

Results of omnibus surveys with tobacco-related questions conducted in Ukraine in 2013-2019

All these surveys were conducted by the Kiev International Institute of Sociology with a sample of 2000+ adult dwellers of Ukraine aged 18 years or older. Questions for determining the smoking status were based on the GATS questionnaire.

Prevalence of smoking-related behaviors

While some decline in the overall prevalence of smoking among men was observed, mainly between 2013 and 2014 (see Table 1), there were no statistically significant changes in the prevalence of daily and current smoking among either men or women between 2013 and 2019.

The percentage of former smokers has also not changed significantly; however, it increased in 2019, and, among women, it became significantly higher than in 2014. There was an overall upward trend among women in the percentage that former smokers constitute among all those who have ever smoked daily from 13.8% in 2013 to 15.6% in 2014, to 18.7% in 2015, to 19.3% in 2017 and to 26.6% in 2019. The corresponding percentage among men was more stable in the range of 19-23%.

Table 1. Proportions of daily, current and former smokers among Ukrainian men and women, results of 2013, 2014, 2015, 2017, and 2019 omnibus surveys: percentages and 95% confidence intervals

	Year	Daily smokers	Current smokers	Ex-daily smokers
Men				
	2013	44.6 (41.4-47.9)	48.0 (44.8-51.3)	12.7 (10.5-14.8)
	2014	42.0 (38.8-45.2)	45.2 (41.9-48.4)	10.7 (8.7-12.7)
	2015	42.4 (39.2-45.6)	45.0 (41.8-48.2)	11.8 (9.7-13.9)
	2017	41.2 (38.0-44.4)	44.9 (41.7-48.1)	10.6 (8.6-12.6)
	2019	42.2 (39.0-45.4)	45.0 (41.8-48.3)	13.4 (11.2-15.6)
Women				
	2013	11.2 (9.3-13.0)	12.8 (10.8-14.7)	1.8 (1.0-2.6)
	2014	9.3 (7.6-11.0)	10.9 (9.1-12.7)	1.7 (0.9-2.5)
	2015	9.0 (7.3-10.7)	10.6 (8.7-12.4)	2.1 (1.2-2.9)
	2017	9.3 (7.6-11.0)	11.2 (9.4-13.1)	2.5 (1.6-3.4)
	2019	9.4 (7.7-11.2)	10.7 (8.9-12.5)	3.7 (2.6-4.8)
All				
	2013	26.2 (24.3-28.1)	28.6 (26.7-30.6)	6.7 (5.6-7.8)
	2014	24.0 (22.1-25.9)	26.3 (24.4-28.2)	6.2 (5.2-7.3)
	2015	24.1 (22.2-25.9)	26.1 (24.2-28.0)	6.5 (5.4-7.5)
	2017	23.7 (21.9-25.6)	26.4 (24.5-28.3)	6.1 (5.1-7.2)
	2019	24.2 (22.4-26.1)	26.2 (24.3-28.1)	8.1 (6.9-9.3)

To consider whether greater changes in smoking prevalence occurred in particular age groups, we conducted the stratified analysis in groups of people aged 30 or younger and those who are older than 30 (Table 2). No changes in the prevalence of daily smoking among older men and women were seen between 2013 and 2019. However, the prevalence of daily smoking among people aged 30 years or younger declined substantially between 2013 and 2017 from 54% to 40% among men (and this reached the level of statistical significance) and from 20% to 13% among women.

The proportions of ex-daily smokers (as mentioned above) slightly increased among women, and this is seen among both younger and older women. However, the observed changes were not statistically significant due to small sample size. Opposite to this, the percentage of ex-smokers among men does not show any clear trend, both in younger and older age groups.

