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The Pepper Spray Dispute

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## **ABSTRACT**

Pepper spray was first used in the United States as a bear deterrent. In the 1980's the U. S. Postal Service issued pepper spray to mail carriers to protect them from dog bites. Soon pepper spray manufacturers claimed their products were safe to use against people. In 1987 the Federal Bureau of Investigation endorsed pepper spray as less lethal option. In the 1990's pepper spray had become the less lethal weapon of choice for many law enforcement agencies.

The dispute soon began. Pepper spray adversaries began to argue pepper spray is not safe [to use] and it causes or contributes to in-custody deaths. In response to the allegations, researchers began to study the effects of pepper spray. The purpose of this research was to answer the question; is pepper spray safe [to use] and does it cause or contribute to in-custody deaths? The research indicates some brands of pepper spray contain substances that are hazardous. A 1994 study concluded that pepper spray did not cause or contribute to in-custody deaths. However, the study did indicate that law enforcement officers should be aware of certain risk factors – individuals exhibiting bizarre / violent behavior, obesity, drug and or alcohol involvement, and apparent ineffectiveness of pepper spray – should be monitored diligently and they should not be placed in a prone position (hog-tied).

At this time, the research cannot conclude pepper spray is safe [to use] and does not cause long-term health effects, or has the research definitively concluded pepper spray causes or contributes to in-custody deaths. This writer believes that in order to answer those questions and end the dispute, more research should be done.

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## Introduction

The U. S. Postal Service deployed pepper spray, also known as oleoresin capsicum (OC) spray, in the 1980's as a dog repellent to protect letter carriers from dog bites. The Federal Bureau of Investigation (FBI) endorsed pepper spray as a less lethal option in 1987. By the mid-nineties, pepper spray was the less lethal option of choice for law enforcement agencies across America. The manufacturers of pepper spray declared their product was safe [to use] and effective against animals and people. This included intoxicated people, those under the influence of drugs and the mentally deranged.

Despite the declarations of being safe, complaints were made that using pepper spray was excessive force, that pepper spray was unsafe [to use], and pepper spray caused serious injuries with the potential for long-term consequences. There were those who complained pepper spray was responsible for or contributed to in-custody deaths. Others complained that law enforcement officers used pepper spray as an implement of torture and it should be banned as an unlawful chemical weapon. Inevitably, lawsuits were filed, with the potential of substantial monetary loss to government entities, and demands were made to eliminate pepper spray as a less lethal option for law enforcement. Pepper spray manufacturers responded to the complaints declaring pepper spray as medically safe and not responsible for in-custody deaths.

The Mesquite Police Department sanctioned pepper spray in 1993. Early on, Mesquite police officers came to appreciate the effectiveness of this new technology. Violent suspects were routinely arrested with fewer injuries to police officers and despite

suffering from the effects of the pepper spray, the suspects suffered less serious injuries or were not injured at all.

This project will examine the question; is pepper spray safe [to use] and does it cause or contribute to in-custody deaths? Police journals, Internet searches, magazine articles, interviews with police officers, and review of previous research papers will be used to reach a conclusion. Obviously much is at stake, pepper spray manufacturers want to continue producing and selling their products. Law enforcement officers want to retain pepper spray in their arsenals. Those who vehemently oppose pepper spray want the police to discontinue its use and government entities do not want to pay large sums of money resulting from lawsuits. In order to end the pepper spray dispute, those conducting the medical testing of this product will have to prove that pepper spray is safe [to use] and that it does not cause or contribute to in-custody deaths. Until that is done, the dispute will continue.

The purpose of this research is to assist law enforcement officials make reasonable and responsible decisions regarding the continued use of pepper spray or whether they should adopt pepper spray as another less lethal option. It is believed this project will not reach a definitive conclusion one way or another. The research at this time indicates there may be some safety concerns about pepper spray. Unfortunately, the research conducted thus far cannot substantiate that pepper spray causes or contributes to in-custody deaths.

