**Estimated public health gains from smokers in Germany switching to risk-reduced alternatives: Results from population health impact modelling by socioeconomic group**

**Short title:** Public health gains from smokers in Germany switching to risk-reduced alternatives by socioeconomic group

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**ADDITIONAL FILE 3**

This document presents the transition probabilities (TP) by socioeconomic group (SEG) for each Alternative Scenario in Germany.

This document presents the monthly transition probabilities (TP) by SEG under the RRP Scenario for the seven Alternative Scenarios described in the paper. The TPs are expressed per million and are given separately by sex, period of follow-up (1–60, 61–120, and 121+ months), and age (10–14, 15–19…75–79 years). The presentation might be reduced where the TPs are the same for different subgroups. There are 24 TPs representing the probabilities of transition among the six states (N = never use, C = current cigarettes only, H = current HnB only, E = current ECigs only, M = current multiple product use, and F = former use). Of the 24 probabilities, four (PNC, PNH, PNE, and PNM) refer to initiation, four (PCF, PHF, PEF, and PMF) to cessation, four to re-initiation (PFC, PFH, PFE, and PFM), and twelve (PCH, PCE, PCM, PHC, PHE, PHM, PEC, PEH, PEM, PMC, PMH, and PME) to switching among current use groups.

**Alternative Scenario 1: Complete cessation**

For both sexes, each period of follow-up, and all age groups, PCF is set as 1000000 with all other TPs set as 0.

**Alternative Scenario 3: Complete switch to RRPs (50% HnBs and 50% ECigs)**

For both sexes, each period of follow-up, all age groups, and each SEG, PCH and PCE are each set at 500000. The initiation probabilities PNH and PNE and the re-initiation probabilities PFH and PFE are each set at half of the corresponding probabilities PNC and PFC in Table 3 of the main paper, while the quitting probabilities PHF and PEF are each set at the value for PCF in that table. All other TPs are set as 0.

**Alternative Scenario 6: Conversion Scenario**

The TPs for initiation, cessation, and re-initiation, which vary by sex, period of follow-up, age, and SEG are shown below. Note that the sum of the initiation TPs and the sum of the re-initiation TPs are equal to the values of PNC and PFC shown in Table 3 of the main paper, while each the cessation TP is equal to the value of PCF in that table.

