

Pattern of Smoking Prevalence across different Sub-population in the United States for year 2018

11/13/2020

Building the survey design using survey weights

```
nhis18_design <- svydesign(id=~PPSU, strata= ~PSTRAT, nest = TRUE,  
                          weights = ~WTFA_SA, data = nhis18)  
summary(nhis18_design)
```

Smoking Prevalence by Age

Table 1: Table Showing Smoking by Age and Type of Product

binned_age	Type of Smoke	No	Yes	Prevalence (%)
18-24	Cigarette	26888666	2272272	7.8
25-44	Cigarette	71443919	14084941	16.5
45-64	Cigarette	69300202	13474015	16.3
65+	Cigarette	46923769	4322972	8.4
18-24	E-cigarette	26930207	2218603	7.6
25-44	E-cigarette	81928534	3641402	4.3
45-64	E-cigarette	81083537	1776898	2.1
65+	E-cigarette	50826151	428595	0.8
18-24	Cigar	27926661	1196646	4.1
25-44	Cigar	81284369	4259921	5.0
45-64	Cigar	79758852	3060628	3.7
65+	Cigar	50100019	1075252	2.1
18-24	Pipe	28659681	510966	1.8
25-44	Pipe	84259454	1243429	1.5
45-64	Pipe	82288643	524728	0.6
65+	Pipe	50951439	302031	0.6
18-24	Smokeless Tobacco	28702194	468453	1.6
25-44	Smokeless Tobacco	82840950	2711923	3.2
45-64	Smokeless Tobacco	80869227	1991346	2.4
65+	Smokeless Tobacco	50537130	706928	1.4

Smoking Prevalence by Gender

Table 2: Table Showing Prevalence of Smoking by Sex and Type of Product

SEX	Type of Smoke	No	Yes	Prevalence (%)
Men	Cigarette	101235981	18757787	15.6
Women	Cigarette	113320575	15396413	12.0
Men	E-cigarette	114955592	5148433	4.3
Women	E-cigarette	125812837	2917065	2.3
Men	Cigar	111815610	8202481	6.8
Women	Cigar	127254291	1389966	1.1
Men	Pipe	118186125	1850701	1.5
Women	Pipe	127973092	730453	0.6
Men	Smokeless Tobacco	114514254	5590813	4.7
Women	Smokeless Tobacco	128435247	287837	0.2

Smoking Prevalence by Race/Ethnicity

Table 3: Smoking Prevalence by Race and type of Smoke

RACERPI2	Type of Smoke	No	Yes	Prevalence (%)
AIAN	Cigarette	2131366	661679	23.7
Asian	Cigarette	14818633	1107795	7.0
Black/African American	Cigarette	26263315	4447668	14.5
Multiple	Cigarette	4797069	959601	16.7
white	Cigarette	165996887	26886853	13.9
AIAN	E-Cigarette	2685066	107979	3.9
Asian	E-Cigarette	15557891	353144	2.2
Black/African American	E-Cigarette	30159227	570361	1.9
Multiple	E-Cigarette	5422037	334633	5.8
white	E-Cigarette	186351012	6652687	3.4
AIAN	Cigar	2673509	119536	4.3
Asian	Cigar	15616288	242386	1.5
Black/African American	Cigar	29241812	1488887	4.8
Multiple	Cigar	5486640	270030	4.7
white	Cigar	185445501	7437869	3.9
AIAN	Pipe	2767197	25848	0.9
Asian	Pipe	15776612	130585	0.8
Black/African American	Pipe	30200317	517720	1.7
Multiple	Pipe	5692165	64505	1.1
white	Pipe	191103643	1830265	0.9
AIAN	Smokeless Tobacco	2654842	138203	4.9
Asian	Smokeless Tobacco	15774857	152372	1.0
Black/African American	Smokeless Tobacco	30501903	233923	0.8
Multiple	Smokeless Tobacco	5692647	64023	1.1
white	Smokeless Tobacco	187722198	5253293	2.7

Smoking Prevalence by Education

Table 4: Smoking Prevalence by Education and type of Smoke

EDUC1	Type of Smoke	No	Yes	Prevalence (%)
<College Grad	Cigarette	64329100	11263121	14.9
<HS Grad	Cigarette	18030562	4708403	20.7
College Grad+	Cigarette	78294439	4645713	5.6
HS Grad	Cigarette	52787246	13347012	20.2
<College Grad	E-Cigarette	72383707	3216389	4.3
<HS Grad	E-Cigarette	22030352	744000	3.3
College Grad+	E-Cigarette	81508035	1464629	1.8
HS Grad	E-Cigarette	63555768	2640480	4.0
<College Grad	Cigar	72323713	3210235	4.3
<HS Grad	Cigar	22082136	680369	3.0
College Grad+	Cigar	79992039	2934107	3.5
HS Grad	Cigar	63424493	2738163	4.1
<College Grad	Pipe	74731746	847811	1.1
<HS Grad	Pipe	22649285	125067	0.5
College Grad+	Pipe	82153734	764395	0.9
HS Grad	Pipe	65320440	843881	1.3
<College Grad	Smokeless Tobacco	73572387	2010588	2.7
<HS Grad	Smokeless Tobacco	22064989	709363	3.1
College Grad+	Smokeless Tobacco	81932106	1040754	1.3
HS Grad	Smokeless Tobacco	64104309	2093660	3.2