## **Review of Literature**

Pepper spray, in the law enforcement arena, has been around for several years and is utilized by law enforcement agencies across the country. When pepper spray

was first introduced to law enforcement is questionable however, according to Chan, et al. (2001, p.1), "Pepper spray became available in aerosol spray in 1973 and was initially used by FBI personnel and U. S. mail carriers to incapacitate humans and animals." Frey (1998) wrote in her LEMIT research paper (Lanny, 1991; Lawing, 1995, p.3; Balchunas, 1997 pp. 3-4):

There are differing opinions as to when pepper spray was first developed. One source reveals that pepper spray was first developed as an animal deterrent. Others maintain it [pepper spray] was developed in the 1930's by the U. S. military. The general consensus is that pepper spray was introduced into law enforcement in 1976 by CAP-STUN.

Wilson (no date, p. 3) points out in her article, "The Use and Abuse of Pepper Spray:"

The FBI adopted pepper spray as the agency's official chemical agent in 1987. Pepper spray was considered an improvement over tear gas, which reportedly does not work well on intoxicated or agitated persons. Its [pepper spray] effectiveness and safety was promoted to local law enforcement agencies in a series of reports written by FBI Special Agent Thomas Ward, the chief chemical weapons expert at the FBI Academy in Virginia. In July 1989, Ward's report entitled "Chemical Agent Research: Oleoresin Capsicum" was wired to every local police agency in the country and in 1990 Ward traveled around the country promoting CAP-STUN as the FBI's approved OC brand.

Regardless of when pepper spray was first introduced to law enforcement, in the 1990's pepper spray became the less lethal weapon of choice in a majority of law enforcement

agencies across America. Unfortunately, it was not long before allegations were being made that pepper spray was unsafe [to use] and caused or contributed to in-custody deaths.

According to Chan et al. (2001, p.1), “Oleoresin Capsicum is the oily extract of the cayenne pepper plant. Exposure to Oleoresin Capsicum irritates the skin, eyes, and mucous membranes of the upper respiratory tract. The properties of the pepper plant have been known for centuries. In Japan, samurai warriors threw rice-paper bags filled with pepper extracts at the eyes of their enemies to cause temporary blindness. Even prior to that, Chinese soldiers heated red peppers in hot oil to form irritant smoke to be blown over enemy lines.” The ancient Japanese and Chinese knew the value of pepper plants. Modern law enforcement officers have been introduced to this knowledge and they too have come to appreciate the value of the pepper plant – in the form of pepper spray. Unlike those ancient warriors who used pepper powder to help defeat their enemies in battle, law enforcement officers today use pepper spray to control and subdue violent offenders and in some instances to disperse riots or confrontations posing the threat of violence.

Much has been written about pepper spray since it became the less lethal weapon of choice with law enforcement agencies. Pepper spray has many advocates, primarily those in law enforcement, the military, those in related fields and pepper spray manufacturers. At the same time, pepper spray has many adversaries who want to see it banned completely or at least strictly regulated. In the law enforcement arena, pepper spray is known to work effectively when subduing violent offenders. Wilson (no date) as reported in the *Covert Action Quarterly*, “Echoing advertising by the 200-pepper spray

manufacturers, police managers also report that it [pepper spray] is 95% effective in stopping suspects almost immediately compared to tear gas or mace at 60% [of the time].” Others, including Amnesty International (1997), view the use of pepper spray as “tantamount to torture.” Amnesty International (1997) makes the claim, “There is evidence pepper spray can have serious harmful effects when used in a confined space or on asthmatics or people with other medical conditions. Some studies have warned that pepper spray is potentially lethal and it has been rejected in the United Kingdom because of its potential carcinogenic properties.” Amnesty International (1997) claims that the USA has defied its solemn obligation under the Convention against Torture and Other Cruel, Inhuman and Degrading Treatment or Punishment because the U. S. Government does not regulate the use of pepper spray. There have been many allegations involving pepper spray and excessive use of force, in-custody deaths, and safety to the public and law enforcement officers as well.

Charles Levendosky (1997) wrote in article for the *Casper Star-Tribune*, “The manufacturer of the brand of pepper spray used in the Eureka [California] action, Defense Technology Corporation of America (Casper, Wyoming), recommends that its spray not be used closer than three feet from the face to avoid permanent damage to the eyes.” The Eureka incident, which occurred in 1997, was an anti-logging protest in Eureka, Humboldt County, California. In this incident law enforcement officers applied pepper spray directly into the eyes of non-resisting protesters. Reed and Dornin (1997) reported in an article they co-authored:

Dr. David Smith, an expert in the use of pepper spray, says rubbing the liquid [pepper spray] into someone’s eyes can damage the cornea. “...It’s [pepper



spray] not for use in this fashion or for this purpose. These [protesters] were not individuals that were a threat to officers. They were not a threat to public safety, and the way it [pepper spray] was used would be most damaging to individuals.” In response to these allegations, Humboldt County Sheriff Danny Lewis said pepper spray was the safest way to disperse the protesters. The Eureka Police Chief, Arnie Millsap, said, “That’s not torture [rubbing pepper spray directly into one’s eyes]. This is an outrageous accusation brought about by people who have absolutely no respect for the rights of others at all.”