SEG A

|  | Period of |  | Initiation | Cessation | Re-initiation |
| --- | --- | --- | --- | --- | --- |
| Sex | follow-up (mo) | Age(years) | PNC | PNH | PNE | PNM | PCF | PHF | PEF | PMF | PFC | PFH | PFE | PFM |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M | 1–60 | 10–14 | 3,007 | 558 | 558 | 172 | 2,446 | 2,446 | 2,446 | 2,446 | 466 | 233 | 233 | 233 |
|  |  | 15–19 | 3,905 | 725 | 725 | 223 | 4,293 | 4,293 | 4,293 | 4,293 | 814 | 407 | 407 | 407 |
|  |  | 20–24 | 1,792 | 333 | 333 | 102 | 4,631 | 4,631 | 4,631 | 4,631 | 877 | 439 | 439 | 439 |
|  |  | 25–29 | 121 | 22 | 22 | 7 | 3,411 | 3,411 | 3,411 | 3,411 | 648 | 324 | 324 | 324 |
|  |  | 30–34 | 361 | 67 | 67 | 21 | 3,695 | 3,695 | 3,695 | 3,695 | 702 | 351 | 351 | 351 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 4,007 | 4,007 | 4,007 | 4,007 | 761 | 380 | 380 | 380 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 3,569 | 3,569 | 3,569 | 3,569 | 678 | 339 | 339 | 339 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 4,041 | 4,041 | 4,041 | 4,041 | 574 | 287 | 287 | 287 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 5,040 | 5,040 | 5,040 | 5,040 | 474 | 237 | 237 | 237 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 4,487 | 4,487 | 4487 | 4,487 | 211 | 105 | 105 | 105 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 2,153 | 2,153 | 2,153 | 2,153 | 102 | 51 | 51 | 51 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 2,252 | 2,252 | 2,252 | 2,252 | 53 | 27 | 27 | 27 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 2,673 | 2,673 | 2,673 | 2,673 | 32 | 16 | 16 | 16 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 2,673 | 2,673 | 2,673 | 2,673 | 32 | 16 | 16 | 16 |
|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 61–120 | 10–14 | 2,558 | 475 | 475 | 146 | 2,063 | 2,063 | 2,063 | 2,063 | 394 | 197 | 197 | 197 |
|  |  | 15–19 | 3,371 | 626 | 626 | 193 | 7,804 | 7,804 | 7,804 | 7,804 | 1,464 | 732 | 732 | 732 |
|  |  | 20–24 | 685 | 127 | 127 | 39 | 4,476 | 4,476 | 4,476 | 4,476 | 848 | 424 | 424 | 424 |
|  |  | 25–29 | 224 | 42 | 42 | 13 | 4,047 | 4,047 | 4047 | 4,047 | 768 | 384 | 384 | 384 |
|  |  | 30–34 | 323 | 60 | 60 | 18 | 4,158 | 4,158 | 4,158 | 4,158 | 789 | 394 | 394 | 394 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 4,044 | 4,044 | 4,044 | 4,044 | 767 | 384 | 384 | 384 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 3,146 | 3,146 | 3,146 | 3,146 | 599 | 299 | 299 | 299 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 3,751 | 3,751 | 3,751 | 3,751 | 533 | 267 | 267 | 267 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 4,358 | 4,358 | 4,358 | 4,358 | 411 | 205 | 205 | 205 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 3,865 | 3,865 | 3,865 | 3,865 | 182 | 91 | 91 | 91 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 2,627 | 2,627 | 2,627 | 2,627 | 124 | 62 | 62 | 62 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 2,680 | 2,680 | 2,680 | 2,680 | 63 | 32 | 32 | 32 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 3,144 | 3,144 | 3,144 | 3,144 | 37 | 19 | 19 | 19 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 3,144 | 3,144 | 3,144 | 3,144 | 37 | 19 | 19 | 19 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 121–240 | 10–14 | 2,018 | 375 | 375 | 115 | 1,840 | 1,840 | 1,840 | 1,840 | 351 | 176 | 176 | 176 |
|  |  | 15–19 | 3,107 | 577 | 577 | 178 | 14,553 | 14,553 | 14,553 | 14,553 | 2,672 | 1,336 | 1,336 | 1,336 |
|  |  | 20–24 | 262 | 49 | 49 | 15 | 5,489 | 5,489 | 5,489 | 5,489 | 1,037 | 519 | 519 | 519 |
|  |  | 25–29 | 324 | 60 | 60 | 19 | 5,296 | 5,296 | 5,296 | 5,296 | 1,001 | 501 | 501 | 501 |
|  |  | 30–34 | 286 | 53 | 53 | 16 | 5,029 | 5,029 | 5,029 | 5,029 | 952 | 476 | 476 | 476 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 4,385 | 4,385 | 4,385 | 4,385 | 831 | 416 | 416 | 416 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 2,750 | 2,750 | 2,750 | 2,750 | 524 | 262 | 262 | 262 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 3,376 | 3,376 | 3,376 | 3,376 | 434 | 217 | 217 | 217 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 3,432 | 3,432 | 3,432 | 3,432 | 281 | 141 | 141 | 141 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 3,139 | 3,139 | 3,139 | 3,139 | 127 | 64 | 64 | 64 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 2,893 | 2,893 | 2,893 | 2,893 | 111 | 56 | 56 | 56 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 3,015 | 3,015 | 3,015 | 3,015 | 57 | 28 | 28 | 28 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 3,571 | 3,571 | 3,571 | 3,571 | 33 | 17 | 17 | 17 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 3,571 | 3,571 | 3,571 | 3,571 | 32 | 16 | 16 | 16 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| F | 1–60 | 10–14 | 2,423 | 450 | 450 | 138 | 1,454 | 1,454 | 1,454 | 1,454 | 278 | 139 | 139 | 139 |