Table 2. Proportions of daily smokers and former daily smokers in February 2013, February 2017 and February 2019, by gender and age group: percentages and 95% confidence intervals

Gender	Age	Year	N	Daily smokers	Ex-daily smokers
Men					
	18-30	2013	252	53.6 (47.4-59.7)	6.3 (3.3-9.4)
		2017	238	40.3 (34.1-46.6)*	3.8 (1.4-6.2)
		2019	215	42.8 (36.2-49.4)	5.1 (2.2-8.1)
	>30	2013	662	41.2 (37.5-45.0)	15.1 (12.4-17.8)
		2017	679	41.4 (37.7-45.1)	13.0 (10.4-15.5)
		2019	701	42.1 (38.4-45.7)	16.0 (13.3-18.7)
Women					
	18-30	2013	245	20.0 (15.0-25.0)	2.9 (0.8-4.9)
		2017	234	12.8 (8.5-17.1)	4.3 (1.7-6.9)
		2019	201	11.4 (7.0-15.8)	6.5 (3.1-9.9)
	>30	2013	872	8.7 (6.8-10.6)	1.5 (0.7-2.3)
		2017	884	8.5 (6.6-10.3)	2.1 (1.2-3.1)
		2019	910	8.9 (7.1-10.8)	3.1 (2.0-4.2)
All					
	18-30	2013	497	37.0 (32.8-41.3)	4.6 (2.8-6.5)
		2017	472	26.7 (22.7-30.7)*	4.0 (2.3-5.8)
		2019	416	27.6 (23.3-31.9)	5.8 (3.5-8.0)
	>30	2013	1534	22.8 (20.7-24.8)	7.4 (6.1-8.7)
		2017	1563	22.8 (20.7-24.9)	6.8 (5.6-8.1)
		2019	1611	23.3 (21.3-25.4)	8.7 (7.3-10.1)

* - the difference with the previous measurement is statistically significant at 95% confidence level

Intensity of smoking

Average numbers of cigarettes smoked per day (Table 3) have not changed significantly in 2013-2019 and remained at the level of 16-17 cigarettes among men and 10-12 cigarettes among women who reported daily smoking.

Table 3. Average number of cigarettes smoked per day by Ukrainian male and female daily smokers in 2013-2019: numbers and 95% confidence intervals

	Men	Women
2013	16.8 (16.1-17.5)	10.5 (9.5-11.4)
2014	16.6 (15.8-17.3)	12.1 (10.8-13.5)
2015	17.1 (16.5-17.7)	12.3 (11.2-13.5)
2017	16.1 (15.4-16.8)	11.7 (10.4-13.1)
2019	16.7 (15.9-17.5)	12.1 (10.8-13.3)

Specific tobacco or nicotine delivery products

Exploratory questions to estimate the prevalence of smoking of various tobacco and nicotine delivery products were posed to daily cigarette smokers in 2017 and to all survey participants in 2019 (see Table 4).

Flavored cigarettes

Whereas in 2017 smoking of flavored cigarettes on a regular basis (at least within last month) was significantly higher among women (18% among women smokers vs. 8% of men smokers), in 2019 the percentage of men-smokers who used to smoke flavored cigarettes increased to the same level as among women.

Among women-smokers, the proportion of those who smoked flavored cigarettes within the last year but not last month decreased from 20% to 8%.

Additionally, 15% of men and 9% of women identified as current non-smokers have experience of smoking flavored cigarettes. Among young people aged 30 years or younger who identify themselves as non-smokers, almost 5% smoked flavored cigarettes within the last month and 8% within the last year.

E-cigarettes

Experience of smoking e-cigarettes was reported by about 15-20% of men and women current smokers and about 5% of current non-smokers, both among men and women. No significant changes between 2017 and 2019 have been revealed.

Water-pipe

The proportion of regular water-pipe users among smokers increased and reached 7-8% among both men and women. Additionally, about 20% of men and women smokers have experience of less regular water-pipe use. Moreover, among current non-smokers, about 13% of men and 9% of women have experience of water-pipe use. In 2019, almost 2% of current non-smokers report last month water-pipe smoking which is higher than among current smokers two years ago.

Heat-not-burn

New heat-not-burn products have ever been used by 2-6% of men and women, both current smokers and non-smokers. Regular (last week) use was reported by 0.6% of daily cigarette smokers.

