

# PATTERNS OF USE BEHAVIORS IN A SAMPLE OF JAPANESE “HEAT-NOT-BURN” TOBACCO PRODUCT (IQOS®) USERS

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## BACKGROUND

Innovative potential reduced-risk tobacco-/nicotine-containing products are being developed with the aim of advancing tobacco harm reduction efforts and reducing the risk of smoking-related diseases compared with continued smoking. An example is Philip Morris International’s novel heat-not-burn tobacco product, the Tobacco Heating System (commercialized under the brand name *IQOS*). The potential beneficial individual and public health impact of these products ultimately depends upon smokers’ acceptance to completely switch to them instead of continuing to smoke cigarettes. Thus, post-market monitoring is important to evaluate actual use.



## METHODS

The aim of this study is to assess the use of *IQOS* in real-world conditions and describe patterns of use behaviors in Japanese current *IQOS* users following commercialization of the product.

Here, we describe data from the first year (2016-2017) of a repeated online survey planned for three years. This includes **N = 2,000** participants from a random sample of current *IQOS* users in Japan more than 20 years old and registered in PMI’s database.

## SAMPLE

	n	% [95% CI]		n	% [95% CI]
Mean age (years)	2000	38.5 [38.0-39.0]	Highest education	Junior High School	124 6.2 [5.1-7.4]
Age group*	20-29	420 21.0 [19.2-22.9]		High School	726 36.3 [34.1-38.5]
	30-39	736 36.8 [34.6-39.0]		College/University	1135 56.8 [54.5-59.0]
	40-49	568 28.4 [26.4-30.5]	Occupation	Don't know/Not applicable	15 0.8 [0.4-1.3]
	50+	276 13.8 [12.3-15.4]		Farming/Agriculture/Fishery	8 0.4 [0.1-0.8]
Sex *	Male	1632 81.6 [79.8-83.3]		Self-employed/Small private business	329 16.5 [14.8-18.2]
	Female	368 18.4 [16.7-20.2]		Clerical employee	284 14.2 [12.6-15.9]
				Manual employee	268 13.4 [11.9-15.0]
				Managing profession	414 20.7 [18.9-22.6]
				Housewife	84 4.2 [3.3-5.2]
				Student	37 1.9 [1.3-2.6]
				Retired/Unemployed	26 1.3 [0.8-1.9]
				Don't know/Not applicable	550 27.5 [25.5-29.6]

## IQOS USE IN THE SAMPLE

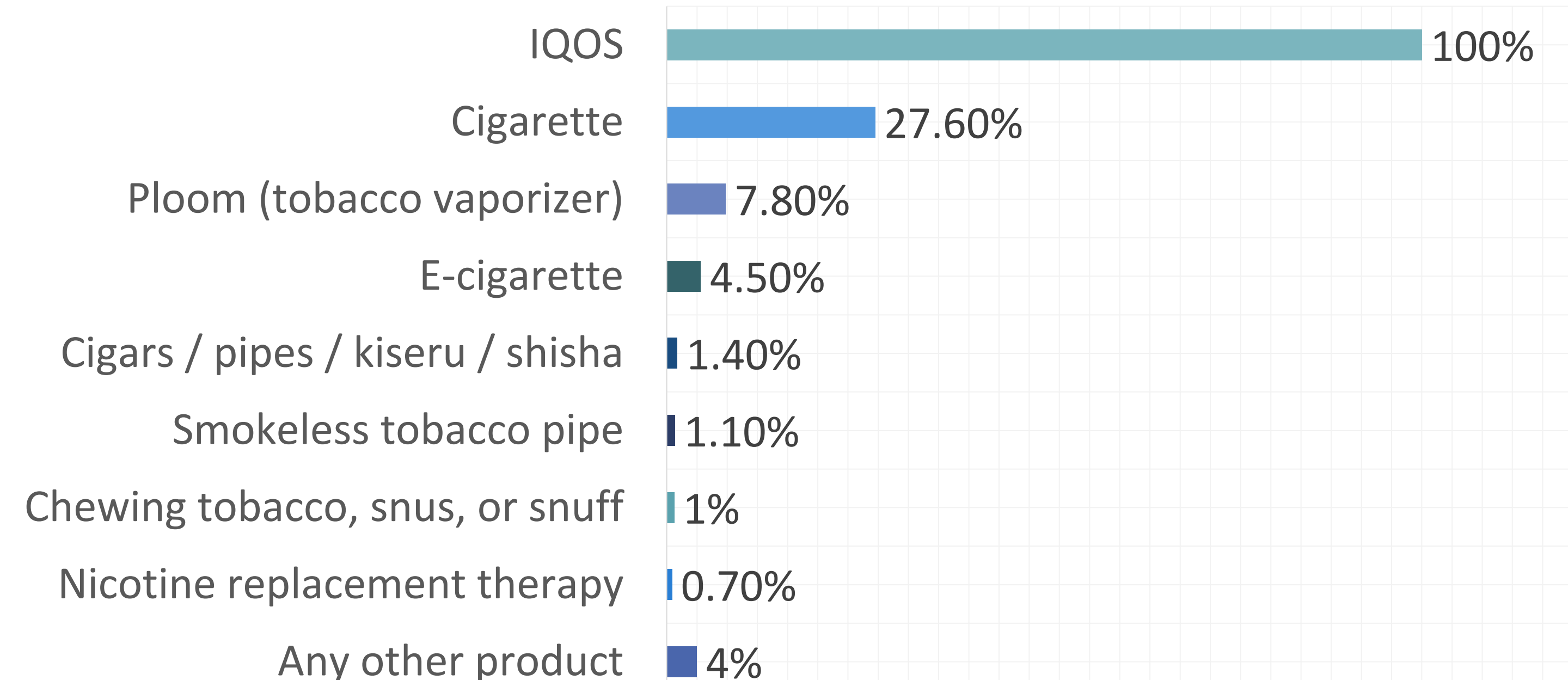
**74.8%** [72.7-76.7%] started using *IQOS* within 12 months prior to the survey, while 25.2% [23.3-27.3%] started more than 12 months prior. Those who started more than a year prior to the survey had started *IQOS* use on average 1.5 years prior to the survey.