|  |  | 15–19 | 4,164 | 773 | 773 | 238 | 18,310 | 18,310 | 18,310 | 18,310 | 3,330 | 1,665 | 1,665 | 1,665 |
|  |  | 20–24 | 1,898 | 353 | 353 | 108 | 2,808 | 2,808 | 2,808 | 2,808 | 535 | 267 | 267 | 267 |
|  |  | 25–29 | 911 | 169 | 169 | 52 | 2,390 | 2,390 | 2,390 | 2,390 | 456 | 228 | 228 | 228 |
|  |  | 30–34 | 447 | 83 | 83 | 26 | 2,532 | 2,532 | 2,532 | 2,532 | 483 | 241 | 241 | 241 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 2,891 | 2,891 | 2,891 | 2,891 | 550 | 275 | 275 | 275 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 2,089 | 2,089 | 2,089 | 2,089 | 399 | 199 | 199 | 199 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 2,396 | 2,396 | 2,396 | 2,396 | 342 | 171 | 171 | 171 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 3,463 | 3,463 | 3,463 | 3,463 | 202 | 101 | 101 | 101 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 6,368 | 6,368 | 6,368 | 6,368 | 162 | 81 | 81 | 81 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 6,226 | 6,226 | 6,226 | 6,226 | 122 | 61 | 61 | 61 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 3,685 | 3,685 | 3,685 | 3,685 | 78 | 39 | 39 | 39 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 3,020 | 3,020 | 3,020 | 3,020 | 50 | 25 | 25 | 25 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 3,020 | 3,020 | 3,020 | 3,020 | 50 | 25 | 25 | 25 |
|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 61–120 | 10–14 | 2,090 | 388 | 388 | 119 | 2,210 | 2,210 | 2,210 | 2,210 | 422 | 211 | 211 | 211 |
|  |  | 15–19 | 2,979 | 553 | 553 | 170 | 14,719 | 14,719 | 14,719 | 14,719 | 2,706 | 1,353 | 1,353 | 1,353 |
|  |  | 20–24 | 1,395 | 259 | 259 | 80 | 3,470 | 3,470 | 3,470 | 3,470 | 659 | 330 | 330 | 330 |
|  |  | 25–29 | 677 | 126 | 126 | 39 | 3,044 | 3,044 | 3,044 | 3,044 | 579 | 290 | 290 | 290 |
|  |  | 30–34 | 334 | 62 | 62 | 19 | 3,100 | 3,100 | 3,100 | 3,100 | 590 | 295 | 295 | 295 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 3,056 | 3,056 | 3,056 | 3,056 | 582 | 291 | 291 | 291 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 2,798 | 2,798 | 2,798 | 2,798 | 480 | 240 | 240 | 240 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 3,440 | 3,440 | 3,440 | 3,440 | 424 | 212 | 212 | 212 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 4,121 | 4,121 | 4,121 | 4,121 | 315 | 157 | 157 | 157 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 5,097 | 5,097 | 5,097 | 5,097 | 198 | 99 | 99 | 99 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 4,689 | 4,689 | 4,689 | 4,689 | 185 | 92 | 92 | 92 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 3,966 | 3,966 | 3,966 | 3,966 | 146 | 73 | 73 | 73 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 4,767 | 4,767 | 4,767 | 4,767 | 82 | 41 | 41 | 41 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 4,767 | 4,767 | 4,767 | 4,767 | 82 | 41 | 41 | 41 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 121–240 | 10–14 | 1,450 | 269 | 269 | 83 | 3,593 | 3,593 | 3,593 | 3,593 | 683 | 341 | 341 | 341 |
|  |  | 15–19 | 2,576 | 478 | 478 | 147 | 12,981 | 12,981 | 12,981 | 12,981 | 2,399 | 1,200 | 1,200 | 1,200 |
|  |  | 20–24 | 830 | 154 | 154 | 47 | 3,933 | 3,933 | 3,933 | 3,933 | 746 | 373 | 373 | 373 |
|  |  | 25–29 | 401 | 75 | 75 | 23 | 3,823 | 3,823 | 3,823 | 3,823 | 726 | 363 | 363 | 363 |
|  |  | 30–34 | 198 | 37 | 37 | 11 | 3,931 | 3,931 | 3,931 | 3,931 | 746 | 373 | 373 | 373 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 3,091 | 3,091 | 3,091 | 3,091 | 588 | 294 | 294 | 294 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 3,681 | 3,681 | 3,681 | 3,681 | 458 | 229 | 229 | 229 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 5,215 | 5,215 | 5,215 | 5,215 | 278 | 139 | 139 | 139 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 4,989 | 4,989 | 4,989 | 4,989 | 199 | 100 | 100 | 100 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 4,394 | 4,394 | 4,394 | 4,394 | 174 | 87 | 87 | 87 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 3,412 | 3,412 | 3,412 | 3,412 | 136 | 68 | 68 | 68 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 4,064 | 4,064 | 4,064 | 4,064 | 81 | 41 | 41 | 41 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 7,872 | 7,872 | 7,872 | 7,872 | 59 | 30 | 30 | 30 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 7,872 | 7,872 | 7,872 | 7,872 | 50 | 25 | 25 | 25 |

