

2003 YOUTH RISK BEHAVIOR SURVEY

2003 Data Processing Document

This document explains how YRBS data are edited and how calculated variables are derived.

I. Editing/Cleaning

Editing consists of checking responses for range, height/weight plausibility, and logical consistency.

1. Basic Edits for Single Questions

For a single question, responses that do not correspond to the possible responses are invalid. If possible responses are either “A” or “B” and the response recorded is “C”, the variable is set to missing. If more than one response was selected for a question, the question is set to missing.

2. Height, Weight and Body Mass Index (BMI) Edits

Basic Height/Weight Edits: Height is scanned as a three-column character variable from columns 53-55 of the ASCII file. It is not compressed or justified by the scanning program. The system reads it into `q5_orig`. The first column ranges from “3” to “7” and indicates whole feet; the second and third columns range from “00” to “11” and indicate inches. If either feet or inches isn’t filled in or is unreadable, then both are set to missing and `Q5` is set to missing. If it was filled in correctly, it is converted to meters by the formula

$$Q5 = (Q5_origft \times 12 + Q5_origin) \times 0.0254 \frac{m}{in}$$

`Q5` is stored as a numeric variable formatted as 8.2. `Q5_orig` is stored on CDC’s copy of the data but is not included on the data file that is sent to the site.

Weight is scanned as a three-column character variable from 56-58 of the ASCII file. It is not compressed or justified by the scanning program. The processing system reads it into `q6_orig`. The first column indicate 100s of pounds and ranges from “0” to “3”; the second column indicates 10s of pounds and ranges from “0” to “9”; the third column indicates single pounds and ranges from “0” to “9”. If any column is left blank or is unreadable, all columns are set to missing and `Q6` is set to missing. If it was filled in correctly, it is converted to kilograms by the formula

$$Q6 = q6_orig \times 0.4536 \frac{kg}{lb}$$

`Q6` is stored as a numeric variable formatted as 8.2. `Q6_orig` is stored on CDC’s copy of the data but is not included on the data file that is sent to the site.

If Q5 is missing, Q6 is set to missing. If Q6 is missing, Q5 is set to missing.

If Q5 and Q6 are missing, BMI is set to missing. If Q5 and Q6 pass basic data edits, Body Mass Index (BMI) is calculated by the formula

$$BMI = \frac{kg}{m^2} = \frac{Q6}{Q5^2}$$

Biologically Implausible Value Edits: When basic edits are complete, logical edits are applied to Q5, Q6, and BMI to make sure that the results are biologically plausible or reasonable. Q5, Q6, and BMI are set to missing if age or sex is unknown. Q5, Q6, and BMI are set to missing when an observation lies outside the following limits. These limits were developed by the Division of Nutrition and Physical Activity.

Age	Males	Females
≤10	Weight: 13.61-90.72 kg Height: .94-1.68 m BMI: 11.5 –41	Weight: 13.61-90.72 kg Height: .94-1.73 m BMI: 11-40
11-12	Weight: 20.41-136.08 kg Height: 1.02-1.83 m BMI: 11.5-41	Weight: 15.88-136.08 kg Height: 1.02-1.83 m BMI: 11-40
13-14	Weight: 27.22-181.44 kg Height: 1.27-1.98 m BMI: 13-55	Weight: 27.22-181.44 kg Height: 1.27-1.98 m BMI: 13-55
≥15	Weight: 31.75-181.44 kg Height: 1.27-2.11 m BMI: 13-55	Weight: 27.22-181.44 kg Height: 1.27-1.98 m BMI: 13-55

The loading report includes the number of questionnaires that did not pass basic edits and the number that did not pass logical edits.

When edits are complete, overweight and risk of overweight indicators are calculated. See qnovwgt and qnrovwgt in the calculated variable tables for details on how these are calculated. See “Reference Data for Obesity” on page 18 for BMI percentile cutoffs.

3. Logical Consistency Edits

Responses are edited to ensure logical consistency. The majority of the edit criteria compare two questions at a time. If responses from two questions conflict logically, both variables are set to blank, except for the demographic variables.

The IV Drug Use question is edited differently than other questions. The respondent must specifically indicate use of an injectable drug in q48, q52, q53, q54, or q55 in order for them to indicate IV drug use in q56. If no injectable drug use is indicated, then q56 is set to A. If no injectable drug use is indicated but some of the drug use questions are left blank, then q56 is set to missing. The IV drug use edits are applied only to high school questionnaires.

For modified questionnaires, there may be additional site-added edit criteria. Site-added questions are edited among themselves. If necessary, demographic variables may also be used to edit against the site-added questions. However, no other standard variables are used to cross-edit with site-added questions to maintain integrity of internal consistency among core questions.

Records will be completely deleted or “subverted” under the following conditions:

When there are more than 50 total questions and if a respondent answers 20 or less questions or answers with b, c, d, e, f, g, or h 15 or more times in a row, all values except the demographic variables are set to missing.

When there are 50 or fewer total questions and if the respondent answers 15 or less questions or answers with b, c, d, e, f, g, or h 12 or more times in a row, all values except the demographic variables are set to missing.