In an article for EXTRA, Neil deMause (2000) wrote, “Pepper spray... is classified as a chemical weapon, and as such banned for use in war – but not in domestic police work. The pepper spray used by [the] police is highly concentrated – 300 times as strong as jalapeño peppers, and five times as strong as the pepper-spray mixture sold for self-defense to the public. (The U. S. Consumer Product Safety Commission... requires commercially sold pepper spray to carry a caution label: “Warning: irritant, avoid contact with eyes.)” Greg Cahill (1997) noted in his article “Canned Heat:”

Despite claims that pepper spray is safe, there never has been a comprehensive health study of its effects. The chemical is not regulated by any federal drug or consumer product agency. The major manufacturer of pepper spray for California law enforcement has advised that [the] police use just a single one-second burst of the chemical or no more than two half-second bursts. “Anything more than that, according to the manufacturer, is creating a health hazard,” says John Crew, American Civil Liberties Union police procedures expert.

There are also those in law enforcement and corrections who complain exposure to pepper spray may pose adverse effects to those exposed to it during training. Smith and Stopford (no date) wrote:

The U. S. Department of Labor warned that OC spray posed significant health risks to exposed employees, that it could cause unpredictable, severe adverse health outcomes, and that it should not be intentionally sprayed on the skin, eyes, or mucous membranes of employees during training. In 1996, the North Carolina Department of Health and Human Services ... concluded that exposure to OC spray during training constituted an unacceptable health risk. A review of reported injuries found that 61 of approximately 6,000 officers directly exposed to OC spray during training experienced adverse effects (eye irritation, eye burns and abrasions, dyspnea, asthma attacks, nasal irritation, acute hypertension, severe headaches, chest pain and loss of consciousness) sufficiently severe to require medical attention. In nine cases, effects (headaches, corneal abrasions and asthma) lasted for more than a week.

Pepper spray manufacturers dispute these allegations. ZARC International, Inc., the maker of CAP-STUN, refutes the safety allegations, “Although ZARC cannot generalize about all pepper sprays, CAP-STUN has been used in the field and in training on [a] variety of subjects in hundreds of thousands of applications for nearly two decades. There has never been any report of adverse health effects.” Despite that declaration, ZARC also advises that all pepper sprays are not safe – some pepper spray manufacturers use various and diverse aerosol propellants and carrier formulations.

A 1998 article in the *Vermont Rutland Herald and Barre Times-Augus* noted, “Since the switch to OC, the Department of Justice and the International Association of Chiefs of Police have received reports that at least 113 people have died nationwide after [the] police used the weapon [pepper spray] on them. Eighty of them died after December 1993, according to John Firman, Director of research IACP.” The California ACLU alleges that since 1990 there have been at least 60 in-custody deaths resulting from the use of pepper spray in California. Twenty-six of these deaths occurred between 1993 and 1995. ZARC International, Inc. disputes these allegations – the basis of their dispute is the Granfield, et al. Study (1994) which concluded that of the 22 in-custody deaths studied none were caused by pepper spray nor was it a contributing factor.

## **Methodology**

This project will examine the questions; is pepper spray safe [to use] and does it cause or contribute to in-custody deaths? Pepper spray adversaries allege law enforcement use of pepper spray is tantamount to torture, violates the Chemical Weapons Convention and (depending on the chemical makeup of the product) is unsafe [to use] and dangerous. ZARC International, Inc. disputes the allegations and declares that its brand of pepper spray, CAP-STUN, is safe [to use] and does not cause or contribute to in-custody deaths. Studies indicate that pepper spray does not cause or contribute to in-custody deaths – the underlying causes of the deaths are said to be other medical and psychological factors. Despite the studies to the contrary, an investigation of training sessions by the Division of Epidemiology of the North Carolina Department of Health and Human Services and the Occupational Safety and Health

Section of the North Carolina Department of Labor concluded that exposure to OC spray ... constituted an unacceptable health risk. ZARC International, Inc. while asserting its CAP-STUN product is safe, state other brands may contain some chemical mixtures that could make them hazardous.

