**Q & A on FIRS statement**

**Q: What is the situation with advertising, sales, regulation, etc. in USA, EU, other regions?**

It is highly variable, and Europe is a perfect example. Some European nations apply many regulatory domains whereas others apply few. Portugal has regulations on child safety, advertising, promotion, sponsorship, health warning labelling, ingredients, flavours, minimum age, nicotine volumes and concentrations, reporting, safety, sale, tax and vape-free areas. In contrast, Switzerland has no regulation but prohibits sale of nicotine-containing devices. Norway recently lifted its ban on electronic cigarettes, while Belgium, Austria and Turkey prohibit the sale of all products.

In 2016, only twenty-three countries had implemented minimum age-of-purchase policies (Kennedy RD, et al. Tob Control. 2017;26:440-5). It is also important to note that a law on a minimum age-of-purchase has little or no effect if it is not enforced. That is why we strongly recommended that “the sale of electronic cigarettes to adolescents and young adults must be prohibited by all nations, and those bans must be enforced.”

**Q: What is the evidence that that these recommendations will help young people?**

There will be only a modest, immediate effect, other than hopefully preventing the next generation from becoming addicted to nicotine. The addictive power of nicotine and its adverse effects in youths should not be underestimated. The tobacco industry recognized that youth, often referred as “replacement smokers” or “learners” in industry documents, are their critical market. The US National Academies of Sciences, Engineering, and Medicine found substantial evidencethat e-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults“ (National Academies of Sciences, Engineering, and Medicine. 2018. *Public health consequences of e-cigarettes.* Washington, DC: The National Academies Press).

We are still determining the long-term health effects of electronic cigarettes, but past claims of safety may have been premature. Current evidence indicates that exposure of potentially harmful ingredients from electronic cigarettes is significantly lower than combustible cigarettes (National Academies of Sciences, Engineering, and Medicine. 2018). However, it does not mean that electronic cigarette aerosols are “harmless vapor.” A recently published study showed that proteomic analyses of lavage samples collected from healthy non-smokers, smokers and vapers who used the product for more than six-months clearly showed that electronic cigarette vapors exert marked and extensive biological effects on human airways, which led the authors to conclude electronic cigarettes “should not be prescribed as a safe or harmless tobacco alternative.” (Ghosh A, et al. Am J Respir Crit Care Med.2018. In press).

**Q: Tobacco companies are ‘cleaning up’, they’re not like that anymore?**

There is very little evidence to support that claim. Electronic cigarette manufacturers are using many of the same strategies as tobacco companies have used in the past to sell “light” or “smoke-free” products. The evolution is clear – they are being marketed as the next “healthier” cigarette (US Department of Health and Human Services. *E-cigarette use among youth and young adults. A Report of the Surgeon General.* Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016). In reality, the tobacco industry has long relied on nicotine addiction as a strategy for creating and retaining customers.

There are many examples of tobacco companies creating or purchasing electronic cigarette companies or brands. The brand VUSE is owned by RJ Reynolds Vapor Company, a subsidiary of the tobacco giant Reynolds America, and British American Tobacco, the largest tobacco company in the Europe, launched Vype. The electronic cigarette product Blu was purchased from Lorillard, which was bought by RJ Reynolds, then sold to Imperial Tobacco. Altria, previously known as formerly Phillip Morris USA, owns MarkTen.

The World Health Organization, professional respiratory societies, and others are particularly concerned about a newer “nonprofit and independent” organization, the Foundation for a Smoke-Free World, which in fact is funded by the Philip Morris International to the extent of $80 million annually for 12 years (<http://www.who.int/mediacentre/news/statements/2017/philip-morris-foundation>), a cynical attempt by the company to continue their efforts to expand nicotine addiction and influence the world in favor of alternatives, like electronic cigarettes.

**Q: What is the situation with rates of use in children/adolescents in USA, EU, other regions?**

That is one of the issues we are trying to address. In many nations and regions, data are lacking and is why we recommended that routine surveillance and surveys concerning combustible and electronic cigarette use be performed to better understand the scope and health threat of tobacco products to youths.

Here in North America, electronic cigarette use has exploded just during the past few months, particularly Juuls, a newer electronic nicotine delivery device that is small, designed to be concealed, and delivers a nicotine content much higher than “typical” electronic cigarettes. Their popularity is rapidly growing on school campuses in North America, as evidenced by numerous recent reports in the American national news media.

This phenomenon ***will*** spread worldwide. It would be naïve to believe otherwise.

**Q: Could your recommendations have unintended consequences for adult smokers who might want to use e-cigarettes to help them quit?**

I suppose that is possible, but as the US National Academies of Sciences, Engineering, and Medicine concluded earlier this year, there is limited evidence that e-cigarettes are effective aids to promote smoking cessation. There are very few controlled clinical trials (Bullen C, et al. Lancet 2013;382:1629-37). The long-term effectiveness of electronic cigarettes as a smoking cessation strategy was rather poor.

More worrisome, two recent studies indicate that electronic cigarettes have the opposite effect and may be a *barrier to smoking cessation* (Kulik MC, et al. Am J Prev Med. 2018; in press; Kalkhoran S, et al. Lancet Respir Med. 2016;4:116-28).