*Table S2: Available childhood asthma incidence rates by state and year*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **State** | **2006\*** | **2007\*** | **2008\*** | **2009\*** | **2010\*** | **Aggregate**  **IR\*** | **Aggregate PR\*\*** |
| Alabama |  |  |  |  |  | 11.6 | 14.4 |
| Arizona | 23.7 | 6.8 |  |  |  | 15.2 | 13.1 |
| Arkansas |  |  |  |  |  | 11.6 | 13.1 |
| California | 12.1 | 6.5 |  |  |  | 9.3 | 12.2 |
| Colorado |  |  |  |  |  | 11.6 | 13.1 |
| Connecticut |  | 9.9 | 14.1 | 10.8 | 13.5 | 12 | 16 |
| Delaware |  |  |  |  |  | 11.6 | 18.2 |
| District of Columbia | 5.3 | 28.8 |  |  |  | 17.7 | 19.9 |
| Florida |  |  |  |  |  | 11.6 | 13.1 |
| Georgia | 6.4 | 5.8 | 9.1 | 16.6 | 6.9 | 9.1 | 15.1 |
| Idaho |  |  |  |  |  | 11.6 | 9 |
| Illinois |  | 4.2 |  | 9.2 |  | 6.7 | 12.4 |
| Indiana | 25.4 | 9.3 | 13.4 | 9.9 | 17.6 | 15.2 | 12.8 |
| Iowa | 5 | 4 | 9.9 |  |  | 6.3 | 8.4 |
| Kansas | 7.8 | 9.9 | 9.9 | 8.3 | 9 | 9 | 11.6 |
| Kentucky |  |  |  |  |  | 11.6 | 14 |
| Louisiana |  |  |  | 5.8 |  | 5.8 | 13 |
| Maine | 13 | 8.7 | 5.8 |  |  | 9.2 | 13.2 |
| Maryland | 16.2 | 8.6 | 11 | 17.3 | 2.3 | 11.2 | 14.8 |
| Massachusetts |  |  |  |  |  | 11.6 | 13.1 |
| Michigan | 5.3 | 7.7 | 5.2 | 13.4 | 29.3 | 12 | 13.6 |
| Minnesota |  |  |  |  |  | 11.6 | 9.5 |
| Mississippi |  | 10.8 |  |  | 17.2 | 14 | 14.2 |
| Missouri | 21.2 | 10.3 | 7.2 |  |  | 12.9 | 13.9 |
| Montana | 2.8 | 2 |  | 3.7 | 8.5 | 4.3 | 9.7 |
| Nebraska | 11.9 | 8.3 | 8.9 | 3.3 | 12.9 | 9.1 | 9.3 |
| Nevada |  |  |  |  |  | 11.6 | 10.9 |
| New Hampshire | 11.5 | 13.8 | 10.4 |  |  | 12 | 12.1 |
| New Jersey |  |  | 6.3 | 12.5 | 10.5 | 9.8 | 14.3 |
| New Mexico |  | 3.2 | 9.5 |  | 7.2 | 6.7 | 12 |
| New York | 12.9 | 6.1 | 28.4 | 11.2 |  | 14.7 | 15.8 |
| North Carolina |  |  |  |  |  | 11.6 | 13.1 |
| North Dakota |  |  |  |  |  | 11.6 | 8.9 |
| Ohio |  | 13.1 | 17 |  |  | 15.1 | 12.3 |
| Oklahoma |  | 9.2 | 10.1 |  | 12.9 | 10.8 | 14 |
| Oregon |  | 11.1 |  |  |  | 11.1 | 11.1 |
| Pennsylvania |  | 21.8 |  |  | 4.3 | 13.2 | 13.9 |
| Rhode Island |  |  | 15.3 | 13.2 |  | 14.3 | 16.1 |
| South Carolina |  |  |  |  |  | 11.6 | 13.1 |
| South Dakota |  |  |  |  |  | 11.6 | 13.1 |
| Tennessee |  |  |  |  |  | 11.6 | 13.1 |
| Texas | 14.4 |  | 18.2 | 12.5 | 21 | 16.6 | 13.1 |
| Utah |  | 15.4 | 11.9 | 5.6 | 9.3 | 10.4 | 10.2 |
| Vermont | 13.5 | 4.4 | 8.5 | 21.2 | 10.4 | 11.5 | 13.8 |
| Virginia |  |  |  |  |  | 11.6 | 13.6 |
| Washington |  |  |  | 7.9 | 5.6 | 6.8 | 10.8 |
| West Virginia |  | 11.8 |  |  |  | 11.8 | 12.7 |
| Wisconsin | 12.3 |  |  |  |  | 12.3 | 10.6 |
| Wyoming |  |  |  |  |  | 11.6 | 9.5 |

*\*Incidence rate per 1,000 at-risk children*

*\*\* Prevalence rate per 100 children*