Subverting records eliminates records that are judged too incomplete overall to be valid for analysis.

Lists of the logical edits used for 2003 high school and middle school questionnaires follow.

List of High School Edit Criteria

Weapon Carrying

1. If q12 = a and q13 = b, c, d, or e
2. If q12 = b and q13 = c, d, or e
3. If q12 = c and q13 = d or e
4. If q12 = d and q13 = e
5. If q12 = a and q14 = b, c, d, or e
6. If q12 = b and q14 = c, d, or e
7. If q12 = c and q14 = d or e
8. If q12 = d and q14 = e

Fighting

9. If q18 = a and q19 = b, c, d, or e
10. If q18 = b and q19 = c, d, or e
11. If q18 = c and q19 = d or e
12. If q18 = d and q19 = e
13. If q18 = a and q20 = b, c, d, e, f, g, or h
14. If q18 = b and q20 = c, d, e, f, g, or h
15. If q18 = c and q20 = d, e, f, g, or h
16. If q18 = d and q20 = e, f, g, or h
17. If q18 = e and q20 = f, g, or h
18. If q18 = f and q20 = g or h
19. If q18 = g and q20 = h

Attempted Suicide

20. If q26 = a and q27 = b or c
21. If q27 = a and q26 = b, c, d, or e

Tobacco Use

22. If q1 = a and q29 = e, f, or g
23. If q1 = b and q29 = f or g
24. If q1 = c and q29 = f or g
25. If q1 = d and q29 = g
26. If q1 = e and q29 = g
27. If q28 = b and q29 = b, c, d, e, f, or g
28. If q28 = b and q30 = b, c, d, e, f, or g
29. If q28 = b and q31 = b, c, d, e, f, or g
30. If q28 = b and q32 = b, c, d, e, f, g, or h
31. If q28 = b and q33 = b, c, d, e, f, or g
32. If q28 = b and q34 = a
33. If q28 = b and q35 = b
34. If q29 = a and q31 = c, d, e, f, or g
35. If q29 = a and q34 = a
36. If q29 = a and q35 = b
37. If q30 = a and q31 = b, c, d, e, f, or g
38. If q30 = a and q32 = b, c, d, e, f, g, or h
39. If q30 = a and q33 = b, c, d, e, f, or g
40. If q30 = b and q33 = c, d, e, f, or g
41. If q30 = c and q33 = d, e, f, or g
42. If q30 = d and q33 = e, f, or g
43. If q30 = e and q33 = f or g
44. If q30 = f and q33 = g

45. If q31 = a and q30 = b, c, d, e, f, or g
46. If q31 = a and q32 = b, c, d, e, f, g, or h
47. If q31 = a and q33 = b, c, d, e, f, or g
48. If q32 = a and q30 = b, c, d, e, f, or g
49. If q32 = a and q31 = b, c, d, e, f, or g
50. If q32 = a and q33 = b, c, d, e, f, or g
51. If q35 = a and q30 = b, c, d, e, f, or g
52. If q35 = a and q31 = b, c, d, e, f, or g
53. If q35 = a and q32 = b, c, d, e, f, g, or h
54. If q35 = a and q33 = b, c, d, e, f, or g
55. If q36 = a and q37 = b, c, d, e, f, or g
56. If q36 = b and q37 = c, d, e, f, or g
57. If q36 = c and q37 = d, e, f, or g
58. If q36 = d and q37 = e, f, or g
59. If q36 = e and q37 = f or g
60. If q36 = f and q37 = g

Alcohol Use

61. If q1 = a and q40 = e, f, or g
62. If q1 = b and q40 = f or g
63. If q1 = c and q40 = f or g
64. If q1 = d and q40 = g
65. If q1 = e and q40 = g
66. If q39 = a and q11 = b, c, d, or e
67. If q39 = a and q40 = b, c, d, e, f, or g
68. If q39 = a and q41 = b, c, d, e, f, or g
69. If q39 = b and q41 = c, d, e, f, or g
70. If q39 = c and q41 = e, f, or g
71. If q39 = d and q41 = f or g
72. If q39 = a and q42 = b, c, d, e, f, or g
73. If q39 = b and q42 = d, e, f, or g
74. If q39 = c and q42 = f or g
75. If q39 = d and q42 = g
76. If q39 = a and q43 = b, c, d, e, f, or g
77. If q39 = b and q43 = c, d, e, f, or g
78. If q39 = c and q43 = e, f, or g
79. If q39 = d and q43 = f or g
80. If q40 = a and q11 = b, c, d, or e
81. If q40 = a and q39 = b, c, d, e, f, or g
82. If q40 = a and q41 = b, c, d, e, f, or g
83. If q40 = a and q42 = b, c, d, e, f, or g
84. If q40 = a and q43 = b, c, d, e, f, or g
85. If q41 = a and q11 = b, c, d, or e
86. If q41 = a and q42 = b, c, d, e, f, or g
87. If q41 = b and q42 = d, e, f, or g
88. If q41 = c and q42 = e, f, or g
89. If q41 = d and q42 = f or g
90. If q41 = e and q42 = g
91. If q41 = a and q43 = b, c, d, e, f, or g
92. If q41 = b and q43 = c, d, e, f, or g
93. If q41 = c and q43 = d, e, f, or g

