

The impact of working rotating shifts on the family life of correctional staff

Prisons, by their nature, must be staffed 24 hours a day. Therefore, many of the people who work in prisons must work around the clock on either fixed or rotating shifts. In the Correctional Service of Canada, the majority of prison employees work rotating shifts. Correctional officers work eight-hour shifts, while those in health support, maintenance and other areas may work eight- or 12-hour shifts

Most correctional officers work rotating shifts, with the most common rotation being the 7-3/7-4 rotation, which requires an officer to work 7 days on one shift, take 3 days off and then work 7 days on another shift, followed by 4 days off. Start times for shifts vary, but the most common start times are 7:00 a.m., 3:00 p.m. and 11:00 p.m. The order of the shift varies by institution and officer level, with more senior officers working fewer late-night shifts.

Most shift work research has thus far focused on work productivity and safety issues, although some studies have examined the effects of shift work on non-work activities such as family life. This article does not, however, review this research in detail. It instead attempts to provide an overall perspective on how working rotating shifts affects the family life of workers in general, and correctional officers in particular.

The research results in this article were obtained as part of a study into possible changes in the hours of work for correctional officers. However, the results are equally applicable to the many other Service staff who work rotating shifts. A starting point An important point to keep in mind is that our society is organized around a working day between 8:00 a.m. and 6:00 p.m. -evenings and weekends are spent away from work. Although a great many people do not work within this schedule, businesses, offices, schools and social activities are organized around it.

An example of the ingrained nature of this routine is that even people who work continuous night shifts usually switch to a "social cycle" of being awake during the day and sleeping at night on their days off, requiring readjustment to the late-night schedule on their return to work. The physiological impact of shift work One of the most consistent effects of shift work is sleep loss resulting from being awake at unusual hours. For people working late-night shifts, sleep loss can be as much as two hours a day, with fatigue accumulating during the work week. Those working day shifts (starting before 8:00 a.m.) often suffer a lesser degree of loss, while those working evening shifts experience the least sleep loss.

In addition to sleep loss problems, shift workers experience disruptions to their circadian rhythm. The circadian rhythm is the biological clock within each of us that controls sleep, wake and arousal periods. If people are placed in an environment with no external clues about time, the circadian rhythm operates on a 25- to 26-hour cycle. However, it adapts easily to society's 24-hour clock.

Researchers who study the circadian rhythm and the effects of its disruption use body temperature to track it over the course of a day. Higher body temperature indicates higher levels of arousal, while lower body temperature indicates periods of lower arousal. With consistent working hours, people maintain a consistent pattern of temperature change throughout each day. Shift work disrupts this pattern by constantly changing the hours for wakefulness and sleep.

Disruptions to the circadian rhythm lead to feelings such as tiredness, irritability, mild nausea and loss of appetite until the body adapts to the changing sleep / wake cycle required for different shifts. These ill effects are similar to the jet lag experienced after flying across time zones.

Meal times and the quality of food consumed are also affected by changing work hours. Often, people working evening and night shifts do not have access to nutritious meals at their worksite and their eating patterns at, and away from, work are disrupted. Poor diet and inappropriate meal times result in digestive problems.

The combination of sleep loss, disrupted circadian rhythm, and eating and digestive problems tends to result in irritability and depression, which may have a negative impact on family interaction. The social effects of shift work on the family Working rotating shifts also affects family life. It limits personal contact because of irregular working hours and days off. For example, school-aged children do not see parents who are working the evening shift (3:00 to 11:00 p.m.) during the week and the parent(s) may have to work on weekends when children are home from school.

When a parent is working the late-night shift, the activity of children must be restricted to provide a quiet day-time sleeping environment. Many children's social and sporting activities also require the presence of a parent, so the fact that a parent is working "odd" hours may limit participation in these events.

Further, in our society, weekends are prime periods for major social events. Shift workers are frequently prevented from attending these events because they have to work. Regularly scheduled (weekly, biweekly or monthly) activities, such as organized sports, clubs, upgrading courses and community meetings, are also difficult to commit to because shift schedules make regular attendance impossible.

Maintaining contact with extended family is also problematic. Large family gatherings are usually organized for weekends and special holidays, but again, shift workers often have to work on these days. In addition, extended family members often find it difficult to understand the schedule of shift workers and fail to consider the worker's days off when planning activities.

Taken together, these factors greatly reduce the time shift workers have to spend with family members. This may lead to feelings of isolation and guilt from being unable to fully participate in family activities and activities with their children. Research with correctional officers A national examination of the working hours of correctional officers within the Correctional Service of Canada led to two recent research projects. The first involved interviews with a small sample of correctional officers to determine what they liked and disliked about the current shift system.

The interviews were conducted with correctional officers at their work sites using an informal semi-structured format. Although the interviews were not specifically designed to obtain information on the effect of shift work on the family, many of the responses focused on the subject. Some staff concerns were:

- their lack of time with school-aged children when working the evening shift (3:00 to 11:00 p.m.);

- their limited time with young children (who are in bed by 7:00 p.m.) when working the day shift;
- their lack of time with family when working weekends;
- their restricted ability to participate in extended family activities, which are usually on weekends and not planned with consideration for the shift worker;
- a lack of understanding by extended family members of the limited flexibility of shift work;
- problems providing care for elderly parents;
- problems scheduling time with children in separated or divorced families; and
- problems having time alone with their spouse because of differences in days off.

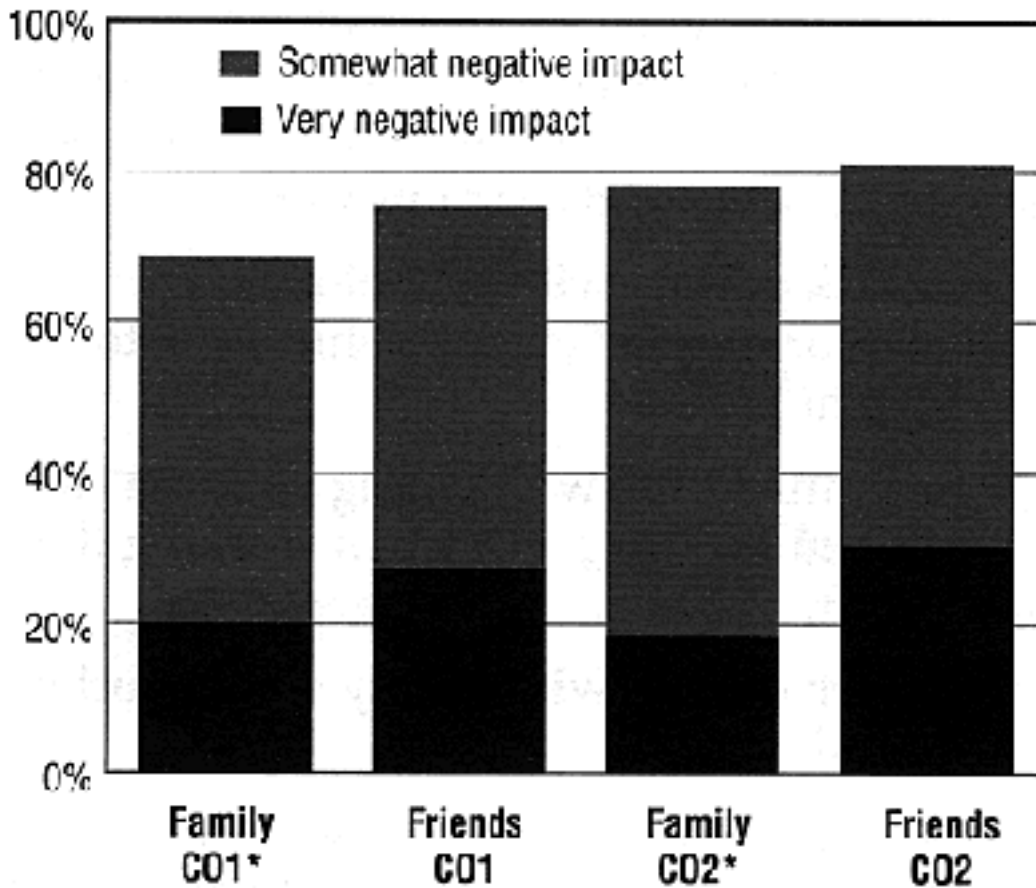
The second research project analyzed responses to a series of shift-work-related questions from the 1994 national staff survey. The survey was distributed to all Service staff. About 60% of staff members returned the survey, including about 2,000 correctional officers.

There are two classifications for correctional officers: C01 and C02. C01s are generally younger and less experienced, and C02s also have case management responsibilities for offenders.

Close to 70% of C01s and 80% of C02s indicated that shift work has a "somewhat" or "very negative" impact on relations with their families (see Figure 1). More specifically, 20% of C01s and 18% of C02s indicated that shift work has a "very negative" effect on relations with their families. The negative impact of shift work on relations with friends was slightly higher than for families.

Figure 1

Impact of Shift Work on Relations with Family and Friends



* CO1 and CO2 represent different correctional officer classifications.

The staff survey also asked about job satisfaction and job stress. Results indicate that, while there was no difference in the level of job stress and job satisfaction between CO1s and CO2s, job satisfaction was lower and job stress was higher for those reporting negative effects of shift work on relations with both family and friends.

In short, the negative effects of shift work on relationships with family and friends may lead to greater work-related stress and a decrease in job satisfaction. Additional research is needed to verify this hypothesis. What can be done to reduce the impact? Given that working rotating shifts has a negative effect on relations between workers and their families and friends, what can be done to reduce the effects? Training programs are available to assist workers in developing healthy lifestyles that are compatible with shift work. These programs stress the need for proper sleep and nutrition.

Properly designed shift schedules can also reduce the effect of rotating shift work. In some instances, changing the shift rotation or the number of consecutive workdays may help.

Longer shifts (10 and 12 hours) would also reduce the number of days employees have to report to work. More days away from work provides more time for contact with families. However, longer shifts are not

necessarily the best solution and are only appropriate for certain types of work.

The Correctional Service of Canada is currently reviewing the shift schedules worked by all correctional officers to determine if there are better alternatives. If alternatives are identified, they will be tested at selected prisons to determine if they can improve relations between workers and their families and friends.

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