# Shift work, lifestyle and health

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# Section C

We have produced this booklet to assist both our elected Representatives and our Members in coping with shift work and the long hours culture in Britain's railways.

ASLEF's policy, agreed at our "Parliament", the Annual Assembly of Delegates (AAD) is contained in the "ASLEF Charter". We are working towards all of these policies that will enhance the heath, safety and welfare of our Members.

We want new regulations to control Drivers working time. That is why we have published a Train Drivers' Hours Bill. An Early Day Motion sponsored by MP Mick Clapham has gained support from over 100 MPs.

Why should train driving be the only transport job that is not covered by regulation? We will be fighting for regulation, and the Drivers Charter.

In the meantime, this booklet gives some advice on how to cope with shift work, and the long hours culture.

Mick Rix,
ASLEF General Secretary

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# Shift work, lifestyle and health

## 1 Shifts and health

Research has shown that shift work, in particular night work, can have negative effects on the health, safety and well-being of workers. (US Congress OTA, 1991 Waterhouse et al 1992) This is both in the short and long term.

### Short term,

Effects can include: disturbed sleep, stress, fatigue, irritability, psychosomatic illnesses, family problems and accidents.

### Long term

Increased risk of gastrointestinal, cardiovascular and psychoneurotic diseases, and women shiftworkers can experience adverse effects on their hormonal and reproductive functions and family roles. Studies in the UK have found that, compared with day workers, shift workers :

- suffer 2 to 5 times the rate of stomach disorders;
- are 40% more likely to suffer from cardiovascular disease;
- suffer from peptic ulcers at an earlier age;
- suffer more from anxiety and depression;
- are more likely to die younger.

## 2 Sleep and alertness

Sleep is as essential to good health and to maintain alertness and performance as food and water. Alertness is defined as "a state of wakefulness when we are best able to process information and be responsive to our external environment" J McColgan, Red Alert, No.13 October 2001.

Adults usually need between seven and eight and a half hours a night. Less than that incurs "sleep debt". So, a person who needs eight hours sleep, but only gets five, has a sleep debt of three hours. Sleep debt leads to impaired alertness, which in turn lowers reaction time, reduces concentration and perception, and decision making. Together, this is usually defined as fatigue. Sleep debt is accumulative and over several nights, the effects are compounded.

Even moderate levels of fatigue can impair reaction times and judgement – more than if the legal limit for alcohol has been consumed.
The DTLR Road Safety Research Report on (road) driver sleepiness found that "caffeine (150mg) is an effective countermeasure to sleepiness, as is a short (less than 15 minutes) nap or doze. The two combined together (caffeine in the form of a caffeinated drink, then a nap) are particularly effective. The efficacy of these treatments will depend on the magnitude of the sleepiness. Even 'relaxing with the eyes closed' is worthwhile". However members need to be aware of the adverse effects of too much caffeine. See section 8.

## 3 Circadian rhythms

This is a 24 hour cycle that virtually all bodily functions have, with a high and low point over the day. Body temperature and alertness both have a cycle for example. We are programmed to sleep at night and be alert in the day.

For shift workers, this means that it is very difficult to fall asleep in the day, or keep awake at night – our bodies just do not work that way.
The hours between 23.00 and 06.00 are when the body naturally wants to go to sleep, with maximum sleepiness between 03.00 and 05.00. Early afternoon between 15.00 and 17.00 is another period when the body naturally wants to sleep.

The internal circadian clock also receives external cues from changes between day and night, and between work and your social life.
"Jet lag" is a well know example of body rhythms being upset, but working shifts and suffering sleep debt can also produce chronic fatigue and worsening safety performance at work.

## 4 How do you Risk Assess Shift Schedules?

The HSE published a report "validation and development of a method for assessing the risks arising from mental fatigue". A "Fatigue Index" is used to assess the risks from the impact of rostering on mental fatigue in safety critical work.

The Fatigue Index requires the calculation of 5 factors: shift start time (F1), shift duration (F2), rest period between shifts (F3), breaks during shifts (F4) and cumulative fatigue (F5). These are added together to give an overall index for the roster.

The Rail Industry Advisory Committee (RIAC) Human Factors Working Group, on which ASLEF is represented, have endorsed further work on the applicability of the Fatigue Index to the rail industry.

## 5 Impact of shift work and fatique on safety

and on mental and visual acuity
The paper by Professor Folkhard commissioned by Railtrack gives an overview of the current research into fatigue and shift working.

### Main points

- Safe duties are those between 8 and 10 hours (This fits well with ASLEF policy)
- Second to fourth hour on duty is a SPAD risk and about 50% of all SPADs occur in this period. This has implications and suggests that longer, but less, turns are safer than shorter, but more turns. (An example would be that 4x10 hours = 40 is actually "safer" than 5x8 = 40 hours, as 4x 2/4 hour peak has one less 2/4 hour SPAD peak risk).

- However, there is no real evidence to suggest that risk is significantly increased from working up to 12 hours.
- The Report believes that "there is a strong case to be made for developing and piloting a set of guidelines for good practice on one or more TOCs. Drivers and Management's would set guidelines with benefit from expert advice. Trial would last 2/3 years. Then follow up with 6 monthly surveys.

Other findings
Night turns – should be only 2/3 consecutive turns
Early's again 2/3 consecutive turns
Rest Periods – minimum 14 hours (Now 12).
PNB's need research to find optimum times and duration.
Commuting time to and from work. No established maximum. DERA suggests max of 1 hour (Eurostar have this already).