In an attempt to reach a conclusion, police journals, Internet searches, magazine articles, newspaper articles, editorials, interviews with police officers, and other research papers were reviewed. The belief is this project will not determine definitively that pepper spray is safe [to use] or if pepper spray causes or contributes to in-custody deaths.

The ability for a law enforcement officer or corrections officer to safely arrest and subdue a violent individual is paramount in today's litigious society. Throughout the history of law enforcement the ability to limit the use of deadly force has always been a priority. The term less lethal may be relatively new, but less lethal tactics and equipment are not. Empty hand tactics, police batons, "slappers," neck restraint, pain compliance, joint locks, and other less lethal alternatives have been available to law enforcement since its beginnings. These less lethal weapons were effective, yet they also created their own controversy. These weapons many times caused serious injuries, especially if used by an overzealous officer, and they do nothing for improving the image of law enforcement. When pepper spray made its debut, it was viewed as a panacea. Many in law enforcement believed pepper spray would eliminate "those other" less lethal weapons and some in the civilian sector believed pepper spray would eliminate the need for law enforcement officers to carry a firearm. Obviously, pepper

spray is not the panacea many wanted it to be and law enforcement officers have not turned in their firearms.

## Findings

The use of pepper plant derivatives has been used for centuries as a spice for food. To this date, these derivatives are being used to spice our foods. Pepper plant derivatives were used by the ancient Chinese and Japanese warriors to help them win battles. Smith and Stopford (no date, p. 6), wrote, “Japanese police historically have used the *Mitsubishi*, a lacquer or brass box, to blow pepper dust into the eyes of persons they sought to apprehend.” Duke Johnson (1997) points out in his LEMIT research paper, “... pepper spray has been used in the past by campers to ward off bear attacks in the woods. The product was tested for six years by the Border Grizzly Project, a former research group that was affiliated with the University of Montana. The effects proved to be temporary and did not cause any damage [injury] to the bears.” In the early eighties, the Postal Service issued pepper spray to mail carriers to protect them from dog bites. As Smith and Stopford (no date) noted, “Today, more that 2,000 public safety agencies now use some form of pepper spray to subdue and arrest aggressive violent persons. Law enforcement publications suggest that individuals who are subjected to pepper spray suffer relatively minor, transient effects, and that serious adverse effects are uncommon.” The ACLU, Amnesty International, and others allege pepper spray is unsafe and responsible for more than 100 deaths across the U. S. Wilson (no date) declares in her article, “Pepper Spray Madness,” “...the pain [from pepper spray], which can last up to 45 minutes, is so intense that the National Coalition on Police Accountability (N-COPA) has called for monitoring pepper spray as a form of

torture as defined by the United Nations Convention on Torture and Other Cruel, Inhuman and Degrading Treatment signed by the U. S. last year.” Mark Harris, an attorney who represented the protesters who participated in the Eureka CA incident said, “It’s a lot like bobbing for French fries in a deep fat fryer. That’s what it feels like when this chemical weapon [pepper spray] is applied to your face.” According to Johnson (1997, p.6), “The International Association of Chiefs of Police (IACP) contend OC [pepper spray] is an effective weapon that doesn’t kill...” ZARC International, Inc. claims CAP-STUN is safe and does not cause long term health effects. Other brands of pepper spray contain CN (chloroacetophenone) and CS (ochlorobenzylidene malononitrile) and these substances are known to be toxic. An article found in the Western Ohio Personal Safety (no date, p. 1 & p. 6) states:

Tear gas, both CS and CN are synthesized chemicals that are known as lacrimators. A lacrimator is a substance that produces profuse tearing. Lacrimators, such as tear gas, are not effective against animals. They can cause severe blistering of the skin and permanent blindness. In short, tear gas has a very high level of toxicity whereas pepper spray is totally non-toxic. There is considerable more risk of liability with tear gas than pepper spray. Also, many pepper-based sprays contain methylene chloride, an active solvent found in older paint strippers (banned in California). These sprays may cause permanent eye damage.

