

**PE1367/B**

**OPINION for HEALTH PROTECTION SCOTLAND on 'Noise Mosquitoes'**

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As far as I can ascertain there is no case law on the subject of noise which is created by the use of mosquito devices in public places. Furthermore, there seems to be no legal literature on the subject.

I also have little knowledge of the extent or nature of the use of such devices but have a few observations to make.

**Law of nuisance**

It is possible that the noise which is created by a mosquito could affect nearby properties in which case it would be possible that those residents who are affected by the noise could raise an action against the operators of the device in nuisance.

However, at the outset, the pursuer would require to establish that he had a proprietary interest in the house etc which is affected by the noise -i.e. he would have to be owner occupier, tenant etc- *Hunter v Canary Wharf Ltd* [1997] AC 655. In other words, it is insufficient that the affected person simply lives in the house. It is, therefore, more likely that most young people would not have the requisite proprietary interest in order to raise an action in nuisance.

As to whether mosquito noise could rank as a nuisance, it is possible that such noise could constitute a private nuisance since one factor which requires to be taken into account by the courts in determining whether a given state of affairs ranks as a nuisance is whether the noise in question is inflicted intentionally. If the noise is created with the primary intention to annoy (as is the case here) the courts lean heavily in favour of deciding that a nuisance exists- *Christie v Davey* [1893] 1 Ch 316. The noise from a mosquito could, therefore, possibly rank as a nuisance in law.

**Human Rights Law**

It is now beyond dispute that noise pollution is capable of engaging Art 8(1) and Art 1 of Protocol No 1 of the European Convention of Human Rights which guarantee respect for family life and home and also the right to the peaceful enjoyment of one's property- see eg *Hatton v UK* [2003] EHLR 297. However, the cases which have been decided thus far indicate that the level of noise requires to be fairly severe before the Convention can be engaged. I have no knowledge about the degree of annoyance which the 'victims' of mosquito noise are normally subjected to but I would assume that it cannot be minimal if the device is to secure its object of compelling young people not to congregate in public places. Therefore, it may be the case that Art 8(1) is engaged. However, Art 8(2) of the Convention provides a defence for the state if the measures which give rise to the interference with art 8(1) is inter alia necessary in the interests of national security, public safety, for the prevention of disorder or crime. Generally, the courts accord the state wide discretion as to balancing the rights of the individual against those of the general public. However, the European Court of Human Rights has in *Dudgeon v the United Kingdom* (22nd October 1981, Series A no 45, p21 at para. 52) recognised that where government policy interferes with a particularly intimate aspect of

an individual's private life the margin of appreciation is reduced in scope. It could be argued, therefore, that noise, especially that which is deliberately aimed at people in general, does so interfere with an intimate aspect of like of the individual and, therefore, more store should be set by annoyance to the individual and less to the benefit of the public.

Of importance as far as human rights jurisprudence is concerned there is no need for the complainant to establish any proprietary interest before he can invoke his rights under Art 8.

Therefore, individuals who simply reside in an affected house could sue.

Law of negligence

**As far as individuals** who are simply using public places in order to congregate etc unless the noise in question inflicts some form of recognisable psychological injury (which is not likely to be the case) they would have no legal remedy.

**Health effects** (summarised by Michelle Reid, HPS)

The German Federal Institute for Occupational Safety and Health published a report on 'the Mosquito' in 2007<sup>1</sup>. The report highlighted the potential risks to very young children who may not be able to remove themselves from the vicinity of the noise. Young people may choose to move away from the source of the noise and adults do not hear it. The report also concluded that at frequency levels emitted from the device, there may be an onset of physical symptoms such as "dizziness, headache, nausea and impairment". HPS cannot comment on the time exposure time that may be required for this to occur.

The Institute of Sound and Vibration Research (ISVR) undertook a research paper on behalf of the Health and Safety Executive (HSE), published in 2001<sup>2</sup>. This report, in addition to a report by the Royal College of Paediatrics and Child Health<sup>3</sup>, relate to adult exposure levels. Accordingly, these reports cannot be taken as being conclusive in establishing whether the device is safe for children.

The ISVR reported stated that:-

"Amongst sensitive individuals, adverse subjective effects may appear shortly after very high frequency noise exposure. An increase in the permitted band level, taking into account a correction factor for duration of exposure, would speed up the onset of subjective effects in sensitive individuals, and probably involve a larger proportion of the exposed population – both of which is unacceptable".

The report calls for further research in to the effects of the dose-response relationship for 'adverse subjective effects' of high frequently noise.

From the literature reviewed and the findings from an online search (OVID, Medline etc), HPS cannot draw firm conclusions as to the likelihood of health effects on children from exposure to noise emitted by the 'mosquito' deterrent. However, as studies cited related to exposure in adults rather than children and that some adverse health effects,

particularly in susceptible individuals, was noted as being a possibility, HPS are unable to provide an evidence-based quantification of the risk posed by these devices to children's health.

In the event that alleged effects on individuals are being reported, we would recommend that an individual risk assessment be undertaken by the person's GP in the first instance.

1. *"Use of ultrasonic noise channels not entirely safe":*

["BAuA - Aktuelle Pressemitteilungen / Presse / Bundesanstalt für Arbeitsschutz und Arbeitsmedizin".](#) Baua.de. 2007-12-14.

2. *Damage to human hearing by airborne sound of very high frequency or ultrasonic frequency.* Prepared for the Health and Safety Executive by the Institute of Sound and Vibration Research

Accessed via [http://www.hse.gov.uk/research/crr\\_pdf/2001/crr01343.pdf](http://www.hse.gov.uk/research/crr_pdf/2001/crr01343.pdf)

Retrieved 10/11/2010

3. *Mosquito High Frequency Sound Deterrent and teenagers/children*

Royal College of Paediatrics and Child Health

Accessed via

[http://www.compoundsecurity.co.uk/sites/default/files/RCPCH%20\(Royal%20College%20of%20Paediatrics%20and%20Child%20Health\)%20Advocacy%20Report.doc](http://www.compoundsecurity.co.uk/sites/default/files/RCPCH%20(Royal%20College%20of%20Paediatrics%20and%20Child%20Health)%20Advocacy%20Report.doc)

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