

Tasers could cause cardiac arrest, doctor says

Risk 'Not Insignificant'

Neal Hall, Canwest News Service

Published: Wednesday, May 21, 2008



Getty Images File Photo

VANCOUVER - The electrical shock from a Taser stun gun used by police could cause cardiac arrest, a Vancouver heart surgeon testified yesterday at a Taser inquiry.

"One can conclude the risk of death from a Taser is small but not insignificant," Dr. Michael Janusz, a heart surgeon at Vancouver General Hospital, told inquiry commissioner Thomas Braidwood.

"Tasers must be regarded as being capable of causing cardiac arrest," he said. "The device appears to be safer for all concerned, including bystanders, than guns and clubs, but its consequences are not trivial," he added. "Hearts don't simply stop."

Dr. Janusz said there has to be underlying heart disease or other contributing factors, such as lack of oxygen due to asphyxia or massive blood loss or severe metabolic abnormalities, such as acidosis or abnormal potassium levels.

He said first responders should be thoroughly trained in providing first aid and use of a defibrillator.

Another expert, Vancouver cardiologist Dr. Charles Kerr, made a similar submission.

Dr. Janusz also questioned the credibility of Taser International, the manufacturer of the Taser, which maintains that the devices could not cause cardiac arrest.

"This creates a problem with respect to the credibility of the company and could lead to difficulty in dealing with the company in matters of safety standards and training requirements," he said.

Dr. Kerr, who practises in the field of electrophysiology and is head of the Arrhythmia Management program at St. Paul's Hospital and the University of British Columbia, told the inquiry that a heart beats as the result of an electrical impulse. Of most concern about the use of the Taser is the electrical function of the heart ventricles, the main pumping chambers of the heart.

Dr. Kerr said there is a potential for harm and cardiac arrest.

"It is my opinion that there is a small possibility that an electrical discharge from a Taser dart could directly induce ventricular fibrillation," he said.

Presented by

NP Network
Blogs

He said the pain inflicted by the Taser causes intense muscle contraction, an increase in heart rate and adrenaline-like chemicals and sympathetic nerve discharge. "This, coupled with subsequent physical restraint of the individual, could also result in the inability to breath adequately and possibly a drop in oxygen levels and changes in the acid balance in the blood, which would make the patient more prone to ventricular arrhythmias."

While the Taser appears to be a much safer weapon than guns for both victims and police, police do not seem to recognize that Taser use could lead to death, Dr. Kerr said.

In such situations, he added, people should be ready to perform cardio-pulmonary resuscitation and use automatic external defibrillators.

"It would seem reasonable to recommend that an automatic defibrillator be readily available in such circumstances," Dr. Kerr said.