

THE BILL BLACKWOOD
LAW ENFORCEMENT MANAGEMENT INSTITUTE OF TEXAS

The Use of Oleoresin Capsicum Spray as a Non-Lethal Weapon

A Policy Research Project
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by
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Abstract

The Comal County Sheriff's Office has never authorized its officers to carry or use any type of chemical agents against suspects. The officers have had to rely on impact weapons or physical strength, which can hurt the suspect or officer alike. New officers from other agencies around the state have recently been hired. These officers were allowed to carry OC spray with their previous agencies. These new officers are requesting the Sheriff's Office to examine the possibility of carrying OC.

The purpose of this Policy Research Project is to determine if OC spray would be a useful tool for Comal County Deputies. If, it is determined that OC is authorized, A working policy on OC spray will be developed. It would include placing OC spray in the use-of-force continuum. OC would also be provided to our animal control officers to use on vicious dogs.

Research will include numerous surveys from police agencies who have already adopted OC spray in their use-of-force continuum. It will also include research performed by the F.B.I.. This researcher will also be exposed to OC spray and report the findings on its affects.

The conclusion of this Policy Research Project shows that OC spray is an effective tool for officers to use when apprehending a violent subject. The studies show that OC spray, when used properly, drastically reduce officer and suspect injuries. Other police agencies also reported a reduction in lawsuits. A policy will need to be developed for the officers in the use of OC spray, OC will be placed on the same level as impact weapons in the Comal County Sheriff's Office use-of-force continuum.

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Introduction

The Comal County Sheriff's Office has had an increase in officer and suspect injuries in the last year. Some patrol officers of the Sheriff's Office have approached their supervisors and asked about the possibility of carrying pepper spray. Oleoresin Capsicum (OC), also known as pepper spray, is becoming more popular everyday with law enforcement agencies across the nation. Small and large agencies are reporting positive results with OC spray.

The problem at the present time is that deputies with the Comal County Sheriff's Office are not allowed to carry OC spray and have to rely on empty hand control methods, expandable batons, or deadly force when dealing with violent subjects. This could result in not only injury to the officer, but also to the offender. The use of OC spray would be another tool for the officer to choose from within the use-of-force continuum. Some officers that have approached their supervisors had already been involved in altercations and felt that if they had had OC spray, the situation could have been handled with less chance of injury.

The purpose of this research is to examine the aspects of OC spray and determine if it would be a useful tool for officers of the Comal County Sheriff's Office. If the outcome on this project is positive, it will also be necessary to address policy changes and training issues.

The intended audience of this research paper is the Sheriff, Chief Deputy, and other supervisors with the Comal County Sheriff's Office who are involved in the policy making decisions. This research paper will give the necessary facts to make an informed decision.

Resources for this research paper will include journals, training manuals, legal

opinions, articles, and policies of other police agencies. It will also include surveys of other agencies that are already using OC spray and how it has impacted their agency.

The intended outcome of this policy research project is to allow the officer's of the Comal County Sheriff's Office to carry OC spray in addition to the expandable baton and to provide the agency with a workable policy pertaining to the use of OC spray.

Historical, and Theoretical Context

The Comal County Sheriff's Office has never considered the use of OC spray in its use of force continuum. Comal County is a small county with minimal physical confrontations with suspects. The last few years our county has grown tremendously and so have the confrontations. This research paper will provide information that will be useful in deciding whether to adopt OC spray in our use of force continuum.

The information provided will include the history of OC spray, studies from other police agencies, studies on OC spray itself, officer-suspect injuries, and where to put OC spray in the use of force continuum.

Before Christ, man has used various forms of chemical weapons to subdue enemies. As early as 2,000 B.C., Chinese armies used "stink pots", -- red pepper burned in hot oil that produced irritating and suffocating smoke (NIJ 1997). After W.W.I., law enforcement started using Chloroacetophenone (CN). CN is marketed under the trade name of Mace. It is a respiratory irritant. It relied on producing pain. If a subject was mentally ill, under the influence, or had a greater tolerance for pain, it did not work very well. CN also had to be removed from the skin because the longer it lingered, the more damage it could render. Cross-contamination between officer and suspect was also common.