This research could be very useful for pushing ASLEF's agenda of a 35-hour week, 10 hour day, Sundays in working week and also looking at PNB's.

## 6 DERA Study on "visual acuity"

Conclusions and recommendations
Distance and angle are crucial for distinguishing between red and yellow lights. Driver training now assumes that Drivers look at signals directly, but this is not the case. DERA have devised training tool and briefing materials for Driver training.

A review of the Railway Group Standard on signal sighting takes signal position into account

Further work by DERA of the effects of brightness on colour discrimination. The yellow is significantly brighter at present than green and red signals.

Distinct sounds for correct identification of signals. i.e. different sounds for green yellow and red

Testing of white border to a signal background – Railtrack Line conducting trials for possible future adoption.

### Mental Acuity

A lot of this work ended up in the study on fatigue, and DERA recommend more research.

## 7 Lifestyle training and some criticisms

Lifestyle training using Self-help booklets has been promoted as a way of helping shift workers cope. However a recent HSE Contract Research Paper examined guidance given by Lothian and Borders Police from a book entitled "The shiftworkers guide" Wedderburn Z and Rankin D, 2001.

It found that "the big flaw, amply demonstrated in the reviews of the literature, was to suppose that simple delivery of the guide to the ongoing shiftworker would make a difference. We do not know whether it was read, understood, and seriously considered"

### ASLEF Action

Reps should therefore be aware of the limitation of such self-help guidance. If companies are to use such guidance they must not just hand out booklets and expect Drivers to change their behaviour.

They must also take into account:

- Knowledge of the effects of biological rhythms in the planning of shift rostering
- Education of shift workers and their families
- Environmental design changes, especially those aspects which can improve alertness such as temperature, lighting and comfort levels;
- Provide medical advice for shift workers, especially for those with existing medical conditions.
- The first and foremost control measure is to eliminate, or reduce as far as possible, the need for shiftwork.

This is difficult in the rail industry as we run a 24/7 service for the public.
But, we would argue that the best way to combat the effects of shiftwork is to employee more drivers, so they can all work less!
That is the aim of the ASLEF Charter and our campaign for a 35 hour week.

## Chronotypes

How we cope with shiftwork has been found to be related to our chronotype, the scientific tern for this particular circadian rhythm pattern.

We are all of three basic types:

| Chronotype | Population | Sleep patterns | Shift type preferred |
|---|---|---|---|
| *Morning larks* | 15% | 2 hours earlier & feel sleepy 20.00 – 22.00. Feel that around 24.00 is the middle of the night | Early shifts – have greater difficulty coping with nightshift as natural tendency to wake early reduces their day time sleep after a nightshift. Can try napping in evening, but does not replace quality sleep |
| *Evening owls* | 20% | 2 hours later & feel sleepy 24.00 – 02.00 | Late shifts |
| *Indifferent* | 60%–70% | | |

## Morningness-Eveningness Test

This test, adapted from: Horne, J.A. and Ostberg, O. "A Self-Assessment Questionnaire to Determine Morningness-Eveningness in Human Circadian Rhythms", 1976, can be taken to see if you are a "lark" or an "owl" at the following website http://www.matrices.com/Workplace/Learning

## Normal sleep patterns

Adults usually need one hours sleep for every two hours awake, which means 7 to 8 hours sleep per night. However, daytime sleep can be 1.5 to 2 hours shorter than sleep at night. This is due to the rise in core body temperature during the day, together with the external time cues such as daylight and increased social activity.

## Sleep debt

When working nights, by the fifth night, the loss of sleep accumulates, and you can be 8 to10 hours 'in debt'. "Sleep debt" can cause lapses in concentration and alertness leading to slower reaction and decision making times leading to errors and accidents.

## 'Microsleeps'

You can fell yourself "nodding off" and your brain does not react to what you see or hear around you.

Lack of sleep can also lead to irritability and negative moods, and can cause conflicts both at work and at home.

How to improve sleep and fight "sleep debt"
Before the first night shift try napping for 2 to 3 hours in the evening;
Inform your family that you need peace and quite to be able to sleep in the daytime – you could use a "do not disturb" notice;
Make sure that the bedroom is dark and cool;
Think about using earplugs;
Remember that tea and coffee are stimulants and also make you want to go to the toilet.
Following your last night shift, try sleeping for only 3 or 4 hours, then stay awake all day and go to bed at your normal time.

## Nutrition

Nutritional advice can be obtained from the British Nutrition Foundation High Holborn House 52-54 High Holborn London WC1V 6RQ Tel: 020 7404 6504 Fax: 020 7404 6747 postbox@nutrition.org.uk http://www.nutrition.org.uk/

The digestive system is relatively inactive at night, due to the circadian rhythm for the gastrointestinal function being at its minimum during the night and at its peak during the day. So, some foods which are tolerated well during the day, cause digestive problems if taken during the night. This can lead to gastrointestinal problems, particularly ulcers, being more common among shiftworkers. The reasons for this include:

- there is less access to nutritious meals at night and workers rely on snack foods with a high fat content;
- night shift workers drink more coffee to stay alert. Heavy coffee consumption increases the risk of developing ulcers;
- meals are taken at irregular times and are often rushed or interrupted.