- 94. If q41 = d and q43 = e, f, or g
- 95. If q41 = e and q43 = f or g
- 96. If q41 = f and q43 = g

Marijuana Use

- 97. If q1 = a and q45 = e, f, or g
- 98. If q1 = b and q45 = f or g
- 99. If q1 = c and q45 = f or g
- 100. If q1 = d and q45 = g
- 101. If q1 = e and q45 = g
- 102. If q44 = a and q45 = b, c, d, e, f, or g
- 103. If q44 = a and q46 = b, c, d, e, or f
- 104. If q44 = b and q46 = c, d, e, or f
- 105. If q44 = c and q46 = d, e, or f
- 106. If q44 = d and q46 = e or f
- 107. If q44 = e and q46 = f
- 108. If q44 = a and q47 = b, c, d, e, or f
- 109. If q44 = b and q47 = c, d, e, or f
- 110. If q44 = c and q47 = d, e, or f
- 111. If q44 = d and q47 = e or f
- 112. If q44 = e and q47 = f
- 113. If q45 = a and q44 = b, c, d, e, f, or g
- 114. If q45 = a and q46 = b, c, d, e, or f
- 115. If q45 = a and q47 = b, c, d, e, or f
- 116. If q46 = a and q47 = b, c, d, e, or f
- 117. If q46 = b and q47 = c, d, e, or f
- 118. If q46 = c and q47 = d, e, or f
- 119. If q46 = d and q47 = e or f
- 120. If q46 = e and q47 = f

Cocaine and Other Drugs

- 121. If q48 = a and q49 = b, c, d, e, or f
- 122. If q48 = b and q49 = c, d, e, or f
- 123. If q48 = c and q49 = d, e, or f
- 124. If q48 = d and q49 = e or f
- 125. If q48 = e and q49 = f
- 126. If q50 = a and q51 = b, c, d, e, or f
- 127. If q50 = b and q51 = c, d, e, or f
- 128. If q50 = c and q51 = d, e, or f
- 129. If q50 = d and q51 = e or f
- 130. If q50 = e and q51 = f

Sexual Behavior

- 131. If q1 = a and q59 = d, e, f, g, or h
- 132. If q1 = b and q59 = e, f, g, or h
- 133. If q1 = c and q59 = f, g, or h
- 134. If q1 = d and q59 = g or h
- 135. If q1 = e and q59 = h
- 136. If q58 = a and q59 = a
- 137. If q58 = b and q59 = b, c, d, e, f, g, or h
- 138. If q58 = a and q60 = a
- 139. If q58 = b and q60 = b, c, d, e, f, or g
- 140. If q58 = a and q61 = a
- 141. If q58 = b and q61 = b, c, d, e, f, g, or h

- 142. If q58 = a and q62 = a
- 143. If q58 = b and q62 = b or c
- 144. If q58 = a and q63 = a
- 145. If q58 = b and q63 = b or c
- 146. If q58 = a and q64 = a
- 147. If q58 = b and q64 = b, c, d, e, f, g, or h
- 148. If q58 = b and q65 = b, c, or d
- 149. If q59 = a and q60 = b, c, d, e, f, or g
- 150. If q59 = a and q61 = b, c, d, e, f, g, or h
- 151. If q59 = a and q62 = b or c
- 152. If q59 = a and q63 = b or c
- 153. If q59 = a and q64 = b, c, d, e, f, g, or h
- 154. If q59 = a and q65 = b, c, or d
- 155. If q60 = a and q59 = b, c, d, e, f, g, or h
- 156. If q60 = a and q61 = b, c, d, e, f, g, or h
- 157. If q60 = b and q61 = d, e, f, g, or h
- 158. If q60 = c and q61 = e, f, g, or h
- 159. If q60 = d and q61 = f, g, or h
- 160. If q60 = e and q61 = g or h
- 161. If q60 = f and q61 = h
- 162. If q60 = a and q62 = b or c
- 163. If q60 = a and q63 = b or c
- 164. If q60 = a and q64 = b, c, d, e, f, g, or h
- 165. If q60 = a and q65 = b, c, or d
- 166. If q61 = a and q59 = b, c, d, e, f, g, or h
- 167. If q61 = a and q60 = b, c, d, e, f, or g
- 168. If q61 = a and q62 = b or c
- 169. If q61 = a and q63 = b or c
- 170. If q61 = a and q64 = b, c, d, e, f, g, or h
- 171. If q61 = a and q65 = b, c, or d
- 172. If q62 = a and q59 = b, c, d, e, f, g, or h
- 173. If q62 = a and q60 = b, c, d, e, f, or g
- 174. If q62 = a and q61 = b, c, d, e, f, g, or h
- 175. If q62 = a and q63 = b or c
- 176. If q62 = a and q64 = b, c, d, e, f, g, or h
- 177. If q62 = a and q65 = b, c, or d
- 178. If q63 = a and q59 = b, c, d, e, f, g, or h
- 179. If q63 = a and q60 = b, c, d, e, f, or g
- 180. If q63 = a and q61 = b, c, d, e, f, g, or h
- 181. If q63 = a and q62 = b or c
- 182. If q63 = a and q64 = b, c, d, e, f, g, or h
- 183. If q63 = c and q64 = d
- 184. If q63 = a and q65 = b, c, or d
- 185. If q64 = a and q59 = b, c, d, e, f, g, or h
- 186. If q64 = a and q60 = b, c, d, e, f, or g
- 187. If q64 = a and q61 = b, c, d, e, f, g, or h
- 188. If q64 = a and q62 = b or c
- 189. If q64 = a and q63 = b or c
- 190. If q64 = a and q65 = b, c, or d