Chlorobenzylidene Malononitrile (CS), replaced CN and was adopted by law enforcement. CS was commonly used by the U.S. military and S.W.A.T. teams. It was super tear gas because it was less toxic and there were immediate results when sprayed on the suspect. Because CN was classified as a solid, not a gas, it was hard to decontaminate anyone or anything that was sprayed. CS and CN have caused injuries to officers and suspects (IACP Training Key 1). Some injuries included chemical burns and lasting eye problems.

After trying CS and CN, law enforcement came back full circle to using peppers to subdue combative suspects. Oleoresin Capsicum, OC or commonly called pepper spray, was first developed and used in Montana on wild grizzly bears. It was found to be 100% effective in stopping the bears (Lloyd 1992). OC spray was first developed *for* law enforcement in 1976 by Cap-Stun (MSI993). The F.B.I. conducted a 3 year study and in 1989, authorized its use by their agents (Winner 1995).

OC is an inflammatory agent, unlike CN and CS, which are chemical irritants. Because of this, OC is more effective than CN and CS, and does not have to be washed off the contaminated surface. OC is a naturally occurring substance found in cayenne peppers. It is the oily resin of the peppers. OC spray is referred to as a "naturally occurring inflammatory agent" (Wilson).

The strength of the OC spray is measured in Scoville Heat Units (SHU's). A jalapeno pepper is rated at around 5,000 SHU's, while OC is rated around 1.5 million SHU's. After being sprayed with OC, the eyelids shut immediately and it takes approximately 15 seconds before the suspect can open their eyes (Lein). The mucous membranes in the eyes, throat, and nose become inflamed and swollen (NIJ1997). When

the suspect breaths in the OC, the mucous membranes of the respiratory tract swell, resulting in shortness of breath and the loss of strength and coordination (Lawing 10). It also produces a painful, burning sensation on the exposed skin (Morgan 22). After being sprayed, a suspect's initial response is to wipe the spray out of their eyes. This does not do any good and only distributes the spray across the eyeball. OC spray is packaged in 5% and 10% concentrations, This does not mean that the higher the percentage, the hotter the spray. The higher the concentration means it will take longer to recover from the effects. There are basically three different ways to dispense OC Spray. These are a stream, mist, or foam. The stream is the type most preferred by law enforcement. The mist when dispensed is much like a can of hair spray and if the wind is blowing, it will get on everybody. The foam can be wiped off by the suspect and applied back onto the officer. OC's inflammatory properties render the agent more effective than CN and CS on the mentally ill, violent and drugged individuals (NIJ 97). OC spray gives law enforcement officers a way to control subjects without resorting to physical confrontations (Hunter 24). It can be utilized by a very large officer or the smallest of officer. After an officer is trained in the policies and procedures of OC spray, there is no additional training needed to maintain proficiency because it does not require any skill to point and spray. OC may be used with little concern about the safety of officers and suspects (Pilant 52). There is a greater chance of the offender being injured when hit by an impact weapon, such as an ASP or baton. This would require a trip to the hospital for stitches or other treatment. Under normal situations, the only treatment needed with OC spray is washing out the subjects eyes with cool water. Baby shampoo is also a preferred choice because it is not an oil base. Oil base shampoo

will not help remove the spray.

REVIEW OF LITERATURE OR PRACTICE

There has been much literature written about the use of DC spray. Most has been based on departmental experiences. The FBI conducted a 3-year study before authorizing agents to carry DC. A training officer for the New Britain Connecticut Police Department stated that his agency has been carrying DC for over two and a half years with 360 documented cases. During this time, DC was effective 95% of the time with no injuries to either the suspect or the officer (Nowicki 1993). The officer, Bruce Howard also stated that their department was receiving 5 to 10 lawsuits per alleging excessive use of force. In the last 2 and 1 1/2 years, they have received only one complaint and that complaint was unfounded.

