

0 Preamble

- 01 With 73,000 annual deaths in France, smoking is the leading cause of preventable death in 2014. All actions that reduce tobacco use is beneficial to public health.
- 02 Electronic cigarettes are new products most often containing nicotine. In France, in November 2013, it is estimated that half of smokers had tried to use e-cigarettes. In France, currently, e-cigarettes are not considered to be a tobacco product, a pharmaceutical product, or a medical device. However, health professionals should consider these new products in the treatment of tobacco dependence.
- 03 Approved treatments for smoking cessation - cognitive and behavioural therapies (CBT) and motivational interviewing, nicotine replacement therapies, and prescription drugs - remain the reference. In 2014, these interventions remain the first line treatments for smokers.
- 04 Electronic cigarettes are not considered a healthy product because they release, among others, irritant substances, and most often nicotine, an addictive substance.
- 05 Because of these irritating and addictive properties, and other unknown effects, health professionals should absolutely discourage experimentation with electronic cigarette by non-smokers - whether adult or adolescent - and to ex-smokers wishing to test these new products.
- 06 E-cigarettes, even without nicotine, reproducing the hand to mouth behaviour and oropharyngeal sensory effect (throat hit) close to that of smoking, could contribute to re-normalise tobacco in our society and promote initiation, especially among adolescents. It is therefore justified that the sale is prohibited to minors and that advertising is prohibited. Healthcare professionals should consider e-cigarettes with or without nicotine in the same way.
- 07 The Experts do not address in this review the particular issue of the rules to be adopted for the use of electronic cigarettes in public places, especially in the public or private health care premises, for some patients in psychiatric or palliative care units. An opinion on this topic would be needed to inform decisions.
- 08 The attitudes of physicians and other health professionals are not yet standardized in the absence of benefit-risk studies. This expert opinion is based primarily on listening to users and their practices. Proposed in April 2014 by expert practitioners in smoking cessation, this opinion shall evolve in response to new knowledge, insufficient as of today.

The main situations that health professionals may face are discussed by the Experts:

1. Smoker who plans to stop smoking by using electronic cigarettes → *inform about and propose effective and validated treatments, while remaining open at the request of the smoker who wish to use electronic cigarettes.*
2. e-cigarette user ('vaper') who still smoke some cigarettes → *provide help to eliminate the remaining cigarettes.*
3. Smoker attempting to quit tobacco who cannot eliminate the last cigarettes → *what is the place for electronic cigarettes ?*
4. Vaper who cannot quit electronic cigarettes → *health professionals can help.*
5. Ex-smoker, ex-vaper → *as for a non-smoker, should not use electronic cigarettes.*

Specific situations - pregnancy, surgery, heart disease in acute phase - justify a specific attitude.

Finally, health professionals should help avoid accidents related to misuse of e-liquid and electronic cigarettes.

1 What responses from health professionals to a smoker who questioned about the use of electronic cigarettes ?

- 10 As therapeutic support, electronic cigarettes can only be proposed to smokers who do not want to, or could not quit with validated treatments, or those who want to use, or who have already started to use e-cigarettes.
- 11 Validated smoking cessation treatments should always be presented and proposed as first-line treatment, while respecting the final choice of the smoker.
- 12 In the absence of combustion, current electronic cigarettes do not release carbon monoxide (asphyxiant gas), significant amounts of fine solid particles (pro-inflammatory substances), or carcinogens unlike tobacco smoke.
- 13 Despite the uncertainties, it is very likely that electronic cigarettes are much safer than traditional cigarettes and that switching from tobacco smoking to electronic cigarettes may result in harm-reduction, beneficial to health.
- 14 Electronic cigarettes may be proposed to smokers who do not want or are unable to quit or reduce their tobacco smoking with conventional interventions.
- 15 Smoking a few cigarettes while vaping greatly reduce the expected benefit of complete tobacco cessation. As in a reduction strategy using NRT, the health professional must have for objective the total cessation of tobacco use.
- 16 If the choice of a smoker is to use electronic cigarettes, the health professional must explain the need to correctly choose the appropriate device and e-liquid, to optimize the use at each step, and thus increase the chances of the smoker to completely stop cigarettes use.
 - 16.1 The first step is choosing a device that meets the standards and regulations. It must be suitable for the smoker in order to facilitate its use.
 - 16.2 The second step is the choice of an e-liquid that provides an oropharyngeal sensory effect (**throat hit**), and a relief, in just a few seconds.
 - 16.3 The third step is to avoid the nicotine withdrawal effect in the minutes following the use, by adapting the nicotine dosage to the needs.
- 17 The needs for a product whose flavour, oropharyngeal sensory effect, and the dose of nicotine delivered are well adapted to the tastes of the smoker is common to all oral nicotine replacement products and electronic cigarettes. If this goal is not reached, alternatives to tobacco, whatever they are, are often little or not used, then abandoned.
- 18 Healthcare professionals should alert users to read precautions for handling of the products. For the record, the nicotine solution of e-liquid is toxic, especially by contact and absorption, and must be handled with extreme caution, on a washable plane, sitting quietly in order to avoid spilling. To protect children, e-liquids must be stored in a closed place.