Table 4. Percentage of current smokers and non-smokers who reported using various tobacco and nicotine delivery products within last 7 days, last 30 days, last 12 months or ever in a lifetime, by gender and year, 2017 and 2019

Tobacco and nicotine delivery products	Gender	Period of time	Current smokers	Current smokers	Current non-smokers
			2017	2019	2019
Flavored cigarettes	Men		N=376	N=408	N= 486
		Last 7 days		9.6 (6.7-12.4)	1.2 (0.3-2.2)
		Last 30 days	7.7 (5.0-10.4)	8.6 (5.9-11.3) ^{&}	1.9 (0.7-3.1)
		Last 12 months	10.6 (7.5-13.8)	10.0 (7.1-13.0)	2.3 (0.9-3.6)
		Earlier	19.1 (15.2-23.1)	15.7 (12.2-19.2)	10.3 (7.6-13.0)
		Never	62.2 (57.3-67.1)	56.1 (51.3-60.9)	84.4 (81.1-87.6)
	Women		n=103	N=118	N= 966
		Last 7 days		12.7 (6.7-18.7)	0.5 (0.1-1.0)
		Last 30 days	18.3 (10.8-25.7)	8.5 (3.4-13.5)	0.7 (0.2-1.3)
		Last 12 months	20.2 (12.5-27.9)	7.6 (2.8-12.4)*	0.8 (0.3-1.4)
		Earlier	20.2 (12.5-27.9)	16.1 (9.5-22.7)	7.1 (5.5-8.8)
		Never	41.3 (31.9-50.8)	55.1 (46.1-64.1)	90.8 (89.0-92.6)
e-cigarettes	Men		n=376	N=406	N=480
		Last 7 days		1.7 (0.5-3.0)	0.0 (0.0-0.0)
		Last 30 days	1.9 (0.5-3.2)	2.5 (1.0-4.0)	0.2 (0.0-0.6)
		Last 12 months	5.6 (3.3-7.9)	4.4 (2.4-6.4)	0.8 (0.0-1.6)
		Earlier	9.6 (6.6-12.5)	6.7 (4.2-9.1)	3.3 (1.7-4.9)
		Never	83.0 (79.2-86.8)	84.7 (81.2-88.2)	95.6 (93.8-97.5)
	Women		n=103	N=119	N=971
		Last 7 days		2.5 (0.0-5.3)	0.1 (0.0-0.3)

	Last 30 days	2.9 (0.0-6.2)	3.4 (0.1-6.6)	0.3 (0.0-0.7)
	Last 12 months	3.9 (0.2-7.6)	4.2 (0.6-7.8)	0.3 (0.0-0.7)
	Earlier	8.7 (3.3-14.2)	8.4 (3.4-13.4)	2.4 (1.4-3.3)
	Never	84.5 (77.5-91.5)	81.5 (74.5-88.5)	96.9 (95.8-98.0)
Water-pipe	Men	n=376	N=408	N=476
	Last 7 days		2.9 (1.3-4.6)	0.0 (0.0-0.0)
	Last 30 days	1.3 (0.2-2.5)	3.9 (2.0-5.8) ^{&}	1.7 (0.5-2.8)
	Last 12 months	7.7 (5.0-10.4)	7.8 (5.2-10.5)	1.9 (0.7-3.1)
	Earlier	13.8 (10.3-17.3)	12.0 (8.9-15.2)	9.2 (6.6-11.8)
	Never	76.6 (72.3-80.9)	73.3 (69.0-77.6)	87.2 (84.2-90.2)
	Women	n=103	N=119	N=975
	Last 7 days		1.7 (0.0-4.0)	0.3 (0.0-0.7)
	Last 30 days	1.0 (0.0-2.9)	5.9 (1.7-10.1) ^{&}	1.1 (0.5-1.8)
	Last 12 months	6.8 (1.9-11.7)	10.9 (5.3-16.5)	1.0 (0.4-1.7)
	Earlier	10.7 (4.7-16.6)	11.8 (6.0-17.6)	6.1 (4.6-7.5)
	Never	81.6 (74.1-89.0)	69.7 (61.5-78.0)	91.5 (89.7-93.2)
Heat-not-burn products	Men		N=406	N=485
	Last 7 days		0.7 (0.0-1.6)	0.0 (0.0-0.0)
	Last 30 days		0.7 (0.0-1.6)	0.2 (0.0-0.6)
	Last 12 months		1.5 (0.3-2.7)	0.8 (0.0-1.6)
	Earlier		2.0 (0.6-3.3)	2.5 (1.1-3.9)
	Never		95.1 (93.0-97.2)	96.5 (94.9-98.1)
	Women		N=118	N=977
	Last 7 days		0.8 (0.0-2.5)	0.2 (0.0-0.5)
	Last 30 days		2.5 (0.0-5.4)	0.1 (0.0-0.3)
	Last 12 months		2.5 (0.0-5.4)	0.6 (0.1-1.1)
	Earlier		0.0 (0.0-0.0)	1.3 (0.6-2.0)
	Never		94.1 (89.8-98.3)	97.7 (96.8-98.7)