The Baltimore County, Maryland Police Department performed a very in depth study on DC spray. This was during a nine month period. The DC spray was used 194 times on either humans or dogs. The results were that it was effective 90% of the time on humans and almost 100% of the time on dogs. Their study also showed that of the 10% of suspects that DC spray did not work on were either drugged, mentally ill, or highly intoxicated (IACP 1995).

The International Association of Chiefs of Police (IACP) and the National Institute of Justice (NIJ) have conducted an extensive joint study of the effects of the adoption of OC spray (IACP Training Key 1). Their studies showed the OC spray was effective 90% of the time, There was also a large decrease in the number of assaults on officers when DC was available. The study showed there were two reasons for the drop

in injuries. The first reason indicated was that suspects were less likely to resist or attack an officer when they believed that OC spray maybe used against them. The second reason is that OC reduced or eliminated physical contact by the suspect on the officer. The research also indicated that OC spray was far less likely to produce serious injuries than choke holds, ASP batons, or firearms.

This researcher conducted a survey on the practices and policies of 14 other police agencies that were in Module I of LEMIT in April, 1999 (See Appendix B). These are state, county, municipal, and campus police agencies. They all carry OC spray. They were asked numerous questions that would assist in deciding to carry OC spray and in formulating a use of force policy, for OC spray. The fourteen police agencies carried OC spray on the average of four and ½ years each. Every agency felt that by using OC spray, it has been an asset in dealing with violent and combative subjects. The police agencies also felt that officer and suspect injuries have decreased with the use of OC spray. Lt. Ramiro R. Castillo of the Del Rio Police Department advised me that there is a very large and violent subject that they end up arresting almost every Saturday night. He was always very combative and-would resist arrest. Castillo advised that after deploying OC spray on the subject only one time, he now is handcuffed and goes to jail peacefully.

Thirteen of the fourteen agencies use cool water flushed in the suspects eyes as a decontaminate. Only Weatherford College uses a decontaminate wipe on the suspects.

One issue that was brought up repeatedly was should everyone who carries OC spray be required to be sprayed themselves first as part of training. Ten of the fourteen agencies require their officers to be sprayed. Retired FBI Agent, now Comal County Sheriff Deputy Gregg G. Van de loo, is a certified instructor with TCLEOSE. He also

has instructed numerous agencies, including the FBI, on OC spray. Van de 100 advised he would prefer that officers be sprayed as during training. He stated that if an officer is sprayed in training, he could testify in a court of law that he knows first hand how OC spray affected him (Van de Loo). Also, if they were sprayed by another officer accidentally during a scuffle with a suspect, he or she would not panic. Van de 100 also advised to use cool clean water to decontaminate the suspect. Van de loo stated that he was called to instruct a police agency where it was required that you be sprayed if you wanted to carry OC spray. He advised about half of the officers went through his course of instruction. Six months later, he was called back to the agency to instruct the other half of the agency saw how effective the OC spray was and decided to carry it.

In preparation of this Policy Research Project, this researcher went through training with Van de 100. Part of the training was to be sprayed with OC spray. The classroom portion provided the preparation of what to expect. The first step is to hold your breath as to not breathe in any of the spray. If you breathe it in, it will tighten up your breathing and burn your throat and nose. The instant this researcher was exposed, the eyes shut and felt like they were on fire. Attempts to open the eyes numerous times proved futile. The water hose was brought in for decontamination. The pain did not go away as the eyes were flushed with cool water. Then this researcher noticed that the eyes were still shut and had to pry them open with a free hand one at a time to allow the water to enter the eyes. Each eye had to be rinsed approximately 5 times for about 2 wipes each time. After eyesight was restored, it was pointed out that my shoes were soaking wet. While attempting to get the OC out of your eyes, you get yourself soaking wet, but never notice because of the pain in your eyes. The skin and face turned red and

still burned for about one hour. Two hours later, everything was back to normal with no side effects.

