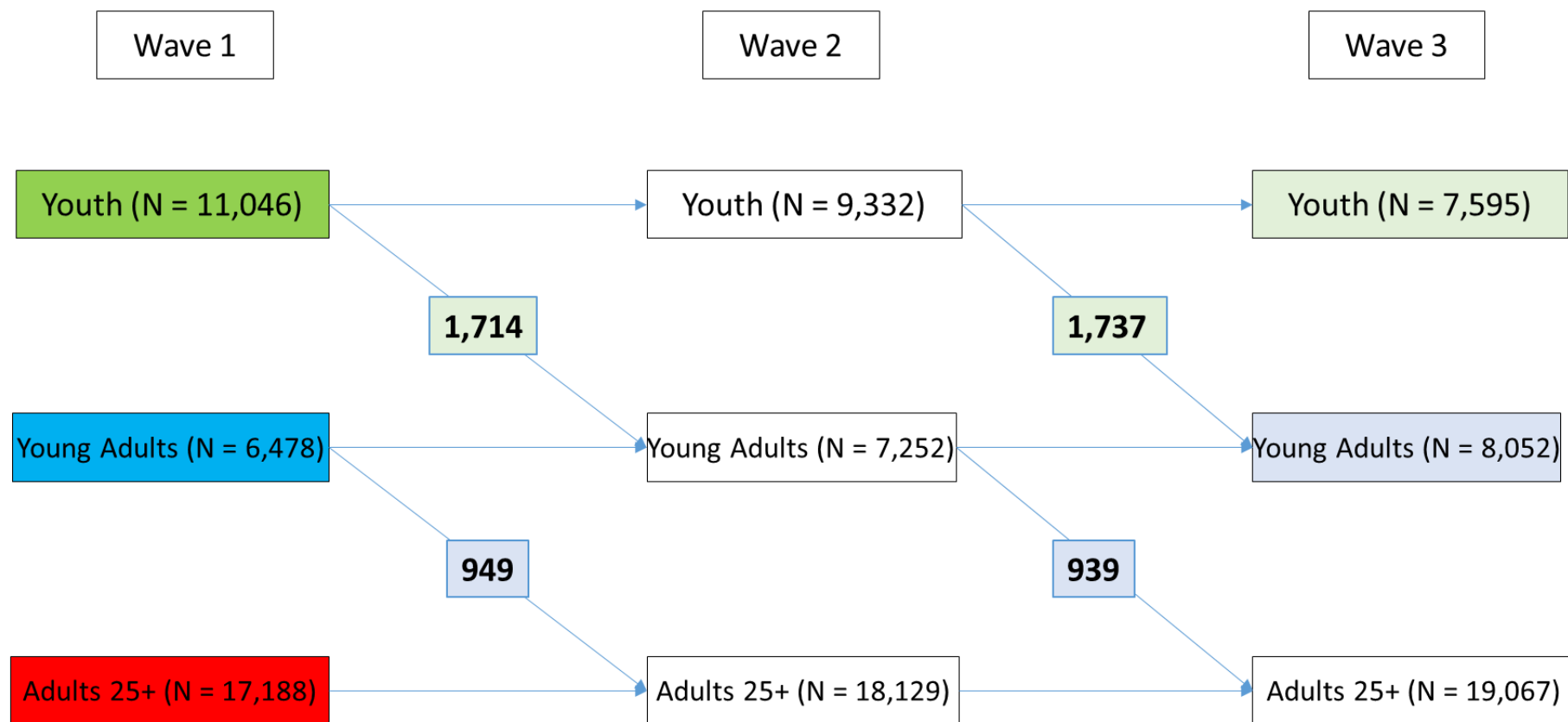
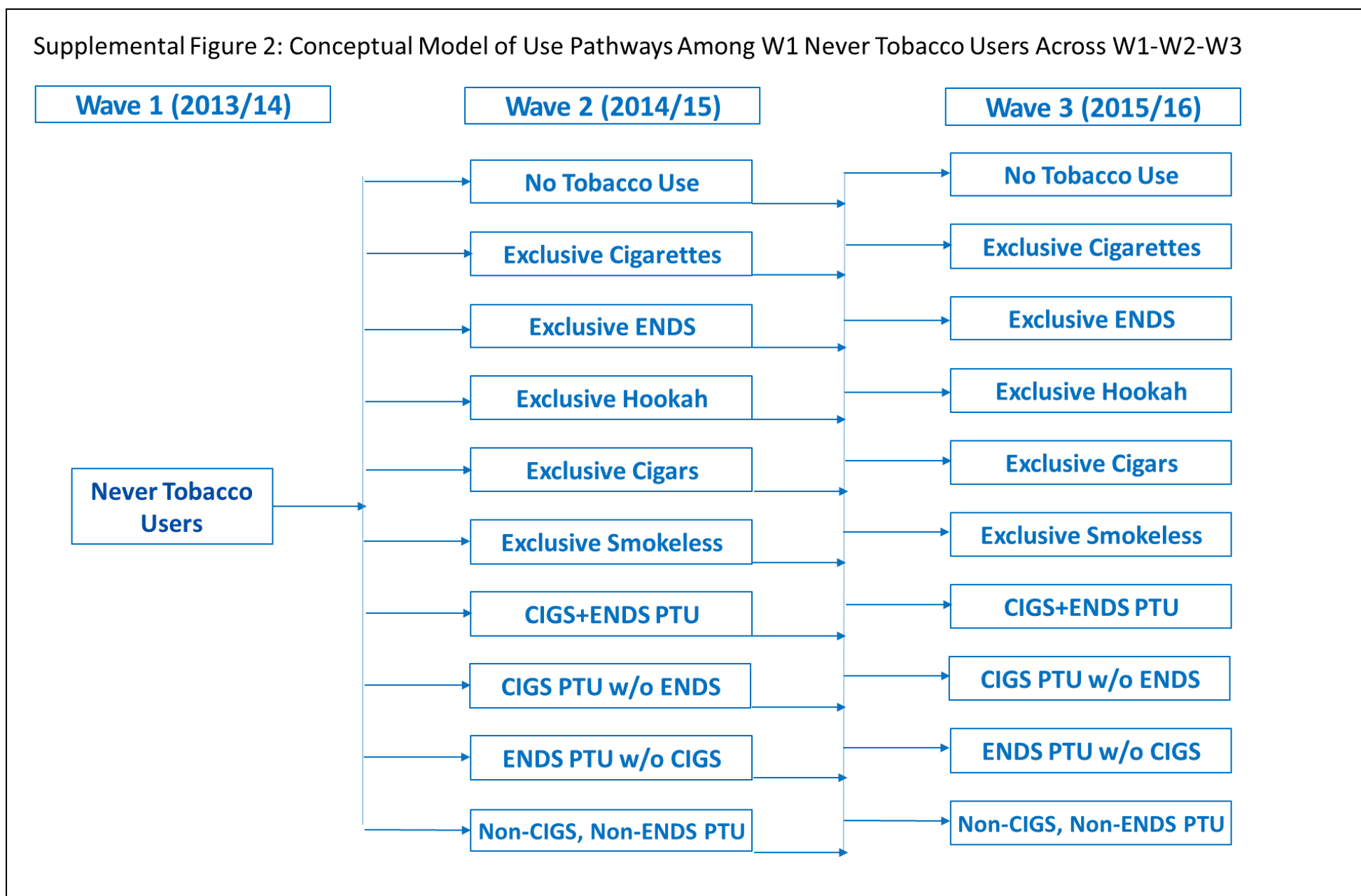