*[Note: The grey highlight represents no available data]Table S5: State-specific results and comparison*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Results using flat national-level IR** | | | **Results using state-specific IR** | | | **Difference** | | | **Difference (%)** | | |
| **State** | **Incident cases** | **AC** | **AF** | **Incident cases** | **AC** | **AF** | **Incident cases** | **AC** | **AF** | **Incident cases** | **AC** | **AF** |
| **Alabama** | 12,216 | 1,439 | 11.8% | 11,288 | 1,330 | 11.8% | -928 | -109 | 0.0% | -7.6% | -7.6% | 0.0% |
| **Arizona** | 17,573 | 3,772 | 21.5% | 21,538 | 4,623 | 21.5% | 3,965 | 851 | 0.0% | 22.6% | 22.6% | 0.0% |
| **Arkansas** | 7,675 | 887 | 11.6% | 7,204 | 832 | 11.5% | -471 | -55 | 0.0% | -6.1% | -6.2% | -0.1% |
| **California** | 100,270 | 25,395 | 25.3% | 75,829 | 19,205 | 25.3% | -24,441 | -6,190 | 0.0% | -24.4% | -24.4% | 0.0% |
| **Colorado** | 13,221 | 3,089 | 23.4% | 12,410 | 2,900 | 23.4% | -811 | -189 | 0.0% | -6.1% | -6.1% | 0.0% |
| **Connecticut** | 8,814 | 1,601 | 18.2% | 8,265 | 1,502 | 18.2% | -549 | -99 | 0.0% | -6.2% | -6.2% | 0.0% |
| **Delaware** | 2,220 | 355 | 16.0% | 1,960 | 313 | 16.0% | -260 | -42 | 0.0% | -11.7% | -11.8% | -0.1% |
| **D.C.** | 1,088 | 293 | 26.9% | 1,433 | 386 | 26.9% | 345 | 93 | 0.0% | 31.7% | 31.7% | 0.0% |
| **Florida** | 43,173 | 5,502 | 12.7% | 40,522 | 5,164 | 12.7% | -2,651 | -338 | 0.0% | -6.1% | -6.1% | 0.0% |
| **Georgia** | 26,878 | 3,887 | 14.5% | 19,165 | 2,772 | 14.5% | -7,713 | -1,115 | 0.0% | -28.7% | -28.7% | 0.0% |
| **Idaho** | 4,629 | 581 | 12.6% | 4,549 | 571 | 12.6% | -80 | -10 | 0.0% | -1.7% | -1.7% | 0.0% |
| **Illinois** | 33,756 | 8,333 | 24.7% | 18,264 | 4,509 | 24.7% | -15,492 | -3,824 | 0.0% | -45.9% | -45.9% | 0.0% |
| **Indiana** | 17,350 | 3,143 | 18.1% | 21,263 | 3,852 | 18.1% | 3,913 | 709 | 0.0% | 22.6% | 22.6% | 0.0% |
| **Iowa** | 7,853 | 971 | 12.4% | 4,193 | 519 | 12.4% | -3,660 | -452 | 0.0% | -46.6% | -46.5% | 0.1% |
| **Kansas** | 7,842 | 1,067 | 13.6% | 5,781 | 787 | 13.6% | -2,061 | -280 | 0.0% | -26.3% | -26.2% | 0.1% |
| **Kentucky** | 11,040 | 1,649 | 14.9% | 10,256 | 1,532 | 14.9% | -784 | -117 | 0.0% | -7.1% | -7.1% | 0.0% |
| **Louisiana** | 12,061 | 1,401 | 11.6% | 5,616 | 653 | 11.6% | -6,445 | -748 | 0.0% | -53.4% | -53.4% | 0.1% |
| **Maine** | 2,962 | 234 | 7.9% | 2,196 | 173 | 7.9% | -766 | -61 | 0.0% | -25.9% | -26.1% | -0.3% |
| **Maryland** | 14,595 | 2,787 | 19.1% | 12,849 | 2,454 | 19.1% | -1,746 | -333 | 0.0% | -12.0% | -11.9% | 0.0% |
| **Massachusetts** | 15,307 | 2,539 | 16.6% | 14,367 | 2,383 | 16.6% | -940 | -156 | 0.0% | -6.1% | -6.1% | 0.0% |
| **Michigan** | 25,287 | 4,211 | 16.7% | 24,356 | 4,056 | 16.7% | -931 | -155 | 0.0% | -3.7% | -3.7% | 0.0% |
| **Minnesota** | 13,852 | 2,093 | 15.1% | 13,540 | 2,046 | 15.1% | -312 | -47 | 0.0% | -2.3% | -2.2% | 0.0% |
| **Mississippi** | 8,151 | 832 | 10.2% | 9,101 | 929 | 10.2% | 950 | 97 | 0.0% | 11.7% | 11.7% | 0.0% |
