

Appendix 2.3-4: ALCS Analyses of HINTS Data for Section 2.3 – Executive Summary

1. **Statement of Purpose/ Objective:** To substantiate HINTS analyses in [Section 2.3](#)
2. **Source and data set up**

Data were downloaded from the HINTS website, <https://hints.cancer.gov/data/download-data.aspx>

HINTS Public Use File, 2016

Analysis weight (person_finwt0) was used to account for selection probabilities and post-stratification factors. Variance estimation was implemented to account for the multi-stage complex sampling using jackknife replicate weights, as recommended by the HINTS survey team. Data were set up using the following command in Stata 15.0:

```
svyset [pw=person_finwt0], jkrw(person_finwt1-person_finwt50,  
multiplier(0.98)) vce(jack) mse
```

3. Summary of outcomes assessed

We conducted analysis for one outcome using HINTS 2016 data for [section 2.3](#). The outcome is listed in the table below along with the survey questions and the variables used to derive the outcome variable.

Outcome Measure	Corresponding Variables & Questions	
	Variable	Question
1 Relative harmfulness of smokeless tobacco compared to cigarettes	smokelesslessharm	In your opinion, do you think that some smokeless tobacco products, such as chewing tobacco, snus and snuff, are less harmful to a person's health than cigarettes?

More information can be found in HINTS documentations at <https://hints.cancer.gov/data/download-data.aspx>

4. User Groups

This section describes the definition of the user groups and variables used to identify these groups, as presented in [section 2.3](#).

User Groups	Definitions	Variables / Syntax
ST users	Current ST users who were not current cigarette smokers	smokelessstat=1 & (smokestat=2 smokestat=3)
Smokers	Current cigarette smokers who were not current ST users	smokestat=1 & (smokelessstat=2 smokelessstat=3)
Dual Users	Current ST users who were current cigarette smokers	smokelessstat=1 & smokestat=1

5. Results: Syntax and Output

In this section, we present Stata syntax and original output tables to generate results shown in [section 2.3](#).

***Syntax and output**

```
gen user=1 if smokelessstat==1 & (smokestat==2 | smokestat==3)
replace user=2 if smokestat==1 & (smokelessstat==2 | smokelessstat==3)
replace user=3 if (smokelessstat==1 ) & (smokestat==1)
label def user 1 "ST" 2 "cig" 3 "ST+cig"
label value user user

. svy, subpop(if user~=0): tab user smokelesslesssharm, row per ci format(%2.1f)
(running tabulate on estimation sample)
Jknife *: for rows
Number of strata = 1
Number of obs = 3,606
Population size = 236,751,260
Subpop. no. obs = 548
Subpop. size = 39,427,772
Replications = 50
Design df = 49
```

user	D8. Do you think that some smokeless tobacco products are less harmful to a pers					
	Missing	Multiple	Yes	No	Don't kn	Total
ST	0.0	0.0	29.5 [17.1,45.8]	60.0 [41.1,76.3]	10.5 [3.9,25.3]	100.0
cig	0.0 [0.0,0.2]	0.0	10.3 [5.9,17.5]	70.7 [63.8,76.7]	19.0 [13.4,26.2]	100.0
ST+cig	0.0	0.0	27.1 [6.1,68.0]	71.8 [31.9,93.2]	1.2 [0.2,8.2]	100.0
Total	0.0 [0.0,0.2]	0.0	13.2 [9.3,18.5]	69.6 [64.2,74.5]	17.1 [12.3,23.4]	100.0

Key: row percentage
 [95% confidence interval for row percentage]