SEG B

|  | Period of |  | Initiation | Cessation | Re-initiation |
| --- | --- | --- | --- | --- | --- |
| Sex | follow-up (mo) | Age(years) | PNC | PNH | PNE | PNM | PCF | PHF | PEF | PMF | PFC | PFH | PFE | PFM |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M | 1–60 | 10–14 | 3,007 | 558 | 558 | 172 | 2,446 | 2,446 | 2,446 | 2446 | 466 | 233 | 233 | 233 |
|  |  | 15–19 | 9,121 | 1,694 | 1,694 | 521 | 4,406 | 4,406 | 4,406 | 4,406 | 835 | 418 | 418 | 418 |
|  |  | 20–24 | 3,694 | 686 | 686 | 211 | 964 | 964 | 964 | 964 | 185 | 92 | 92 | 92 |
|  |  | 25–29 | 1,703 | 316 | 316 | 97 | 1,061 | 1,061 | 1,061 | 1,061 | 203 | 102 | 102 | 102 |
|  |  | 30–34 | 545 | 101 | 101 | 31 | 1,251 | 1,251 | 1,251 | 1,251 | 239 | 120 | 120 | 120 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 1,474 | 1,474 | 1,474 | 1,474 | 282 | 141 | 141 | 141 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 2,506 | 2,506 | 2,506 | 2,506 | 238 | 119 | 119 | 119 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 3,506 | 3,506 | 3,506 | 3,506 | 165 | 83 | 83 | 83 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 3,733 | 3,733 | 3,733 | 3,733 | 88 | 44 | 44 | 44 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 2,756 | 2,756 | 2,756 | 2,756 | 65 | 33 | 33 | 33 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 2,859 | 2,859 | 2,859 | 2,859 | 34 | 17 | 17 | 17 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 4,057 | 4,057 | 4,057 | 4,057 | 24 | 12 | 12 | 12 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 5,292 | 5,292 | 5,292 | 5,292 | 15 | 8 | 8 | 8 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 5,292 | 5,292 | 5,292 | 5,292 | 15 | 8 | 8 | 8 |
|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 61–120 | 10–14 | 2,558 | 475 | 475 | 146 | 2,063 | 2,063 | 2,063 | 2,063 | 394 | 197 | 197 | 197 |
|  |  | 15–19 | 6,629 | 1,231 | 1,231 | 379 | 3,177 | 3,177 | 3,177 | 3,177 | 604 | 302 | 302 | 302 |
|  |  | 20–24 | 2,352 | 437 | 437 | 134 | 1,323 | 1,323 | 1,323 | 1,323 | 253 | 127 | 127 | 127 |
|  |  | 25–29 | 826 | 153 | 153 | 47 | 1,238 | 1,238 | 1,238 | 1,238 | 237 | 118 | 118 | 118 |
|  |  | 30–34 | 532 | 99 | 99 | 30 | 1,640 | 1,640 | 1,640 | 1,640 | 313 | 157 | 157 | 157 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 1,954 | 1,954 | 1,954 | 1,954 | 373 | 187 | 187 | 187 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 2,219 | 2,219 | 2,219 | 2,219 | 317 | 158 | 158 | 158 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 2,907 | 2,907 | 2,907 | 2,907 | 273 | 137 | 137 | 137 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 3,276 | 3,276 | 3,276 | 3,276 | 172 | 86 | 86 | 86 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 2,947 | 2,947 | 2,947 | 2,947 | 126 | 63 | 63 | 63 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 2,853 | 2,853 | 2,853 | 2,853 | 61 | 31 | 31 | 31 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 3,824 | 38,24 | 3,824 | 3,824 | 40 | 20 | 20 | 20 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 4,687 | 4,687 | 4,687 | 4,687 | 25 | 12 | 12 | 12 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 4,687 | 4,687 | 4,687 | 4,687 | 25 | 12 | 12 | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 121–240 | 10–14 | 2,018 | 375 | 375 | 115 | 1,840 | 1,840 | 1,840 | 1,840 | 351 | 176 | 176 | 176 |