Smith and Stopford (no date, pp. 6-7) write in their article, “Health Hazards of Pepper Spray:”

Many law enforcement and corrections agencies now prohibit the practice of spraying trainees directly in the face with OC. Based on reports of ocular damage, bronchospasm, pulmonary edema, laryngospasm, respiratory arrest, and death following OC exposure, it is reasonable to conclude that exposure during training, particularly repetitive, direct facial spraying of individuals at increased risk, may cause serious adverse effects and possibly even death. Those with increased risk refers to those individuals with asthma, bronchitis, respiratory infections, heart disease, hypertension, corneal disease, smokers and those with pre-existing allergies to peppers.

A review of 81 cases of pepper spray exposure seen in the emergency department of Truman Medical Center, Kansas City, MO, and representing about 10% of the total instances of spraying by the Kansas City Police Department over three years, found no significant ocular or pulmonary effects. Burning and redness of the eyes and exposed skin were the most common symptoms; there were corneal abrasions in seven and respiratory symptoms in six patients, but none required hospitalization.

Despite these encouraging findings, allegations of pepper spray causing or contributing to in-custody deaths continued, as did the allegations about pepper spray safety. There are many that passionately declare pepper spray causes or is a contributing factor to in-custody deaths. Greg Cahill wrote (1997, p.3):

In California, law enforcement personnel use pepper spray once an hour. Once a month – or in one out of every 600 cases – a person dies after being pepper-sprayed by the police. A 1995 ACLU report, “Pepper Spray Update: More

Fatalities, More Questions,” examines 26 fatal cases between 1993 and 1995. It notes that state [California] scientists have warned for several years that so little is known about the residual effects of pepper spray that medical examiners may not know what to look for during an autopsy, a real problem since there is no red flag indicating its role in a death. Steven Beazer, president of Advanced Technologies, a manufacturer of pepper spray devices, told the *Los Angeles Times* in 1995, “You have people who die after they have been sprayed. Does pepper spray have a role in some of those deaths? I will say yes. It is going to have an effect. These are weapons. Clearly this [pepper spray] is not a breath freshener or an underarm deodorant.”

ZARC International, Inc. citing the study by Grandfield et al. (1994), declares that pepper spray is not responsible for any fatalities.

A total of 30 incidents from 13 different states that occurred between August 1990 and December 1993 were studied. All of the individuals, who died, did so subsequent to OC [pepper spray] use. All [the] subjects behaved in a combative and / or bizarre manner and struggled with the police. Drugs and / or alcohol were involved in most [of the] cases. In the majority of [the] cases, OC [pepper spray] was either ineffective or less than totally effective. Generally, restraint techniques were employed subsequent to spraying, and with one exception, all deaths occurred either immediately or soon after the confrontation. Sufficient information was obtained in 22 of the 30 cases to allow for a thorough review of the incident so a reasonable conclusion as to the cause of death could be determined. The review’s results indicate that OC [pepper spray] was not the



cause of death in any of the cases. In one case where OC [pepper spray] was listed in the autopsy report as a factor in the death, the review did not substantiate that opinion. The review concluded that, in these cases, OC [pepper spray] was not a factor in any of the deaths and that something else caused the subject to die. More specifically, it was concluded that in 18 of the 22 cases, positional asphyxia was the cause of death, with drugs and / or disease also being contributing factors. In the remaining four cases, three involved a drug [cocaine]-related death, and one involved a drug [cocaine] / disease-related death. The circumstances leading to positional asphyxia in many cases were probably initiated by handcuffing subjects (behind their back) and having them [lying] on their stomachs or in a position that allowed them to end up on their stomachs. In some cases, an officer concomitantly employed ankle restraints with hog-tying and / or pressure on the back. Subjects were also often transported in a prone position and a number [of] them were markedly overweight with “big bellies.”

Granfield et al. (1994) concluded in none of the 22 cases was OC [pepper spray] considered to be a cause of, or a contributing factor to, the deaths. Rather, the cause of death in the majority of the cases was determined to be positional asphyxia, aggravated by drugs, disease, and / or obesity.

