

## WHAT IS AN EDW?

An EDW is a weapon that delivers a series of electrical pulses intended to temporarily incapacitate subjects through pain compliance (the use of painful stimulus to control or direct a person). An EDW can be used directly on the subject (e.g. stun gun or belt) or by two probes shot from up to a 10-meter distance (TASER).

The UN Committee against Torture concluded that the TASER X26 constitutes a form of torture as it causes severe pain and may even cause death (1). The European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) issued general principles for the use of EDWs stating that it should be "limited to situations where there is a real and immediate threat to life or risk of serious injury" (2).

## IN PRACTICE

While the TASER X26 was discontinued in 2014, it remains in use having been purchased by over 15,000 law enforcement and military agencies, including the US and France(3). A variety of TASER models are still available on the market both to law enforcement and private individuals. Other devices relying on pain compliance through electric shock are also available on the market. These include electric shock batons and stun cuffs. Electric stun vests, electric riot shield and stun sleeves have been banned in the EU since 2006 (4).

Electro-shock stun belts, strapped onto prisoners during transport and during judicial hearings, are reportedly used in 30 state prisons and all federal trial courts in the U.S. as well as by prison staff and police in South Africa (6).

EDWs are promoted as less-lethal weapons in comparison to deadly force. The UK police force for example, places the TASER M26 directly before firearms in the hierarchy of use-of-force (5). Use is therefore intended only in situations where it is absolutely necessary to protect life.

The CPT has investigated and documented allegations of ill-treatment or torture regarding the use of EDWs by law enforcement in countries including Bulgaria and Russia (7,8).

## HEALTH CONSEQUENCES

Studies report that injuries occur in 20% - 41.2% of cases involving a range of EDW use (9,10). While some studies show no increased risk of death due to the use of EDWs (11), a study of police departments on moderate to large cities in California using Tasers, shows a 6.4-fold increase in the rate of in-custody deaths (not involving firearms force) in the early deployment period of Tasers compared to the average mortality rate in the five years before the deployment. This rate decreased to pre-deployment levels in years 2-5 after deployment (12). EDWs have been found to cause the following injuries:

**Electrically induced injuries:** Eye trauma caused by an EDW dart has been reported in several studies (13). Research has shown that EDW shocks can affect the heart and that people with pre-existing heart conditions can be vulnerable to the electric shocks from EDWs (14).

**Fall-related trauma due to EDW application:** Falls can induce serious trauma since the person subjected to the EDW will often be paralyzed and therefore not capable of reducing the fall and its consequences (15). Hence, falls are a common factor when EDWs induce severe injuries to the brain, which in some cases can be fatal (16).

**Mechanical trauma from probes:** EDW darts cause injuries, including burns, lacerations and punctures to the area hit by the darts. Studies have documented injuries to areas such as the skull, face, eyes and nose(13,17). Documented injuries to the skull involved the dart penetrating through the skull (18). Single cases of serious injury from the darts have been documented including for example a case of severe neurologic injury and stroke (19) and a case of pneumothorax (collapsed lung) (20).

## CONCLUSION

EDWs encompass a broad range of weapons designed to temporarily incapacitate a person, however injuries and even death have been documented in cases where EDWs were deployed. The risk of injury or death from EDWs is amplified in the absence of international and sometimes national standards or laws regulating their use.

## REFERENCES

1. CAT. Conclusions and recommendations of the Committee against Torture : Portugal [Internet]. 2008 Feb. Report No.: CAT/C/PRT/CO/4. Available from: <https://www.refworld.org/docid/4804a62e2.html>
2. CPT. The European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) Standards [Internet]. 2011. Available from: <https://www.pytkam.net/web/images/news/2009/09/0000007.pdf>
3. Alpert Geoffery P, Smith Michael R, Kaminski Robert J, Fridell Lorie A, MacDonald John, Kubu Bruce. Police use of force: Tasers and other less-lethal weapons [Internet]. National Institute of Justice; 2011 [cited 2018 Sep 28]. Available from: <http://dx.doi.org/10.13140/RG.2.1.5100.4647>
4. Union PO of the E. Council Regulation (EC) No 1236/2005 of 27 June 2005 concerning trade in certain goods which could be used for capital punishment, torture or other cruel, inhuman or degrading treatment or punishment, CELEX1 [Internet]. 2011 [cited 2018 Sep 28]. Available from: <https://publications.europa.eu/en/publication-detail/-/publication/e7749622-48ca-4339-a7e0-92b363c975cb/language-en>
5. Jenkinson E, Neeson C, Bleetman A. The relative risk of police use-of-force options: evaluating the potential for deployment of electronic weaponry. *J Clin Forensic Med.* 2006;13(5):229–41.
6. Amnesty International. Pain Merchants: Security Equipment and Its Use in Torture and Other Ill-treatment. 2003;
7. Council Of Europe. Report to the Bulgarian Government on the visit to Bulgaria carried out by the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) from 24 March to 3 April 2014. Strasbourg; 2015 Jan. Report No.: CPT/Inf (2015) 12.
8. Council Of Europe. Report to the Russian Government on the visit to the North Caucasian region of the Russian Federation carried out by the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) from 27 April to 6 May 2011. Strasbourg; 2013 Jan. Report No.: CPT/Inf (2013) 1.
9. Gardner AR, Hauda WE, Bozeman WP. Conducted electrical weapon (TASER) use against minors: a shocking analysis. *Pediatr Emerg Care.* 2012 Sep;28(9):873–7.
10. Terrill W, III EAP. Conducted Energy Devices (CEDs) and Citizen Injuries: The Shocking Empirical Reality. *Justice Q.* 2012 Apr 1;29(2):153–82.
11. Bozeman WP, Hauda WE, Heck JJ, Graham DD, Martin BP, Winslow JE. Safety and injury profile of conducted electrical weapons used by law enforcement officers against criminal suspects. *Ann Emerg Med.* 2009 Apr;53(4):480–9.
12. 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. *Am J Cardiol.* 2009 Mar 15;103(6):877–80.
13. Sayegh R, Madsen K, Adler J, Johnson M, Mathews M. Diffuse retinal injury from a non-penetrating TASER dart. *Doc Ophthalmol.* 2011;123(2):135–139.
14. Council Of Europe. Electrical discharge weapons Extract from the 20th General Report of the CPT, published in 2010. European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT); 2010. Report No.: CPT/Inf(2010)28-part.
15. Hudak LA, Marti JJ, Houry DE. Bilateral patellar tendon rupture after stun gun shock. *Inj Extra.* 2011;42(11):186–188.
16. Kroll MW, Adamec J, Wetli CV, Williams HE. Fatal traumatic brain injury with electrical weapon falls. *J Forensic Leg Med.* 2016 Oct;43:12–9.
17. Mangus BE, Shen LY, Helmer SD, Maher J, Smith RS. Taser and Taser associated injuries: a case series. *Am Surg.* 2008 Sep;74(9):862–5.
18. Le Blanc-Louvry I, Gricourt C, Touré E, Papin F, Proust B. A brain penetration after Taser injury: Controversies regarding Taser gun safety. *Forensic Sci Int.* 2012 Sep;221(1–3):e7–11.
19. Bell N, Moon M, Dross P. Cerebrovascular accident (CVA) in association with a Taser-induced electrical injury. *Emerg Radiol.* 2014 Apr;21(2):211–3.
20. Hinchey PR, Subramaniam G. Pneumothorax as a complication after TASER activation. *Prehospital Emerg Care Off J Natl Assoc EMS Physicians Natl Assoc State EMS Dir.* 2009;13(4):532–5.

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