activate and deactivate the safety mechanism. Normally this is a twist-lock technology that prevents accidental discharge, and you should only ever disarm the device once you're sure your back to safety.

Understand how your canister works

There are two points to consider at this stage. You need to have an idea how many shots remain in your canister, if it runs out in the middle of a fight you will be in trouble. Second, you need to understand the effective range of your particular canister, so you can maintain the maximum distance between the attacker and yourself, without needlessly wasting your pepper spray.

Keep a relaxed stance

Never reach out and fully extend your arm towards your attacker when using pepper spray, as there's a much greater risk they will be able to overpower you and knock the pepper spray from your hand. Bend your elbow and keep your arm bent ever so slightly, using your other arm to fend off any attacks on your hand holding the canister. Take a defensive stance with your feet, planting them shoulder width apart with one foot slightly in front of the other, and bend your knees as you drop down an inch or so.

Aim for their eyes and mouth

To maximize the effect of your attack, focus your spray on hitting your attackers eyes, as well as their mouth if it is open. You may need to spray from ear to ear if you're using a stream or gel spray pattern, and if you miss simply reverse the process until you make a successful hit. Cone and fogger sprays need to be moved up and down ever so slightly while you aim at their face, again putting a focus on getting the spray into their eyes. if you're worried at this point, it's OK, but you don't need to be. Think of your canister of pepper spray as if it's simply air freshener, or insect spray. The basic principles of spraying it are the same, and with a little practice you will be ready to take on any situation, no matter how stressful.



Source: http://commons.wikimedia.org/wiki/File:Marines_feel_the_burn_during_OC_spray_training_150306-M-RH401-038.jpg

Don't stay in one place

Once you've made a successful hit, sidestep and escape the area as fast as you can. Running backwards is not recommended, as many attackers will remember where you were standing and charge forward in a rage following a pepper spray attack. Getting out and around them to the side can give you an edge in getting to safety, and evading their grasp until the full effects of the pepper spray kick in. Another good trick is to dodge a step or two as you launch your pepper spray attack, to avoid any back-spray accidentally hitting you. Remember when you need to use pepper spray, you want to cover your face as much as possible with your other arm. Coming in contact with your own pepper spray will burn, and you definitely do not want to get any blowback from the spray getting into your own eyes or mouth.

Keep your canister within reach

Pepper spray will not protect you if you've left it in the bottom of your handbag, the glove compartment of your car, or in your desk drawer at the office. The key to remaining safe is to always have your canister ready to fire when you are navigating a potentially vulnerable situation. In a typical assault you will get no warning before the criminals strike, and you may find you get attacked when you least expect it. To stay inconspicuous, you could always hold the canister in your hand inside your jacket pocket, just make sure you can quickly and easily draw your canister if you need it. If you're not cradling it in your hand, make sure that the spot you keep it in is secure, and your pepper spray will not fall out by accident. Many pepper sprays also come with a carry case to solve this problem for you.

Personally, I find the keychain pepper spray canisters to be the best solution to keep this self-defense tool handy, as we're always going to carry our keys with us, and most of these have enough blasts to launch 5 or 6 sprays into your attacker's face.

Perform a few test sprays

From here, you need to be very comfortable quickly pulling your pepper spray out and taking a shot. Know exactly how to deactivate the safety, push the trigger and take appropriate aim, so that if you ever need to perform these steps in a hurry, you have no problem doing so. The more familiar you are with your pepper spray, the more effective you can be with this defensive tool. There's no harm in purchasing a couple of extra canisters and practicing in your yard, however be sure to keep any of your family members (including your pets) inside and out of any potential blow-back areas. For yourself, ensure you're always upwind, you don't want nature sending a gust of wind and a cloud full of pepper-spray back into your face

When Should I Actually Use Pepper Spray?

This is a tough one as circumstances can differ and there is no best case scenario you can apply to every situation. In addition to this, remember no self defense weapon is 100% effective in every instance. Our team recommends using common sense, and if you feel threatened or that your life is in danger, use your pepper spray on your attacker. But you really do need to believe your life is in danger, using pepper spray without just cause on a person can get you into serious trouble.

Spraying an Attacker

If the time comes and you've got no other options, whip out your pepper spray and send a burst into your attackers face. In this situation, these tips will help you to do it effectively.