Supplemental Figure 1 – Tracking Wave 1 Respondents Through All 3 Waves of the PATH Study



Notes:
 Supplemental Figure 1 shows the full Wave 1 sample respondents who have data at Waves 1, 2, and 3. There are 2,605 Wave 1 youth (ages 12-17) and 8,650 Wave 1 adult (ages 18 and older) respondents excluded at W2 and W3 because they do not have data at all three waves. The figure illustrates Wave 1 youth and young adults (ages 18-24) who aged up at Wave 2 and Wave 2 youth and young adults who aged up at Wave 3. The boxes at each wave show the total sample size for each age group at each wave.

Supplemental Figure 2: Conceptual Model of Use Pathways Among W1 Never Tobacco Users Across W1-W2-W3



Notes:

Abbreviations: W1 = Wave 1; W2 = Wave 2; W3 = Wave 3; CIGS = cigarettes; + = and; ENDS* = electronic nicotine delivery system; PTU = polytobacco use; w/o = without

- 1) No tobacco: Defined as no use of any tobacco products within the past 30 days.
- 2) Exclusive cigarettes: Defined as use of only cigarettes in the past 30 days.
- 3) Exclusive ENDS: Defined as use of only ENDS in the past 30 days.
- 4) Exclusive cigars: Defined as use of only traditional cigars, filtered cigars, and/or cigarillos in the past 30 days.
- 5) Exclusive hookah: Defined as use of only hookah in the past 30 days.
- 6) Exclusive smokeless: Defined as use of only smokeless tobacco and/or snus pouches in the past 30 days.
- 7) CIGS+ENDS PTU: Defined as use of only both cigarettes and ENDS in the past 30 days.
- 8) CIGS PTU w/o ENDS: Defined as use of cigarettes and any other tobacco product(s) except for ENDS in the past 30 days.
- 9) ENDS PTU w/o CIGS: Defined as use of ENDS and any other tobacco product(s) except for cigarettes in the past 30 days.
- 10) Non-CIGS, Non-ENDS PTU: Defined as use of two or more tobacco products, excluding cigarettes and ENDS in the past 30 days.