## 8 Advice on nutrition for shiftworkers

- try to develop a regular eating schedule for the shift you are on;
- try to have your main meal of the day in the middle of your awake period and a couple of hours before commencing night duty;
- try to join your family for at least one meal a day, even if it is your 'breakfast' and their supper;
- eat lightly but nutritionally during the night;
- avoid caffeine if possible;
- control your sugar intake.
- Take regular exercise, one or two hours before your shift will keep you more alert whilst on duty.
- Avoid doing exercise within an hour or two of going to bed, as it increases your alertness and makes falling asleep more difficult.

## 9 Sleeping and age

"It is not uncommon for a person who has been working shifts all of his or her career without due strain to start having trouble coping as he or she gets older." (Biological Rhythms: Implications for the Worker, US Congress, Office of Technical Assessment, 1991).

There is a growing body of evidence to indicate that as one gets older, typically between 40 and 45 years of age, changes occur in the internal biological clock which affect the coordination between various circadian rhythms such as core body temperature, hormone levels and the sleep/wake cycle, causing sleep to become more fragile and easily disrupted, particularly on night shifts.

## 10 Working Time Regulations

These do not apply to the transport sector, including rail, at present but some sections will from 1 August 2003. Under the Working Time Regulations:
a night workers are entitled to a free health assessment before they start working nights and thereafter at regular intervals; and
b Night workers suffering from health problems recognised as being connected with the fact that they perform night work should be transferred to day work where possible.

'Recognised' medical conditions for the purposes of part (b) are:
1 diabetes, particularly where treatment with insulin injections on a strict timetable is required;
2 some heart and circulatory disorders, particularly where factors such as physical stamina are affected;
3 stomach or intestinal disorders, such as ulcers and conditions where the timing of a meal is particularly important;
4 medical conditions affecting sleep;
5 some chronic chest disorders where night-time symptoms may be particularly troublesome;
6 other medical conditions requiring medication on a strict timetable.

DTI Guidance on interpreting and applying the Working Time Regulations,section 4: health assessments for night workers

http://www.dti.gov.uk/er/work_time_regs/wtr4.htm#section4

To be sure workers are fit for night work, employers must offer a free health assessment to anyone who is about to start working nights and to all night workers on a regular basis.

Every employer should regularly assess the health and safety risks their workers are exposed to. They should identify hazards, assess how harmful they could be and take steps to reduce any risks.

It is rare that someone cannot work at night at all because of a medical condition. However, some workers may be more at risk working at night if they suffer from certain medical conditions.

### How employers should assess workers' health

Employers are advised to take two steps to be sure workers are fit to work nights.
Step 1: You ask workers to fill in a questionnaire which asks specific questions about their health which are relevant to the type of night work they will be doing.
Step 2: If you are not certain they are fit for night work following the questionnaire results, you ask them to have a medical examination.

Health assessments must be offered before someone starts working nights. They should then be repeated on a regular basis afterwards.

When the questionnaire has been answered by the night worker, it should be checked. Please remember that some people may not want to say they have a medical condition in case it affects their chances to work. If there are any doubts as to whether someone is fit for night work, the employer should ask the worker to have a medical examination.
When asking for a medical examination to be carried out, employers should explain to the doctor or nurse what type of work is involved.
The medical examination may produce two types of information:

- A simple fitness-for-work statement which will be given to the employer.
- Clinical information which is confidential and can only be released to an employer (or any other third party) with the worker's written consent.

### What to do if a worker is unfit for night work?

If a qualified health professional advises that a night worker is suffering from health problems caused by or made worse by working at night, the worker has a right to be transferred, if possible, to suitable day work.

### Shift patterns

Research into shift work and effects on health have resulted in a set of ergonomic recommendations which should be taken into account , and include:

- minimise permanent nights;
- minimise sequence of nights: only 2-4 night shifts in succession should be worked;
- consider shorter night shifts;
- avoid quick change-overs;
- plan rotas with some free weekends;
- avoid overlong work sequences;
- Rotate forward (ie clockwise rotation morning/ evenings/ nights);
- Avoid early starts.

(Guidelines For Shiftworkers, Ed. by A. Wedderburn, Bulletin of European Studies on Time, 1991).

**Fixed shifts** cause the least disruption to circadian rhythms, provided that the workers maintain the same sleep/wake cycle on their rest days as on their work days. However, most night workers revert to a normal day/night cycle on their days off to participate in family/social life, thus negating any adjustment in circadian rhythms.

Slowly **rotating shifts** allow greater time for circadian rhythms to adjust to each new shift. However, this type of shift system can result in sleep debt and fatigue due to more consecutive periods of day sleep. Studies on shiftworkers have shown it takes about 21 consecutive days for circadian rhythms to fully adjust to nightshift. Again, workers tend to revert to a normal day/night cycle on their rest days during this period, thus negating any adjustment which has begun.

**Weekly rotating shifts** have been shown to provide insufficient time for the circadian rhythms to adjust completely and enough time for a sizeable 'sleep debt' to build up. Working 4 to 7 night shifts in a row is now widely condemned by experts. Those Police Forces which adopted the 'Ottowa' shift pattern in the early 1990 (which included 7 consecutive nights) are now looking at VSA's (Variable Shift Arrangements) which minimise consecutive nights.

**Rapid rotating shifts** have the advantage that (i) the circadian rhythms remain day orientated since not enough time elapses for them to adjust to the new routine;(ii) there is less accumulation of sleep debt; and (iii) there are free evenings every week for social/ family contact. The disadvantage is that when on the 2 to 4 nights of work, the worker will be out of sync and alertness may be affected.