Discussion of Relevant Issues

Some of the key issues to be addressed are does OC spray reduce officer and suspect injuries and liabilities? Should Comal County Sheriff's Office add OC spray to their use-of-force continuum, and if OC spray is added, where should it be placed in the continuum?

The first issue was reducing officer/suspect injuries and liability. Every police agency that surveyed and articles read agreed that it was a big asset to them. It is easier to spray someone with OC spray and then flush out their eyes with cool water than hit them with an impact weapon, hopefully in the right area of the body. If you don't hit them properly, you may have to take them to the hospital to get stitches to close a wound, or to set a broken bone. In either case, you now have swelling and bruising. The suspect will now have to recover and the police agency has a hospital bill to pay for and possibly a lawsuit.

The main reason to use OC spray over an impact weapon is it drastically decreases officer injury. Officers do not have to wrestle around and physically subdue the suspect. A large suspect does not have an advantage over a small officer armed with OC spray. Most of the time, a single burst of spray will stop a suspect.

Only the American Civil Liberties Union of Southern California felt differently. They stated there were 26 deaths among people who were OC sprayed by police officers in the period Jan. 1, 1993, through June. 1, 1995. This suggests that one out of every 600 people died after being OC sprayed (ACLU 1995).

The International Association of Chiefs of Police and the FBI conducted separate studies of sudden in-custody deaths and came to the conclusion that there were similarities in all the deaths. The subjects who died possessed one or more of the following: bizarre/violent behavior, obesity, drugs or alcohol, ineffectiveness of OC spray, hidden heart disease, and had been involved in a struggle (Jett 1997). Many of the subjects were restrained and laid face down in the back seat of patrol cars. Given the above information, when officers go through training they are advised that if OC spray is used, officers must ensure that the subject stays in an upright position with a clear airway to avoid possible positional asphyxiation, which occurs when the position of the body interferes with a persons ability to breathe (Reay1996). The studies revealed no specific evidence that OC spray caused or contributed greatly to any of the deaths (Jett 1997).

While doing this policy research project, 3 other patrol officers also went through the OC spray training. The first officer was 34 years of age, average weight, and had eye surgery to correct nearsightedness only 1 month earlier. The second officer was 30 years of age, about 110 pounds over weight and didn't appear to exercise. The third officer was 48 years of age and had open heart surgery only 3 months ago. All three officers went through the training with no ill effects and recovered completely in one hour. The OC spray did not effect the overweight officer any different from the officer who had open heart surgery. Studies have also shown that there are no significant injuries or problems even when asthmatic suspects are involved (Onnen 2).

Cost of equipment and training is another issue. The cost of the MARK III OC spray is \$9.95 per can (GT Distributors). This supplies on the average eight, one second bursts. The cost of the black basketweave holders is \$13.95 each (Quarter Master). This

would bring the total cost per officer to \$23.90. The can will need to be replaced every two years. The holder will need to be replaced about every eight years. The Comal County Sheriff's Office has at this time, sixty-four officers that would be issued the equipment at a total cost of \$1529.60. One trip to the hospital for the officer and any possible time off work due to injury would cost more than \$1529.60. Another issue is training. The potential for criminal and civil liability is tremendous when officers use OC spray without documented training and proof of competency (Norwicki 1995). Training the officers would not cost the County a penny. Van de 100, who is a certified OC spray instructor, and he advised that he could train all of our officers in four hour segments. Van de loo, as mentioned earlier is one of our patrol officers. We have overlapping shifts and officers would be given comp time instead of being paid.

Another issue that needs to be addressed is whether to make it mandatory to carry OC spray and mandatory to be sprayed with it. As stated earlier, nine of the thirteen agencies surveyed require their officers to be sprayed. Van de loo also stated he felt it would be best to follow this practice. An officer that has been sprayed knows that if they spray someone and that does not stop the subject, something is wrong with the subject and may have to resort to an impact weapon, or possibly their firearm.

