



**Belgian Superior Health Council- opinion nr. 8415**

**Mosquito**

**Influence on people's health of high frequency sound, produced by Mosquito**

**Conclusions on the effects of sound produced by Mosquito on health.**

Mosquito produces a high frequency (16-20 kHz) pulsating sound, which in practise only is audible by youths. The sound pressure changes in function of the position of the observer to the devise: both the direction and the distance play a role. In closed spaces that combination is weaker than outside. When the devise is switched on, it goes through a 40 minute cycle whereby it is in a high stand for 10 minutes, 10 minutes in low stand and for the following 20 minutes it does not emit any noise. There are different setting methods (manual, timer, movement detector, sound detector), the choice of the setting also determines the length of the exposure.

Based on the available data, the Superior Health Council concluded that there is no danger for hearing loss for adults and youths as a consequence of exposure to the Mosquito sound. Aspecific complaints can arise, which is consistent with the function of the devise, e.g. annoyance in youths.

The effect on babies is unknown. Therefore long lasting exposure of small children and babies should be avoided.

There are no scientific studies on possible damages of the produced sound to the foetus. Taking into account the reflection and absorption of the high frequency sound in the air and the attenuating consequences of the different surfaces/tissue (air-mother's tissue- foetal water- ear foetus) it is unlikely that a lot of energy will be absorbed by the foetus' ear.

In terms of the impact on people inside surrounding buildings, high frequency sound will on the one hand be reflected strongly by walls, windows and other building materials, on the other hand it only has a limited depth of penetration. Consequently, effects on occupants (such as sleeping children/babies) should not be feared.