Physical Activity

- 191. If q84 = a and q85 = b, c, d, e, f, g, or h
- 192. If q85 = a and q84 = b, c, d, e, or f

IV Drug Use

193. If $q48 = a$ and $q52 = a$ and $q53 = a$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = a$
194. If $q48 = a$ and $q52 = a$ and $q53 = a$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
195. If $q48 = a$ and $q52 = a$ and $q53 = a$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
196. If $q48 = a$ and $q52 = a$ and $q53 = a$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
197. If $q48 = a$ and $q52 = a$ and $q53 = .$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
198. If $q48 = a$ and $q52 = a$ and $q53 = .$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
199. If $q48 = a$ and $q52 = a$ and $q53 = .$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
200. If $q48 = a$ and $q52 = a$ and $q53 = .$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
201. If $q48 = a$ and $q52 = .$ and $q53 = a$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
202. If $q48 = a$ and $q52 = .$ and $q53 = a$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
203. If $q48 = a$ and $q52 = .$ and $q53 = a$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
204. If $q48 = a$ and $q52 = .$ and $q53 = a$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
205. If $q48 = a$ and $q52 = .$ and $q53 = .$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
206. If $q48 = a$ and $q52 = .$ and $q53 = .$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
207. If $q48 = a$ and $q52 = .$ and $q53 = .$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
208. If $q48 = a$ and $q52 = .$ and $q53 = .$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
209. If $q48 = .$ and $q52 = a$ and $q53 = a$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
210. If $q48 = .$ and $q52 = a$ and $q53 = a$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
211. If $q48 = .$ and $q52 = a$ and $q53 = a$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
212. If $q48 = .$ and $q52 = a$ and $q53 = a$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
213. If $q48 = .$ and $q52 = a$ and $q53 = .$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
214. If $q48 = .$ and $q52 = a$ and $q53 = .$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
215. If $q48 = .$ and $q52 = a$ and $q53 = .$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
216. If $q48 = .$ and $q52 = a$ and $q53 = .$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
217. If $q48 = .$ and $q52 = .$ and $q53 = a$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
218. If $q48 = .$ and $q52 = .$ and $q53 = a$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
219. If $q48 = .$ and $q52 = .$ and $q53 = a$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
220. If $q48 = .$ and $q52 = .$ and $q53 = a$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
221. If $q48 = .$ and $q52 = .$ and $q53 = .$ and $q54 = a$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
222. If $q48 = .$ and $q52 = .$ and $q53 = .$ and $q54 = a$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$
223. If $q48 = .$ and $q52 = .$ and $q53 = .$ and $q54 = .$ and $q55 = a$ and $q56 = b$ or c then $q56 = .$
224. If $q48 = .$ and $q52 = .$ and $q53 = .$ and $q54 = .$ and $q55 = .$ and $q56 = b$ or c then $q56 = .$

Sex and Alcohol or Drugs

225. If $q62 = b$ and $q39 = a$ and $q44 = a$ and $q48 = a$ and $q50 = a$ and $q52 = a$ and $q53 = a$ and $q54 = a$

List of Middle School Edit Criteria

Fighting

1. If q13 = b and q14 = a

Tobacco Use

2. If q1 = a and q19 = e, f, g, or h
3. If q1 = b and q19 = f, g, or h
4. If q1 = c and q19 = g or h
5. If q1 = d and q19 = h
6. If q18 = b and q19 = b, c, d, e, f, g, or h
7. If q18 = b and q20 = b, c, d, e, f, or g
8. If q18 = b and q21 = b, c, d, e, f, or g
9. If q18 = b and q22 = b, c, d, e, f, g, or h
10. If q18 = b and q23 = a
11. If q19 = a and q21 = c, d, e, f, or g
12. If q20 = a and q21 = b, c, d, e, f, or g
13. If q20 = a and q22 = b, c, d, e, f, g, or h
14. If q21 = a and q20 = b, c, d, e, f, or g
15. If q21 = a and q22 = b, c, d, e, f, g, or h
16. If q22 = a and q20 = b, c, d, e, f, or g
17. If q22 = a and q21 = b, c, d, e, f, or g

Alcohol Use

18. If q1 = a and q27 = e, f, g, or h
19. If q1 = b and q27 = f, g, or h
20. If q1 = c and q27 = g or h
21. If q1 = d and q27 = h
22. If q26 = a and q27 = a

