



**To:** Place Directorate

**From:** Adrian Davis

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**Subject:** Essential Evidence on a page: No.140 How much can active travel contribute to reducing the disease burden?

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Top line: Active travel appears to be a key means through which populations can routinely achieve at least the minimum recommended levels of physical activity in order to protect against sedentary lifestyle diseases.

Physical inactivity is a significant and growing contributor to the burden of disease. Modern, urban lifestyles have engineered physical activity out of everyday life and this has resulted in an emerging, widespread threat to population health caused by sedentary lifestyles. It is estimated that physical inactivity causes 21–25% of the global burden of disease from breast and colon cancer and even greater proportions for diabetes (27%) and heart disease (30%). Physical activity is increasingly regarded as the ‘best buy’ in preventative health measures and walking and cycling represent one of most effective methods of building physical activity into daily life, whilst at the same time reducing CO<sub>2</sub> emissions, air pollution and congestion caused by motorised forms of transport. For healthy adults aged between 18–64 years a minimum of 150 minutes of moderate intensity aerobic activity throughout the week or an equivalent combination of moderate and vigorous intensity activity is recommended.

The Netherlands (NT) is widely regarded as a world leader in active transport, particularly cycling with 16% of the total road network dedicated to cycle paths. A third of all trips under 7.5 km are cycled. The Dutch reputation for cycling, combined with relatively strong walking levels therefore presents what might be considered world’s best practice levels of physical activity through incidental, transport based walking and cycling. Yet despite the fact 27% of all trips are by bicycle, 44% of the Dutch population over 12 years old do not engage in sufficient levels of physical activity to protect against sedentary lifestyle diseases.

A recent study quantified walking and cycling’s contribution in NT to meeting minimum adult physical activity guidelines.<sup>1</sup> By investigating the Dutch National Travel Survey (NTS) data for 2010 to 2012, socio-demographic, spatial and environmental factors associated with higher and lower levels of active transport were determined. The findings revealed that Dutch men and women, on average, gain 41% and 55% more physical activity respectively than minimum recommended levels. Overall, 38% of Dutch adults meet or exceed recommended minimum levels of PA from active travel alone. However, approximately half the investigated sample recorded no active transport at all. This means that those who did any walking or cycling are likely to be achieving physical activity levels significantly higher than recommended minimums. Women were found to engage in slightly higher levels of active travel than men, and this contrasts with other developed countries such as the United States, UK and Australia.

Significant factors associated with greater levels of active transport include older age, native Dutch ethnicity (for cycling, reversed for walking), and not working more than 30 hours per week. Owning a car was negatively associated with active travel and moped ownership reduced the likelihood of cycling. Higher housing densities were positively associated with active travel.

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<sup>1</sup> Fishman, E., Böcker, L., Helbich, M. 2015 Adult active transport in the Netherlands: An analysis of its contribution to physical activity requirements, *PLOS One*, 10(4):e0121871 doi:10.1371/journal.pone.0121871