*Respondents were asked about “e-cigarettes” at W1 and “e-products” (i.e., e-cigarettes, e-cigars, e-pipes, and e-hookah) at W2 and W3.

Notes:

Abbreviations: P30D = past 30-day; W2 = Wave 2; W3 = Wave 3; W1 = Wave 1; CI = confidence interval; CIGS = cigarettes; ENDS* = electronic nicotine delivery system; + = and; PTU = polytobacco use; w/o = without; - = not applicable because of zero cases

Analysis included youth (ages 12-17), young adult (ages 18-24), and adult 25+ (ages 25 and older) W1 never tobacco users with data at all three waves. Respondent age was calculated based on age at W1. W3 longitudinal (all-waves) weights were used to calculate estimates at all waves.

For transitions between waves:

- 1) Never tobacco: Defined as no use of any tobacco products in the past 12 months, even once or twice, if a never user in the prior wave.
- 2) No tobacco: Defined as no use of any tobacco products within the past 30 days.
- 3) Exclusive CIGS: Defined as use of only cigarettes in the past 30 days.
- 4) Exclusive ENDS: Defined as use of only ENDS in the past 30 days.
- 5) Exclusive cigars: Defined as use of only traditional cigars, filtered cigars, and/or cigarillos in the past 30 days.
- 6) Exclusive hookah: Defined as use of only hookah in the past 30 days.
- 7) Exclusive smokeless: Defined as use of only smokeless tobacco and/or snus pouches in the past 30 days.
- 8) CIGS+ENDS PTU: Defined as use of only both cigarettes and ENDS in the past 30 days.
- 9) CIGS PTU w/o ENDS: Defined as use of cigarettes and any other tobacco product(s) except for ENDS in the past 30 days.
- 10) ENDS PTU w/o CIGS: Defined as use of ENDS and any other tobacco product(s) except for cigarettes in the past 30 days.
- 11) Non-CIGS, Non-ENDS PTU: Defined as use of two or more tobacco products, excluding cigarettes and ENDS in the past 30 days.

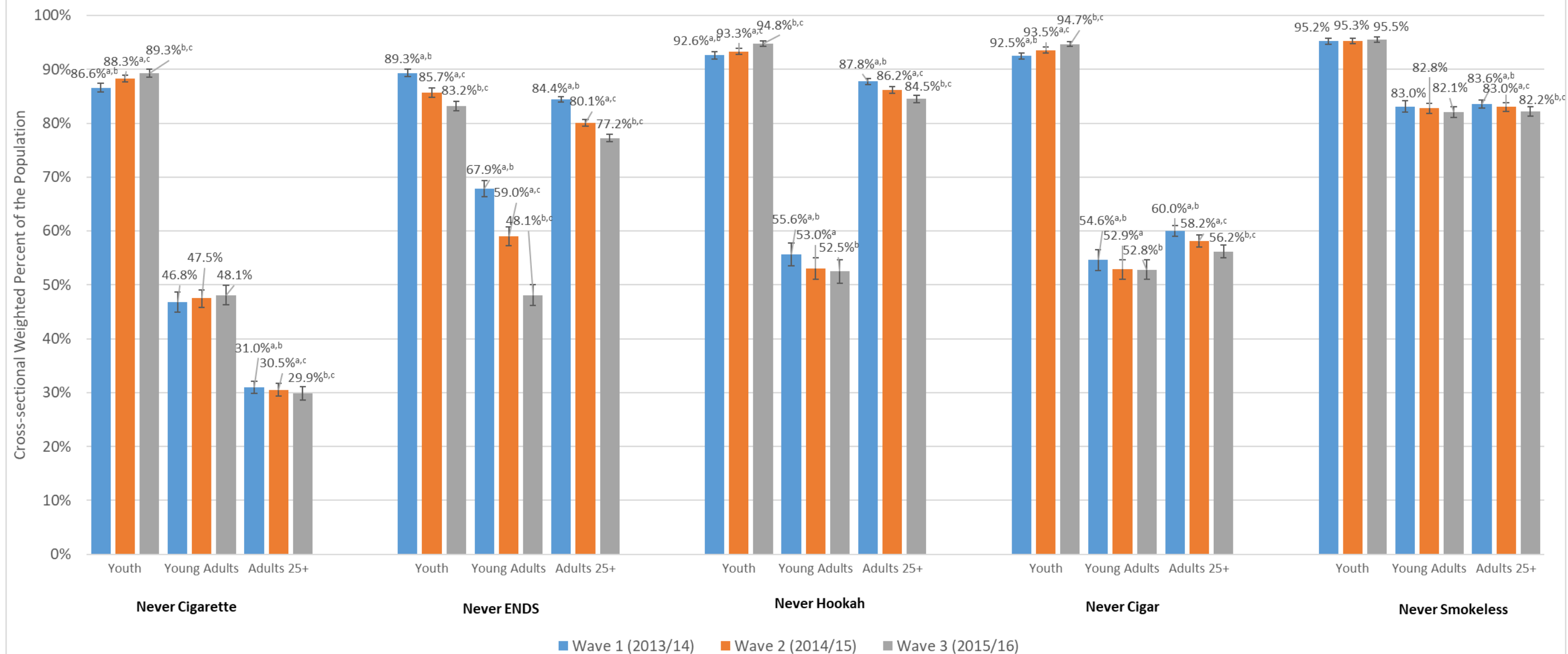
*Respondents were asked about “e-cigarettes” at W1 and “e-products” (i.e., e-cigarettes, e-cigars, e-pipes, and e-hookah) at W2 and W3.

