

## 15-Second Conducted Electrical Weapon Exposure Does Not Cause Core Temperature Elevation In Non-Environmentally Stressed Resting Adults

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### INTRODUCTION:

In many cases of sudden in-custody death, especially in cases of the excited delirium syndrome or certain illegal drug toxicities, the subjects are hyperthermic.

Since in many hyperthermia phenomena mortality is directly related to temperature and time at that temperature, it is speculated that worsening or prolonging the hyperthermia with a Conducted Electrical Weapon (CEW) discharge can lead to increased mortality.

The objective of this study is to determine whether a CEW discharge causes an increase in core body temperature in non-environmentally stressed resting adults.

### METHODS:

This was a prospective, observational study of adult human volunteers. Subjects swallowed a telemetric temperature recording capsule and had a data recording device attached to their waists.

The capsule sampled core body temperature every 15 seconds. After a waiting period of at least 30 minutes for equilibration, the subjects were exposed to a 15-second continuous discharge from the TASER X26<sup>®</sup> CEW.



### RESULTS:

A total of 21 exposure subjects were enrolled in the study.

There was no change in temperature from one minute before the exposure to one minute, 10 minutes, or 20 minutes after the exposure in the majority of patients.

One patient had a 0.2 degree increase at 20 minutes, three patients had a 0.1 degree decrease in temperature at 10 minutes or 20 minutes.



### CONCLUSIONS:

Our results do not show that a 15-second conducted electrical weapon discharge significantly affects core body temperature in non-environmentally stressed resting adults.

Our data suggests that theories about conducted electrical weapons contributing to hyperthermia are likely unfounded.