- 1. Remember to always keep your pepper spray handy. It's faster to pull from your jacket pocket than the bottom of your handbag.
- 2. Distract your attacker by yelling "STOP" at the top of your voice, which may give you the split second you need to produce your pepper spray and begin spraying.
- 3. Use the spray at a distance that is just under your sprays advertised reach. If it says on the can it works up to 10 feet, start spraying your attacker at 8 feet to ensure it is effective.
- 4. Remember to walk backwards as you are spraying, and if you are up against a wall or cannot back up, circle to the left or right until you have a path to escape.
- 5. Bend your knees, stabilizing your body in case you are rushed by your attacker.
- 6. Keep a distance between you and your attacker, while remaining in the effective spray zone, watching your attacker for any sign you may need to spray them a second time.
- 7. If you're having difficulty hitting their eyes, fan the container as you use the spray with a side-to-side motion (while still aiming at their face) to increase your chances of a direct hit.
- 8. Aim the stream or spray from your canister into their face, eyes or open mouth, and keep a steady stream of spray into their face until they are out of commission. If they open their mouth for any reason, aim here with your spray because it will cause an instant inability to breathe, along with heaving coughs that puts even a large attacker on their back.
- 9. Once your attacker is feeling the effects, wait for a couple of seconds. If they seem to be recovering, spray them with a second (direct) shot if necessary, to give you ample time to

escape. Remember that it normally takes a second or two for pepper spray to have an effect, so don't be too eager to get the second shot in unless it is really required.

Finally, never ever warn your attacker you have pepper spray. Criminals and delinquents have normally been sprayed once or twice before, and if they anticipate your pepper spray attack they can significant reduce its effectiveness by holding their breath, and blocking their eyes and nose with their arms as they rush forward to attack you before you can spray them first. Do not give your attacker an edge and allow them to mentally prepare themselves to deal with the pain, use surprise to your advantage and hit their open face directly with your attack.

One last word of advice here when using pepper spray in a real self-defense situation, never forget that the weapon you have is simply a deterrent. It's a damn painful one, but it will not stop 100% of attackers in their tracks, 100% of the time. Direct hits will generally put even the largest opponents out of commission, but after being sprayed they can still grab, punch, stab or shoot you, and you'll now be facing an opponent who is understandably more than a little mad you've pepper sprayed their face. Use your pepper spray to get your window of escape, and if you believe it's necessary another burst to the face when they have fallen to their knees can stop most retaliations as you completely incapacitate them. Once their more concerned about fighting for air, run and escape to a safe location.

Testing your Pepper Spray

Your pepper spray canister has an effective life, and just because it's still within its expiration date it doesn't mean it will work effectively. To be sure, you need to periodically test your pepper spray. We recommend conducting a test spray every 3 to 6 months, but remember that this will result in you gradually reducing the amount of pepper spray you have to defend yourself. In a large canister this isn't a problem, however if you're using the smaller keychain size you may need to replace it every 12 to 18 months to ensure it's packed with enough spray so you can effectively use it to defend yourself.

Testing pepper spray is simple, just head outside on a day without much of a breeze. If there is any, make sure you're standing upwind, and holding your pepper spray at arm's length, give it a short, half a second spray. Make note of how effectively the pepper spray fires, and be sure to check your canister remains in good working condition. Often, this may mean you're throwing away canisters that aren't totally empty, but don't let this discourage you, you'll be much better prepared to defend yourself if you are equipped with the right tools and ammunition.

Looking after your Pepper Spray

Once you buy your pepper spray, pay close attention to any warnings or advisories that are listed on the packaging. Normally, there will be minimum and maximum temperatures listed on the can, which means if you expose them to extremely hot or cold environments, they will leak or rupture.

The potency of the capsaicin does not deteriorate over time, however you'll notice that there will normally be an expiration date stamped onto the base of each canister. This is because the canister

may not be as effective over time, and the aerosol propellant which is used to propel the OC ingredient can leak which makes spraying impossible. Keep an eye on the manufacturers labels for any advice on a best before date, to ensure you are not caught out when you may need it most. In general the ability to spray effectively will last for about three years, but this can vary by brand.

In addition, you should ensure you're keeping your pepper spray away from children, and never store it in your car, as the high temperatures during summer can cause the propellants to leak. The best place to keep your pepper spray is with you, on a key chain so you know it is always handy, and you can quickly reach it in an emergency. Many joggers like to carry it in their hands when they are running in the very early hours of the morning, and there are even specific armband models to cater for this niche customer base.

Travelling with Pepper Spray

When travelling it pays to have a form of self defense, but remember you're probably not going to be able to take your keychain pepper spray canister on the plane. If you're going via bus or train you can usually take your pepper spray without incident, but it always pays to double check for any specific regulations the company you will be travelling with may have in place. In an airport, you cannot have pepper spray on your person, or in your carry-on bag, and "forgetting" about it isn't an excuse. You violate federal law if you try to bring it on board an airplane, and may face fines up to \$25,000. Depending on the airline you're travelling with, there may be an exception allowing you to take your pepper spray in your checked luggage, as most allow a canister up to 4 ounces in size so long as you make it clear at the check in counter.

Staying safe with Pepper Spray

We consider pepper spray to be one of the most important tools in your survival arsenal, because it can give you the upper hand in a confrontation, to help incapacitate even a larger and more aggressive attacker. Because of the ease to obtain pepper spray, its economical cost, and the fact it is legal in almost every state, we highly recommend you purchase this self-defensive weapon, should you ever need it in a pinch. Hopefully you never face a situation that calls for a reaction so severe you need to pepper spray another human, but if you do, having a can in your back pocket really might just save your life, without causing any permanent damage to your attacker.

