

Supplementary Online Content

Baliatsas C, Gerbecks J, Dückers MLA, Yzermans CJ. Human health risks of conducted electrical weapon exposure: a systematic review. *JAMA Netw Open*. 2021;4(2):e2037209. doi:10.1001/jamanetworkopen.2020.37209

eTable 1. Types of Taser Weapons Documented in the Literature and Basic Characteristics

eTable 2. Inclusion and Exclusion Criteria Form

eTable 3. Summary of Case Studies on Documented Health Problems After CEW Exposure

eAppendix 1. Modified Version of the AXIS Tool for the Assessment of Study Quality

eAppendix 2. List of Descriptive Studies Identified During the Search

eAppendix 3. List of Case-Studies Identified in the Literature Searches

eAppendix 4. Reviews and Overviews Identified in the Literature Searches

eAppendix 5. Studies on Reported Associations Between Death Incidents and Taser

eAppendix 6. Database Searches

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Types of Taser weapons documented in the literature and basic characteristics*

Type (production year)	Electrical charge**	Additional details
AIR TASER® (1993)	70 µC	
M26 (1999)	70 – 120 µC	
X26 (2003)	80 – 135 µC	Not available since 2014
X3 (2009)	63 (+/- 9) µC	It fires two barbed darts
X2 (2011)	63 (+/- 9) µC	It fires two barbed darts in one cartridge; the electric current lasts a maximum of 5 seconds for every activation
X26P (2013)	63 (+/- 9) µC	Compact version of X26 (in terms of produced charge, weight and size)
X7 (2018)	Not documented	Newest version; has the features of the X2, but also toggles between cartridges by flicking the weapon, simultaneously reloads two cartridges, and is close-range optimized

* There are more TASER® CEW types available for civilian use. In the present table only CEW types extensively used in law enforcement are presented.

** Measured in microcoulombs (µC).

Source: Reuters Investigates. Shock Tactics – Part 5 – the X26. 2017. Retrieved from <https://www.reuters.com/investigates/special-report/usa-taser-x26/>

eTable 2. Inclusion and exclusion criteria form

Specifications regarding Inclusion/Exclusion criteria	
Publication characteristics	Criteria
Publication language	English, Dutch, French, German, Spanish.
Publication status	Primary scientific studies on original data, published in peer-reviewed journals (as a minimum, fundamental criterion of quality and validity). Studies only reported in books, reports without peer-review, conference proceedings/abstracts, dissertations, and protocols (without findings) are excluded. In the case of “double” publications/multiple articles based on the same data, the original/first publication is included as reference.
Publication period	01/2000 – 04/2019 (04/2020 after the update search)
Study characteristics	Criteria
Study design	No restriction, except for case studies (1 person per investigation as sample).
Study population	No restriction regarding human samples (studies on healthy individuals as well as patients with specific conditions are eligible for inclusion). Also no restriction in terms of demographic characteristics. Animal studies are excluded.
Health outcome	No restriction.
Health outcome assessment	Self-reported and/or diagnosed/objectively assessed health symptoms and conditions, health status/symptom scores and/or physiological measures, as dependent variables. Studies that did not examine specific health/physiological outcomes in relation to CEW exposure are not eligible for inclusion.
Presence of somatic and/or psychological (co-)morbidity	No restriction.
Sample age	No restriction.
Sample size	No restriction.
Exposure	Criteria
Type of exposure (source)	Studies focusing on TASER® CEWs (all models from Taser International/Axon), more specifically: M26, X26(P), X3, X2, XREP (and also more recent models), as primary exposure source. Studies on guns/devices that do not fall within this classification, such as “stun guns”, “batons”/”prods” and “belts” are excluded.

eTable 3. Summary of case studies on documented health problems after CEW exposure

Organ system	Type of conditions	N studies
Eye	Penetration of eye (region) by darts	37
Cardiovascular	Atrial fibrillation, ventricular fibrillation, cardiacarrest , chest pain, asystole, myocardial capture, tachycardia	26
Skin	Skin burns, stab wound	23*
Neurological	Sixteen times head trauma/injury (caused by a fall), in 8 cases this led to death, in 8 other cases it 'supposedly' led to death Epilepsy	19**
Skull	Penetration of the skull by darts	10
Muskoskeletal	Fractures of different body parts, rhabdomyolysis	10
Respiratory	Air between the lungs, pneumothorax	2
Pharynx	Perforation of the pharynx by dart	1
Male genitals	Penetration by dart	1
Other	Excited delirium	1
* of which 22 from one study		
** of which 16 from one study		

eAppendix 1. Modified version of the AXIS tool for the assessment of study quality**

Introduction

1. Clear definition of objectives/ aims?

Methods

2. Study design appropriate for the stated aims?

3. Was the sample size justified?

4. Target population clearly defined (appropriate population base/unbiased sampling)?

5. Risk factor and outcome variables measured correctly using instruments that had been trialed, piloted or published previously?