23. If q26 = b and q27 = b, c, d, e, f, g, or h

Marijuana Use

24. If q1 = a and q29 = e, f, g, or h
25. If q1 = b and q29 = f, g, or h
26. If q1 = c and q29 = g, or h
27. If q1 = d and q29 = h
28. If q28 = a and q29 = b
29. If q28 = b and q29 = b, c, d, e, f, g, or h

Sexual Intercourse

30. If q1 = a and q35 = e, f, g, or h
31. If q1 = b and q35 = f, g, or h
32. If q1 = c and q35 = g or h
33. If q1 = d and q35 = h
34. If q34 = a and q35 = a
35. If q34 = b and q35 = b, c, d, e, f, g, or h
36. If q34 = a and q36 = a
37. If q34 = b and q36 = b, c, d, or e
38. If q34 = a and q37 = a
39. If q34 = b and q37 = b or c
40. If q35 = a and q36 = b, c, d, or e
41. If q36 = a and q35 = b, c, d, e, f, g, or h
42. If q35 = a and q37 = b or c
43. If q37 = a and q35 = b, c, d, e, f, g, or h
44. If q36 = a and q37 = b or c
45. If q37 = a and q36 = b, c, d, or e

II. Calculated Variables

1. Race/Ethnicity Calculation

Race data are scanned as an eight-column character variable from columns 44–51 of the ASCII file. The system reads it into `q4_orig`. If the respondent selected “A”, then column 44 contains an “A”. If they selected “B”, then column 45 contains a “B”, and so on up to column 51, if they selected “H”. The standard questionnaire only goes up to “F” but the processing system supports up to eight choices.

The information in `q4_orig` is used to create `Q4`. If the respondent selected only one response option, then `Q4` is set to “1” to “6” depending on the option selected. If they selected more than one response and included Hispanic, then `Q4` is set to “7” indicating “Multiple – Hispanic”. If they selected more than one response and did not include Hispanic, then `Q4` is set to “8” indicating “Multiple – Non-Hispanic”. If they did not select anything, then `Q4` is set to missing.

`Q4` is stored as a single column character variable. `Q4_orig` is maintained in CDC’s copy of the data and is included in the data sent to the site should they desire additional analyses.

This plan meets the processing and reporting standards for the combined format race/ethnicity question contained in “Provisional Guidance on the Implementation of the 1997 Standards for Federal Data on Race and Ethnicity” provided by the Office on Management and Budget (Feb. 1999).

2. Calculated Variables

Calculated variables are created and added to the master datasets during editing. They’re names correspond to the original question number. The calculated variable for Q10 will be named `QN10`, for example. In general the `QN`-variables are based on a single question.

Occasionally, calculated variables are subset differently or are based on more than one question. There are also additional calculated variables that don’t correspond to a single questionnaire question. How these variables are derived is detailed in the following tables. The values included in the samples are numbers that correspond to the original responses; 1 = A, 2 = B, etc.

High School Calculated Variables

Var	Description	SAS Code
Qn8	<p>When you rode a bicycle during the past 12 months, how often did you wear a helmet?</p> <p>A. I did not ride a bicycle during the past 12 months B. Never wore a helmet C. Rarely wore a helmet D. Sometimes wore a helmet E. Most of the time wore a helmet F. Always wore a helmet</p> <p>Qn8 is one when the student reports that they never or rarely wore a helmet when riding a bicycle. It's two if they wore a helmet more than that. It's missing if they never rode a bicycle.</p> <p>The denominator is all students who reported riding a bicycle.</p>	<pre>if q8 in ('2','3') then qn8 = 1; else if q8 in ('4','5','6') then qn8 = 2;</pre>
Qn35	<p>During the past 12 months, did you ever try to quit smoking cigarettes?</p> <p>A. I did not smoke during the past 12 months B. Yes C. No</p> <p>Qn35 is one when the student reports that they have tried to quit smoking. It's two if they report they didn't try to quit. It's missing if they report they didn't smoke.</p> <p>The denominator is all students who report that they are a current smoker (Q30 = B through G).</p>	<pre>If q35 = '2' then qn35 = 1; Else if q35 = '3' then qn35 = 2; If q30 in (' ', '1') then qn35 = .;</pre>
Qn62	<p>Did you drink alcohol or use drugs before you had sexual intercourse the last time?</p> <p>A. I have never had sexual intercourse B. Yes C. No</p> <p>Qn62 is one when the student reports that they drank alcohol or used drugs before the last sexual intercourse. It's two if they didn't. It's missing if in q61 they report that they've never had sexual intercourse or not in the last 3 months or if q61 is missing.</p> <p>The denominator is all students who are currently sexually active (Q61 = C through H).</p>	<pre>if q62 = '2' then qn62 = 1; else if q62 = '3' then qn62 = 2; if q61 in (' ', '1', '2') then qn62 = .;</pre>