The Granfield et al. (1994) Study of in-custody deaths named four factors that cause or contribute to in-custody deaths: positional asphyxia, cocaine intoxication, excited delirium, and neuroleptic malignant syndrome. Positional asphyxia occurs when body position, unless seated upright, interferes with respiration. The individual

becomes quiet and inactive, respiratory difficulty is exhibited, and the individual stops breathing. This condition is exacerbated by drug / alcohol intoxication, especially acute alcohol intoxication, excited delirium, and violent muscular activity. Excited delirium is an acute mental disorder characterized by impaired thinking, disorientation, visual hallucinations, and illusions. These individuals can be very dangerous. Being cocaine-induced makes this condition even more dangerous. These individuals exhibit several types of behavior such as being paranoid, violent, bizarre behavior such as running aimlessly, screaming, panic, sudden tranquillity, removal of clothing, violence toward inanimate objects, great strength and significantly diminished sense to pain. A police officer encountering this type of individual often encounters some type of violent physical confrontation that appears to have minimal effect to the individual. Sudden death can occur during or immediately following the struggle. Neuroleptic malignant syndrome is very similar to excited delirium. This condition generally occurs in psychiatric patients who are taking antipsychotic medication. The factors exhibited by these individuals are often the same as those of excited delirium. These individuals are scared to death because psychological stress can induce fatal cardiac arrhythmias (a change of the heart's rhythm).

Several Mesquite police officers were interviewed regarding pepper spray. Every one of them was trained from the same lesson plan. Every one of them believe pepper spray is an effective less lethal option that is safe [to use] with little or no side effects to those sprayed with it. When asked if pepper spray causes or contributes to in custody deaths, every one of them said. That response can partially be contributed to the training they have received. The instructors taught them pepper spray is safe [to use]

and has not been found to cause or contribute to in custody deaths. Every one of them was asked if they have ever experienced a situation or incident where a person subjected to pepper spray failed to have an adverse to the substance. The answer was unanimous – no. However, a few of them stated they did know other officers who have experienced such an incident. When asked if they knew of anybody who should not be subjected to pepper spray, every one of them said, “the very young, the elderly, anyone suffering from respiratory problems.” A few stated in their own words three of the four factors mentioned in the Granfield et al. (1994) study – positional asphyxia, cocaine intoxication (drug use), and excited delirium. They all said that no person subjected to pepper spray will be hog-tied, which is in accordance to departmental policy.

Sergeant Paul Mathers and Officer Chad Ashworth, long time pepper spray instructors, were asked the same questions asked of the rank and file officers during their respective interviews. Both men answered the questions in much the same way the officers mentioned in the previous paragraph. In regard to which people should or should not be sprayed. Sergeant Mathers said an officer should be very careful about using pepper spray in a crowded area such as a mall, theater, music hall, department store, office building to prevent an incident such as the one that recently occurred in Chicago.

Law enforcement officers should be aware of the risk factors – individuals exhibiting bizarre / violent behavior, obesity – especially those with “big bellies,” drug and / or alcohol involvement, and apparent ineffectiveness of pepper spray. Individuals exhibiting these risk factors should be monitored diligently and they should not be placed in a prone position – especially when hog-tied.

## Discussion / Conclusion

The purpose of this project is to examine the questions; is pepper spray safe [to use] and does it cause or contribute to in-custody deaths? There have been many studies searching for an answer to these questions, and undoubtedly there will be many more in the days ahead. Does pepper spray pose a health hazard to those who will use it and to those to whom it will be used against? Some say 'no' and some, especially those who have been subjected to it, say 'yes.' Some claim pepper spray is a form of torture, and others claim pepper spray is cruel and unusual punishment, and there are those who allege the police use it to mete out "street justice." According to Smith and Stopford (no date):

In April 1998, Dr. Ronald H. Levine, then [North Carolina] State Health Director, and Harry Payne, the [North Carolina] Commissioner of Labor, sent an advisory letter outlining the health and legal concerns associated with the use of OC spray, and recommending that exposure during training be discontinued. The advisory letter further outlined several measures to reduce the chance of serious injury, should organizations choose to continue exposure training. Serious adverse health effects, even death, have followed the use of OC sprays. These sprays should be regarded as poisons and kept away from children and teenagers.

Despite the claims from the State of North Carolina, many law enforcement agencies continue to directly spray their employees during training sessions. This training practice is [in theory] beneficial for those officers being trained to deploy pepper spray. Once subjected to the pepper spray, an officer can learn firsthand that with the proper

mindset, an individual can overcome or at least tolerate the effects of the spray rather than becoming a victim to it. Therefore, an officer who is sprayed with pepper spray (intentionally or accidentally) can continue to function, which can be a lifesaver.