|  |  | 15–19 | 4,786 | 889 | 889 | 273 | 1,340 | 1,340 | 1,340 | 1,340 | 256 | 128 | 128 | 128 |
|  |  | 20–24 | 926 | 172 | 172 | 53 | 1,532 | 1,532 | 1,532 | 1,532 | 293 | 146 | 146 | 146 |
|  |  | 25–29 | 1,297 | 241 | 241 | 74 | 2,093 | 2,093 | 2,093 | 2,093 | 399 | 200 | 200 | 200 |
|  |  | 30–34 | 1,203 | 223 | 223 | 69 | 2,458 | 2,458 | 2,458 | 2,458 | 469 | 234 | 234 | 234 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 2,727 | 2,727 | 2,727 | 2,727 | 519 | 260 | 260 | 260 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 1,856 | 1,856 | 1,856 | 1,856 | 355 | 177 | 177 | 177 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 2,293 | 2,293 | 2,293 | 2,293 | 328 | 164 | 164 | 164 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 3,219 | 3,219 | 3,219 | 3,219 | 258 | 129 | 129 | 129 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 3,077 | 3,077 | 3,077 | 3,077 | 122 | 61 | 61 | 61 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 3,259 | 3,259 | 3,259 | 3,259 | 64 | 32 | 32 | 32 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 3,821 | 3,821 | 3,821 | 3,821 | 38 | 19 | 19 | 19 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 4,223 | 4,223 | 4,223 | 4,223 | 21 | 10 | 10 | 10 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 4,223 | 4,223 | 4,223 | 4,223 | 15 | 8 | 8 | 8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| F | 1–60 | 10–14 | 2,423 | 450 | 450 | 138 | 1,454 | 1,454 | 1,454 | 1,454 | 278 | 139 | 139 | 139 |
|  |  | 15–19 | 6,877 | 1,277 | 1,277 | 393 | 5,752 | 5,752 | 5,752 | 5,752 | 1,086 | 543 | 543 | 543 |
|  |  | 20–24 | 1,729 | 321 | 321 | 99 | 3,630 | 3,630 | 3,630 | 3,630 | 690 | 345 | 345 | 345 |
|  |  | 25–29 | 1,164 | 216 | 216 | 67 | 2,619 | 2,619 | 2,619 | 2,619 | 499 | 249 | 249 | 249 |
|  |  | 30–34 | 506 | 94 | 94 | 29 | 1,770 | 1,770 | 1,770 | 1,770 | 338 | 169 | 169 | 169 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 981 | 981 | 981 | 981 | 188 | 94 | 94 | 94 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 1,935 | 1,935 | 1,935 | 1,935 | 128 | 64 | 64 | 64 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 1,903 | 1,903 | 1,903 | 1,903 | 73 | 36 | 36 | 36 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 1,789 | 1,789 | 1,789 | 1,789 | 51 | 26 | 26 | 26 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 30,32 | 3,032 | 3,032 | 3,032 | 43 | 22 | 22 | 22 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 7,788 | 7,788 | 7,788 | 7,788 | 28 | 14 | 14 | 14 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 10,198 | 10,198 | 10,198 | 10,198 | 18 | 9 | 9 | 9 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 14,584 | 14,584 | 14,584 | 14,584 | 13 | 6 | 6 | 6 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 14,584 | 14,584 | 14,584 | 14,584 | 13 | 6 | 6 | 6 |
