

Technical Memorandum

TM-03-2007 E

Bibliography of Selected Resources on OC Spray and Other Chemical Irritants

April 2007

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This Technical Memorandum is a Canadian Police Research Centre publication. To obtain additional information, please contact :

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ISBN 978-0-662-46063-0 ISSN 1912-4244 PS63-1/2007-3E-PDF



CPRC Reports:

CPRC survey of Canadian Police Services on OC Spray Experience http://www.cprc.org/tm/tm-2004-03.pdf

Comments on the Use of Capsaicin Spray http://www.cprc.org/tm/tm-01-98.pdf

OC Spray - A Review of Its Possible Risks including Carcinogenicity http://www.cprc.org/tm/tm-08-98.pdf

Oleoresin Capsicum in Buffalo http://www.cprc.org/tr/tr-1995-04E.pdf

Evaluation of Pepper Spray for the Winnipeg Police Department http://www.cprc.org/tm/tm-11-94E.pdf

Oleoresin Capsicum Spray http://www.cprc.org/tm/tm-19-94.pdf http://www.cprc.org/tm/tm-19-94F.pdf (French version)

Our international partners have also done studies in this area and some of their reports are shown below.

International Association of Chiefs of Police (IACP)

Pepper Spray Evaluation Project http://www.theiacp.org/research/peppersprayeval.pdf

United States Department of Justice

List of less lethal publications (several OC articles) http://www.ojp.usdoj.gov/nij/topics/lesslethal/pubs.htm



United States National Institute of Justice

Effectiveness and Safety of Pepper Spray NCJ 195739, April 2003, Research for Practice, by National Institute of Justice http://www.ncjrs.gov/pdffiles1/nij/195739.pdf

Deaths in Police Confrontations When Oleoresin Capsicum is Used NCJ 204029, 2002, Final Grant Report, by Petty, Charles S. <u>http://www.ncjrs.gov/pdffiles1/nij/grants/204029.pdf</u>

Pepper Spray's Effects on a Suspect's Ability to Breathe NCJ 188069, December 2001, Research in Brief, by Gary M. Vilke, Jack Clausen, Paul Schmidt, Richard Clark, Theodore C. Chan, Thomas Snowden, Tom Neuman http://www.ncjrs.gov/pdffiles1/nij/188069.pdf

Evaluation of Oleoresin Capsicum (O.C.) Use by Law Enforcement Agencies: Impact on Injuries to Officers and Suspects, Final Activity Report NCJ 184934, 2000, Final Grant Report, by Bowling, J. Michael; Gaines, Monica http://www.ncjrs.gov/pdffiles1/nij/grants/184934.pdf

Evaluation of Oleoresin Capsicum (O.C.) Use by Law Enforcement Agencies: Impact on Injuries to Officers and Suspects, Summary of Research Findings NCJ 184935, 2000, Final Grant Report, by Bowling, J. Michael; Gaines, Monica http://www.ncjrs.gov/pdfiles1/nij/grants/184935.pdf

Impact of Oleoresin Capsicum Spray on Respiratory Function in Human Subjects in the Sitting and Prone Maximal Restraint Positions, Final Report NCJ 182433, 2000, by Chan, Theodore C.; Clark, Richard; Clausen, Jack; Neuman, Tom; Schmidt, Paul; Snowden, Thomas; Vilke, Gary M. http://www.ncjrs.gov/pdffiles1/nij/grants/182433.pdf

Oleoresin Capsicum: Pepper Spray as a Force Alternative NCJ 181655, March 2000, Special Report, by National Institute of Justice http://www.ncjrs.gov/pdffiles1/nij/grants/181655.pdf



Evaluation of Pepper Spray NCJ 162358, 1997, Research in Brief, by Jamie Onnen, John Granfield, and Steven M. Edwards http://www.ncjrs.gov/pdffiles/162358.pdf

United States National Institute of Standards and Technology

Droplet Size Distributions in the Spray from Commercial 'Fogger' Type Pepper Spray Products NISTIR 7395, by Dr. Alim A. Fatah, Cary Presser, Edward V. White

United Kingdom - Home Office Scientific Development Branch

Comparison of CS and PAVA: Operational and Toxicological Aspects 88-04 This report has been produced to provide comparative information on the chemical incapacitants chlorobenzylidene malononitrile (CS) and pelargonic acid vanillylamide(PAVA). <u>http://scienceandresearch.homeoffice.gov.uk/hosdb/publications/police-</u> weaponry/Compairson_CS_and_PAVA?version=1

HOSDB Standard for CS and PAVA Sprays for Operational Police Use 36-05 This document details a number of tests that products had to pass to gain approval, the results of these tests provided information to the police to aid procurement. <u>http://scienceandresearch.homeoffice.gov.uk/hosdb/publications/police-weaponry/36-05-HOSDB-Standard-CS1.pdf?version=1</u>

Other Web Resources:

Less-lethal.org is a source of information on less-lethal technology used by law enforcement agencies. The web site content is dynamic, with updates provided on a periodic basis. Provides a basic and advanced search function for articles and contains many references on the subject of OC spray with some links to full text. http://www.less-lethal.org

Bradstock, M. What is the safety of "pepper spray" use by law enforcement or mental health service staff? *NZHTA Tech Brief Series 2002*;**1(2)** <u>http://nzhta.chmeds.ac.nz/publications/pepper_spray.pdf</u>



Related Studies:

CPRC

Conducted Energy Devices <u>http://www.cprc.org/tr/tr-2006-01.pdf</u> <u>http://www.cprc.org/tr/tr-2006-01f.pdf</u> (French version)

Excited Delirium Its correlation to sudden and unexpected death proximal to restraint. <u>http://www.cprc.org/tr/tr-2005-02_e.pdf</u> <u>http://www.cprc.org/tr/tr-2005-02_f.pdf</u> (French version)

British Columbia Office of the Police Complaints Commissioner

Taser Technology Review and Interim Recommendations <u>http://www.cprc.org/docs/bcopcc_interm.pdf</u> Taser Technology Review Final Report <u>http://www.cprc.org/docs/bcopcc_final.pdf</u>