Based on the studies to date, many law enforcement administrators and officers contend pepper spray is safe. However, every one of them (especially those who have found themselves on the wrong side of a pepper spray canister or otherwise subjected to it) know pepper spray is a very unpleasant experience and is to be avoided whenever possible. If law enforcement officers know that being sprayed with pepper spray is unpleasant, then why do they use it so often? Because every one of them understand that being sprayed with pepper spray is better than being struck with a baton, it's better than being punched or kicked, and it is certainly better than being shot. Law enforcement officers know that spraying a violent offender with pepper spray is safer for the officer and by far safer for the offender than some of the alternatives stated in the previous sentence. As Smith and Stopford (no date) noted, "Despite training-related hazards, field-use data by police departments in Baltimore, Portland, and Winston Salem indicate that properly used OC [pepper spray] can be effective and provide additional safety to law enforcement officers. In many instances it may reduce injuries to officers as well as to those who have been arrested (such as fractures, traumatic brain injury, or gunshot wounds, which sometimes result when physical force or impact weapons are required)." The ACLU, rather demanding that it be banned, wants stricter guidelines for using pepper spray. These guidelines include such things as not using pepper spray against the elderly, the very young, those with obvious medical conditions, obesity, those displaying bizarre behavior, those not offering violent resistance, peaceful

protesters, and those already restrained. Many pepper spray manufacturers agree with these guidelines and many law enforcement agencies include them in their use of force policies. The research also indicates that law enforcement officers should be trained to recognize the dangers of positional asphyxia, excited delirium, and neuroleptic malignant syndrome. The research determined that some pepper spray manufacturers admit pepper spray is a weapon and can be very dangerous. Also noted in the research, some pepper sprays contain dangerous chemical components known to be carcinogenic.

Does pepper spray cause or contribute to in-custody deaths? There are many that say 'yes.' The research does not necessarily indicate this to be true. The Granfield et al. (1994) Study concludes the answer to the question is 'no.' Rather, Granfield et al. (1994) declares that positional asphyxia, excited delirium, and neuroleptic malignant syndrome, especially when aggravated by alcohol, cocaine, disease, and obesity are most likely to be the cause of in-custody deaths. According to Granfield et al. (1994), "Sudden death in custody is neither a new phenomenon nor attributable to the use of OC spray. Rather, sudden [in] custody death can occur at any time for a variety of reasons." Although OC [pepper spray] was not implicated as a lethal factor in the reported deaths, further discussion of sudden death in custody is warranted because of the potential for certain individuals to die in police custody. ZARC International, Inc. who manufactures CAP-STUN, alleges the product is safe, but some of the other brands may not be. The ACLU of Oregon wants pepper spray banned yet the ACLU of California demands that law enforcement put into effect stricter guidelines for using pepper spray. Some pepper spray manufacturers claim their product is safe and others

say it is a dangerous weapon. The FBI claims pepper spray (CAP-STUN) is safe and the organization has no intention [at this time] to discontinue its use. A review by the Civilian Complaint Review Board (2000, p. 17) for the New York Police Department stated, "The review of the CCRB pepper spray cases and the growing body of information on pepper spray appear to show that, if used within careful guidelines and if subjects are carefully monitored and given prompt medical treatment, the spray can be a useful alternative to traditional non-lethal force."

The research thus far has not determined definitively that pepper spray is safe [to use], nor has the research determined definitively that pepper spray causes or contributes to in-custody deaths. However, the research does indicate that further studies are needed to settle this dispute, once and for all. During the interim, law enforcement officers should be reasonable and responsible when making the decision to spray or not to spray.

On February 17, 2003, in Chicago Illinois at the E2 nightclub, someone sprayed mace or pepper spray to quell a fight at about 2 a.m. Panic ensued, because some believed a terrorist attack was in progress. There were reports that as many as 500 people tried to escape through a single exit. In the aftermath, 21 people were dead and more than 50 injured (*Dallas Morning News*, Feb. 18, 2003). If the individual who sprayed the substance had acted reasonably this dreadful incident would not have occurred. Pepper spray may not be dangerous and unsafe, but when used in an irresponsible, unreasonable manner, pepper spray can turn an apparent safe environment into a potentially unsafe and dangerous environment very quickly.

Therefore, law enforcement officers must act in a reasonable and responsible manner at all times – especially when deciding to utilize pepper spray.

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