High School Calculated Variables

Var	Description	SAS Code
Qn63	<p>The last time you had sexual intercourse, did you or your partner use a condom? A. I have never had sexual intercourse B. Yes C. No</p> <p>Qn63 is one when the student reports that they or their partner used a condom the last time they had sexual intercourse. It's two if they didn't. It's missing if in q61 they report that they've never had sexual intercourse or not in the last 3 months or if q61 is missing.</p> <p>The denominator is all students who are currently sexually active (Q61 = C through H).</p>	<pre>if q63 = '2' then qn63 = 1; else if q63 = '3' then qn63 = 2; if q61 in (' ', '1', '2') then qn63 = .;</pre>
Qn64	<p>The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? (Select only one response.) A. I have never had sexual intercourse B. No method was used to prevent pregnancy C. Birth control pills D. Condoms E. Depo-Provera (injectable birth control) F. Withdrawal G. Some other method H. Not sure</p> <p>Qn64 is one when the student reports that they used birth control pills to prevent pregnancy the last time they had sexual intercourse. It's two if they didn't. It's missing if in q61 they report that they've never had sexual intercourse or not in the last 3 months or if q61 is missing.</p> <p>The denominator is all students who are currently sexually active (Q61 = C through H).</p>	<pre>if q64 = '3' then qn64 = 1; else if q64 in ('2', '4', '5', '6', '7', '8') then qn64 = 2; if q61 in (' ', '1', '2') then qn64 = .;</pre>
Qn85	<p>During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports? A. I do not take PE B. Less than 10 minutes C. 10 to 20 minutes D. 21 to 30 minutes E. 31 to 40 minutes F. 41 to 50 minutes G. 51 to 60 minutes H. More than 60 minutes</p>	<pre>if q85 in ('4', '5', '6', '7', '8') then qn85 = 1; else if q85 in ('2', '3') then qn85 = 2;</pre>

High School Calculated Variables		
Var	Description	SAS Code
	<p>Qn85 is one when the student reports that they spent more than 20 minutes exercising in an average PE class. It's two if they spent 20 minutes or less. It's missing if they are not enrolled in PE.</p> <p>The denominator is all students who are enrolled in PE based on Q85.</p>	
Qnfrfcig (M1)	<p>Qnfrfcig is based on Q30 and indicates frequent cigarette smoking. It's one when the student reports they smoked on ≥ 20 days of the past 30 days; two otherwise. If Q30 is missing, then qnfrfcig is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q30 summary table.</p>	<pre>if q30 in ('6','7') then qnfrfcig = 1; else if q30 in ('1','2','3','4','5') then qnfrfcig = 2;</pre>
Qntencig (M2)	<p>Qntencig is based on Q31 and indicates that the student smoked more than 10 cigarettes per day on the days that they smoked. It's one if the condition is met; two otherwise. It's missing is Q31 is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q31 summary table.</p>	<pre>if q31 in ('6','7') then qntencig = 1; else if q31 in ('1','2','3','4','5') then qntencig = 2;</pre>
Qnstore (M3)	<p>Qnstore is based on Q1 and Q32 and indicates that the student is < 18 years old, is a current smoker, and bought cigarettes in a store. It's one when they meet these conditions and two otherwise. If the student is ≥ 18 or is not a current smoker, then qnstore is missing. If Q1 or Q32 is missing, then qnstore is missing.</p> <p>The denominator is all students who are less than 18 years old.</p> <p>Prints after Q32 summary table.</p>	<pre>if q32 in ('2') then qnstore = 1; else if q32 in ('3','4','5','6','7','8') then qnstore = 2; if q1 in ('7',' ') then qnstore = .;</pre>

High School Calculated Variables

Var	Description	SAS Code
Qnanytob (M4)	<p>Qnanytob is based in Q30 (cigarettes), Q36 (smokeless tobacco), and Q38 (cigars). It's one if the respondent has used any tobacco in the past 30 days. It's two if not. It's missing if any of Q30, Q37, or Q39 is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q38 summary table.</p>	<pre> qnanytob = 2; if q30 in ('2','3','4','5','6','7') then qnanytob = 1; if q36 in ('2','3','4','5','6','7') then qnanytob = 1; if q38 in ('2','3','4','5','6','7') then qnanytob = 1; if q30 = ' ' or q36 = ' ' or q38 = ' ' then qnanytob = .; </pre>
Qnabstsx (M5)	<p>Qnabstsx is based on Q61 and indicates that the student is currently sexually abstinent. It's one when they indicate that they have ever had sexual intercourse but haven't had sexual intercourse in the last three months; it's two if they answer one or more people. If Q61 is missing or the student indicates that they have never had sexual intercourse, then qnabstsx is missing.</p> <p>The denominator is all students who are currently sexually active (Q61 = C through H).</p> <p>Prints after Q61 summary table.</p>	<pre> if q61='2' then qnabstsx = 1; else if q61 in ('3','4','5','6','7','8') then qnabstsx = 2; </pre>
Qnrespsx (M6)	<p>Qnrespsx is based on Q61 and Q63 and indicated that the student is being sexually responsible. It's one if they've never had sex or haven't had sex in the last three months or used a condom the last time they had sex.</p> <p>The denominator is all students.</p> <p>Prints after Q63 summary table.</p>	<pre> if (q61=1) then safecomp=1; else if (q61=2) then safecomp=2; else if (3<=q61<=8) and (q63=2) then safecomp=3; else if (3<=q61<=8) and (q63=3) then safecomp=4; if safecomp=1 then qnrespsx=1; else if safecomp=2 then qnrespsx=1; else if safecomp=3 then qnrespsx=1; else if safecomp=4 then qnrespsx=2; </pre>