**Direction of Rotation**: Forward rotation (earlies/lates/nights) is recommended from a circadian perspective because the internal body clock naturally tends to run slow (ie every 25 hrs). It is easier then, to delay sleep than it is to advance it. Consider 'jet lag' - people experience less jet lag going from east to west than from west to east. The same principle is at work. However some workers prefer a backward rotation (nights/lates/earlies) because it affords more time to recover lost sleep and prepare for the next night shift.

**Early starts** to the morning shift should be avoided. Early starts reduce sleep as, by choice or by family circumstances, most workers go to bed around their normal time. Reduced sleep leads to fatigue which increases the risk of errors and accidents on the morning shift.

There is no optimum starting time - but 0700hrs is better than 0600hrs which is better than 0500hrs.

**Consider shorter night shifts**. As mental alertness and physical performance deteriorate during the night, it is argued that night shift should be restricted to 7 or 8 hours to minimise the risk of errors and accidents. VSA's enable the Early or Late shifts to be extended accordingly.

**Minimise sequence of nights.** Minimising the sequence of nights worked minimises the degree of adaption (or disruption) of the circadian rhythms from their normal day orientation. Academic recommendations vary between a maximum of 2 and 4 consecutive nights.

## 11 ASLEF policy Working time for Train Drivers

### Length of weekly working time

44 hours maximum for each seven day period.
35 hours maximum per week on average over a 52 week period, save for any excluded days in that period.

### Length of daily working time

Maximum in a 24 hour period, ten, when worked during the period between 6 am and 11 pm; or eight, when worked during night time. In exceptional circumstances, may be increased to twelve. A train driver's minimum period for a turn of duty shall be six hours.

### Night working

Defined as the not less than six hours, which includes at least three hours in the period between 23.00and 06.00.

### Weekly rest period

Maximum four consecutive daily turns of duty, when the turns of duty are worked between the hours of 6 am and 11 pm, or maximum three consecutive turns of duty during night time.

### Uninterrupted rest period per week

Not less than 48 hours on completion of a turn of duty and in any event in each seven-day period during which she/he works for her/his employer, such seven-day period to begin at the start of each week. Week starts at midnight between Sunday and Monday.

### Daily rest period

Not less than 14 consecutive hours in each 24-hour period.

### Rest breaks

Under six hours, a rest break of not less than 20 minutes to be taken between the commencement of the third hour of duty and the end of the fifth hour of duty.
Over six hours, two rest breaks of not less than 20 minutes each; the first to be taken between the commencement of the third hour of duty and the end of the fifth hour of duty and the second to be taken between the commencement of the sixth hour of duty and the end of the eighth hour of duty.

## 12 Mens' Health & Safety

Most of the advice in this booklet is general for all shift workers. However, differences do exist between the sexes, and testicular cancer is one of them.

Testicular cancer is the most common cancer amongst young men between the ages of 20 and 35, although it can develop in boys as young as 15.
The incidence of testicular has doubled over the last 20 years. Currently about 1500 men a year develop the disease, around one in 400.
The causes of the increase are unknown. Exposure to female hormones in the environment, in water, or in baby milk have been suggested. In Spain and most Asian countries there has been no significant increase. Men with one or more undescended testes have a greatly increased risk - one in 44.

Many types of testicular cancer can be cured in around 96% of cases if caught at an early stage. Even when these tumours spread, they can still be cured in 80% of cases, and large volume tumours can be cured in 60% of cases.

The most common type of testicular cancer is treated by removal of the testis followed by radiotherapy, and when needed, various drug treatments.
The risk of infertility is low.
What are the symptoms?

- a lump in either testicle
- any enlargement of a testicle
- a feeling of heaviness in the scrotum
- a dull ache in the abdomen or groin
- a sudden collection of fluid in the scrotum
- enlargement or tenderness of the breasts

If you have any of these symptoms, go and see your doctor.
(Information from Cancer Research).

# 13 Women's Health & Safety

Women menstruate; bear children; breast feed; the menopause can effect health; on average, women have only two-thirds of the muscular strength of men (but we also have to remember that a fit young woman may well be stronger than an older man); on average, women are shorter; they can be women are more susceptible to the health effects of some chemical, biological and physical agents (but note that these can also effect men's health); they are more likely to be bullied, attacked and even face being raped at work; the stresses of the "double shift" of work and home mean that women can take more time off sick; they can face hazards from kit designed with men in mind and end up with strains from heavy lifting for example; working in a traditionally male industry, they can suffer social isolation.

## How big is the problem?

According to an HSE 'Self reported work related illness' survey, at least 10,000 women a year suffer back trouble due to work; 10% of women between 24 and 34 had been attacked at work; stress was the second most reported condition, but the cause of the highest level of concern.

## Health issues faced by women

Professor Karen Messing of the University of Quebec, Montreal, speaking at the TUC's 1998 women, work and health conference found that the true extent of women's ill-health is not reflected in the statistics. According to Messing, in her devastating critique One-eyed science, occupational health and women workers: "The types of health problems women have are not recognised or compensated, creating a vicious circle where women's occupational health problems are not taken seriously, therefore not recognised, therefore do not cost enough to matter."

"Little research leads to a blinkered view of women's health problems at work - they are put down to 'getting old' or the menopause, or hysteria. Women's problems are seen as unreal. So there is little incentive to do research - or to do any prevention."