[&] - is significantly higher when the sum of those who selected "last week" and "last month" options is compared to the previous measurement.

Tobacco pack health warnings

In each survey conducted in 2013-2019, between 387 and 429 cigarette packs demonstrated by the respondents were examined (Table 5). Packs with Ukrainian health warnings constituted from 88% in 2014 to 98% in 2017.

In all years of surveys, packs produced in each of the neighboring countries and duty-free packs with health warnings in English constituted 0-3% of the total number of examined packs. The overall percentage of potentially illicit cigarettes smoked in Ukraine constituted between 2% in 2017 and 12% in 2014.

Table 5. Distribution of tobacco pack health warnings in the sample of packs demonstrated by the survey participants; data from 2013, 2014, 2015, 2017, and 2019 omnibus surveys

Country of origin/language of health warning	2013		2014		2015		2017		2019	
	N	%	N	%	N	%	N	%	N	%
Ukraine	352	89.8	351	88.3	371	95.8	383	97.7	403	93.8
Russian Federation	8	2.2	7	1.7	10	2.6	1	0.3	10	2.3
Belarus/Russian	4	1.0	10	2.5	0	0.0	3	0.7		
Moldova	0	0.0	2	0.5		0.0	2	0.6	8	1.8
English									9	2.1
Other (English?)	27	7.0	28	7.1	6	1.6	3	0.7		
Total	392	100.0	398	100.0	387	100.0	392	100.0	429	100.0

Smoke-free policies and tobacco smoke exposures

Although in 2017 the proportion of visitors of catering facilities who observed smoking significantly declined, a much higher proportion of respondents surveyed in 2019 witnessed smoking of both cigarettes and water-pipes in such facilities (Table 6).

Table 6. Percentage of respondents who observed smoking in restaurants, cafes or bars among those who visited such facilities within 30 days before the survey

	2013 N=671	2015 N=788	2017 N=630	2019 N=964
Observed smoking	27.9 (24.5-31.3)	32.2 (28.9-35.4)	16.3 (13.4-19.1)*	38.5 (35.4-41.6)*
- of cigarettes			12.0 (9.5-14.5)	19.6 (17.1-22.1)*
- of water-pipe			4.3 (2.7-5.8)	12.8 (10.7-14.9)*
- of e-cigarettes				5.5 (4.1-6.9)
- of heat-not-burn				1.7 (0.9-2.5)

* - the difference with the previous measurement is statistically significant at 95% confidence level

Attitude towards tobacco control policies

Respondents were asked about their attitude towards several tobacco control policies: (1) the ban of the point-of-sale advertisement (in both 2017 and 2019 surveys); (2) making more public places smoke-free (in 2019) and (3) ban of e-cigarette sales to minors (only in 2019).

The distribution of responses in the whole sample (Table 7) shows that in 2019, a majority of respondents 'strongly approved' all three suggested measures. The group of strong supporters was the largest with regard to the ban of e-cigarette sales to minors (over 3/4). If 'approve' and 'strongly approve' are summed up, all three policies received the support of 85-90% of respondents.

Comparison of responses in 2017 and 2019 to the question regarding the ban of the point-of-sale advertisement shows a substantial increase of support.

