Appendix Table A1. Detail of calculation morbidity and mortality in 2015 in the Danish studies. Total number of deaths in Denmark was 52,555, CVD was 52,283, T2D was 28,835 and cancer was 35,432. Cycling attributable disease/deaths was calculated as the sum of cases prevented for each level of cycling: ∑((1-RRi)\*N\*Pi (P: prevalence for the group, N: total cases in Denmark). Reference group is non-cycling.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study | Outcome | Type of cycling analyzed | Level of cycling | Relative risk (RR) | Prevalence | Prevented cases  (1-RR)\*P\*N | Result of prevented  cases | Prevented  cases (sum of groups) | Percentage  of all cases |
| Andersen, Cooper  2011 | All-cause mortality  N=52,555 | Total cycling | Non-cycling | 1 | 0.53 | 0 |  |  |  |
| Level 2 <3 h/w | 0.78 | 0.17 | 0.22\*0.17\*52555 | 1965 |  |  |
| Level 3  3-7 h/w | 0.76 | 0.16 | 0.24\*0.16\*52555 | 2018 |  |  |
| Level 4  >7 h/w | 0.70 | 0.14 | 0.30\*0.14\*52555 | 2207 | 6190 | 11.8% |
| Andersen“ et al 2000 | All-cause mortality  N=52,555 | Commuter cycling | Non-cycling | 1 | 0.75 | 0 |  |  |  |
| Cycling | 0.72 | 0.25 | 0.28\*0.25\*52555 |  | 3679 | 7.0% |
| Rasmussen  et al  2016 | Type 2 diabetes  N=28,835 | Total cycling | Non-cycling | 1 | 49.0% | 0 |  |  |  |
| Level 2  1-60 min/w | 0.87 | 22.3% | 0.13\*0.223\*28835 | 836 |  |  |
| Level 3  61-150 min/w | 0.83 | 17.9% | 0.17\*0.179\*28835 | 877 |  |  |
| Level 4  >150 min/w | 0.80 | 28.0% | 0.20\*0.28\*28835 | 1615 | 3328 | 11.5% |
| Rasmussen  et al 2016\* | Type 2 diabetes  N=28,835 | Commuter cycling | Non-cyclists | 1 | 0.738 | 0 | 0 |  |  |
| Level 2  1-60 min/w | 0.72 | 0.136 | 0.28\*0.136\*28835 | 1098 |  |  |
| Level 3  61-150 min/w | 0.83 | 0.118 | 0.17\*0.118\*28835 | 578 |  |  |
| >150 min/w | 0.70 | 0.108 | 0.30\*0.108\*28835 | 934 | 2610 | 9.1% |
| Blond et al 2016 | CVD  N=52,283 | Total cycling | Non-cyclists | 1 | 0.55 | 0 | 0 |  |  |
| Level 2  1-60 min/w | 0.84 | 0.223 | 0.16\*0.223\*52283 | 1865 |  |  |
| Level 3  61-150 min/w | 0.89 | 0.139 | 0.11\*0.139\*52283 | 799 |  |  |
| >150 min/w | 0.82 | 0.327 | 0.18\*0.327\*52283 | 3077 | 5742 | 11.0% |
| Blond et al 2016 | CVD  N=52,283 | Commuter cycling | Non-cyclists | 1 | 0.648 | 0 | 0 |  |  |
| Level 2  1-90 min/w | 0.78 | 0.176 | 0.22\*0.176\*52283 | 2025 |  |  |
| Level 3  >90 min/w | 0.88 | 0.176 | 0.12\*0.176\*52283 | 1104 | 3129 | 6.0% |
| Matthews  et al  2007 | Cancer  N=35432 | Total cycling | Non-cyclists | 1 | 0.754 |  |  |  |  |
| Level 1  0.1-3.4 MetH/d | 0.82 | 0.193 | 0.18\*0.193\*35432 | 1231 |  |  |
| >3.4 MetH/d | 0.55 | 0.053 | 0.45\*0.053\*35432 | 845 | 2076 | 5.9% |

“We used a prevalence of 25% for women and 50% for men in the calculations, which was found in the age group of 60 years, because most deaths occur in the older groups.