6. Methods (including statistical methods) sufficiently described to enable them to be repeated?

7. Was an attempt made to blind those measuring the main outcomes of the intervention? (*Note: For all experimental studies*)*

8. Were study subjects randomised to intervention groups? (*Note: For controlled trials*)*

Results

9. Were the results for analysis described in the methods, adequately presented?

10. Were the authors' discussions and conclusions justified by the results?

Disussion

11. Were the limitations of the study discussed?

12. Was ethical approval or consent of participants attained?

*** The total quality score can vary between 0 and 10 where 0-4 = (Low); 5-7 = (Moderate) and 8-10= (High). For Controlled trials (CTs) two extra items were used (7, 8) and the total score is adjusted accordingly: 0-6 = (Low); 7-9 = (Moderate) and 10-12= (High). For experimental studies/interventions without a control group, one extra item is used (7) and the total score is adjusted accordingly: 0-5 = (Low); 6-8 = (Moderate) and 9-11= (High).*

**Added from from Downs and Black, 1998*

eAppendix 2. List of descriptive studies identified during the search

- Bécour B. Conducted electrical weapons: About 42 cases examined in emergency department. *Revue de Medecine Legale*. 2012; 3:57-63.
- Bozeman WP, Hauda IWE, Heck JJ, Graham Jr DD, Martin BP, Winslow JE. Safety and Injury Profile of Conducted Electrical Weapons Used by Law Enforcement Officers Against Criminal Suspects. *Annals of emergency medicine*. 2009; 53:480-9.
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- Coombs AV, Eyerly-Webb SA, Solomon RJ, Sanchez R, Lee SK, Carrillo EH, et al. Investigating clinical and cost burdens of law enforcement–related K9 injuries: The impact of “the bite” on a community hospital. *American Surgeon*. 2019; 85:64-70.
- DeLone GJ, Thompson LM. The application and use of TASERs by a Midwestern police agency. *International Journal of Police Science & Management*. 2009;11:414-28.
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- Feldman JM, Gruskin S, Coull BA, Krieger N. Quantifying underreporting of law-enforcement-related deaths in United States vital statistics and news-media-based data sources: A capture–recapture analysis. *PLoS medicine*. 2017; 14.
- Gardner AR, Hauda WE, Bozeman WP. Conducted electrical weapon (TASER) use against minors: A shocking analysis. *Pediatric emergency care*. 2012; 28:873-7.
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- Lee BK, Vittinghoff E, Whiteman D, Park M, Lau LL, Tseng ZH. Relation of Taser (Electrical Stun Gun) Deployment to Increase in In-Custody Sudden Deaths. *American Journal of Cardiology*. 2009; 103:877-80.
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- White MD, Ready J, Riggs C, Dawes DM, Hinz A, Ho JD. An incident-level profile of TASER device deployments in arrest-related deaths. *Police Quarterly*. 2013; 16:85-112.

eAppendix 3. List of case-studies identified in the literature searches

Al-Jarabah M, Coulston J, Hewin D. Pharyngeal perforation secondary to electrical shock from a Taser gun. *Emergency medicine journal*. 2008; 25:378.

Baldwin DE, Nagarakanti R, Hardy SP, Jain N, Borne DM, England AR, et al. Myocardial infarction after taser exposure. *The Journal of the Louisiana State Medical Society*. 2010; 162:291-2, 4-5.

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eAppendix 4. Reviews and overviews identified in the literature searches

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Azadani PN, Tseng ZH, Ermakov S, Marcus GM, Lee BK. Funding source and author affiliation in TASER research are strongly associated with a conclusion of device safety. *American heart journal*. 2011; 162:533-7.

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Vilke GM, Bozeman WP, Chan TC. Emergency department evaluation after conducted energy weapon use: review of the literature for the clinician. *The Journal of emergency medicine*. 2011; 40:598-604.

