

Supplement 1: Questions asked on Surveys to estimate cigarette and E-cigarette Prevalence

To Accompany “Examining the Relationship of Vaping to Smoking Initiation Among U.S. Youth and Young Adults: A Reality Check” by Levy et al.

1) Monitoring Future (MTF) survey

Current smokers: those reporting any smoking in the past 30 days. Intensity measured by daily use and half-pack a day use.

Current vapers: those reporting any vaping in the past 30 days

For smokers (2010-2016):

SOURCE for 2010: <http://www.monitoringthefuture.org/datavolumes/2010/2010dv.pdf>

SOURCE for 2012: <http://www.monitoringthefuture.org/datavolumes/2012/2012dv.pdf>

SOURCE for 2016 (only B002):

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125759/>

B001: Have you ever smoked cigarettes?

1. Never—GO TO Q.B006
2. Once or twice
3. Occasionally but not regularly
4. Regularly in the past
5. Regularly now

B002: How frequently have you smoked cigarettes during the past 30 days?

1. Not at all
2. Less than one cigarette per day
3. One to five cigarettes per day
4. About one-half pack per day
5. About one pack per day
6. About one and one-half packs per day
7. Two packs or more per day

B003: "To be more precise, during the past 30 days about how many cigarettes have you smoked per day?"

For e-cigarettes (2014-2017):

SOURCE: <https://onlinelibrary.wiley.com/doi/full/10.1111/add.14119>

SOURCE (search e-cigarette):
<https://www.icpsr.umich.edu/icpsrweb/NAHDAP/search/variables>

The following questions were asked in 2015 and 2016. In 2014, the questions referred only to e-cigarettes. In 2017, separate questions were asked about vaporizing nicotine and vaporizing marijuana.

Electronic vaporizers make a mist that is inhaled and have the feel of cigarette smoking. Examples include e-cigarettes and e-pens. Have you ever used an electronic vaporizer such as an e-cigarette?

1="Never"

2="Once or twice"

3="Occasionally but not regularly"

4="Regularly in the past"

5="Regularly now"

(Two variations for the questions below were found for MTF in the same year)

Variation 1: During the LAST 30 DAYS, on how many occasions (if any) have you used electronic cigarettes (e-cigarettes)?

Variation 2: During the LAST 30 DAYS, on how many days (if any) have you used electronic cigarettes (e-cigarettes)?

1="None"

2="1-2 days"

3="3-5 days"

4="6-9 days"

5="10-19 days"

6="20-30 days"

2) National Youth Tobacco Survey (NYTS)

Current smokers: smoked in past 30 days.

Current e-cigarette users: used e-cigarettes 1 or more days in past 30 days.

Source for all years:

https://www.cdc.gov/tobacco/data_statistics/surveys/nyts/data/index.html

For smokers (2009, 2011, 2012, 2013, 2014, 2015, 2016, and 2017; no questionnaire for 2010):

9. Have you ever tried cigarette smoking, even one or two puffs?

- A. Yes
- B. No

14. About how many cigarettes have you smoked in your entire life?

- A. I have never smoked cigarettes, not even one or two puffs
- B. 1 or more puffs but never a whole cigarette
- C. 1 cigarette
- D. 2 to 5 cigarettes
- E. 6 to 15 cigarettes (about 1/2 a pack total)
- F. 16 to 25 cigarettes (about 1 pack total)
- G. 26 to 99 cigarettes (more than 1 pack, but less than 5 packs)
- H. 100 or more cigarettes (5 or more packs)

15. During the past 30 days, on how many days did you smoke cigarettes?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

16. During the past 30 days, on the days you smoked, about how many cigarettes did you smoke per day?

- A. I did not smoke cigarettes during the past 30 days
- B. Less than 1 cigarette per day
- C. 1 cigarette per day
- D. 2 to 5 cigarettes per day
- E. 6 to 10 cigarettes per day
- F. 11 to 20 cigarettes per day
- G. More than 20 cigarettes per day

17. When was the last time you smoked a cigarette, even one or two puffs? (PLEASE CHOOSE THE FIRST ANSWER THAT FITS)

- A. I have never smoked cigarettes, not even one or two puffs
- B. Earlier today
- C. Not today but sometime during the past 7 days
- D. Not during the past 7 days but sometime during the past 30 days
- E. Not during the past 30 days but sometime during the past 6 months
- F. Not during the past 6 months but sometime during the past year
- G. 1 to 4 years ago
- H. 5 or more years ago

For e-cigarettes (2011, 2012, 2013):

35. Which of the following tobacco products have you ever heard of? (You can CHOOSE ONE ANSWER or MORE THAN ONE ANSWER)

- A. Roll-your-own cigarettes
- B. Flavored cigarettes, such as Camel Crush
- C. Bidis (small brown cigarettes wrapped in a leaf)
- D. Clove cigars (kreteks)