In a major union initiative, the TUC is pressing for a "gender sensitive" approach to occupational health and safety. It helped convince the Health and Safety Commission to include social equality, including gender, in its current three-year corporate plan, and is continuing to press for better statistics, for HSE materials to reflect better the presence of women in the workforce and for more women on HSC committees.

At workplace level the TUC, supported by ASLEF, want safety reps to:

- Survey women in their workplace to identify their views on key safety problems;
- Compare findings with the existing workplace health and safety statistics;
- Review the company safety policy to ensure women's safety concerns are covered;
- Check whether risks assessments cover the risks to women workers; and
- Decide whether their workplace needs a special action plan on health and safety.

## ASLEF Questionnaire

The 1999 International Workers Memorial Day on 28 April,1999, was marked by the TUC on the theme of women's health and safety.

As an initial step towards addressing the problems of women's health and safety, on 15 January 1999, ASLEF sent a questionnaire to all women members, asking about the workplace health and safety problems that women suffer from and what they think most needs to be dealt with. We made it clear in the questionnaire that no individuals would be identified and that answers would be confidential. The response to that questionnaire from our women members was very helpful in highlighting areas of concern that need to be addressed urgently, including lack of information and understanding by management on women's health issues, including pregnancy, issues like sexual harassment not being dealt with properly by management and the lack of accessible toilet facilities for female traincrew.

Set out below are the concerns that were listed in the responses to the questionnaire which, as can be seen, are fundamental to women members safety and well being in the workplace: -

- Sexual harassment: not dealt with properly by management
- Unhelpful and obstructive attitude towards women by managers
- bullying by male colleagues at the depot involving a large number ; naming people makes situation worse
- physical violence on trains from passengers
- need training on how to deal with angry/rude passengers
- safety of late trains
- safety of access to car parks, late night driver security for driver only operations, isolated walking routes
- need for personal attack alarm
- no female managers to talk to about women's reproductive health problems i.e. pregnancy and menopause.
- no breaks in diagrams until after 6 hours and only toilets available on trains and in very poor state
- no toilet facilities on ballast sites,
- need for proper, clean toilet facilities, not shared with public
- platform staff who clean the men's toilets, refuse to clean the women's toilets as well
- toilet facilities at older depots and stations are not suitable-some have to be shared with men
- respiratory problems
- back problems because of heavy equipment to carry
- need for a crèche/ child minding facilities
- stress caused by shifts changing at short notice
- stress caused by unsociable shift patterns when have a baby to look after
- no risk assessment when became pregnant
- during pregnancy being demoted to Customer Service Assistant, on Eurostar, just as tiring and stressful

- more information about working when pregnant
- better management of pregnancy needed
- specific women's safety reps required
- more supportive attitude by management on menstrual problems
- isolation (i.e. only woman at the depot so does not feel women's issues are taken seriously) feels unable to talk to branch and local reps about women's health problems e.g. menopause because they would not keep it confidential
- provision of transport to/ from home when travelling very early or very late at night

As the questionnaire was confidential and no members were identified by name, we followed up the questionnaire by asking in Head Office Circular 222/1999 for Branch Secretaries and Safety Representatives to forward any specific examples of problems raised by women members relating to the above to Head Office, in order that they could be progressed through the machinery.

There was no response from this circular and so we followed it up with Head Office Circular 45/2000 that stated: – "We would like to encourage women members to come forward with any safety problems and would suggest that Society representatives approach women members with a view to seeking their concerns, that can then be forwarded to Head Office. The Society will also raise these issues at Train Operating Companies and Freight Operating Companies Joint Safety Committees. "

This circular and an article in the Locomotive Journal on the same lines also produced no response.

The conclusion can only be that there were barriers within the culture of ASLEF that prevented the concerns of women members being dealt with.

This may be because the atmosphere of some branch meetings is off-putting to women members and they do not attend.

It may also be that our representatives at all levels of ASLEF need to be more proactive in actively encouraging women members to raise issues.

However, there are signs that things are changing. There has been an encouraging number of responses to ASLEF asking for nominations to go to the Women's TUC and to stand for the Women's Committee.

The culture of activism among women members will undoubtedly be enhanced and expanded by the Women's Committee. However, this does not take away the responsibility of all sections of ASLEF to ensure that women members feel comfortable with raising issues with their representatives.

## Women's Consultative Committee Research

Some very interesting research was carried out by National Women's Consultative Delegate for District No. 7 concerning facility breaks with regard to female health issues.

EWS has 12 female drivers out of a total of 2,400 (some 0.5% of the driving workforce).

The committee maintains that inadequate facilities breaks on locomotives can open the door to fatal infections. Many of the places where facility breaks can be taken away from the driving cab are run down and filthy and the driving cabs are often beyond filthy. The cabs are confined and no doubt a breeding ground for all sorts of nasty bacteria. A pair of gloves, which cause the hands to seal thus creating perfect conditions for microscopic bacteria to replicate, and a tub of wet wipes that fall apart due to their flimsy make up don't help. The handrails on most of the locomotives are disgusting and can be a conduit for the hepatitis bacteria.

Many American and European companies wash their locomotives at least once a week, but this does not seem to be standard in the UK.

Female drivers have obvious biological needs due to menstruation. During this time they need to change sanitary wear every 3 to 5 hours when awake. Currently this is bearable due to facility breaks being taken in places that have access to a toilet and hand scrubbing materials, although some toilets have, as yet to see the introduction of used sanitary disposal bins. In the case of the latter, females are reduced to having to securely seal and store the used item until they can be disposed of in a safe and non-hazardous manner.

