

# Health Problems due to Long Working Hours in Japan: Working Hours, Workers' Compensation (*Karoshi*), and Preventive Measures<sup>a</sup>

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**Abstract:** Late in the 1970s, serious social concern over health problems due to long working hours has arisen in Japan. This report briefly summarizes the Japanese circumstances about long working hours and what the Government has achieved so far. The national statistics show that more than 6 million people worked for 60 h or more per week during years 2000 and 2004. Approximately three hundred cases of brain and heart diseases were recognized as labour accidents resulting from overwork (*Karoshi*) by the Ministry of Health, Labour and Welfare (MHLW) between 2002 and 2005. Consequently, the MHLW has been working to establish a more appropriate compensation system for *Karoshi*, as well as preventive measures for overwork related health problems. In 2001, the MHLW set the standards for clearly recognizing *Karoshi* in association with the amount of overtime working hours. These standards were based on the results of a literature review and medical examinations indicating a relationship between overwork and brain and heart diseases. In 2002, the MHLW launched the program for the prevention of health impairment due to overwork, and in 2005 the health guidance through an interview by a doctor for overworked workers has been enacted as law. Long working hours are controversial issues because of conflicts between health, safety, work-life balance, and productivity. It is obvious that we need to continue research regarding the impact on worker health and the management of long working hours.

**Key words:** Long working hours, Working time law, Workers' compensation, *Karoshi*, Health measures

## Introduction

According to the International Labour Organization (ILO) report (2004)<sup>1)</sup>, in 2001, 28.1% of Japanese employees were working for 50 h or more per week. This figure is much higher than those in European countries such as Netherlands (1.4%), Sweden (1.9%), Finland (4.5%), and Germany (5.3%). Reflecting this substantial number of long hour workers, we have been facing a number of health problems due to long working hours in Japan<sup>2-7)</sup>. *Karoshi* is regarded

as the ultimate consequence. Recently the Japanese government has been tackling the establishment of a more appropriate compensation system for *Karoshi* and various preventive measures for overwork related health problems<sup>8)</sup>. In this article, we review the current situation concerning working hours and *Karoshi* in Japan.

## Working Hours and the Law in Japan

Figure 1 shows the number of employees by weekly working hours in Japan according to the Labour Force Survey (2004)<sup>9)</sup>. The number of employees working 60 h or more per week is 6.39 million, which corresponds to 12% of non-

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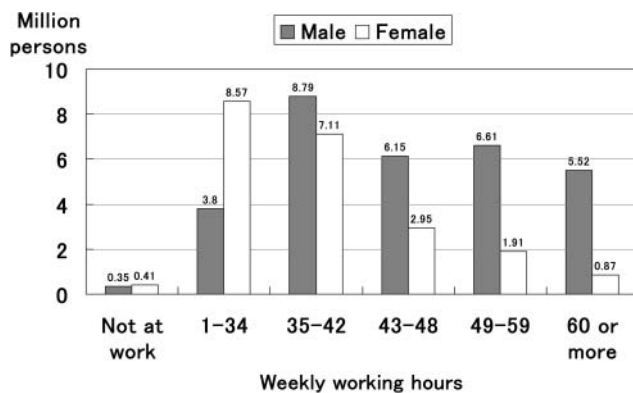


Fig. 1. Numbers of non-agricultural employees by weekly working hours in Japan (Japan Statistics Bureau, Annual Report on the Labour Force Survey 2004).

The total number of non-agricultural employees is 53.19 million in 2004.

agricultural employees. The number of employees working 49 h or more per week (the sum of employees working 49–59 and 60 or more hours per week) is 15 million (28%); the proportion of which is predominantly male.

Figure 2 shows yearly variations in the number of employees working 60 h or more per week in the period of 1967 to 2004 based on the Labour Force Survey<sup>10)</sup>. From 1975 to 1988, its number increased rapidly to 8 million and it was during this period that *Karoshi* became a well-known problem of health and workers' compensation in our society. Despite a decrease to fewer than 6 million workers exceeding 60 h or more per week, mainly because of an economical recession in the 1990s, this number has again started to increase gradually.