E. Flavored little cigars (such as mint, clove, spice, alcohol (wine, cognac), candy, fruit, chocolate, or other sweets)

F. Smoking tobacco from a hookah or a waterpipe

G. Snus, such as Camel or Marlboro Snus

H. Dissolvable tobacco products, such as Ariva, Stonewall, Camel orbs, Camel sticks, or Camel strips

I. Electronic Cigarettes or E-cigarettes, such as Ruyan or NJOY

J. Some other new tobacco products not listed here

K. I have never heard of any of the products listed above or any new tobacco product

36. Which of the following tobacco products have you ever tried, even just one time? (You can CHOOSE ONE ANSWER or MORE THAN ONE ANSWER)

A. Roll-your-own cigarettes

B. Flavored cigarettes, such as Camel Crush

C. Bidis (small brown cigarettes wrapped in a leaf)

D. Clove cigars (kreteks)

E. Flavored little cigars (such as mint, clove, spice, alcohol (wine, cognac), candy, fruit, chocolate, or other sweets)

F. Smoking tobacco from a hookah or a waterpipe

G. Snus, such as Camel or Marlboro Snus

H. Dissolvable tobacco products, such as Ariva, Stonewall, Camel orbs, Camel sticks, or Camel strips

I. Electronic Cigarettes or E-cigarettes, such as Ruyan or NJOY

J. Some other new tobacco products not listed here

K. I have never tried any of the products listed above or any new tobacco product

37. In the past 30 days, which of the following products have you used on at least one day? (You can CHOOSE ONE ANSWER or MORE THAN ONE ANSWER)

A. Roll-your-own cigarettes

B. Flavored cigarettes, such as Camel Crush

- C. Bidis (small brown cigarettes wrapped in a leaf)
- D. Clove cigars (kreteks)
- E. Flavored little cigars (such as mint, clove, spice, alcohol (wine, cognac), candy, fruit, chocolate, or other sweets)
- F. Smoking tobacco from a hookah or a waterpipe
- G. Snus, such as Camel or Marlboro Snus
- H. Dissolvable tobacco products, such as Ariva, Stonewall, Camel orbs, Camel sticks, or Camel strips
- I. Electronic Cigarettes or E-cigarettes, such as Ruyan or NJOY
- J. Some other new tobacco products not listed here
- K. I have not used any of the products listed above or any new tobacco product in the past 30 days

For e-cigarettes (2014, 2015, 2016, and 2017):

31. Have you ever tried an electronic cigarette or e-cigarette such as blu, 21st Century Smoke or NJOY?

- a. Yes
- b. No

During the past 30 days, on how many days did you use electronic cigarettes or e-cigarettes such as blu, 21st Century Smoke, or NJOY?

- a. 0 days
- b. 1 or 2 days
- c. 3 to 5 days
- d. 6 to 9 days
- e. 10 to 19 days
- f. 20 to 29 days
- g. All 30 days

3) Youth Risk Behavior Survey (YRBS);

Current smokers: those reporting any smoking in the past 30 days.

Current vapers: those reporting any vaping in the past 30 days

Source for all odd years:

https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/YRBS_questionnaire_content_1991-2017.pdf

For smokers (available in odd years since 1991):

Have you ever tried cigarette smoking, even one or two puffs?

- A. Yes
- B. No

Have you ever smoked cigarettes regularly, that is, at least one cigarette every day for 30 days?

- A. Yes
- B. No

During the past 30 days, on how many days did you smoke cigarettes?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

- A. I did not smoke cigarettes during the past 30 days
- B. Less than 1 cigarette per day
- C. 1 cigarette per day
- D. 2 to 5 cigarettes per day
- E. 6 to 10 cigarettes per day
- F. 11 to 20 cigarettes per day
- G. More than 20 cigarettes per day

For e-cigarette users (available in 2015 and 2017):

[only asked in 2017] During the past 12 months, did you ever try to quit using all tobacco products, including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products?

- A. I did not use any tobacco products during the past 12 months
- B. Yes
- C. No

Have you ever used an electronic vapor product?

- A. Yes
- B. No

During the past 30 days, on how many days did you use an electronic vapor product?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

4) National Survey of Drug Use and Health (NSDUH)

Current smokers: those reporting any smoking in the past 30 days. Intensity measured by daily use.

Current vapers: those reporting any vaping in the past 30 days

Sources for 2010-2016:

<https://www.samhsa.gov/data/sites/default/files/NSDUH2010MRB/NSDUH2010MRB/2k10Q.pdf>

<https://www.samhsa.gov/data/sites/default/files/NSDUH2013MRB/NSDUH2013MRB/NSDUHmrbCAIquex2013.pdf>

<https://samhda.s3-us-gov-west-1.amazonaws.com/s3fs-public/field-uploads-protected/studies/NSDUH-2014/NSDUH-2014-datasets/NSDUH-2014-DS0001/NSDUH-2014-DS0001-info/NSDUH-2014-DS0001-info-questionnaire-specs.pdf>

<https://samhda.s3-us-gov-west-1.amazonaws.com/s3fs-public/field-uploads-protected/studies/NSDUH-2015/NSDUH-2015-datasets/NSDUH-2015-DS0001/NSDUH-2015-DS0001-info/NSDUH-2015-DS0001-info-questionnaire-specs.pdf>

<https://www.samhsa.gov/data/sites/default/files/NSDUHmrbCAIquex2016v2.pdf>

For smokers:

CG01 Have you ever smoked part or all of a cigarette?

