

# Heavy work and the possibility of early retirement

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Occupations involving 'heavy work' may be exempt from the proposal by the Dutch government to increase the retirement age from 65 to 67 years. The concept of heavy work is multi-dimensional; it should not be solely about physically heavy work but should at least also take account of the psychosocial workload. It will be difficult to identify occupations to be exempted due to the many jobs and many outcomes that may be relevant.

An ageing population means that participation in the labour force is declining all over Europe, including in the Netherlands. To maintain labour participation at a high enough level in the future, the Dutch government proposes increasing the retirement age from 65 to 67 years. However, it may exempt occupations that perform 'heavy work' from the proposed change in retirement age. It is necessary, therefore, to consider what 'heavy work' is and which occupations perform heavy work in the Netherlands.

Heavy work is often characterised by being dirty, dangerous and demeaning. It is mainly associated with physically demanding jobs which are largely found in agriculture, construction and industry. However, this kind of work is not very prevalent in the Netherlands where over 75% of the working population is employed in the services sector, where exposure to physical risks is less common.

## Risk factors associated with heavy work

A recent study by Smulders et al (2009) using information from the National Survey on Working Conditions (Nationale Enquête Arbeidsomstandigheden, *NEA*) showed that exposure to what is traditionally regarded as heavy work (dangerous, loud noise and physically demanding) is associated with:

- negative health outcomes such as physical and psychosocial complaints;
- work absenteeism;
- a perceived lack of ability to work until the age of 65 years.

The study also found that exposure to psychosocial factors such as high work pressure, emotionally demanding work, intimidation and aggression, lack of autonomy and lack of creative work is just as much, and in some cases even more, associated with negative health outcomes (see table). Occupations with high psychosocial risks should therefore also be regarded as occupations where workers are performing heavy work. Results from multiple regression analyses reveal that physical and particularly psychosocial risk factors at work are linked to health-related outcomes.

Risk factors and their relationship to work and health-related outcomes

	Burn-out	Musculoskeletal complaints	Work absenteeism	Unable to work until age 65
Physical risk factors				
Dangerous work	-0.01	-0.04		0.05
Loud noises	0.10	0.04	0.01	0.04
Physically heavy work	0.02	0.08	0.05	0.20
Psychosocial risk factors				
High work pressure	0.23	0.12		0.07
Emotionally demanding work	0.30	0.10	0.08	0.08

Intimidation and aggression	0.02	0.04	0.02	0.06
Lack of autonomy	0.08	0.02	0.04	0.13
Lack of creative work	0.11	0.09	0.04	0.08

Note: The numbers reflect beta values which indicate associations that may range from -1.00 (complete negative association) to 1.00 (complete positive association); zero indicates no association. All figures in the table indicate significant relations.