Everyone carries a bacteria called straphylococcus aureus, which normally lives harmlessly on the skin, in the nose, armpits and in the case of females, the vagina. This bacterium produces a toxin, which in turn causes toxic shock syndrome, although it is not fully known what triggers this bacteria to produce the toxin.

Toxic Shock Syndrome is an infection of the blood normally associated with tampons. It is a rare infection that can be avoided by proper use of tampon products, that the hands be washed before and after inserting a tampon, and awareness of the early signs of the infection are known and acted upon. Some of the symptoms are sudden high fever, nausea, diarrhoea, dizziness and feeling faint, disorientation and extremely low blood pressure with a rapid weakening pulse. The treatment usually involves antibiotics. Toxic Shock Syndrome can result in kidney failure, liver failure and in about 3% of cases, death.

However, this does not only affect the female population. Men can suffer too. Staphylococcus Toxic Shock Syndrome can result from an infected wound or skin abscess and produce similar symptoms. In 1987 another form of toxic shock syndrome was officially recognised. This was STSS (Streptococcus Toxic Shock Syndrome). The illness can appear after the Streptococcus bacteria have invaded areas of injured skin (cuts, scrapes, surgical wounds and even chicken pox blisters.

The bacteria that cause these illnesses can be carried on unwashed hands to infect broken skin or wounds anywhere on the body. Both illnesses can be deadly and need immediate treatment.

Is it right that women have to eat food, go to the toilet and change tampons in the confines of a cab or whatever loop we are shoved into in the full knowledge that the facilities for cleaning hands are inadequate? Sometimes it can be necessary to change tampons in public in the cab or out in the fresh air on or near a running line. Are we expected to retire to the engine room where it is hot, poorly lit and again filthy? Or are we expected to hold on until we reach a point where a toilet is provided for this private act? It is very risky to change tampons with dirty hands.

There are also health effects which can result from the inability to take mental rest away from the driving cabs. Drivers could become more prone to having SPADs. There is also the possibility of Deep Vein Thrombosis (DVT) or Economy Class Syndrome (ECS). Contrary to popular belief ECS is not exclusively a long haul flight syndrome. It often begins in the calf or thigh due to the movement of blood being somewhat slower in these areas, especially if exercise is limited. As the blood begins to pool in an area, a clot develops and can attach itself to the wall of a vessel or in more severe cases become wedged within a vessel, blocking the blood flow. The best way of reducing the risk of DVT is that of prevention; making sure a person exercises and flexes their leg muscles if they are sitting in a cramped position for a long period of time or even better reduce the amount of time spent in these sitting positions.

TSS and STSS are rare illnesses, but avoidable ones. They can be avoided through basic hygiene.

We must resist the attempts of companies who try to insist that facility breaks must be taken on the locomotive and insist that we have a right to decent adequate facility breaks.

ASLEF have raised this lack of facilities and have had some success, but Health & Safety Reps must keep up the pressure. Another issue is that of equipment designed for use by men. This ranges from driving cabs to manual handling of Drivers, and Train Managers, bags.

### Older women's health and safety ignored

A report from the TUC and the Pennell Initiative for Women's Health says the health and safety of twelve million women is being ignored. The health and work of older women: a neglected issue, says that older women work longer hours than younger women, have lower status jobs and have a higher chance of developing bad backs and broken bones. The report, launched on 8 March 2002 , International Women's Day, sets out an agenda for action by government, employers, unions and researchers, saying: Employers should ask older women workers about the risks they face so that they can be controlled better; unions should encourage older women workers to become safety reps and speak out about the health problems they have; the government should promote to employers the economic contribution that older women workers make; and researchers should look at the differences between older women workers and other groups rather than pretend those differences don't exist. The author of the report, Professor Lesley Doyal of the University of Bristol, said there was little research on the area, but the new report "demonstrates the impact of work on the physical, emotional and mental health of this neglected group of workers and makes recommendations for ensuring that their well being is actively promoted."

## 14 Manual Handling Regulations 1992

The main point is that manual handling should be avoided as far as is reasonably practical, and that there is no "safe weight" for lifting. Weight is only one factor in a manual handling risk assessment, that should also include the number of times the lifting and moving is repeated; the type and size of the load, the distribution of the weight and the individual.

Individual factors include age, sex, weight, possible pregnancy and any prior history of back trouble.

That means any kit that is not absolutely necessary for Train Crew to carry should be left in the cab.

This issue has been raised with all TOCs and FOCs Joint Safety Committee meetings.

## 15 Occupational Health and Rehabilitation

Health and safety failures at work cost Britain at least £18 billion per year in lost production, treating injuries and illnesses and on compensating the victims. The cost of this falls on all of us as victims of poor workplace conditions are treated by the NHS and paid injury, illness, sickness and bereavement benefits by the government. The personal cost to those injured, made ill or bereaved is enormous:

- each year, about 2 million people are made ill by work, over half are due to musculo-skeletal problems and stress affects half a million people;

- 150,000 people have occupational asthma with 1,500 - 1,700 new cases each year;
- 27,000 workers are forced to leave the workforce completely every year; and
- this is in addition to over 20,000 killed in workplace incidents or by occupational illnesses every year.

The NHS currently lacks the resources or expertise to provide a national occupational health service available freely to all. What OHSs there are tend to be medically driven without worker involvement, often used as a disciplinary tool and, as they are not integrated into the health and safety systems at work, they lack preventative effect. Training in occupational health is optional for medical professionals and therefore expertise is lacking. Consequently ill-health related to work is poorly diagnosed, poorly treated and many workers suffer long periods of ill-health without adequate referral or treatment and little chance of rehabilitation.