1 Yes

2 No

DK/REF

CGREF1 [IF CG01 = REF] The answers that people give us about their cigarette smoking are important to this study's success. We know that this information is personal, but remember your answers will be kept confidential. Please think again about answering this question: Have you ever smoked part or all of a cigarette?

1 Yes

2 No

DK/REF

CG05 [IF CG01 = 1 OR CGREF1 = 1] Now think about the past 30 days, that is, from [DATEFILL] up to and including today. During the past 30 days, have you smoked part or all of a cigarette?

1 Yes

2 No

DK/REF

CG06 [IF CG05 = 2] How long has it been since you last smoked part or all of a cigarette?

1 More than 30 days ago but within the past 12 months

2 More than 12 months ago but within the past 3 years

3 More than 3 years ago

DK/REF

CG07 [IF CG05 = 1] During the past 30 days, that is, since [DATEFILL], on how many days did you smoke part or all of a cigarette?

OF DAYS: [RANGE: 1 - 30]

DK/REF

CG07DKRE [IF CG07 = DK/REF] What is your best estimate of the number of days you smoked part or all of a cigarette during the past 30 days?

1 1 or 2 days

2 3 to 5 days

3 6 to 9 days

4 10 to 19 days

5 20 to 29 days

6 All 30 days

DK/REF

CG08 [IF CG07 > 1 OR CG07DKRE = 1 - 6] On the [CG07 days / CIGDKRE] you smoked cigarettes during the past 30 days, how many cigarettes did you smoke per day, on average?

1 Less than one cigarette per day

2 1 cigarette per day

3 2 to 5 cigarettes per day

4 6 to 15 cigarettes per day (about ½ pack)

5 16 to 25 cigarettes per day (about 1 pack)

6 26 to 35 cigarettes per day (about 1 ½ packs)

7 More than 35 cigarettes per day (about 2 packs or more)

DK/REF

CG10 [IF CG07 = 1] On the one day you smoked cigarettes during the past 30 days, how many cigarettes did you smoke?

1 Less than one cigarette

2 1 cigarette

3 2 to 5 cigarettes

4 6 to 15 cigarettes (about ½ pack)

5 16 to 25 cigarettes (about 1 pack)

6 26 to 35 cigarettes (about 1 ½ packs)

7 More than 35 cigarettes (about 2 packs or more)

DK/REF

CG16a [IF (CG05 = 2 OR DK/REF) OR ((CG08 < 4) OR (CG08 = 4 AND CG07 <17) OR (CG08 = 5 AND CG07 <7) OR (CG08 = 6 AND CG07 <4) OR (CG08 = 7 AND CG07 <3 AND CG07DKRE NE BLANK)) Have you smoked at least 100 cigarettes in your entire life?

1 Yes

2 No

DK/REF

For e-cigarette users: NOT ASKED

5) National Health Interview Survey (NHIS) [only for adults aged 18+]

Current smokers: those reporting currently smoking every day or somedays.

Current vapers: those reporting currently smoking every day or somedays.

Source for 2010-2016:

ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Survey_Questionnaires/NHIS/2010/english/qadult.pdf

ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Survey_Questionnaires/NHIS/2013/english/qadult.pdf

ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Survey_Questionnaires/NHIS/2014/english/qadult.pdf

ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Survey_Questionnaires/NHIS/2015/english/qadult.pdf

ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Survey_Questionnaires/NHIS/2016/english/qadult.pdf

For smokers:

Have you smoked at least 100 cigarettes in your ENTIRE LIFE?

- 1 Yes
- 2 No
- 7 Refused
- 9 Don't know

Do you NOW smoke cigarettes every day, some days or not at all?

- 1 Every day
- 2 Some days
- 3 Not at all
- 7 Refused
- 9 Don't know

On how many of the PAST 30 DAYS did you smoke a cigarette?

*Enter '0' for None.

- 00 None
- 01-30 1-30 days
- 97 Refused
- 99 Don't know

On the average, when you smoked during the PAST 30 DAYS, about how many cigarettes did you smoke a day?

* Enter '1' if less than 1.
* Enter '95' if 95 or more cigarettes.

- 01-94 1-94 cigarettes
- 95 95+ cigarettes
- 97 Refused
- 99 Don't know

For e-cigarette users (starting in 2016):

Have you EVER used an e-cigarette EVEN ONE TIME? *Read if necessary: E-cigarettes and similar products can be bought as one-time, disposable products, as re-usable kits with a cartridge, or with refillable chambers. These usually contain a liquid, often called an “e-liquid” or “e-juice.” Popular brands include NJOY, BLU, LOGIC, and VUSE.

1 Yes

2 No

7 Refused

9 Don't know

Do you now use e-cigarettes every day, some days, or not at all?

1 Every day

2 Some days

3 Not at all

7 Refused

9 Don't know

On how many of the PAST 30 DAYS have you used e-cigarettes?

00-30 0-30

97 Refused

99 Don't know