High School Calculated Variables

Var	Description	SAS Code
Qnrowwgt and Qnovwgt (M7 and M8)	<p>Qnrowwgt is based on height, weight, Q1, and Q2 and indicates the student is at risk of being overweight. Qnovwgt is based on height, weight, Q1, and Q2 and indicates the student is considered overweight. BMI values that pass the editing standards stated in Section 2 are compared to the following chart. Qnrowwgt is set to 1 when BMI is greater than or equal to the 85th percentile and less than the 95th percentile in weight distribution; two otherwise. If BMI is missing, then qnrowwgt is missing. Qnovwgt is set to 1 when BMI is greater than or equal to the 95th percentile in weight distribution; two otherwise. If BMI is missing, then qnovwgt is missing. Qnrowwgt and qnovwgt are mutually exclusive. BMI itself is not included on the file that is sent to the site.</p> <p>The denominator is all students.</p> <p>Both print after Q65 summary table.</p>	<p>SAS code not available.</p>
Qnfrvg (M9)	<p>Qnfrvg is based on Q73 to Q78 and indicates that the student ate five or more servings of fruits and vegetables a day, on average, over the past seven days. It's one when they meet these conditions and two otherwise. If any of the variables are missing then qnfrvg is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q78 summary table.</p>	<pre> Length qfrvg1 qfrvg2 qfrvg3 qfrvg4 qfrvg5 qfrvg6 8; Qfrvgtot=0; Array qfv{6} q73 q74 q75 q76 q77 q78; Array qfrvg{6} qfrvg1 qfrvg2 qfrvg3 qfrvg4 qfrvg5 qfrvg6; do I=1 to 6; select (qfv{i}); when('1') qfrvg{i}=0; when('2') qfrvg{i}=2/7; when('3') qfrvg{i}=5/7; when('4') qfrvg{i}=1; when('5') qfrvg{i}=2; when('6') qfrvg{i}=3; when('7') qfrvg{i}=4; otherwise qfrvg{i}=.; end; qfrvgtot = qfrvgtot+qfrvg{i}; end; if qfrvgtot>=5 then qnfrvg=1; else if qfrvgtot ne . then qnfrvg=2; else qnfrvg=.; drop qfrvg1-qfrvg6 qfrvgtot; </pre>

High School Calculated Variables

Var	Description	SAS Code
Qnminpa (M10)	<p>Qnminpa is based on Q80 and Q81 and indicates that the student didn't do the minimum of moderate and didn't do the minimum of vigorous physical activity. It's one if the student didn't do at least the minimum level of either; it's two if they did the minimum level or more of either. It's missing if either Q80 or Q81 is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q81 summary table.</p>	<pre> Qnminpa = 2; if q80 in ('1','2','3') and q81 in ('1','2','3','4','5') then qnminpa = 1; if q80 = ' ' then qnminpa = .; if q81 = ' ' then qnminpa = .; </pre>
Qnnopa (M11)	<p>Qnnopa is based on Q80 and Q81 and indicates that the student didn't do any moderate PA and didn't do any vigorous PA. It's one if the student did zero days of moderate and zero days of vigorous PA; it's two if they did at least some of one or the other. It's missing if either Q80 or Q81 is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q81 summary table.</p>	<pre> qnnopa = 2; if q80 = '1' and q81 = '1' then qnnopa = 1; if q80 = ' ' then qnnopa = .; if q81 = ' ' then qnnopa = .; </pre>
Qndlype (M12)	<p>Qndlype is based on Q84 and indicates that the student takes physical education (PE) daily. It's one if this condition is met; two otherwise. If Q84 is missing, then qndlype is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q84 summary table.</p>	<pre> if q84 = '6' then qndlype = 1; else if q84 in ('1','2','3','4','5') then qndlype = 2; </pre>

Middle School Calculated Variables

Var	Description	SAS Code
Qn9	<p>When you ride a bicycle, how often do you wear a helmet?</p> <p>A. I do not ride a bicycle B. Never wore a helmet C. Rarely wore a helmet D. Sometimes wore a helmet E. Most of the time wore a helmet F. Always wore a helmet</p> <p>Qn9 is one when the student reports that they never or rarely wear a helmet when riding a bicycle. It's two if they wear a helmet more than that. It's missing if they never ride a bicycle.</p> <p>The denominator is all students who report riding a bicycle.</p>	<pre>if q9 in ('2','3') then qn9 = 1; else if q9 in ('4','5','6') then qn9 = 2;</pre>
Qn10	<p>When you rollerblade or ride a skateboard, how often do you wear a helmet?</p> <p>A. I do not ride a bicycle B. Never wear a helmet C. Rarely wear a helmet D. Sometimes wear a helmet E. Most of the time wear a helmet F. Always wear a helmet</p> <p>Qn10 is one when the student reports that they never or rarely wear a helmet when rollerblading or riding a skateboard. It's two if they wear a helmet more than that. It's missing if they don't rollerblade or ride a skateboard.</p> <p>The denominator is all students who report rollerblading or riding a skateboard.</p>	<pre>if q10 in ('2','3') then qn10 = 1; else if q10 in ('4','5','6') then qn10 = 2;</pre>
Qn37	<p>The last time you had sexual intercourse, did you or your partner use a condom?</p> <p>A. I have never had sexual intercourse B. Yes C. No</p> <p>Qn37 is one when the student reports that they or their partner used a condom the last time they had sexual intercourse. It's two if they didn't. It's missing if in q34 they report that they've never had sexual intercourse or if q34 is missing.</p> <p>The denominator is all students who have ever had sexual intercourse.</p>	<pre>if q37 = '2' then qn37 = 1; else if q37 = '3' then qn37 = 2; if q34 in (' ', '2') then qn37 = .;</pre>