Smoking Prevalence by Income Relative to Federal Poverty Level

Table 5: Smoking Prevalence by Ratio of Family Income to Federal Poverty Level

binned_RATCAT	Type of Smoke	No	Yes	Prevalence (%)
<100%	Cigarette	18499768	5407161	22.6
>400%	Cigarette	93338565	9164070	8.9
100 - 200 %	Cigarette	32354442	7809737	19.4
200 - 400 %	Cigarette	56563306	9904970	14.9
<100%	E-Cigarette	23019229	935209	3.9
>400%	E-Cigarette	99727980	2840348	2.8
100 - 200 %	E-Cigarette	38662620	1503403	3.7
200 - 400 %	E-Cigarette	63985820	2476364	3.7
<100%	Cigar	22966833	954054	4.0
>400%	Cigar	98265778	4259904	4.2
100 - 200 %	Cigar	38798074	1346166	3.4
200 - 400 %	Cigar	63749565	2680549	4.0
<100%	Pipe	23603572	342490	1.4
>400%	Pipe	101738492	815777	0.8
100 - 200 %	Pipe	39525291	636352	1.6
200 - 400 %	Pipe	65723174	703781	1.1
<100%	Smokeless Tobacco	23520237	430184	1.8
>400%	Smokeless Tobacco	100150651	2413390	2.4
100 - 200 %	Smokeless Tobacco	39228849	960076	2.4
200 - 400 %	Smokeless Tobacco	64628877	1829919	2.8

Smoking Prevalance by Sexual Orientation

Table 6: Smoking Prevalence by Sexual Orientation

ORIENT_A	Type of Smoke	No	Yes	Prevalence (%)
Bisexual	Cigarette	2509867	633474	20.2
Don't know the answer	Cigarette	2361416	238615	9.2
Gay/Lesbian	Cigarette	3104618	822971	21.0
Something else	Cigarette	724146	245232	25.3
Straight	Cigarette	201548961	31525456	13.5
Bisexual	E-Cigarette	2886909	254821	8.1
Don't know the answer	E-Cigarette	2538348	66304	2.5
Gay/Lesbian	E-Cigarette	3715049	240334	6.1
Something else	E-Cigarette	894684	68442	7.1
Straight	E-Cigarette	225910974	7304912	3.1
Bisexual	Cigar	2918198	217721	6.9
Don't know the answer	Cigar	2544307	54003	2.1
Gay/Lesbian	Cigar	3798400	156983	4.0
Something else	Cigar	858706	110672	11.4
Straight	Cigar	224158314	8923963	3.8
Bisexual	Pipe	2991573	151768	4.8
Don't know the answer	Pipe	2589578	8732	0.3
Gay/Lesbian	Pipe	3891650	63733	1.6
Something else	Pipe	944520	24858	2.6
Straight	Pipe	230878448	2288051	1.0
Bisexual	Smokeless Tobacco	3114307	29034	0.9
Don't know the answer	Smokeless Tobacco	2586536	13495	0.5
Gay/Lesbian	Smokeless Tobacco	3902273	53110	1.3
Something else	Smokeless Tobacco	969378	0	0.0
Straight	Smokeless Tobacco	227513812	5731495	2.5

Smoking Prevalence by Mental Health status

Table 7: Prevalence of Smoking among people with Mental health Problems

Mental Health	Type of Smoke	No	Yes	Prevalence (%)
Depression	Cigarette	29662036	8496624	22.3
Anxiety	Cigarette	64779754	13705906	17.5
Depression	E-cigarette	36043850	2150607	5.6
Anxiety	E-cigarette	74477688	4038902	5.1
Depression	Pipe	37557092	630600	1.7
Anxiety	Pipe	77560905	961867	1.2
Depression	Cigar	36382701	1783157	4.7
Anxiety	Cigar	74967259	3490936	4.4
Depression	Smokeless Tobacco	37113950	1083839	2.8
Anxiety	Smokeless Tobacco	76533133	2006905	2.6

Dual Smoking Prevalence (Cigarette and other Products)

Table 8: Dual Prevalence of Cigarette and E-cigarette

binmed__age	Prevalence of cigarette (%)	Prevalence of E-cigarette (%)	Dual prevalence cigarette and e-cig (%)
18-24	7.8	7.6	1.7
25-44	16.5	4.3	1.9
45-64	16.3	2.1	1.2
65+	8.4	0.8	0.4

Table 9: Dual Prevalence of Cigarette and Cigar

binmed__age	Prevalence of cigarette (%)	Prevalence of Cigar (%)	Dual prevalence cigarette and cigar (%)
18-24	7.8	4.1	1.5
25-44	16.5	5.0	1.9
45-64	16.3	3.7	1.4
65+	8.4	2.1	0.6

Table 10: Dual Prevalence of Cigarette and Pipe

binmed__age	Prevalence of cigarette (%)	Prevalence of Pipe (%)	Dual prevalence cigarette and pipe (%)
18-24	7.8	1.8	0.7
25-44	16.5	1.5	0.6
45-64	16.3	0.6	0.3
65+	8.4	0.6	0.1

Table 11: Dual Prevalence of Cigarette and Smokeless Tobacco

binmed__age	Prevalence of cigarette (%)	Prevalence of Smokeless Tobacco (%)	Dual prevalence cigarette and smokeless tobacco (%)
18-24	7.8	1.6	0.5
25-44	16.5	3.2	1.0
45-64	16.3	2.4	0.5
65+	8.4	1.4	0.1