Britain is one of the few countries in Northern Europe where all workers do not have access to an OHS. An effective, universal Community Health Workplace Service could have a dramatic impact on reducing and preventing workplace ill-health and thus improving overall public health.

Workers such as Train Drivers do have access to occupational health, but Reps need to be aware of the need for an effective OHS.

The key parts of an effective OHS are:
- preventative OHS in the workplace;
- rehabilitation;
- setting targets for reducing sickness absence;
- giving safety reps more influence; and

making the NHS better at OHS.

## Preventative OHS in the workplace

Good health is good business but most employers still don't get it:
- 160,000 workers are forced to change their jobs through long term illness or disability and 27,000 are forced to give up work altogether each year (Cost to Britain of Workplace Injury and Ill-health 1995/96);
- workplace exposure to respiratory sensitisers cause a third of all adult onset asthma - 150,00 people have occupational asthma - 1,500 -1,700 new cases are caused each year by preventable exposures to 8 chemicals;
- 70% of major injuries and ill-health caused by work are due to the failure of management systems (Health and Safety Executive).

ASLEF and other unions want
- Rapid identification of work-related ill-health so that symptoms can trigger preventative action and acute problems can be treated early so they do not go on to be come chronic or disabling causing time off work and loss of pay;

- Easy and universal access for all workers to multi-disciplinary occupational health services (not just a nurse or the local GP); and
- OHS in which workers and their representatives have some say and control not merely a disciplinary tool.

Most ill-health, injury and death is caused by poor working conditions and would be prevented if employers fully complied with health and safety regulations and fully consulted and involved trade union safety reps and workers in risk assessments, development of safe systems of work and monitoring. Integrating occupational health into the safety systems in the workplace pays dividends. Employees and safety reps should be involved and consulted in identifying areas of the workplace and types of job which cause injury and ill-health and suggesting solutions. Regular reviews of the accident and illness records show where the worst problems are and then safety reps can use tools such as inspections, Body Mapping and Hazard Mapping to pinpoint patterns of work-related ill-health due to poorly designed workstations, tools and methods of work. Monitoring the control of respiratory sensitisers would reduce the risk of asthma. Injury or illness of a worker needs to be rapidly investigated by both medical professionals and also those with work experience, to identify any connection with work and a rapid referral for appropriate treatment and return to work that has been changed to prevent further damage.

Using occupational health as a disciplinary tool - to control sickness absence, to get rid of workers with poor attendance - misses the opportunity to diagnose and correct the sick workplace which causes the problems, unfairly penalises sick workers and costs employers in loss of skills, training, production and recruitment costs.

Reps need to make the argument with their employers, that preventative occupational health services can save them money and enhance the health of the workforce. Check that appropriate records on ill-health and injuries are being kept and regularly reviewed to allow preventative action. Work with your employer to develop an occupational health policy, integrated into the health and safety policy, aimed at prevention rather than treatment and disciplinary tool.

## Rehabilitation

- If you suffer a major injury in Sweden you have a one in two chance of getting back to work - in Britain it's one in ten;
- Every year 27,000 people leave the workforce forever because of a work-related illness or injury, mostly back strain, RSI or stress (HSE, Revitalising Health and Safety); and
- Only 23% of unionised employers provide access to rehabilitation (TUC Survey of Safety Reps 2000).

ASLEF and other unions want:

- a legal duty on employers to have a rehabilitation policy as part of their safety policy; and
- the NHS to make getting people back to work one of its objectives.

Too many people are suffering chronic pain, long term sickness absence and unemployment because of work-related illnesses and injuries. This includes our Members, as well. Early access to rehabilitation can get them back to fitness and back to work at a fraction of the cost of retraining, redeployment or recruitment costs of losing skilled workers- to say nothing of the sick pay and compensation costs. The evidence suggests that employers are leaving it to the NHS to make people well again, and that the NHS is leaving it to employers to get people back to work – meaning that both are ducking their responsibility to people injured or made ill by work.

We need a new Safety Bill to get a legal duty on employers to have rehabilitation policies, but we can make an argument with employers to do something about it now – check how many people where you work are off sick, retire early or leave work every year because of injuries or illnesses? What could your employer offer people off work in terms of access to physiotherapy and other treatments, revised job descriptions and adapting workplaces for example? Could you lobby your local NHS Trusts or Health authority to provide more rehabilitation services?

## Giving safety reps more influence

Safety reps save lives and the benefits should be extended to as many workplaces as possible:

- in workplaces where there are trade union safety reps, joint health and safety committees and full consultation, the major injury rate is 5.3 per thousand compared with 10.9 in workplaces without ('Unions Safety Committees and Workplace Injuries' published in British Journal of Industrial Relations 1995);
- recent HSE case studies show that safety rep and employee involvement has led to major improvements in workplace health and safety ( 'Employee involvement in health and safety - some examples of good practice').

ASLEF and other unions want:

- partnerships between managers and safety reps, so that health problems are identified together and solutions devised, implemented and reviewed together;
- where partnerships don't exist, safety reps should have the ability to raise concerns through a formal system, and management should have a duty to respond (backed up by stiffer penalties for employers who ignore warnings from their workforce); and
- workers in workplaces without union safety reps should have access to union roving safety reps to promote consultation and worker participation in workplace occupational health.

