

NIGHT SHIFT WORK CAN LEAD TO 'CHRONO CHAOS'

Night shift working

Back-up looks at the findings of new research with implications for night shift working, published in the Proceedings of the National Academy of Sciences.

The study monitored the blood samples of 22 participants who had their sleep deliberately disrupted to show the effects of shift work on our bodies.

Researchers at the Sleep Research Centre at Surrey University found that a change to regular sleeping times affects us at a genetic level, influencing the daily rhythm of our genes.

Study author professor Der-Jan Dijk told the BBC: "Its chrono chaos. It's like living in a house. There is clock in every room in the house and in all those rooms those clocks are disrupted, which leads to chaos in the household."

Dijk added: "We of course know that shift work is associated with negative side effects and health consequences. They show up after several years of shift work. We believe these changes in rhythmic patterns of gene expression are likely to be related to some long term health consequences."

The results of the study point to the greatest impact falling on night shift workers, whose sleep is most disrupted by the nature of their work.

TUC head of safety Hugh Robertson said the report reinforced concerns about shift work's links to breast cancer, diabetes, heart attacks and obesity, establishing it as a "major

occupational health issue.

"While we are not going to get rid of shift work, what we should be doing is trying to manage shift patterns and shift changes in a way that reduces the risk."

Reps need to be aware of *The Working Time Regulations 1998 (WTR 1998)* which set out specific entitlements for night shift workers. Workers have an entitlement to be properly assessed before taking on night work. Shift workers need to ensure that they take compensatory rest breaks. Employers are expected to make sure that their night workers get at least the minimum amount of rest.

The WTR 1998 describes a night worker as someone who works at least three hours in the night on the majority of days that they work.

Employers have an obligation to offer a free health assessment carried out by a qualified health professional under the WTR 1998. This should include at least a screening questionnaire to consider whether any particular risks to the worker's health are presented by night work. The criteria should include: physique, maturity, experience and competence to undertake the night work proposed.

Due to the nature of shift work, the WTR 1998 says that compensatory rest breaks should be taken when the normal minimum daily and weekly rest breaks for those working normal hours cannot be taken. Compensatory breaks should be taken, if possible, on the same day.

The WTR 1998 says that, as a minimum, as long as the worker receives a total rest entitlement of 90 hours a week on average (not including rest breaks at work), the rest breaks obligations are

being met by the employer. The regulations further say that night workers should not work more than an average of eight hours in a 24-hour period, including any overtime worked. This is calculated over a reference period of 17 weeks.

Employers are expected to make sure that they take all reasonable steps to make sure that their night workers do not work any longer than this maximum period.

Professor Andrew Watterson heads up the University of Stirling's Occupational and Environmental Health and Safety Research Group and urges trades unions to step

up their campaigns on occupational health issues, including shiftwork.

Watterson says "at workplace level, union safety reps should demand effective risk assessments on shift patterns to ensure the least unhealthy patterns are adopted. Unions

should ensure wherever possible their safety rep cover includes workers on atypical shifts, including night shifts".

■ The January 2014 issue of LRD's *Workplace Report* magazine has a feature on shift patterns, including guidance on shift work hours. For details, visit www.lrdpublications.org.uk

Shift work is associated with negative side effects and health consequences

HSE GUIDANCE

The Health and Safety Executive (HSE) has issued good practice guidelines for shift design. These include:

- offer a choice of permanent or rotating shifts and try to avoid permanent night shifts;
- either rotate shifts every two to three days or every three to four weeks – otherwise adopt forward rotating shifts;
- avoid early morning starts and try to fit shift times in with the availability of public transport;
- limit shifts to 12 hours including overtime, or to eight hours if they are night shifts and/or the work is demanding, monotonous, dangerous and/or safety critical;
- encourage workers to take regular breaks and

allow some choice as to when they are taken;

- consider the needs of vulnerable workers, such as new and expectant mothers;
- limit consecutive work days to a maximum of five to seven days and restrict long shifts, night shifts and early morning shifts to two to three consecutive shifts; and
- allow two nights full sleep when switching from day to night shifts and vice versa.

The HSE website also has hints and tips for shift workers which include ideas on how to sleep better and maintain a good diet and healthy lifestyle.

www.hse.gov.uk/humanfactors/topics/shift-workers.htm