The logit-transformation method was used to calculate confidence intervals.

† Estimate should be interpreted with caution because it has low statistical precision. It is based on a denominator sample size of less than 50, or the coefficient of variation of the estimate or its complement is larger than 30%.

Analyses were run on the W1, W2, and W3 Public Use Files (<https://doi.org/10.3886/ICPSR36498.v8>).

Supplemental Figure 3: Cross-sectional Weighted Percentages of Never Tobacco Product-Specific Use Among Youth, Young Adults, and Adults 25+ in W1, W2, and W3 of the PATH Study



Notes:

Abbreviations: W1 = Wave 1; W2 = Wave 2; W3 = Wave 3; PATH = Population Assessment of Tobacco and Health; ENDS* = electronic nicotine delivery system

W1/W2/W3 Never cigarette use unweighted Ns: youth (ages 12-17) = 11,792/10,720/10,371; young adults (ages 18-24) = 3,144/3,319/3,713; adults 25+ (ages 25 and older) = 3,967/3,387/3,278

W1/W2/W3 Never ENDS use unweighted Ns: youth = 12,156/10,398/9,630; young adults = 5,209/4,185/3,534; adults 25+ = 15,515/12,042/10,662

W1/W2/W3 Never hookah use unweighted Ns: youth = 12,617/11,334/10,953; young adults = 4,046/3,796/4,109; adults 25+ = 17,597/14,719/13,455

W1/W2/W3 Never cigar use unweighted Ns: youth = 12,273/11,085/10,704; young adults = 3,902/3,764/4,071; adults 25+ = 10,231/8,428/7,693

W1/W2/W3 Never smokeless use unweighted Ns: youth = 12,867/11,361/10,837; young adults = 7,141/6,515/6,509; adults 25+ = 17,733/15,277/14,374

X-axis shows five categories of never use (cigarette, ENDS, hookah, cigars, and smokeless) for three age groups: youth, young adults, and adults 25+. Y-axis shows weighted percentages of W1, W2, and W3 never users in these three age groups. Sample analyzed includes all W1, W2, and W3 respondents at each wave. The PATH Study cross-sectional (W1) or single-wave weights (W2 and W3) were used to calculate estimates at each wave. All respondents with data at one wave are included in the sample for that wave's estimate and do not need to have complete data at all three waves. Never tobacco use is defined as not having used any tobacco, even once or twice in lifetime.

^adenotes significant difference at $p < 0.0167$ (Bonferroni corrected for three comparisons) between W1 and W2

^bdenotes significant difference at < 0.0167 (Bonferroni corrected for three comparisons) between W1 and W3

^cdenotes significant difference at < 0.0167 (Bonferroni corrected for three comparisons) between W2 and W3

*Respondents were asked about “e-cigarettes” at W1 and “e-products” (i.e., e-cigarettes, e-cigars, e-pipes, and e-hookah) at W2 and W3.

The logit-transformation method was used to calculate the 95% confidence intervals.

Analyses were run on the W1, W2, and W3 Public Use Files (<https://doi.org/10.3886/ICPSR36498.v8>).