|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 61–120 | 10–14 | 2,090 | 388 | 388 | 119 | 2,210 | 2,210 | 2,210 | 2,210 | 422 | 211 | 211 | 211 |
|  |  | 15–19 | 7,149 | 1,328 | 1,328 | 408 | 9,730 | 9,730 | 9,730 | 9,730 | 1,815 | 907 | 907 | 907 |
|  |  | 20–24 | 1,417 | 263 | 263 | 81 | 3,327 | 3,327 | 3,327 | 3,327 | 633 | 316 | 316 | 316 |
|  |  | 25–29 | 838 | 156 | 156 | 48 | 2,250 | 2,250 | 2,250 | 2,250 | 429 | 215 | 215 | 215 |
|  |  | 30–34 | 266 | 49 | 49 | 15 | 1,462 | 1,462 | 1,462 | 1,462 | 280 | 140 | 140 | 140 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 937 | 937 | 937 | 937 | 179 | 90 | 90 | 90 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 1,486 | 1,486 | 1,486 | 1,486 | 142 | 71 | 71 | 71 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 1,588 | 1,588 | 1,588 | 1588 | 76 | 38 | 38 | 38 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 1,900 | 1,900 | 1,900 | 1,900 | 45 | 23 | 23 | 23 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 2,848 | 2,848 | 2,848 | 2,848 | 34 | 17 | 17 | 17 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 4,239 | 4,239 | 4,239 | 4,239 | 25 | 12 | 12 | 12 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 4,840 | 4,840 | 4,840 | 4,840 | 14 | 7 | 7 | 7 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 5,286 | 5,286 | 5,286 | 5,286 | 9 | 4 | 4 | 4 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 5,286 | 5,286 | 5,286 | 5,286 | 9 | 4 | 4 | 4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 121–240 | 10–14 | 1,450 | 269 | 269 | 83 | 3,593 | 3,593 | 3,593 | 3,593 | 683 | 341 | 341 | 341 |
|  |  | 15–19 | 8,305 | 1,542 | 1542 | 475 | 17,133 | 17,133 | 17,133 | 17,133 | 3,123 | 1,561 | 1,561 | 1,561 |
|  |  | 20–24 | 1,047 | 194 | 194 | 60 | 2,845 | 2,845 | 2,845 | 2845 | 542 | 271 | 271 | 271 |
|  |  | 25–29 | 474 | 88 | 88 | 27 | 1,715 | 1,715 | 1,715 | 1,715 | 328 | 164 | 164 | 164 |
|  |  | 30–34 | 133 | 25 | 25 | 8 | 1,141 | 1,141 | 1,141 | 1,141 | 218 | 109 | 109 | 109 |
|  |  | 35–39 | 0 | 0 | 0 | 0 | 874 | 874 | 874 | 874 | 167 | 84 | 84 | 84 |
|  |  | 40–44 | 0 | 0 | 0 | 0 | 1,166 | 1,166 | 1,166 | 1,166 | 120 | 60 | 60 | 60 |
|  |  | 45–49 | 0 | 0 | 0 | 0 | 1,958 | 1,958 | 1,958 | 1,958 | 93 | 47 | 47 | 47 |
|  |  | 50–54 | 0 | 0 | 0 | 0 | 2,218 | 2,218 | 2,218 | 2,218 | 53 | 26 | 26 | 26 |
|  |  | 55–59 | 0 | 0 | 0 | 0 | 2,882 | 2,882 | 2,882 | 2,882 | 34 | 17 | 17 | 17 |
|  |  | 60–64 | 0 | 0 | 0 | 0 | 2,316 | 2,316 | 2,316 | 2,316 | 27 | 14 | 14 | 14 |
|  |  | 65–69 | 0 | 0 | 0 | 0 | 2,463 | 2,463 | 2,463 | 2,463 | 15 | 7 | 7 | 7 |
|  |  | 70–74 | 0 | 0 | 0 | 0 | 2,245 | 2,245 | 2,245 | 2,245 | 13 | 7 | 7 | 7 |
|  |  | 75–79 | 0 | 0 | 0 | 0 | 2,245 | 2,245 | 2,245 | 2,245 | 13 | 6 | 6 | 6 |

