

ASA

THE AMBULANCE SERVICE ASSOCIATION

POLICE TASER DEVICE

GUIDANCE FOR EMERGENCY CARE STAFF

How Tasers work, what happens and the correct procedure for Barb removal.



jrcalc
joint royal colleges ambulance
liaison committee

WHAT IS A TASER?

There are two models of Taser currently being used by the UK Police service. The original M26 Taser and the newer X26 Taser. Both devices are single shot and use the same cartridges which fire two probes and discharge an electrical current. *They aim to incapacitate rather than lethally injure.*



Both resemble a pistol but administer an electrical current that temporarily incapacitates an individual. They both use compressed nitrogen to fire two darts that trail wires back to the Taser.

The M26 Taser delivers an electrical current of 50,000volts / 26watts (1.76 joules per pulse at 25-38 pulses per second) over 5 seconds and the X26 delivers 50,000volts / 6watts (0.36 joules per pulse at 19 pulses per second) over 5 seconds, which temporarily incapacitates the victim by affecting the neuromuscular system.

Why Guidance for emergency care workers?

The use of Taser devices are becoming more widespread within Britain's police forces, and due to the nature of the action of the Taser, it is possible that people will suffer injury, either as a result of a fall or collapse, or that emergency care workers will be requested to remove the Taser darts, which are barbed and are likely to be embedded within the skin. Guidance is provided here to assist in the removal of Taser barbs, but local arrangements/policies should be referred to where these are in place.

How does it work?

The Taser is laser-sighted and uses air cartridges attached to the end of the barrel. The cartridges project a pair of barbed darts, which attach to the skin or clothing and deliver an electrical charge in the form of a sequence of very high voltage pulses.



The Taser has an absolute maximum range of around 21 feet, this being the length of the wires carrying the current, and which attach the barbed darts to the weapon.

The Taser also has a 'touch stun' mode, where it can be operated without firing the barbs. It is very effective while the charge is being applied and the electrical charge can be repeated if needed.

What does it do to someone?

The normal reaction of a person exposed to the discharge of a Taser is the temporary loss of voluntary muscle control resulting in the person falling to the ground or 'freezing' on the spot. The effect is not intended, nor is it likely to render a person into a state of unconsciousness. The device is meant to be an alternative to conventional firearms and is not intended to result in a fatal outcome. There are cases where people exposed to the discharge of a Taser have died some time after exposure, although the cause is unlikely to have been the Taser itself.

What happens afterwards?

The effects of the Taser are sudden and only last for as long as the charge is applied (usually 5 seconds). Recovery from the direct effects of the Taser should be almost instantaneous.

Advice for emergency care workers

Protective examination gloves should be worn.

The barbs are designed to penetrate the clothing or skin and direct injuries caused by Taser barbs entering the skin are usually minor. Ordinarily, the copper wire attached to the skin should be cut close to the barbs so as to avoid trailing wires. The wires are easily cut using paramedic shears, but particular care should be taken to avoid pulling on the wires with the barbs still attached to the skin.

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Barb Removal

Please refer to local arrangements/policies if these are already in place.

Where barbs are attached to clothing (with no penetration of the skin) they may gently be removed by pulling on the barbs.

Barb penetration to the eyes, face or genitalia should not have occurred, but if this is the case no attempt should be made to remove the barbs. These patients will require specialist removal at a hospital.

Removal of barbs from the skin of other body areas can be achieved by supporting the body with one hand placed away from the barb being removed then using the other hand, gently but swiftly pull on the shaft of the barb to remove.

NOTE:

In all cases where a Taser is used and the person is brought to custody, it is normal practice for the patient to be examined by the police surgeon. Alternatively, if there are any other factors which may indicate that the person is at higher risk then they are likely to be taken directly to hospital still under arrest where the barbs would be removed.

The patient might endure slight discomfort during the process of barb removal and witnessed verbal consent (by a police officer) should be obtained, making note of the police officer's identification number on the supporting patient report form.

Where a patient refuses treatment then normal procedures for patient refusal should be followed.

In cases where the barbs have already been removed, they should be treated as a biohazard and should be treated as any other 'sharp', taking note of where they have been stored**, as they are likely to be required as evidence.

****Barbs should be removed in the presence of a police officer, who should also provide a small evidence container for the sharps to be deposited in.**

If a Taser has been used on a patient with a pacemaker/ICD or other implanted device, then referral to hospital may be necessary. In this case information should be provided to the police officer. Information relating to any device implant site and distance to barb placement should be recorded on the patient report form.

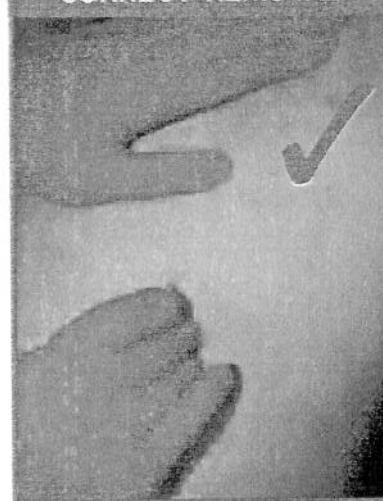
Has it been medically assessed?

The Defence Science and Technology Laboratory (DSTL) have undertaken a programme of medical assessment. An independent body called the Defence Scientific Advisory Council's Sub-Committee on the Medical Implications of Less Lethal technologies has considered the results of both these assessments.

Who will use the Taser?

Tasers are only currently used by authorised firearms officers, although the use of Tasers might become more widespread as time progresses.

CORRECT REMOVAL



INCORRECT REMOVAL



Risks

The Taser should only be aimed at the body area, but there is a specific risk of injury to the eye through penetration of a barb.

Penetration of a barb to other areas of the head and neck, and genital areas may also increase the level of injury (see notes on barb removal).

Sources:

ACPO - Operational Use of Taser / Operational Guidance
BBC News Website - How the stun gun works
<http://news.bbc.co.uk/1/hi/uk/1468188.stm>
Thames Valley Police Website/ Information Service
www.thamesvalley.police.uk/news_info/departments/Taser/

Acknowledgment:

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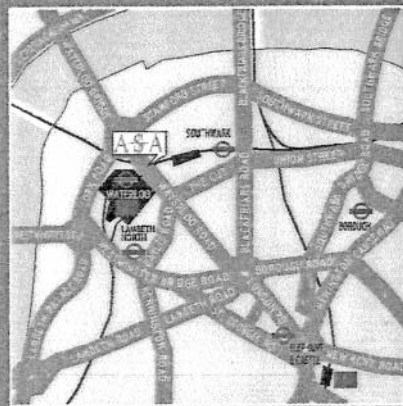
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