The Comal County Sheriff's Office does not have OC spray in its use-of-force continuum, and it is necessary to include it. Where to put OC spray in the continuum is another question. In many police agencies, OC spray is placed between the passive or cooperative stage of verbal communication and executive level stage involving impact weapons (Pilant 1993). Every situation an officer encounters is different and any policy that is hard to interpret is not a very useful policy. Various different policy from many

police agencies have been reviewed and the policy the FBI uses is the best policy choice. This policy has OC spray, impact weapons, and physical contact on the same level. This means that an officer can chose any of the three choices that they feel would be best to bring a situation under control (See Appendix A). The Converse Police Department terminology is best when trying to put into writing. It states in Pepper Aerosol Restraint Spray Policy in Section III. B. 2. OC may be used when (a.) Verbal dialogue has failed to bring about the subject's compliance, and (b.) the subject has signaled his intention to actively resist the officer's efforts to make the arrest (Converse Police Dept. 1996). It is suggested that Animal Control Officers, which work out of the Comal County Sheriffs Office be trained and carry OC spray. The spray is almost 100% effective on dogs. Animal Control officers are bitten every year and this would stop the dogs.

Conclusion/Recommendation

The purpose of this research paper is to determine if OC spray should be authorized for use by officers of the Comal County Sheriffs Office. Currently officers are not allowed to carry OC spray. If OC spray is authorized, written policy must be implemented along with proper training.

With the increase in population in Comal County, There has been an increase in officer and suspect injuries. This occurs when the officer attempt to arrest suspects. The only tools to chose from currently are to physically subdue the suspect or to use an impact weapon. The impact weapon may break bones and cause lacerations to the skin. Also, you may only strike a suspect in certain areas of the body. This takes a certain amount of skill to hit a moving target. By adding OC spray, the officer will only have to aim at the suspects face and push a button. The effects of OC spray last only about one hour with no side effects or injury to the suspect.

The conclusion is that OC spray, when officers are trained properly, is a safe and effective tool for our officers. Studies of other police agencies have shown that OC has drastically reduced injuries to officers and suspects.

The recommendation is to allow officers of the Comal County Sheriff's Office to carry OC spray. This would be a requirement of the job description. They would have to take mandatory training, which would include being sprayed with OC spray. OC spray should be placed in the use-of-force continuum on the same plane as impact weapons and physical contact (See Appendix A). A new policy would also have to be developed in use of force. This would include a new use of force reporting form so that anytime OC spray is used on a subject, it would be documented. Also, the arresting officer would notify the jail when bringing in a suspect sprayed with OC. The suspect will then be observed for at least one hour.

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Appendix A

SUGGESTED USE-OF-FORCE MODEL

Presence

Verbalization

Compliant

Non-compliant

**Assess Dangerousness and
Necessity**

**Physical
Contact**

**Oleoresin
Capsicum
Spray**

**Impact
Weapon**

DEADLY FORCE

Appendix B

SURVEY RESOURCES

Arlington Police Department, Sgt. Blake Miller

Converse Police Department, Sgt. Pete Arroyo

Corpus Christi Police Department, Capt. Robert Bridge

Del Rio Police Department, Lt. Ramiro Castillo

Dickinson Police Department, Capt. Steve Krone

Gaines County Sheriff's Office, Sgt. Ronny Pipken

Grand Prairie Police Department, Lt. Barbara Dixon

Harrison County Sheriff's Office, Lt. Doug Kyle

Luling Police Department, Capt. David Creed

Sherman Police Department, Lt. Terry O'Toole

Texas Department *of* Public Safety, Lt. Jack Allen

Texas City Police Department, Sgt. Bruce Stewart

Travis County Sheriff's Office, Sgt. Danny Hinkle

Weatherford College Police Department, Chief David Stewart