2 With a vaper that combines electronic cigarettes and tobacco

- 20 The maintenance of tobacco consumption, even of a very low number of cigarettes, is likely to maintain a high level of dependence and to maintain the toxicity of tobacco smoke that exists even for low consumption.
- 21 Concomitant use of tobacco and electronic cigarettes is an unstable situation that often leaves the user unsatisfied, immediately or after a period of use. This often exposes them to return to exclusive tobacco use.
- 22 Harm-reduction is optimal with electronic cigarettes only if complete smoking cessation is obtained.
- 23 The goal of complete smoking cessation is the priority. The complete cessation of nicotine consumption is only envisaged as a second step, as in validated strategies of smoking reduction with nicotine replacement therapy.
- 24 In case of persistent tobacco use in a vaper, it is recommended to consider increasing the doses of nicotine by adding nicotine replacement therapy (patch or oral form), or using higher dosage of nicotine in e-liquids, until total tobacco use is obtained.

- 25 A too early and rapid decrease of nicotine doses should be discouraged and consider this decrease only after several weeks of complete cessation of tobacco use.

3 In a smoker trying to quit who still smokes some cigarettes

- 30 Some smokers trying to quit still smoke some cigarettes despite a dose adjustment of NRT or the use of prescription drugs to quit smoking. In the current state of knowledge, to eliminate the last tobacco cigarettes, the use of an electronic cigarette may be an option.

4 In an exclusive vaper (irrespective of whether they ask about cessation)

- 40 As for long-term NRT users, prolonged use of electronic cigarettes is preferable to smoking and any attempt to reduce its use should only be conducted if it is considered that there is no significant risk of relapse to smoking.
- 41 Exclusive vapers often decrease their nicotine dosage month after month before reaching a plateau of lower nicotine consumption.
- 42 Unlike with cigarettes, the pharmacokinetics of nicotine delivery by an electronic cigarette will depend on its usage. Regular electronic cigarette use during the day regularly provides nicotine; irregular use (like smoking during the course of the day) may reproduce a similar nicotine delivery as with tobacco cigarettes.
- 43 Concerning the flavours of e-liquids, in the absence of any medical data, there is no specific recommendation, except for allergic subjects to not use flavourings classified as allergens
- 44 The respective effects of the hand to mouth behaviour and oropharyngeal sensory effect (throat hit) in maintaining electronic cigarette use is unclear and should be investigated.
- 45 There are no data on the long-term use of electronic cigarettes, which lead health professionals to advise stopping their use, as long as there is no longer a significant risk of relapse to tobacco use.
- 46 After complete nicotine withdrawal and if the risk of relapse to smoking appears to be low, it is best on medical grounds to totally stop electronic cigarette use rather than continuing to use an electronic cigarette without nicotine.

5 In an ex-smoker, ex-vaper

- 50 After discontinuation of tobacco and electronic cigarettes use, there is still a lifetime risk for relapse to smoking or vaping in subjects who were dependent.
- 51 In case of immediate relapse situation, it is better to take a nicotine replacement product or to use an electronic cigarette than relapse to tobacco use. However, no relapse is desirable !
- 52 An ex-smoker must stay away from trying electronic cigarettes just out of curiosity. This can indeed reinstate tobacco dependence.

6 Special situations for certain subjects

- 60 To a women vaper who learns she is pregnant, reassurance should be delivered, in the absence of any particular known risk as of today. Nicotine replacement therapy, which can be used in pregnant women according to its licence in France, is always preferable. It is especially recommended not to smoke.
- 61 A smoking pregnant woman, in the absence of data on the health risks of e-cigarettes, should be discouraged to use electronic cigarettes and highly recommend to stop smoking with the help of NRT, if necessary. Carbon monoxide from tobacco smoke is responsible for most of the toxicity on foetal growth effect.
- 62 A patient who must have surgery should be discouraged to use electronic cigarettes, but this use should not be interpreted as a breaking of the fast by anaesthetists.
- 63 A patient with a recent acute coronary event (within a month) who smokes, and in the absence of data in this context, should currently be discouraged to use electronic cigarettes and recommend to use NRT, which has already been assessed in this population.



- 64 In a non-smoker, electronic cigarettes should always be firmly discouraged.
- 65 In a patient treated with certain drugs, smoking cessation modifying their metabolism, it is justified to propose a reassessment of long-term used treatments. Specific drug interactions with the use of electronic cigarettes are unknown.

7 Accident when handling electronic cigarettes

- 70 One 10 ml bottle of 10 to 20 mg/ml of nicotine contains up to 200 mg of nicotine. The lethal dose for a non-smoker (nicotine naïve) is stated as 60 mg. Although the lethal dose is probably much higher, caution should be exercised with nicotine solutions in e-liquids.
- 71 All e-liquid bottles containing nicotine must bear the harmful logo with a skull, and a risk warning, have a child-resistant cap, and a warning triangle in 3D, identifiable by touching by the visually impaired.
- 72 E-liquid bottles look like some bottles of eye drops, e-liquids should never be stored in a medicine cabinet, but in a secure location non accessible to children.
- 73 E-liquid leaflets must inform on precautions. In case of spilling, it must be wiped - with protective gloves and paper towels – and the paper discarded with the regular garbage.
- 74 In case of skin contact, rinse thoroughly with water as soon as possible and wipe with a paper towel.
- 75 In case of eyes contact, they should be flushed for one minute under running water. If the eye is red, when in doubt, consult a physician. Wearing eye protections when refilling minimizes ocular hazard. Always read the manufacturers' and resellers' instructions.
- 76 If swallowed, rinse the mouth, and gargle and spit at least five times. Call a poison control centre, have the bottle on hand to answer the questions of the respondent.



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These recommendations are derived from French experts from the OFT obtained in April 2014 after a progressive consensus research by the Delphi method.

These recommendations of spring 2014 will have a short life and will rapidly integrate advances in the understanding of e-cigarettes.

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