Where safety reps are accorded their full legal rights, the benefits of reduced accident rates are clear. We want the above rights for safety reps to be introduced in the Safety Bill. In the meantime safety reps can act now by: checking that you are fully involved and consulted in good time on all health and safety measures, ensuring you are using your rights to information about sickness and injury rates and that regular monitoring of the air of hazardous chemicals shows levels below the occupational exposure limit, look out particularly for substances that cause respiratory sensitisation or cancer. Check that all

work-related injuries and cases of ill-health are being properly reported and collated and that cases of work-related health problems are being followed up by new risk assessments and changes in job design and content. Use Body Mapping or Hazard Mapping to give management a better picture of what is causing ill-health and injuries in your workplace. If you work somewhere without safety reps, suggest to your employer that the union could supply help from outside, as the GMB does in the Northern Region.

### Setting targets for reducing sickness absence

The government published the first ever targets for improving occupational health and safety in 2000 in 'Revitalising Health and Safety: I a Strategy Statement' (RHS) and 'Securing Health Together' a long term occupational health strategy for Britain (SH2). The targets are:

- a reduction in the number of working days lost per 100,000 workers from work-related injury and ill-health by 30% by 2010 (currently 24.3 million working days are lost each year);
- a reduction in the incidence rate of fatal and major injury accidents by 10% by 2010 (RHS);
- a reduction of the incidence rate of cases of work-related -ill-health by 20% by 2010 (RHS & SH2);
- to achieve half the improvement under each target by 2004 (RHS);

20 % reduction in ill-health to members of the public caused by work activity (SH2);

- everyone currently in employment but off work due to ill-health or disability is where necessary and appropriate, made aware of opportunities for rehabilitation back into work as early as possible (SH2); and everyone currently not in employment due to ill-health or disability is, where necessary and appropriate, made aware of and offered opportunities to prepare for and find work (SH2).

ASLEF and other unions want:

- employers to consult with safety reps in setting challenging targets for reducing work-related illness and injury in each workplace;
- employers to develop policies for improving the occupational health of their workers, not just as a disciplinary tool; and
- industrial sectors to develop examples of good policies and share best practice in reducing work-related ill-health.

The targets set by the government in RHS and SH2 can only be achieved in workplaces and only if employers consult and involve workers and trade unions to identify risk factors and sources of illness and injury. Recent HSE research shows how effective consulting and involving workers can be. Far too many workers are made acutely then chronically ill by working practices which should be changed as soon as workers begin to report pain. This is especially true of musculo-skeletal disorders like back pain and RSI where jobs and work stations are often designed to cause MSDs.

Even before targets are set, safety reps can act now - check how many days are lost due to sickness and injury by types of job or area of the workplace. Use Joint Safety Committee meetings to discuss the likely causes and solutions. Safety reps can use their

skills and techniques like Hazard and Body Mapping to identify the different types of ill-health or injury caused by work and pinpoint risk factors that can then be removed.

### Making the NHS better at Occupational Health

Most workers in Great Britain do not have access to an OHS via work and as the NHS wasn't set up to provide a service on occupational health:

- most GPs have more training in chiropody than in occupational health;
- 1 in 4 people visiting a GP are there for problems related to work but GPs are often unaware of this;
- referral from a GP to a specialist is no guarantee of appropriate treatment or return to work; and
- NHS Plus offers a medically oriented, commercial occupational health service to employers (which the TUC welcomes) but nothing specifically for employees.

ASLEF and other unions want

- government funding for Community Healthy Workplace Services;
- all health authorities to have plans for occupational health provision; and
- more training for medical professionals in occupational health.

Community Healthy Workplace Services should be based on the pioneering style of the Sheffield Occupational Health Project (SOHP) which has been repeated in Bradford, Liverpool, Leeds and other cities. SOHP uses workers to assist medical professionals in GPs surgeries to diagnose and treat work-related illnesses and to feed that back into improving conditions in the workplace that caused the problem.

The NHS is currently not able to provide this to the vast majority of workers, indeed the unions within the NHS complain that it cannot meet their own OH needs! Major injuries are dealt with effectively via NHS A&E services but work-related illnesses such as RSI, back pain, respiratory problems and stress-related illness which constitute the majority of the days lost and ill-health caused by work, are not treated well by the NHS, either at primary care or at consultant level. Consequently workers with acute conditions, are not referred for appropriate treatments and progress to being chronically ill and then disabled. The NHS also does not have a policy of rehabilitating sick workers to a state where they are fit to return to work. NHS Plus offers commercial OHS to employers consists mostly of pre-employment medicals, fitness for work, some medical surveillance for COSHH and a little preventative advice. Making this service more multi-disciplinary, and involving safety reps on site, would make it more responsive to workers needs and more effective as a preventative tool.

Unions can lobby the government to recognise that the NHS cannot provide the OHS required by workers and won't help meet the targets in RHS and SH2 and to begin to introduce Community Healthy Workplace Services urgently. Unions need to lobby the local NHS to examine and improve its OH provision in secondary care so that workers referred by their GPs are diagnosed and treated rapidly and that rehabilitation to working fitness is a primary goal. We can also lobby local NHS Primary Care Trusts to work with trade

unions, Occupational Health Projects and Hazards Centres, to develop the Community Healthy Workplace OH Services in primary care accessible to all - for workers in small and mediums sized firms and the self-employed, as well as those employed in large companies.

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