

# WHO's target for the reduction of noncommunicable disease mortality in Finland is realistic – but not self-evident

## Key Findings

- The probability of a 30-year-old man dying from major noncommunicable diseases before the age of 70 dropped from 40% to 15% between 1970 and 2010. For women, the decline was from 20% to 7.7%.
- Should the decline continue as before, in 2025 the probability will be 9.5% for men and 5.4% for women, with the trend meeting the target set by WHO.
- Meeting the target requires a favourable trend in the risk factors and care.

## WHO targets for 2010–2025

1. A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes and chronic respiratory diseases.
2. At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.
3. A 10% relative reduction in prevalence of insufficient physical activity.
4. A 30% relative reduction in mean population intake of salt/sodium.
5. A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years.
6. A 25% relative reduction in the prevalence of raised blood pressure.
7. Halt the rise in diabetes and obesity.
8. At least 50% of eligible people receive drug therapy and counselling to prevent heart attacks and strokes
9. An 80% availability of the affordable basic technologies and essential medicines required to treat major non-communicable diseases.

## INTRODUCTION

The World Health Organization (WHO) has published its action plan for the prevention and control of noncommunicable diseases for 2013–2020. The action plan includes proposals for health policy and practical action. The objective is for the member states to reach as many as possible of the nine international targets pertaining to the prevention and treatment of noncommunicable diseases by the year 2025. The attainment of the said targets is being monitored through 25 indicators, which represent risk of premature mortality, levels of noncommunicable disease risk and protective factors as well as the potential for and realisation of prevention and treatment. The baseline of the monitoring is year 2010.

The WHO mortality indicator is the probability of a 30-year-old dying from cardiovascular disease, cancer, diabetes or chronic respiratory disease before the age of 70. It is calculated from the annual mortality statistics on the assumption that the person will not die of any other cause prior to turning 70. In addition to being simple to interpret, the indicator has the benefit of not being influenced by other causes of death nor changes in the age structure of the population.

The national target recommended by WHO is a 25% reduction in the said indicator between 2010 and 2025.

In Finland, the indicator values have declined since the 1960s. They were 40% for men and 20% for women in 1970, and 15% for men and 7.7% for women in 2010. In the past 20 years, the relative decline has been quite stable, 2.9% per year for men and 2.2% per year for women. Should the change remain the same, the decline between 2010 and 2025 would be 35% for men and 29% for women. Both projections exceed the 25% target recommended by WHO (Figure 1).

## TRENDS IN NON-COMMUNICABLE DISEASE MORTALITY IN FINLAND

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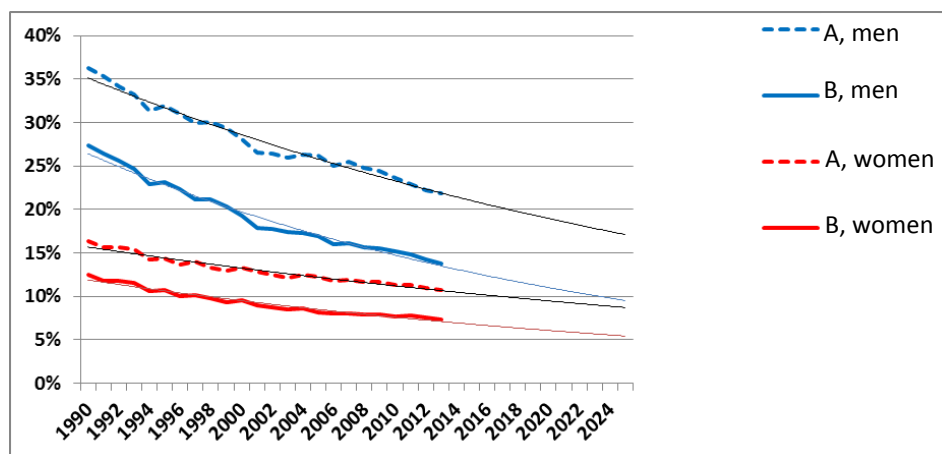


Figure 1.

**The probability of a 30-year-old dying (A) from any cause or (B) from cardiovascular disease, cancer, diabetes or chronic respiratory disease before the age of 70. The thin lines represent the projection for 2025 assuming the decline will continue as before. (The data in the figure have been calculated from the causes of death statistics published by Statistics Finland.)**

## The materials used

Causes of death statistics published by Statistics Finland

## BIBLIOGRAPHY

WHO. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. WHO, Geneva, 2013. Available from: [http://www.who.int/nmh/events/ncd\\_action\\_plan/en/](http://www.who.int/nmh/events/ncd_action_plan/en/)

Borodulin K, Vartiainen E, Peltonen M, Jousilahti P, Juolevi A, Laatikainen T, Männistö S, Salomaa V, Sundvall J, Puska P. Forty-year trends in cardiovascular risk factors in Finland. *Eur J Public Health*. 2015;25:539-46.

Tarkiainen L, Martikainen P, Laaksonen M, Valkonen T. Trends in life expectancy by income from 1988 to 2007: decomposition by age and cause of death; *Journal of Epidemiology & Community Health*, 2010

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## DISCUSSION

The decline in premature mortality from cardiovascular disease, cancer, diabetes or chronic respiratory disease is connected to the long-term decline in known risk factors, such as smoking, hypertension and high cholesterol levels, and improvements in their treatment. The 25% drop in mortality rates by 2025 targeted by WHO will be realised if the decline in mortality from premature death continues as before.

Meeting the target is not self-evident. It requires the positive trend of risk factors and care to continue. However, there have been indications in the past ten years that the decline in blood pressure has stopped, and the cholesterol levels seem to be on the rise. Smoking is still on the decline, and there are signs indicating that the increase in obesity and diabetes is levelling off.

The decline in mortality from cardiovascular diseases, cancer, diabetes and chronic respiratory diseases can also largely explain the decline in the total premature death rate. The percentage of mortality from these causes has decreased in 20 years from three quarters to two thirds because the decline of mortality from other causes has been slight. Of the other causes of premature death, the most common are alcohol-related deaths, accidents and suicides. Public health and well-being can be improved also by influencing these factors.

The differences in the premature mortality between different socioeconomic groups have grown rapidly in the last couple of decades. It is of particular importance to successfully reduce risk factors among those with low income and low level of education because premature deaths and other severe health problems cumulate on these population groups.

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