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) | Percentageof all cases |
| Andersen, Cooper 2011 | All-cause mortalityN=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 mortalityN=52,555 | Commuter cycling | Non-cycling | 1 | 0.75 | 0 |  |  |  |
| Cycling | 0.72 | 0.25 | 0.28\*0.25\*52555 |  | 3679 | 7.0% |
| Rasmussenet al 2016 | Type 2 diabetesN=28,835 | Total cycling | Non-cycling | 1 | 49.0% | 0 |  |  |  |
| Level 21-60 min/w | 0.87 | 22.3% | 0.13\*0.223\*28835 | 836 |  |  |
| Level 361-150 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% |
| Rasmussenet al 2016\* | Type 2 diabetesN=28,835 | Commuter cycling | Non-cyclists | 1 | 0.738 | 0 | 0 |  |  |
| Level 21-60 min/w | 0.72 | 0.136 | 0.28\*0.136\*28835 | 1098 |  |  |
| Level 361-150 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 | CVDN=52,283 | Total cycling | Non-cyclists | 1 | 0.55 | 0 | 0 |  |  |
| Level 21-60 min/w | 0.84 | 0.223 | 0.16\*0.223\*52283 | 1865 |  |  |
| Level 361-150 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 | CVDN=52,283 | Commuter cycling | Non-cyclists | 1 | 0.648 | 0 | 0 |  |  |
| Level 21-90 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% |
| Matthewset al 2007 | CancerN=35432 | Total cycling | Non-cyclists | 1 | 0.754 |  |  |  |  |
| Level 10.1-3.4 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.