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eAppendix 5. Studies on reported associations between death incidents and Taser

Feldman JM, Gruskin S, Coull BA, Krieger N. Quantifying underreporting of law-enforcement-related deaths in United States vital statistics and news-media-based data sources: A capture–recapture analysis. *PLoS medicine*. 2017; 14.

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Zipes DP. Sudden cardiac arrest and death following application of shocks from a TASER electronic control device. *Circulation*. 2012; 125:2417-22.

Zipes DP. TASER electronic control devices can cause cardiac arrest in humans. *Circulation*. 2014; 129:101-11.

eAppendix 6. Data base Searches
Web of Science search

# 37	675	#35 NOT #36 <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 36	1,018,866	TOPIC: (animal*) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 35	714	#32 OR #31 OR #30 OR #29 OR #28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1 Refined by: PUBLICATION YEARS: (2019 OR 2011 OR 2003 OR 2018 OR 2010 OR 2002 OR 2017 OR 2009 OR 2001 OR 2016 OR 2008 OR 2000 OR 2015 OR 2007 OR 2014 OR 2006 OR 2013 OR 2005 OR 2012 OR 2004) AND DOCUMENT TYPES: (ARTICLE OR REVIEW) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 34	908	#32 OR #31 OR #30 OR #29 OR #28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1 Refined by: PUBLICATION YEARS: (2019 OR 2011 OR 2003 OR 2018 OR 2010 OR 2002 OR 2017 OR 2009 OR 2001 OR 2016 OR 2008 OR 2000 OR 2015 OR 2007 OR 2014 OR 2006 OR 2013 OR 2005 OR 2012 OR 2004) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 33	979	#32 OR #31 OR #30 OR #29 OR #28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1 <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 32	13	TOPIC: ("electric weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 31	2	TOPIC: ("electrical shock device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 30	15	TOPIC : ("range projectile") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 29	2	TOPIC: ("electric shock weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 28	5	TOPIC: ("electric shock device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 27	127	TOPIC: ("electrical weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 26	22	TOPIC: ("electronic weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 25	14	TOPIC: ("conductive energy device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 24	6	TOPIC: ("electromuscular disruption*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 23	7	TOPIC: ("neuromuscular incapacitation*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 22	9	TOPIC: ("incapacitation device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 21	17	TOPIC: ("range weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 20	3	TOPIC: ("conductive electronic device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 19	140	TOPIC: ("electronic control device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 18	207	TOPIC: (CEW) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>

# 17	37	TOPIC: ("conducted energy weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 16	30	TOPIC: ("conducted energy device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 15	7	TOPIC: ("impact weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 14	26	TOPIC: ("less-lethal weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 13	3	TOPIC: ("non-lethal device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 12	71	TOPIC: ("non-lethal weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 11	122	TOPIC: ("energy weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 10	110	TOPIC: ("conducted electrical weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 9	138	TOPIC: (CEDs) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 8	2	TOPIC: ("conducted electrical device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 7	3	TOPIC: ("electroshock weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 6	1	TOPIC: ("electronic control weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 5	140	TOPIC: ("electronic control device*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 4	1	TOPIC: ("electronic control weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 3	3	TOPIC: ("electroshock weapon*") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 2	364	TOPIC: ("Taser®") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 1	409	TOPIC: (taser*) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>

