

# European Coalition for Vision (ECV)

Better Eye Health for Europe

## Statement on Damaging Effects of Smoking on Eye Health

11 December 2013

**We have concerns about the possibility of a link between nicotine and blindness and urge caution in the regulation of electronic cigarettes.**

Cigarette smoking has for many years been recognised as a major causative and contributory factor to vision impairment in Europe.<sup>i</sup> For this reason, as a sector we warmly welcomed the inclusion of an eye health warning on tobacco products by European Union institutions in Directive 2012/9/EU<sup>ii</sup> for its role in raising awareness about the links between smoking and blindness.<sup>iii</sup>

As a Coalition, we advocate for anything which can assist smokers to quit for good and we recognise that electronic cigarettes do not contain the majority of toxins found in conventional cigarettes. We do however urge caution in the approach taken to regulating electronic cigarettes. There are two studies pointing to the damaging effects of nicotine on eye health, when tested in isolation from the other toxins in cigarette smoke. Studies in mice have uncovered a link between nicotine and wet age related macular degeneration (wet AMD), through the effects of nicotine on the blood vessels in the macula, the most sensitive part of the retina which is used for detailed vision.<sup>iv</sup>

Nicotine was also shown to increase the risks of progression of wet AMD in passive smokers due to its effect on human retinal pigment epithelium (RPE) cells and in rats.<sup>v</sup> Although this link has not yet firmly established in human eyes, it is strongly suspected to have an adverse effect.

We have followed the recent debate about the safety of electronic cigarettes with interest and we welcome the adoption of harmonised controls on their sale and supply in Europe. Nevertheless, there are major questions over the impact of nicotine on eye health. The safety assessments (proposed in the latest proposal of the revision of the directive) must explicitly assess the impact of the proposed level of nicotine on eye health, prior to placing the product on the market.

Nicotine containing products must be regulated conservatively, in particular due to the cumulative effect of using electronic cigarettes over many years and their potential for use as a gateway product for traditional tobacco consumption. We therefore favour the adoption of a low threshold.

This will help to ensure that all potentially harmful products are regulated appropriately.

In addition, users of electronic cigarettes should receive a warning on the packaging that outlines that these products can have an adverse effect on an individual's health (in line with Directive 2012/9/EU), and they should be encouraged to cease smoking entirely as soon as they can ideally as part of a structured smoking cessation programme.

We also urge for the adoption of mechanisms to monitor these risks and call for further research to be done into the effects of nicotine on the human eye.

Due to the potential for adverse effects from passive smoking of nicotine, we also encourage Member States to implement restrictions on the use of electronic cigarettes in public spaces.

If you have any questions about this Statement please contact Mark Nevin from the European Council of Optometry and Optics (ECOO) on [mark@fodo.com](mailto:mark@fodo.com).

### **Description of European Coalition for Vision (ECV)**

The European Coalition for Vision is an alliance of professional bodies, patient groups, European NGOs, disabled people's organisations, trade associations representing suppliers and research groups. The ECV exists to raise the profile of eye health and vision, help prevent avoidable visual impairment, and secure an equal and inclusive society for those with irreversible blindness or low vision in Europe.

If you have any questions about the European Coalition for Vision, please contact Zoe Gray at the International Agency for the Prevention of Blindness (IAPB) [zgray@iapb.org](mailto:zgray@iapb.org).

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<sup>i</sup> Several studies have demonstrated the link between smoking and vision impairment, a sample of these is referenced below:

Evans JR, Fletcher AE and Wormald RPL (2005) 28,000 cases of age-related macular degeneration causing visual loss in people aged 75 years and above in the United Kingdom may be attributable to smoking, *British Journal of Ophthalmology* (89) 550-3

Kelly SP, Thornton J, Lyratzopolous G, et al (2004): Smoking and blindness strong evidence for the link but public awareness lags, *British Medical Journal* (328) 537-8

Dandekar SS, Jenkins SA, Peto T, Bird AC, Webster AR (2006) Does **smoking** influence the type of age related macular degeneration causing visual impairment?, *British Journal of Ophthalmology* (90) 724-7

Thornton J, Edwards, R, Mitchell P et al (2005): Smoking and Age-related macular degeneration: a review of association, *Eye* (9) 945-8

Kennedy DR, Spafford MM, Parkinson CM, Fong GT (2011) Knowledge about the relationship between smoking and blindness in Canada, the United States, the United Kingdom, and Australia: results from the International Tobacco Control Four-Country Project, *Optometry* (82) 310-7

<sup>ii</sup> Directive 2012/9/EU updated the written health warnings on tobacco products sold in the EU to include 'smoking increases the risk of blindness'

[http://ec.europa.eu/health/tobacco/docs/dir\\_2012\\_9\\_en.pdf](http://ec.europa.eu/health/tobacco/docs/dir_2012_9_en.pdf)

<sup>iii</sup> Joint Statement of RNIB, EBU, AMD Alliance International and Royal College of Ophthalmology 8 March 2013  
<http://www.rnib.org.uk/aboutus/mediacentre/mediareleases/mediareleases2012/Pages/pressrelease8march2012e.aspx>

<sup>iv</sup> Suner IJ, Cousins SW (2006) The Biology of Smoking and AMD, *Review of Ophthalmology*, available online at [http://www.revophth.com/content/d/retinal\\_insider/i/1303/c/25086/](http://www.revophth.com/content/d/retinal_insider/i/1303/c/25086/)

<sup>v</sup> Pons, M and Marin-Castano ME (2011) Nicotine Increases the VEGF/PEDF Ratio in Retinal Pigment Epithelium: A Possible Mechanism for CNV in Passive Smokers with AMD, *Investigative Ophthalmology and Vision Science*, (52) 3842-53