| **Missouri** | 15,377 | 1,845 | 12.0% | 15,821 | 1,898 | 12.0% | 444 | 53 | 0.0% | 2.9% | 2.9% | 0.0% |
| **Montana** | 2,412 | 192 | 8.0% | 866 | 69 | 8.0% | -1,546 | -123 | 0.0% | -64.1% | -64.1% | 0.1% |
| **Nebraska** | 4,954 | 648 | 13.1% | 3,775 | 494 | 13.1% | -1,179 | -154 | 0.0% | -23.8% | -23.8% | 0.0% |
| **Nevada** | 7,174 | 1,431 | 19.9% | 6,904 | 1,377 | 19.9% | -270 | -54 | 0.0% | -3.8% | -3.8% | 0.0% |
| **New Hampshire** | 3,099 | 338 | 10.9% | 3,017 | 329 | 10.9% | -82 | -9 | 0.0% | -2.6% | -2.7% | 0.0% |
| **New Jersey** | 22,278 | 5,357 | 24.0% | 17,281 | 4,155 | 24.0% | -4,997 | -1,202 | 0.0% | -22.4% | -22.4% | 0.0% |
| **New Mexico** | 5,595 | 864 | 15.4% | 3,047 | 471 | 15.5% | -2,548 | -393 | 0.0% | -45.5% | -45.5% | 0.1% |
| **New York** | 46,655 | 11,754 | 25.2% | 53,600 | 13,504 | 25.2% | 6,945 | 1,750 | 0.0% | 14.9% | 14.9% | 0.0% |
| **North Carolina** | 24,613 | 3,182 | 12.9% | 23,102 | 2,986 | 12.9% | -1,511 | -196 | 0.0% | -6.1% | -6.2% | 0.0% |
| **North Dakota** | 1,617 | 139 | 8.6% | 1,591 | 137 | 8.6% | -26 | -2 | 0.0% | -1.6% | -1.4% | 0.2% |
| **Ohio** | 29,458 | 5,036 | 17.1% | 36,060 | 6,165 | 17.1% | 6,602 | 1,129 | 0.0% | 22.4% | 22.4% | 0.0% |
| **Oklahoma** | 10,029 | 1,342 | 13.4% | 8,619 | 1,154 | 13.4% | -1,410 | -188 | 0.0% | -14.1% | -14.0% | 0.1% |
| **Oregon** | 9,347 | 1,295 | 13.9% | 8,517 | 1,180 | 13.9% | -830 | -115 | 0.0% | -8.9% | -8.9% | 0.0% |
| **Pennsylvania** | 30,120 | 6,011 | 20.0% | 31,619 | 6,310 | 20.0% | 1,499 | 299 | 0.0% | 5.0% | 5.0% | 0.0% |
| **Rhode Island** | 2,416 | 380 | 15.7% | 2,679 | 422 | 15.8% | 263 | 42 | 0.0% | 10.9% | 11.1% | 0.2% |
| **South Carolina** | 11,656 | 1,287 | 11.0% | 10,940 | 1,208 | 11.0% | -716 | -79 | 0.0% | -6.1% | -6.1% | 0.0% |
| **South Dakota** | 2,188 | 165 | 7.5% | 2,053 | 155 | 7.5% | -135 | -10 | 0.0% | -6.2% | -6.1% | 0.1% |
| **Tennessee** | 16,138 | 2,503 | 15.5% | 15,147 | 2,349 | 15.5% | -991 | -154 | 0.0% | -6.1% | -6.2% | 0.0% |
| **Texas** | 74,065 | 10,701 | 14.4% | 99,084 | 14,316 | 14.4% | 25,019 | 3,615 | 0.0% | 33.8% | 33.8% | 0.0% |
| **Utah** | 9,396 | 1,929 | 20.5% | 8,142 | 1,672 | 20.5% | -1,254 | -257 | 0.0% | -13.3% | -13.3% | 0.0% |
| **Vermont** | 1,394 | 136 | 9.8% | 1,285 | 126 | 9.8% | -109 | -10 | 0.0% | -7.8% | -7.4% | 0.5% |
| **Virginia** | 19,997 | 3,430 | 17.2% | 18,657 | 3,200 | 17.2% | -1,340 | -230 | 0.0% | -6.7% | -6.7% | 0.0% |
| **Washington** | 17,059 | 3,039 | 17.8% | 9,559 | 1,703 | 17.8% | -7,500 | -1,336 | 0.0% | -44.0% | -44.0% | 0.0% |
| **West Virginia** | 4,179 | 603 | 14.4% | 4,003 | 578 | 14.4% | -176 | -25 | 0.0% | -4.2% | -4.1% | 0.1% |
| **Wisconsin** | 14,450 | 2,118 | 14.7% | 14,694 | 2,154 | 14.7% | 244 | 36 | 0.0% | 1.7% | 1.7% | 0.0% |
| **Wyoming** | 1,461 | 141 | 9.7% | 1,427 | 138 | 9.7% | -34 | -3 | 0.0% | -2.3% | -2.1% | 0.2% |