Embase

Session Results

No.	Query Results	Results	Date
#28.	#25 AND 'human'/de AND (2000:py OR 2001:py OR Apr 2019 2002:py OR 2003:py OR 2004:py OR 2005:py OR 2006:py OR 2007:py OR 2008:py OR 2009:py OR 2010:py OR 2011:py OR 2012:py OR 2013:py OR 2014:py OR 2015:py OR 2016:py OR 2017:py OR 2018:py OR 2019:py) AND ('Article'/it OR 'Article in Press'/it OR 'Review'/it OR 'Short Survey'/it)	433	25
#27.	#25 AND 'human'/de AND (2000:py OR 2001:py OR Apr 2019 2002:py OR 2003:py OR 2004:py OR 2005:py OR 2006:py OR 2007:py OR 2008:py OR 2009:py OR 2010:py OR 2011:py OR 2012:py OR 2013:py OR 2014:py OR 2015:py OR 2016:py OR 2017:py OR 2018:py OR 2019:py)	601	25
#26.	#25 AND 'human'/de Apr 2019	630	25
#25.	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR Apr 2019 #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24	827	25
#24.	'stun gun':ti,ab,kw Apr 2019	40	25
#23.	'electric weapon*':ti,ab,kw Apr 2019	2	25
#22.	'electric shock device*':ti,ab,kw Apr 2019	8	25
#21.	'electric shock weapon*':ti,ab,kw Apr 2019	1	25
#20.	'incapacitation device*':ti,ab,kw Apr 2019	17	25
#19.	'range projectile*':ti,ab,kw Apr 2019	7	25
#18.	'electrical weapon*':ti,ab,kw Apr 2019	116	25
#17.	'electronic weapon*':ti,ab,kw Apr 2019	13	25
#16.	'conductive energy device*':ti,ab,kw Apr 2019	11	25
#15.	'electromuscular disruption*':ti,ab,kw Apr 2019	4	25
#14.	'neuromuscular incapacitation*':ti,ab,kw Apr 2019	17	25
#13.	'electronic control device*':ti,ab,kw Apr 2019	102	25
#12.	cew:ti,ab,kw Apr 2019	154	25
#11.	'conducted energy weapon*':ti,ab,kw Apr 2019	33	25
#10.	'impact weapon*':ti,ab,kw Apr 2019	7	25
#9.	'conducted energy device*':ti,ab,kw Apr 2019	11	25
#8.	'less-lethal weapon*':ti,ab,kw Apr 2019	30	25

#7.	'non-lethal weapon*':ti,ab,kw	46	25
Apr	2019		
#6.	'energy weapon*':ti,ab,kw	53	25
Apr	2019		
#5.	'conducted electrical weapon*':ti,ab,kw	105	25
Apr	2019		
#4.	'electroshock weapon*':ti,ab,kw	4	25
Apr	2019		
#3.	ceds:ti,ab,kw	117	25
Apr	2019		
#2.	taser@:ti,ab,kw	389	25
Apr	2019		
#1.	'taser'/exp OR taser	486	25
Apr	2019		
.....			

Search	Add to builder	Query	Items found
#31	Add	Search (((((((((((((((((((((((taser*[Title/Abstract]) OR "Taser®"[Title/Abstract]) OR CEDs[Title/Abstract]) OR electroshock weapon*[Title/Abstract]) OR conducted electrical weapon*[Title/Abstract]) OR energy weapon*[Title/Abstract]) OR non-lethal weapon*[Title/Abstract]) OR less-lethal weapon*[Title/Abstract]) OR conducted energy device*[Title/Abstract]) OR impact weapon*[Title/Abstract]) OR conducted energy weapon*[Title/Abstract]) OR CEW[Title/Abstract]) OR electronic control device*[Title/Abstract]) OR neuromuscular incapacitation*[Title/Abstract]) OR electromuscular disruption*[Title/Abstract]) OR conductive energy device*[Title/Abstract]) OR electronic weapon*[Title/Abstract]) OR electrical weapon*[Title/Abstract]) OR extended range projectile*[Title/Abstract]) OR incapacitation device*[Title/Abstract]) OR electric shock weapon*[Title/Abstract]) OR electrical shock weapon*[Title/Abstract]) OR electric shock device*[Title/Abstract]) OR electrical shock device*[Title/Abstract]) OR electric weapon*[Title/Abstract] Filters: Publication date from 2003/01/01 to 2019/12/31; Humans	387
#30	Add	Search (((((((((((((((((((((((taser*[Title/Abstract]) OR "Taser®"[Title/Abstract]) OR CEDs[Title/Abstract]) OR electroshock weapon*[Title/Abstract]) OR conducted electrical weapon*[Title/Abstract]) OR energy weapon*[Title/Abstract]) OR non-lethal weapon*[Title/Abstract]) OR less-lethal weapon*[Title/Abstract]) OR conducted energy device*[Title/Abstract]) OR impact weapon*[Title/Abstract]) OR conducted energy weapon*[Title/Abstract]) OR CEW[Title/Abstract]) OR electronic control device*[Title/Abstract]) OR neuromuscular incapacitation*[Title/Abstract]) OR electromuscular disruption*[Title/Abstract]) OR conductive energy device*[Title/Abstract]) OR electronic weapon*[Title/Abstract]) OR electrical weapon*[Title/Abstract]) OR extended range projectile*[Title/Abstract]) OR incapacitation device*[Title/Abstract]) OR electric shock weapon*[Title/Abstract]) OR electrical shock weapon*[Title/Abstract]) OR electric shock device*[Title/Abstract]) OR electrical shock device*[Title/Abstract]) OR electric weapon*[Title/Abstract] Filters: Publication date from 2003/01/01 to 2019/12/31	551
#29	Add	Search (((((((((((((((((((((((taser*[Title/Abstract]) OR "Taser®"[Title/Abstract]) OR CEDs[Title/Abstract]) OR electroshock weapon*[Title/Abstract]) OR conducted electrical weapon*[Title/Abstract]) OR energy weapon*[Title/Abstract]) OR non-lethal weapon*[Title/Abstract]) OR less-lethal weapon*[Title/Abstract]) OR conducted energy device*[Title/Abstract]) OR impact weapon*[Title/Abstract]) OR conducted energy weapon*[Title/Abstract]) OR CEW[Title/Abstract]) OR electronic control device*[Title/Abstract]) OR neuromuscular incapacitation*[Title/Abstract]) OR electromuscular disruption*[Title/Abstract]) OR conductive energy device*[Title/Abstract]) OR electronic weapon*[Title/Abstract]) OR electrical weapon*[Title/Abstract]) OR extended range projectile*[Title/Abstract]) OR incapacitation device*[Title/Abstract]) OR electric shock weapon*[Title/Abstract]) OR electrical shock weapon*[Title/Abstract]) OR electric shock device*[Title/Abstract]) OR electrical shock device*[Title/Abstract]) OR electric weapon*[Title/Abstract] Filters: Humans	434