Working hour regulations in the Labour Standards Law<sup>11)</sup> (LSL) maintained an 8-h workday and a 48-h workweek system until a large-scale revision in 1987. The 1987 LSL revision introduced a 40-h workweek and 8-h workday system.

LSL allows overtime and rest-day work in the event of labour-management agreements called "Art. 36 agreement". However, the LSL had no limitation on the amount of overtime work except for the two-hours per day limitation for underground mine work and other hazardous work specified by an ordinance of the Ministry of Health, Labour and Welfare until 1998. Since 1982, the government had set the standards for the maximum hours of overtime as guidelines calling for voluntary compliance. In 1998, LSL was revised to provide that the Minister of Labour (currently the Minister of Health, Labour and Welfare) can set the standards for the overtime limitation in the Art. 36 agreement. This LSL revision gave the previous administrative guideline more solid legal ground<sup>12)</sup>. The same year the Minister set

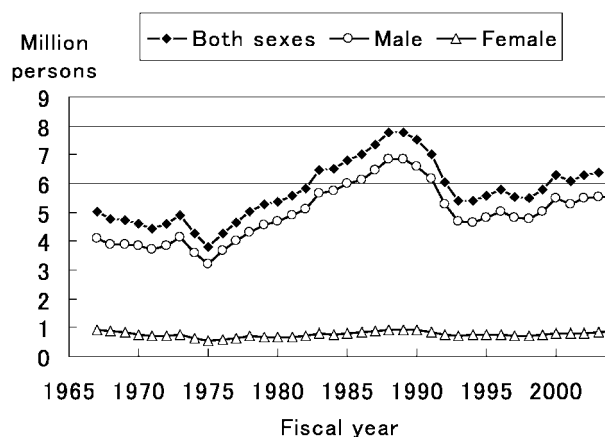


Fig. 2. Trend in the number of non-agricultural employees working 60 h or more per week in Japan (Japan Statistics Bureau, Annual Report on the Labour Force Survey 1967-2004).

Table 1. Standards for the limits on the overtime hours set in labour-management agreements

Unit period for overtime	Maximum overtime hours
1 wk	15 h
2 wk	27 h
4 wk	43 h
1 month	45 h
2 months	81 h
3 months	120 h
1 yr	360 h

the standards<sup>13)</sup> as shown in Table 1. The standards for overtime limitation depend on the unit period for overtime. The overtime limitation is 45 h for one month. Here, "overtime working hours" is defined as hours worked exceeding the legal weekly working hours (40 h per week). These standards for overtime limitation have been used as standards for labour-management overtime agreements. However, the legal binding power of the standards for overtime limitation is pointed out to be weak because of the legal characteristics of the standards and the rule of exceptions in them<sup>14, 15)</sup>. The ILO report (2005)<sup>16)</sup> thus describes Japan as one of countries with no legal overtime limits.

### Workers' Compensation for Overwork Related Health Problems (*Karoshi*)

The term *Karoshi* was first put forward in late 1970s in Japan<sup>17)</sup>. It has been used as a socio-medical term in relation to workers' compensation. *Karoshi* is usually thought to

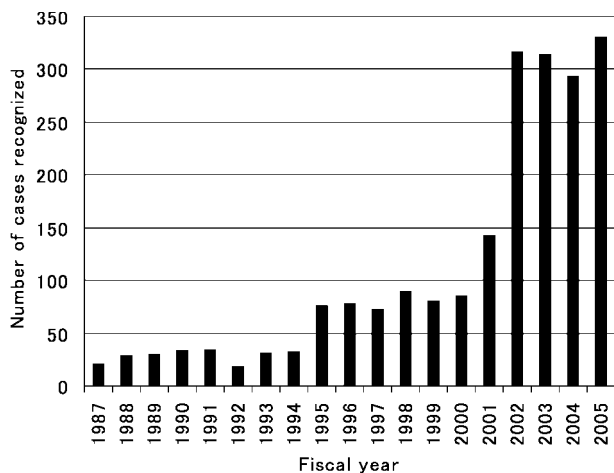


Fig. 3. Workers' compensation for brain and heart diseases in Japan.

indicate death or permanent disability from cerebrovascular diseases and ischemic heart diseases caused by overwork. It is important to note that *Karoshi* includes not only death cases, but also cases with permanent disability. It does not however include cases where a fatigued worker had an auto crash and was killed or was killed or permanently disabled from another type of "accident" due to fatigue.