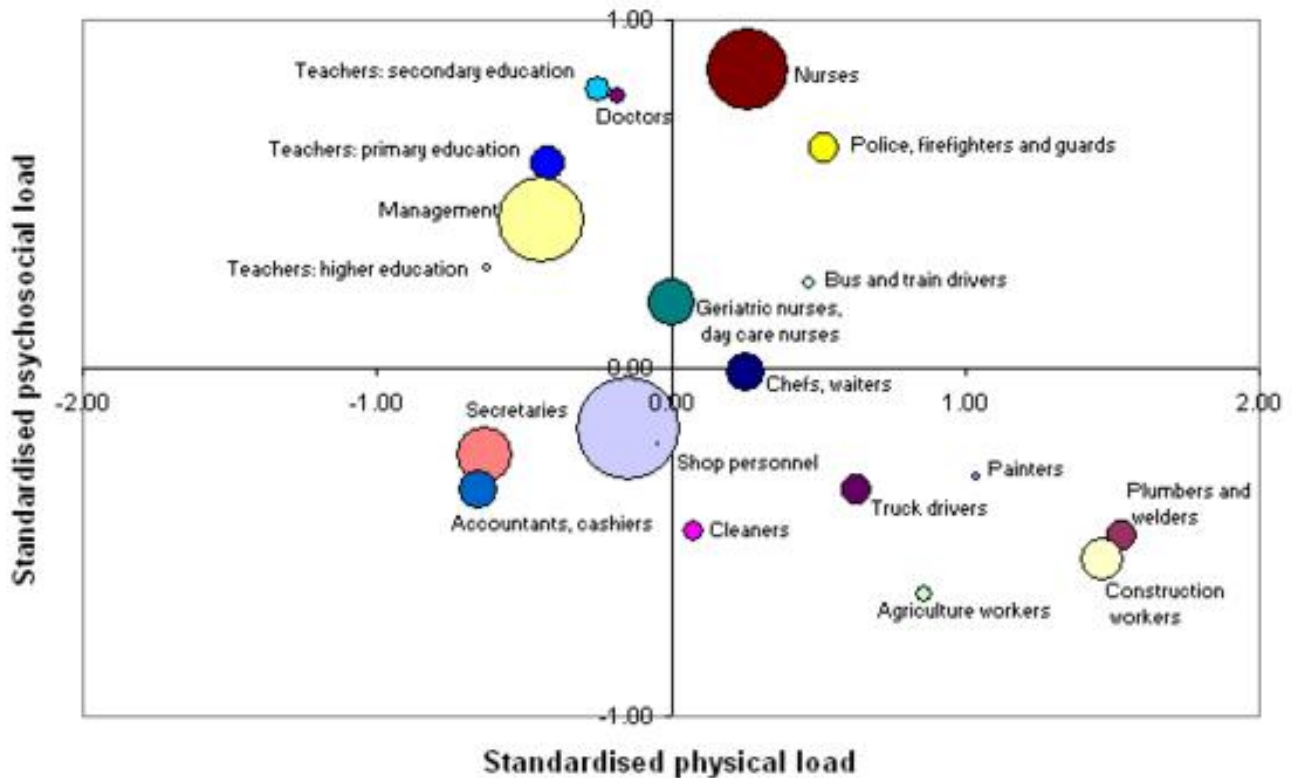
Source: NEA, 2007–2008

## Occupations at risk

In light of the physical and psychosocial risks identified above, it is possible to map occupations and identify those 'at risk', that is those exposed to high physical and psychosocial risks at work. The figure below plots the relative physical and psychosocial exposure of the 20 most common occupations in the Netherlands as well as the relative size of the occupational group.

When high physical load is the only criterion, the 'heavy work' groups appear to be plumbers, construction workers and painters. But when psychosocial workload is also used as a criterion, the risk groups appear to be healthcare workers, police and firemen, and bus and train drivers. These jobs are held by far more employees than those jobs with only physically heavy work.

Physical and psychosocial risks of the 20 most common occupations in the Netherlands



Note: Standardised physical and psychosocial load and relative size of the occupational group are shown in the figure.

Source: NEA, 2007–2008

## Heavy work is multi-dimensional

The discussion about heavy work started because the Dutch Ministry of Social Affairs and Employment wanted to make an exception for those undertaking heavy work when the retirement age is increased to 67 years. It has been shown that the concept of heavy work is multi-dimensional and should not be solely about physically heavy work. It should at least be broadened to include psychosocial workload as well.

However, more topics need to be addressed including the fact that employees in the same occupation will differ in their exposure to physical and psychosocial risks. In addition, the study by Smulders et al (2009) did not examine any changes in exposure–outcome relationships with time. These relationships are used to define relevant cut-off points, but without them, it is difficult to decide which jobs are ‘heavy’ and which are not.

It appears to be quite difficult to define what heavy work is. It will thus be difficult to identify occupations to be exempted from the proposed increase in the Dutch retirement age because of both the many jobs and the many outcomes that could be relevant.

## Reference

Smulders, P., Houtman, I. and Van de Bossche, S., ‘Zwaar werk en vervroegd pensioen’ [Heavy work and early retirement], *Economisch Statistische Berichten*, Vol. 94, No. 4572, 2009, pp. 682–684.

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