Search	Add to builder	Query	Items found
#28	Add	Search (((((((((((((((((((((((taser*[Title/Abstract]) OR "Taser®"[Title/Abstract]) OR CEDs[Title/Abstract]) OR electroshock weapon*[Title/Abstract]) OR conducted electrical weapon*[Title/Abstract]) OR energy weapon*[Title/Abstract]) OR non-lethal weapon*[Title/Abstract]) OR less-lethal weapon*[Title/Abstract]) OR conducted energy device*[Title/Abstract]) OR impact weapon*[Title/Abstract]) OR conducted energy weapon*[Title/Abstract]) OR CEW[Title/Abstract]) OR electronic control device*[Title/Abstract]) OR neuromuscular incapacitation*[Title/Abstract]) OR electromuscular disruption*[Title/Abstract]) OR conductive energy device*[Title/Abstract]) OR electronic weapon*[Title/Abstract]) OR electrical weapon*[Title/Abstract]) OR extended range projectile*[Title/Abstract]) OR incapacitation device*[Title/Abstract]) OR electric shock weapon*[Title/Abstract]) OR electrical shock weapon*[Title/Abstract]) OR electric shock device*[Title/Abstract]) OR electrical shock device*[Title/Abstract]) OR electric weapon*[Title/Abstract]	614
#27	Add	Search electric weapon*[Title/Abstract]	106
#26	Add	Search electrical shockdevice*[Title/Abstract]	2
#25	Add	Search electric shock device*[Title/Abstract]	3
#24	Add	Search electrical shockweapon*[Title/Abstract]	2
#23	Add	Search electric shock weapon*[Title/Abstract]	2
#22	Add	Search incapacitation device*[Title/Abstract]	12
#21	Add	Search range projectile*[Title/Abstract]	293
#20	Add	Search extendedrangeprojectile*[Title/Abstract]	8
#19	Add	Search electrical weapon*[Title/Abstract]	92
#18	Add	Search electronic weapon*[Title/Abstract]	7
#17	Add	Search conductive energydevice*[Title/Abstract]	5
#16	Add	Search electromuscular disruption*[Title/Abstract]	2
#15	Add	Search neuromuscular incapacitation*[Title/Abstract]	10
#14	Add	Search electroniccontroldevice*[Title/Abstract]	61
#13	Add	Search CEW[Title/Abstract]	127
#12	Add	Search conducted energyweapon*[Title/Abstract]	22
#11	Add	Search impact weapon*[Title/Abstract]	5
#10	Add	Search conducted energydevice*[Title/Abstract]	4
#9	Add	Search less-lethal weapon*[Title/Abstract]	19
#8	Add	Search non-lethal weapon*[Title/Abstract]	35
#7	Add	Search energy weapon*[Title/Abstract]	38
#6	Add	Search conducted electrical weapon*[Title/Abstract]	80
#5	Add	Search electroshock weapon*[Title/Abstract]	64
#4	Add	Search CEDs[Title/Abstract]	103
#3	Add	Search "Taser®"[Title/Abstract]	51
#2	Add	Search taser*[Title/Abstract]	295