**98%** *IQOS* users were previously using other tobacco-/nicotine-containing products.

**52.1%** [49.1-55.1%] quit cigarette smoking within the 12 months prior to the survey and had switched to *IQOS*.

## PREVALENCE OF USE

### Prevalence of current tobacco-/nicotine-containing products use among *IQOS* users (N = 2,000)



## PATTERNS OF USE

Participants with valid responses (N = 1,946)	n	% [95%CI]	Mean consumption per day (IQOS HeatSticks) [95%CI]	Mean consumption per day (cigarettes) [95%CI]
<b>Single product use (100% IQOS use)</b>				
IQOS	1234	63.4 [61.2-65.6]	16.8 [16.3-17.3]	-
<b>Dual product use</b>				
IQOS + Cigarette	400	20.6 [18.7-22.5]	13.8 [12.9-14.6]	11.0 [10.1-12.0]
IQOS + E-cigarette	34	1.7 [1.2-2.5]	16.7 [14.1-19.3]	-
IQOS + Other products	96	4.9 [4.0-6.0]	17.9 [16.2-19.5]	-
<b>Poly product use</b>				
IQOS + Cigarette + Other products	142	7.3 [6.1-8.6]	12.8 [11.3-14.2]	12.8 [11.1-14.5]
IQOS + Other products (poly use without cigarette)	40	2.1 [1.4-2.8]	14.6 [12.2-17.0]	-

## CONCLUSIONS

These data show that the majority of Japanese *IQOS* consumers in this sample were former smokers switching to exclusive *IQOS* use. *IQOS* users who continued to smoke had lower average daily consumption of cigarettes compared to a national average of 15.5 cigarettes in Japanese smokers<sup>1</sup>. Multiple product use may be part of a new user’s strategy for smoking reduction on a trajectory to quit smoking and switch to exclusive use of a novel potential reduced-risk product<sup>2,3</sup>. Therefore, further data is needed to closely monitor trends in multiple product use as *IQOS* use progresses within a population.

References: <sup>1</sup> The Japan National Health and Nutrition Survey 2015 [Available from: [http://www.mhlw.go.jp/bunya/kenkou/kenkou\\_eiyuu\\_chousa.html](http://www.mhlw.go.jp/bunya/kenkou/kenkou_eiyuu_chousa.html)]. <sup>2</sup> Abrams et al. Managing nicotine without smoke to save lives now: Evidence for harm minimization. *Prev Med.* 2018. <sup>3</sup> Maglia et al. Dual use of electronic cigarettes and classic cigarettes: a systematic review. *Addict Res Theory.* 2017;26(4):330-8.