The TPs for switching vary only by sex and broad age group and are shown in the following table:

SEG = A

| Sex | Age(years) | PCH | PCE | PCM | PHC | PHE | PHM | PEC | PEH | PEM | PMC | PME | PMH |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 10–24 | 944 | 3,475 | 710 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 1,500 | 1,500 |
|  | 25–79 | 1,889 | 6,951 | 710 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 1,500 | 1,500 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Women | 10–24 | 643 | 2,678 | 509 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 1,500 | 1,500 |
|  | 25–79 | 1,378 | 5,738 | 509 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 1,500 | 1,500 |

SEG = B

| Sex | Age(years) | PCH | PCE | PCM | PHC | PHE | PHM | PEC | PEH | PEM | PMC | PME | PMH |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 10–24 | 915 | 3,548 | 1,108 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 2,000 | 2,000 |
|  | 25–79 | 1,831 | 7,097 | 1,108 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 2,000 | 2,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Women | 10–24 | 830 | 2,970 | 800 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 2,000 | 2,000 |
|  | 25–79 | 1,778 | 6,363 | 800 | 600 | 600 | 231 | 600 | 600 | 3,846 | 10,000 | 2,000 | 2,000 |

**Alternative Scenario 7: Full Conversion Scenario**

The TPs for initiation, cessation, and re-initiation are identical to those in Alternative Scenario 6. Those for switching differ somewhat, as shown below:

SEG = A

| Sex | Age(years) | PCH | PCE | PCM | PHC | PHE | PHM | PEC | PEH | PEM | PMC | PME | PMH |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 10–24 | 1,125 | 3,268 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 10,000 | 10,000 |
|  | 25–79 | 2,250 | 6,536 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 10,000 | 10,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Women | 10–24 | 762 | 2,566 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 10,000 | 10,000 |
|  | 25–79 | 1,634 | 5,498 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 10,000 | 10,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

SEG = B

| Sex | Age(years) | PCH | PCE | PCM | PHC | PHE | PHM | PEC | PEH | PEM | PMC | PME | PMH |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 10–24 | 1,098 | 3,308 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 15,000 | 15,000 |
|  | 25–79 | 2,197 | 6,615 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 15,000 | 15,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Women | 10–24 | 1,006 | 2,775 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 15,000 | 15,000 |
|  | 25–79 | 2,156 | 5,947 | 0 | 600 | 600 | 0 | 600 | 600 | 0 | 10,000 | 15,000 | 15,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |