



HEALTH AND SAFETY **FACT SHEET**

Shiftwork

What are the problems?

Shiftwork is a hazard that affects the health and safety of CUPE members. It disrupts the natural circadian rhythms governing blood pressure, body temperature, digestion, rest, activity and sleep. These rhythms dictate that the body is geared towards daytime activity and nighttime rest. Trying to alter these rhythms by changing sleep patterns causes shiftworkers significant problems:

- Disruption in quality and quantity of sleep resulting in chronic fatigue.
- Anxiety and depression.
- Increased risk of cardio-vascular disease.
- Increased risk of gastro-intestinal disorders.
- Multiple health problems for shiftworkers (e.g., improper blood sugar levels, loss of appetite, hormone imbalances, etc.).

Shiftwork is defined as work scheduled outside regular daytime working hours. Shiftwork includes morning shifts (typically between 6:00 a.m. and 2:00p.m.), evening shifts (typically between 4:00 p.m. and midnight), and night shifts (typically between midnight and 8:00 a.m.). Shiftworkers are often scheduled using a rotation system that usually involves working a week of morning shifts, a week

of evening shifts and then a week of night shifts. Sometimes the rotation lasts for two week or it can be as short as several days. However, there are also workers who are scheduled permanently on morning, evening or night shifts. Each system and each shift is associated with different effects on the health and safety of workers.

What are the causes?

In certain sectors of the workforce shiftwork is inevitable. For example, in health care and public transit shiftwork is necessary in order to provide public services. Shiftwork hazards can result from poor management and improperly planned scheduling. Added to the stresses of shiftwork is the fact that members are being told to do more work with less support and resources. Employers' ignorance about shiftwork hazards creates an atmosphere in which members' concerns can be dismissed as trivial.

Causes of shiftwork hazards include:

- Low staffing levels, especially during the nightshift.
- Inadequate training by employers on the dangers of shiftwork.
- Shifts that last too long and unnecessary overtime.
- Members working alone, especially on the nightshift

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- Morning shifts that start too early (before 6:00 a.m.).
- Low alertness in the early hours of the morning (3:00 a.m. to 5:00 a.m.).
- Split shifts that don't allow for recovery time.
- Improper and mismanaged scheduling.

What are the hazards?

Shiftwork affects the physical and psychological health of CUPE members. But it also goes beyond the workplace, negatively affecting members' families. Shiftworkers often experience stressful domestic lives and social relationships. Women are especially affected by shiftwork in terms of biological factors, family demands and sexual harassment. The cumulative effects of shiftwork can be devastating.

Major outcomes of shiftwork are:

- Stress, depression and burnout from inflexible scheduling, working alone or in isolation, and the rigours of shiftwork, especially the nightshift.
- Disruption of circadian rhythms.
- Excessive mental and physical fatigue.
- Increase in cardio-vascular disease (40 per cent more for shiftworkers compared to dayworkers).
- Gastro-intestinal disorders (e.g., peptic ulcers).
- Shorter life expectancy for shiftworkers compared to regular dayworkers.
- Existing health problems become worse when members change to shiftwork scheduling.
- Fatigue after shift ends increases likelihood of automobile accidents during commute.
- Social isolation due to shiftwork hours, especially for nightworkers.

- Longer shifts causing fatigue and longer exposure to toxins.
- Increase in incidence of breast cancer in women who work night shifts.
- Menstrual disorders and reproductive system dysfunction for women.
- Extra fatigue for pregnant women who already experience elevated levels of tiredness.
- Increased risk of sexual harassment for women on nightshifts.
- Strain from balancing domestic work and family commitments with shiftwork.
- Hazards like noise, improper temperature, poor lighting and vibration can occur more often during shiftwork than during the regular dayshift.

Shiftworkers also have less opportunity for leisure, sports and social activities due to irregular hours and rotating shifts. All of the above hazards add up to a toxic stress load for shiftworkers.

Identify the problem

A first step is to recognize that shiftwork causes health and safety hazards in your workplace. Surveys and mapping techniques are excellent tools to identify shiftwork hazards in your workplace. A shiftwork survey can be done in co-operation with the employer, in which case the union approves the survey and is involved in collecting and assessing the information generated by the survey. The union should conduct its own shiftwork survey if the employer resists the idea or denies that shiftwork causes problems. Body mapping, hazard mapping and your world mapping techniques can be used, in addition to surveys, to identify shiftwork hazards.

Workplace inspections by CUPE members are an important tool in uncovering and identifying shiftwork hazards. Inspections should be carried out regularly to identify and eliminate shiftwork hazards. Hazards common to shiftwork like working alone, fatigue, stress and irregular shift rotation should be given immediate attention.

Actions

Shiftwork hazards largely centre on issues of control over work. Taking action on shiftwork hazards involves members exercising control at work.

The following actions can help combat shiftwork hazards:

- Refuse unsafe working conditions and unnecessary overtime.
- Report shiftwork hazards immediately.
- Conduct regular workplace inspections to uncover shiftwork hazards.
- Put shiftwork hazards on the health and safety committee agenda.
- Demand employers take action on improving work organization, working conditions, scheduling and equipment that cause shiftwork hazards.
- Stipulate adequate rest periods and meal breaks at work.
- Use the best scheduling cycle, which is usually a forward rotation starting with morning to evening to night shifts with no shift longer than eight hours.
- Eliminate split shifts and enforce standard and predictable shift patterns.
- Reduce nightwork as much as possible.
- Increase staffing levels and worker input into scheduling with CUPE involvement in any changes to shift times or shift rotation.
- CUPE sponsored and delivered shiftwork education.
- Demand flexible childcare for shiftworkers.

- Request access to nutritious food providers at the workplace.
- Consider family and transportation needs of workers.
- Nightshifts that never exceed eight hours.

Shiftwork hazards should be eliminated wherever possible. Where elimination is not possible, shiftwork hazards should be controlled. Work organization and well planned scheduling should take priority in controlling shiftwork hazards.

Strategies for change

The strategies outlined below complement the actions listed above. Shiftwork hazards can be eliminated through the following:

- Keep shiftwork issues on the health and safety committee agenda until they are resolved.
- Demand employers obey health and safety laws and regulations.
- Lobby government for shiftwork regulations.
- Where legislation does not provide for specific controls, monitoring, or access to information about shiftwork hazards, the union can negotiate contract language that reflects the protection of members.
- Put the issue of shiftwork hazards on the bargaining table.
- Bargain for rest and break periods that address the particular needs of shiftworkers.
- Bargain for increased vacation time for shiftworkers.
- Sponsor CUPE education around the issue of shiftwork and its effects.
- Create a shiftwork policy for CUPE workplaces starting with the premise that shiftwork is a health and safety hazard, and that all steps should be taken to prevent the hazard.

- Collective job action around the issue of shiftwork.

Employers have the responsibility to provide a healthy and safe workplace. This responsibility is known as the general duty clause. Getting rid of shiftwork hazards is an important part of a healthy workplace. Ending shiftwork hazards requires the participation of our membership. Through education and activism, shiftwork hazards can be eliminated from CUPE workplaces.

This fact sheet provides some information to address the hazards. Related information is presented in the CUPE health and safety guidelines, *Enough Workplace Stress: Organizing for Change; Working Together: Eliminating the Hazards of Working Alone;* and *Enough Overwork: Taking Action on Workload.*

Glossary

Cardio-vascular diseases: Diseases of the heart and circulatory system. Narrowing or blockage of coronary arteries is a common cardio-vascular disease called atherosclerosis. It is caused by the build up of fatty materials in the coronary arteries.

Circadian rhythm: The 24-hour biological cycle of the human body. The cycle dictates work and activity during the day, rest in the evening and sleep at night. The circadian rhythm has developed over thousands of years of human evolution.

Gastro-intestinal disorders: Diseases of the stomach and small and large intestines. Peptic ulcers are an example of gastro-intestinal disorders. Peptic ulcers cause the breakdown and holes in the lining of the stomach and small intestines.

Mapping: A visual technique that uses participatory action research principles in which members draw pictures of hazards and their effects. By representing hazards and their effects visually, mapping makes the hazards more easily recognized. Participatory action relies on workers as a valuable source of information and knowledge in identifying hazards. Body mapping shows the effects on workers' bodies. Hazard mapping identifies all the hazards in a workplace. Your world mapping outlines how the hazards of work spill over into workers' lives and families. Mapping resources are available at www.cupe.ca.

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