#	Query	Limiters/Expanders	Results
S35	S1 OR S2 OR S3 OR S5 OR S7 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S22 OR	Limiters - Publication Year: 2000-2019 Narrow by Population: - human Search modes - Boolean/Phrase	171
S34	S1 OR S2 OR S3 OR S5 OR S7 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S22 OR	Limiters - Publication Year: 2000-2019 Search modes - Boolean/Phrase	203
S33	S1 OR S2 OR S3 OR S5 OR S7 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S22 OR S25 OR S27	Search modes - Boolean/Phrase	226
S32	"electric weapon*"	Search modes - Boolean/Phrase	0
S31	"electrical shock device*"	Search modes - Boolean/Phrase	0

S30	"range projectile**"	Search modes - Boolean/Phrase	0
S29	"electric shock weapon**"	Search modes - Boolean/Phrase	0
S28	"electric shock device**"	Search modes - Boolean/Phrase	0
S27	"electrical weapon**"	Search modes - Boolean/Phrase	1
S26	"electronic weapon**"	Search modes - Boolean/Phrase	0
S25	"conductive energy device**"	Search modes - Boolean/Phrase	2
S24	"electromuscular disruption**"	Search modes - Boolean/Phrase	0
S23	"neuromuscular incapacitation**"	Search modes - Boolean/Phrase	0
S22	"incapacitation device**"	Search modes - Boolean/Phrase	2
S21	"range weapon**"	Search modes - Boolean/Phrase	0

S20	"conductive electronic device**"	Search modes - Boolean/Phrase	0
S19	"electronic control device**"	Search modes - Boolean/Phrase	3
S18	CEW	Search modes - Boolean/Phrase	21
S17	"conducted energy weapon**"	Search modes - Boolean/Phrase	1
S16	"conducted energy device**"	Search modes - Boolean/Phrase	9
S15	"impact weapon**"	Search modes - Boolean/Phrase	1
S14	"less-lethal weapon**"	Search modes - Boolean/Phrase	5
S13	"non-lethal device**"	Search modes - Boolean/Phrase	1
S12	"non-lethal weapon**"	Search modes - Boolean/Phrase	4
S11	"energy weapon**"	Search modes - Boolean/Phrase	4

S10	"conducted electrical weapon**"	Search modes - Boolean/Phrase	1
S9	CEDs	Search modes - Boolean/Phrase	152
S8	"conducted electrical device**"	Search modes - Boolean/Phrase	0
S7	"electroshock weapon**"	Search modes - Boolean/Phrase	2
S6	"electronic control weapon**"	Search modes - Boolean/Phrase	0
S5	"electronic control device**"	Search modes - Boolean/Phrase	3
S4	"electronic control weapon**"	Search modes - Boolean/Phrase	0
S3	"electroshock weapon**"	Search modes - Boolean/Phrase	2
S2	"Taser®"	Search modes - Boolean/Phrase	39
S1	taser*	Search modes - Boolean/Phrase	48

Search Name: taser in Title Abstract Keyword (Word variations have been searched)

Last Saved:27/04/2019 16:53:35

ID Search

#1 taser:ti,ab,kw with Cochrane Library publication date Between Jan 2000 and Dec 2019, in Cochrane Reviews, Cochrane Protocols, Trials (Word variations have been searched) 12

Search Name: Cochrane search (Update)

Date Run: 24/04/2020 13:04:18

Comment:

ID	Search	Hits
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#1	(Taser):ti,ab,kw (Word variations have been searched) with Publication Year from 2019 to 2020, with Cochrane Library publication date Between Mar 2019 and Dec 2020, in Trials	6
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Web of Science search (Update)

