What is night work?

According to the ILO Night Work Convention, 1990 (No. 171), night work is “all work which is performed during a period of not less than seven consecutive hours, including the interval from midnight to 5 a.m.”.

Research indicates that the potential health risks of night work are serious. International labour standards and national legislation initially prohibited night work by women. This prohibition came to be widely criticised, however, as an example of a protective measure that has a discriminatory impact on women, by limiting their employment opportunities and excluding them from industries where shift work is common. In line with the principle of equal treatment of men and women, many countries have repealed laws which prohibit night work only for women. The Night Work Convention also reflects such a gender-neutral approach.

Night work laws

The Night Work Convention calls for measures to protect night workers’ health, assist them to meet their family and social responsibilities, provide them with opportunities for occupational advancement and compensate them appropriately. In particular, it requires that night workers have the right to a regular health assessment and to first-aid facilities. The Convention further requires that night workers certified as unfit for night work, as well as women during and after pregnancy, should be offered an alternative to working at night. The Convention also requires that night workers’ pay “recognise the nature of night work”, a requirement reflected in national laws and collective agreements in the form of premiums for work performed at night. The Convention also mandates that, before introducing a night work schedule, employers should consult workers’ representatives on the details of the schedule, the form of organization of night work best adapted to the establishment and its personnel, and the occupational health measures and social services required.

Similar measures are laid down in the European Union standard on night working, the Working Time Directive, which also prohibits night workers’ normal daily working time from exceeding eight hours. The rules on nightwork in the Working Time Directive are reflected in the national laws of EU Member States. The principles that night workers should be entitled to regular health assessments and that higher wage compensation should be available to them is also generally accepted in the laws of countries outside of the European Union.
How many employees work at night?

According to the European Working Conditions Survey carried out in 2000, 19 per cent of employees in the European Union worked at night, at least occasionally (9 per cent of them worked less than six hours of night work per month; 6 per cent between six and ten hours; 3 per cent between 11 and 20 hours; and 1 per cent more than 20 hours per month). Higher proportions of employees work at night in Finland (more than a quarter of all employees), Greece and the United Kingdom, while employees in Portugal, Italy and Denmark work at night less often than their counterparts in other EU Member States (see the chart below).

Outside the European Union, data on night work are normally limited, but some information on the extent of night work is available from establishment surveys. In Japan, for example, night work concerned 25.2 per cent of companies and is particularly common among large companies.1 A much higher proportion (44 per cent of companies) was reported for the Republic of Korea in 2002.2 Little is known about the extent of night work in developing countries.

Proportion of employees working at night (between 10 p.m. and 5 a.m.) in 2000

Advantages and disadvantages

There are a number of advantages and disadvantages associated with night work. Some advantages and disadvantages for employers and workers have been listed below.

Advantages for employers

- More intensive use of equipment.
- Increased production to cope with higher demand or to deal with perishable goods.
- Effective operation of continuous and semi-continuous production processes.

Disadvantages for employers

- Additional administrative and personnel costs.
- Potential problems with ensuring adequate supervision of night work.
- Potential negative effects on workplace safety and health, especially where night work is involved.

Advantages for employees

- Higher total earnings if workers receive premium pay for working at night.
- Longer periods of free time, if paid time off is granted in addition to night work payments.

Disadvantages for employees

- Alteration in sleep patterns or temporary sleep disturbances.
- Potentially serious health problems (including digestive, cardiovascular and osteoarticular problems).
- Negative effects on work performance.
- Occupational stress and tiredness during leisure time.
- Lower quality of family and social life.
- Increased risk of breast cancer (for women on night shifts).

Protecting night workers

Given the inherent difficulties associated with working at night, steps should be taken to improve the working life of night workers. To this end, specific measures at the workplace can include:

- shorter hours of work;
- sufficient rest periods;
- occupational and safety and health measures, including health assessments, first-aid facilities and access to medical services;
- transfer to day work for health reasons and protection from dismissal for inability to work at night;
- transfer to day work for pregnant women;
- compensation for night workers in the form of additional time off, pay or similar benefits;
- consultation on night work, e.g. schedules, occupational health measures, social services, etc.
Case example

Lufthansa employs 11,000 workers across Germany. When the company decided to improve its aircraft maintenance services in its Frankfurt location, the works council (a labour management body within the firm) conducted interviews among the 52 workers employed in this region, requesting their opinions on how to change the continuous 24-hour shift system. It was found that many workers did not want to work nights, preferring instead to work the morning or evening shifts. Other workers were willing to work only at nights, instead of working in a rotating shift pattern. As a consequence of these workers’ preferences and taking into account workload distribution, a ‘routine night shift’ was introduced. Management also agreed with the works council that a morning-late-rotating shift system should be run at the same time, and that the routine night shift should first be tried out over a period of a year and should be worked only on a voluntary basis. In addition, workers who work only at nights should be examined once a year by the company medical officer. The terms regulating the routine night shift and the modified continuous rotating three-shift system are as follows:

**Morning and evening shift**
- Every shiftworker works seven days, partly in the morning, partly in the evening, and then has five days off. The shifts run from Mondays to Sundays over a 12-week period.
- Working time of 5.36 hours a day and 37.5 hours a week.
- Unpaid rest break of 45 minutes.

**Routine night shift**
- 17 workers per night shift.
- At least one day (36 hours) off between two night shifts.
- A maximum of 37 working Sundays per year.
- Working time changes should be on a voluntary basis and subject to an advance notice period of four weeks.
- Night work premium: 50 per cent over the normal wage for hours worked between midnight and 4 a.m. and 35 per cent for hours worked before midnight.

The implementation of this routine night shift system resulted in a positive reaction from the workers concerned: 85 per cent felt better when working regularly only during nights rather than in the previous continuous rotating three-shift system. Most workers also estimated that their resting time of six to eight hours between two night shifts was sufficient. No negative effects, such as cardiovascular diseases or gastrointestinal disorders, were identified. Thirty more workers expressed their willingness to work at night due to the higher earnings.


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1 Ministry of Labour: *General survey on wages and working hours system* (Tokyo, 2000).
2 Ministry of Labour: *Survey results on working time* (Seoul, 2002).