Middle School Calculated Variables		
Var	Description	SAS Code
Qnfr cig (M1)	<p>Qnfr cig is based on Q20 and indicates frequent cigarette smoking. It's one when the student reports they smoked on ≥ 20 days of the past 30 days; two otherwise. If Q20 is missing, then qnfr cig is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q20 summary table.</p>	<pre>if q20 in ('6','7') then qnfr cig = 1; else if q20 in ('1','2','3','4','5') then qnfr cig = 2;</pre>
Qntencig (M2)	<p>Qntencig is based on Q21 and indicates that the student smoked more than 10 cigarettes per day on the days that they smoked. It's one if the condition is met; two otherwise. It's missing if Q21 is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q21 summary table.</p>	<pre>if q21 in ('6','7') then qntencig = 1; else if q21 in ('1','2','3','4','5') then qntencig = 2;</pre>
Qnstore (M3)	<p>Qnstore is based on Q22 and indicates that the student is a current smoker, and bought cigarettes in a store. It's one when they meet these conditions and two otherwise. If the student is not a current smoker, then qnstore is missing. If Q22 is missing, then qnstore is missing.</p> <p>The denominator is all students who are current smokers.</p> <p>Prints after Q22 summary table.</p>	<pre>if q22 in ('2') then qnstore = 1; else if q22 in ('3','4','5','6','7','8') then qnstore = 2;</pre>
Qnanytob (M4)	<p>Qnanytob is based on Q20 (cigarettes), Q24 (smokeless tobacco), and Q25 (cigars). It's one if the respondent has used any tobacco in the past 30 days. It's two if not. It's missing if any of Q20, Q24, or Q25 is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q25 summary table.</p>	<pre>qnanytob = 2; if q20 in ('2','3','4','5','6','7') then qnanytob = 1; if q24 in ('2','3','4','5','6','7') then qnanytob = 1; if q25 in ('2','3','4','5','6','7') then qnanytob = 1; if q20 = ' ' or q24 = ' ' or q25 = ' ' then qnanytob = .;</pre>

Middle School Calculated Variables		
Var	Description	SAS Code
Qnrowwgt and Qnovwgt (M5 and M6)	<p>Qnrowwgt is based on height, weight, Q1, and Q2 and indicates the student is at risk of being overweight. Qnovwgt is based on height, weight, Q1, and Q2 and indicates the student is considered overweight. BMI values that pass the editing standards stated in Section 2 are compared to the following chart. Qnrowwgt is set to 1 when BMI is greater than or equal to the 85th percentile and less than the 95th percentile in weight distribution; two otherwise. If BMI is missing, then qnrowwgt is missing. Qnovwgt is set to 1 when BMI is greater than or equal to the 95th percentile in weight distribution; two otherwise. If BMI is missing, then qnovwgt is missing. Qnrowwgt and qnovwgt are mutually exclusive. BMI itself is not included on the file that is sent to the site.</p> <p>The denominator is all students.</p> <p>Both print after Q37 summary table.</p>	<p>SAS code not available.</p>
Qndlype (M7)	<p>Qndlype is based on Q47 and indicates that the student takes physical education (PE) daily. It's one if this condition is met; two otherwise. If Q47 is missing, then qndlype is missing.</p> <p>The denominator is all students.</p> <p>Prints after Q47 summary table.</p>	<pre>if q47 = '6' then qndlype = 1; else if q47 in ('1','2','3','4','5') then qndlype = 2;</pre>

3. Reference Data for Obesity

Reference Data for Obesity used in 2003 YRBS Processing				
Age	Males		Females	
	85 th	95 th	85 th	95 th
≤9	18.97	21.58	19.51	22.35
10	19.75	22.64	20.39	23.52
11	20.57	23.69	21.27	24.66
12	21.40	24.67	22.13	25.74
13	22.22	25.59	22.94	26.75
14	23.03	26.42	23.67	27.67
15	23.80	27.18	24.34	28.49
16	24.55	27.88	24.92	29.25
17	25.27	28.58	25.43	29.95
≥18	25.98	29.30	25.87	30.64

Reference for BMI percentiles: Kuczmarski RJ, Ogden CL, Grummer-Strawn LM, et al. CDC growth charts: United States. Advance data from vital and Health statistics; no. 314. Hyattsville, Maryland: National Center for Health Statistics. 2000.