Table 7. Attitudes of respondents to tobacco control policies, 2017 and 2019

Year	Policy	N	Strongly approve	Approve	Disapprove	Strongly disapprove	No answer
2017	Point-of-sale tobacco advertising ban	2026	46.3%	21.8%	11.0%	8.1%	12.8%
2019	Point-of-sale tobacco advertising ban	2028	67.9%	15.6%	4.8%	4.8%	6.9%
2019	Making more public places smoke-free	2031	68.0%	18.3%	4.6%	3.7%	5.5%
2019	Ban of e-cigarette sales to minors	2033	76.3%	12.5%	2.2%	2.6%	6.5%

To explore which population groups changed their attitude to the greatest extent, we conducted comparison by smoking status and gender (Table 8).

Although non-smokers and ex-smokers, both men and women, still showed a substantially more favorable attitude towards this ban than current smokers, the change of the attitude in the positive direction was the greatest among the current smokers: percentage of those who rendered 'strong approval' doubled among both men and women smokers. This changed from 25% to 50% among men and from 19% to 48% among women.

Table 8. Distribution of attitude towards point-of-sale tobacco advertising ban, by gender and smoking status

		Year	N	Attitude towards point-of-sale tobacco advertising ban				
				Strongly approve	Approve	Disapprove	Strongly disapprove	No answer
Men	Current smokers	2017	413	24.5%	25.2%	18.4%	11.9%	20.1%
		2019	414	50.0%	21.0%	8.7%	7.7%	12.6%
	Ex-smokers	2017	106	51.9%	17.9%	9.4%	10.4%	10.4%
		2019	131	77.1%	16.0%	1.5%	1.5%	3.8%
	Non-smokers	2017	399	55.9%	19.8%	10.5%	5.0%	8.8%
		2019	370	63.2%	16.8%	5.4%	7.6%	7.0%
Women	Current smokers	2017	125	19.2%	31.2%	19.2%	8.8%	21.6%
		2019	120	48.3%	25.8%	9.2%	4.2%	12.5%
	Ex-smokers	2017	35	40.0%	37.1%	14.3%	5.7%	2.9%
		2019	45	68.9%	13.3%	6.7%	0.0%	11.1%
	Non-smokers	2017	948	55.1%	19.7%	7.0%	7.5%	10.8%
		2019	948	78.7%	11.6%	2.7%	3.2%	3.8%
All		2017	2026	46.3%	21.8%	11.0%	8.1%	12.8%
		2019	2018	67.9%	15.6%	4.8%	4.8%	6.9%

Conclusions

1. No changes are seen in the prevalence and intensity of cigarette smoking. This means that no effective tobacco control measures have been in place in Ukraine at least since 2014.
2. Tobacco control policies get strong support from the survey participants: the majority expressed 'strong approval' of all three suggested policies: (1) the ban of the point-of-sale advertisement; (2) making more public places smoke-free and (3) ban of e-cigarette sales to minors. The support increased since the previous survey.
3. Percentage of women, who have ever smoked daily and stopped smoking, consistently increases in Ukraine, and in 2019 this proportion constituted over one fourth.
4. Use of flavored cigarettes among women-smokers is increasingly turning from occasional to a more regular one.
5. Flavored cigarettes, which earlier were predominantly 'female' tobacco product, turned to be equally used by men.
6. Among people aged 18-30 years identified as non-smokers, 5% smoked flavored cigarettes within the last month and 8% within the last year.
7. Experience of e-cigarette use is reported by about 15-20% of current smokers and about 5% of current non-smokers.
8. Over the last two years, regular (last month) use of water-pipe increased substantially from about 1% to 7-8% among current smokers. Moreover, current non-smokers regularly use water-pipe to the same extent as current smokers did two years ago.
9. New heat-not-burn products have been ever used by 2-6% of men and women, both current smokers and non-smokers. Regular (last week) use was reported by 0.6% of daily cigarette smokers.
10. Percentage of cigarette packs potentially illegally brought into Ukraine is within 6%.

11. Percentage of visitors to catering facilities, who observed smoking, substantially increased and constituted 38% in 2019. Respondents observed smoking cigarettes, water-pipes, e-cigarettes, heat-not-burn products.

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