The movement requesting workers' compensation for *Karoshi* began to spread nationwide in the 1980s. During this period unrecognized *Karoshi* cases were frequently taken into court. Whether awarded or not by the workers' accident compensation system is critical for the survivors. Tokunaga<sup>18</sup> estimated the total benefit awarded for the survivors by workers' accident compensation system in a death case of *Karoshi*: 45 yr old, male, yearly income of 6.4 million yens (about 55 thousand US dollars), and having a wife and two children. The benefit is composed of a lump-sum payment and a pension under this compensation system. The total amount of benefit reached approximately 88 million yens (about 760 thousand US dollars) in this case. In reality, however, it was extremely hard to keep struggling for a number of years and to win the suit. To support the survivors, the *Karoshi* Hotline, a nonprofit organization, was set up in 1988<sup>19</sup>, which has been offering consultations on workers' compensation resulting from *Karoshi*.

Figure 3 depicts an upward trend in the number of recognized brain and heart diseases<sup>20,21</sup>. In 2005 the number of recognized cases was 330 and the number of claimed cases was 869. The data depict two distinct increases in the number of recognized cases, in 1995 and 2001–2002, that were largely due to relaxations in the compensation criteria. At the last amendment of the compensation criteria (2001),

the Expert Committee of the Ministry of Health, Labour and Welfare (MHLW) conducted a review of the literature and medical examinations and compiled a report concerning the relationship between overwork and brain and heart diseases<sup>8</sup>. Based on this report, the standards of overtime working hours for the judgment of recognizing *Karoshi* has been set clearly in a more quantitative manner (100 overtime hours or more for the past one month or 80 overtime hours or more per month for the past 2 to 6 months before the onset of the diseases).

### Government Preventive Health Measures for Overtime Work

In 2002 MHLW launched a "Comprehensive program for the prevention of health impairment due to overwork"<sup>22</sup>. This program involves three major focus areas<sup>23</sup>, which are 1) reducing overtime work to 45 h or less per month, 2) fully implementing medical examination for workers, and 3) health guidance for overworked workers by a doctor through an interview.

In 2005 health guidance for overworked workers by a doctor has been enacted in a revised Industrial Safety and Health Law<sup>24, 25</sup>. It stipulates that employers must make arrangements for workers to receive health guidance by a doctor through an interview if they have worked overtime exceeding a certain limit of hours (100 overtime hours or more per month) and also (request to have the guidance). The concrete criterion and procedure described in the parentheses of the previous sentence are provided by Ordinance on Industrial Safety and Health<sup>25</sup>. The revised Law also stipulates that employers must make an effort to make the same or similar arrangements for other workers if they fulfill conditions (A) and (B) specified by the Ordinance and require health care. The condition (A) is to be fatigued or to feel anxious for health due to overtime work. In the case of the condition (A), the health guidance by a doctor will be given at the request of workers. The condition (B) is the work history criteria originally set by each workplace such as overtime work more than 45 h per month. The provision of the health guidance for overworked workers is considered weak from the viewpoint of legal binding power. However, it is a matter of great significance in that it gave a firm legal ground for the health measure against overwork.

### Concluding Comments

The development of information and communication technology (ICT) has brought us not only the increase of

productivity, but also the increase of competition, which puts strong pressure on workers to work longer hours<sup>26</sup>. The fundamental challenge is how to deal with long working hours and how to manage the health of overworked workers. Recent provisions in Japan to provide health guidance to overworked workers by a doctor will be one way to prevent health problems due to long working hours. Long working hours are controversial issues because of conflicts between health, safety, work-life balance, and productivity. Consequently, there is a strong need for further research involving the impact and management of long working hours<sup>27</sup>.

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