

HEALTH #4 PEPPER SPRAY

WHAT IS PEPPER SPRAY?

It is a spray containing oleoresin capsicum (OC) as the major active ingredient. OC is a mixture of several compounds including capsaicin, an extract of chili peppers. Pepper spray is used as a riot control agent by law enforcement to temporarily incapacitate individuals by causing intense irritation of mucous membranes of the eyes, nose, throat, lungs, and skin (1).

Pepper spray is intended to be used by spraying the face of a person from a distance of 3-4 meters.

The European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) states that pepper spray should not be used against persons already under control, should never be used in confined places, and that certain measures need to be in place when it is used in open spaces, such as instant access to a medical doctor (2). According to the Special Rapporteur on Torture, the use of otherwise permissible weapons "in order to intentionally and purposefully inflict pain or suffering on a powerless person, always amounts to an aggravated form of cruel, inhuman or degrading treatment or punishment or even torture." (3).

IN PRACTICE

Pepper spray is primarily used for law enforcement purposes such as arrest or restraint of individuals and for riot control purposes. Pepper spray is increasingly used in detention facilities and, in some countries, for self-defense by private individuals.

When pepper spray is used in accordance with the manufacturers' guidelines and in line with international human rights and use of force standards, it can provide an alternative to more violent methods of force, such as electric discharge weapons and firearms. When pepper spray is used in spaces where people cannot disperse, it can lead to serious injury or death, particularly among vulnerable individuals, such as those under the influence of drugs, or those suffering diseases like asthma, and obese persons (4,5).

HEALTH CONSEQUENCES

Exposure to pepper spray can cause injury to different organ systems and even death.

The prevalence of serious medical outcomes and requirement for medical evaluation in pepper spray exposures has been found to range between 3% - 15% (1).

The severity of the health effects from pepper spray exposure depends on the circumstances of the exposure and several product, dispersal, and victim-related factors such as co-ingestants by the victim, chronic disease state, and the ability to promptly and thoroughly irrigate the exposed areas.

Ocular effects: Exposure to pepper spray results in immediate eye pain, loss of blink reflex, lacrimation (tears), reduced visual acuity, neurogenic inflammation, unresponsiveness to chemical and mechanical stimuli and ocular injuries such as corneal erosions, abrasions, and ulcers (1,6).

Dermal effects: Dermal exposure to pepper spray produces intense burning pain, tingling, edema (swelling), erythema (red skin), rash and blisters (1,6).

Respiratory effects: Shortness of breath, cough, chest tightness, wheezing, pulmonary edema, and bronchospasm (1,6).

CONCLUSION

To prevent further injury and/or complications in physical wellbeing, policies must explicitly state procedures for care of persons exposed, and law enforcement should have explicit guidelines specifying the steps to be taken after a person is exposed and subdued (7).

The dearth of epidemiological studies on pepper spray's health effects hinders medical understanding of long-term effects and the development of treatment plans. Therefore, more research is needed to guide legal authorities and health professionals to the best potential treatment options (7).

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Researched and written by:

Nicoline Lokdam, Naomi Lipsius Hincheli, Maha Aon and Ajla Catovic with contribution by Brenda Van den Bergh, Jens Modvig, Marie Brasholt and Marie My Warborg Larsen.

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For questions and comments, please contact: factsheets@dignity.dk