- # 37 **86** #35 NOT #36
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 36 **1,083,380** **TOPIC: (animal*)**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 35 **89** #32 OR #31 OR #30 OR #29 OR #28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
Refined by: PUBLICATION YEARS: (2020 OR 2019) AND DOCUMENT TYPES: (ARTICLE OR REVIEW)
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 34 **95** #32 OR #31 OR #30 OR #29 OR #28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
Refined by: PUBLICATION YEARS: (2020 OR 2019)
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 33 **1,059** #32 OR #31 OR #30 OR #29 OR #28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 32 **14** **TOPIC: ("electric weapon*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 31 **2** **TOPIC: ("electrical shock device*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 30 **16** **TOPIC: ("range projectile*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 29 **3** **TOPIC: ("electric shock weapon*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 28 **5** **TOPIC: ("electric shock device*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 27 **126** **TOPIC: ("electrical weapon*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 26 **20** **TOPIC: ("electronic weapon*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 25 **15** **TOPIC: ("conductive energy device*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 24 **6** **TOPIC: ("electromuscular disruption*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 23 **7** **TOPIC: ("neuromuscular incapacitation*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 22 **9** **TOPIC: ("incapacitation device*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 21 **19** **TOPIC: ("range weapon*")**
Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years

# 20	4	TOPIC: ("conductive electronic device**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 19	137	TOPIC: ("electronic control device**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 18	229	TOPIC: (CEW) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 17	40	TOPIC: ("conducted energy weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 16	34	TOPIC: ("conducted energy device**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 15	10	TOPIC: ("impact weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 14	29	TOPIC: ("less-lethal weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 13	3	TOPIC: ("non-lethal device**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 12	77	TOPIC: ("non-lethal weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 11	133	TOPIC: ("energy weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 10	110	TOPIC: ("conducted electrical weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 9	163	TOPIC: (CEDs) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 8	2	TOPIC: ("conducted electrical device**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 7	3	TOPIC: ("electroshock weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 6	1	TOPIC: ("electronic control weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 5	137	TOPIC: ("electronic control device**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 4	1	TOPIC: ("electronic control weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 3	3	TOPIC: ("electroshock weapon**") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 2	377	TOPIC: ("Taser®") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>
# 1	426	TOPIC: (taser*) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, BKCI-S, BKCI-SSH, ESCI Timespan=All years</i>

weaponising[Title/Abstract] OR weaponizable[Title/Abstract] OR weaponization[Title/Abstract] OR
weaponize[Title/Abstract] OR weaponized[Title/Abstract] OR weaponized'[Title/Abstract] OR
weaponizes[Title/Abstract] OR weaponizing[Title/Abstract] OR weaponless[Title/Abstract] OR
weaponries[Title/Abstract] OR weaponry[Title/Abstract] OR weaponry's[Title/Abstract] OR
weapons[Title/Abstract] OR weapons'[Title/Abstract] OR weapons'laws[Title/Abstract])) OR (stun
gun[Title/Abstract] OR stun guns[Title/Abstract]) AND ("2019/03/01"[PDAT] : "2020/12/31"[PDAT])
AND "humans"[MeSH Terms])

Items found 21

#	Query	Limiters/Expanders	Results
S21	S1 OR S2 OR S3 OR S4	Limiters - Published Date:	3
	OR S5 OR S6 OR S7 OR	20190301-20201231	
	S8 OR S9 OR S10 OR	Expanders - Apply	
	S11 OR S12 OR S13 OR	equivalent subjects	
	S14 OR S15 OR S16 OR	Search modes -	
	S17 OR S18 OR S19	Boolean/Phrase	
S20	S1 OR S2 OR S3 OR S4	Expanders - Apply	233
	OR S5 OR S6 OR S7 OR	equivalent subjects	
	S8 OR S9 OR S10 OR	Search modes -	
	S11 OR S12 OR S13 OR	Boolean/Phrase	
	S14 OR S15 OR S16 OR		
	S17 OR S18 OR S19		
S19	"electrical weapon**"	Expanders - Apply	2
		equivalent subjects	
		Search modes -	
		Boolean/Phrase	
S18	"conductive energy device**"	Expanders - Apply	2
		equivalent	
		Search modes -	
S17	"incapacitation device**"	Expanders - Apply	2
		equivalent	
		Search modes -	
S16	"electronic control device**"	Expanders - Apply	3
		equivalent	
		Search modes -	
S15	CEW	Expanders - Apply	21
		equivalent subjects	
		Search modes -	
		Boolean/Phrase	

S14	"conducted energy weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S13	"conducted energy device**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9
S12	"impact weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S11	"less-lethal weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5
S10	"non-lethal device**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S9	"non-lethal weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4
S8	"energy weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5
S7	"conducted electrical weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S6	CEDs	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	154
S5	"electroshock weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2

S4	"electronic control device**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3
S3	"electroshock weapon**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S2	"Taser®"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	43
S1	Taser*	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	53