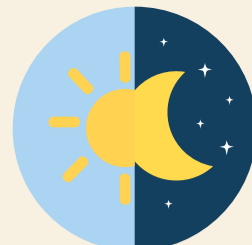


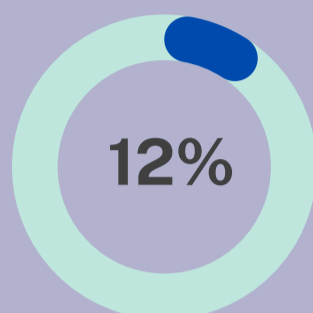
# Night shift work

## AS A CARCINOGEN



Night shift work refers to a work schedule that includes working shifts during the nighttime. But working when you're supposed to sleep disrupts your normal physiology, which may put workers at a higher risk of cancer.

### NIGHT SHIFT WORK IN CANADA



Approximately **12%** of the working population in Canada are exposed to night shift work.

### INDUSTRIES WITH NIGHT SHIFT WORK



Night shift work is common in a number of industries in Canada, including healthcare, emergency and protective services, transportation, retail, and more.

### INTERNATIONAL AGENCY FOR RESEARCH ON CANCER



According to the International Agency for Research on Cancer (IARC), night shift work is probably carcinogenic to humans (Group 2A). This means there is convincing evidence that it can cause cancer in experimental studies, but evidence it causes cancer in human studies is not yet conclusive.



Higher level of certainty



GROUP 2A



GROUP 2B



Lower level of certainty

### ASSOCIATIONS WITH CANCER RISK

Positive associations linking longer years of working night shifts and a higher risk of cancer have been seen for:

Prostate Cancer

Breast Cancer

Colorectal Cancer



### HOW COULD NIGHT SHIFT WORK CAUSE CANCER?

Working night shifts is thought to increase cancer risk in a number of ways, including:

Light at night exposure

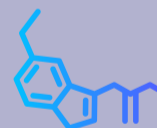


Disrupting sleep schedules



Changes in eating habits

Changes in hormone patterns such as melatonin



### SO WHAT CAN WE DO?

In general, more evidence is needed to confirm that night shift work increases cancer risk. But research is already looking at possible prevention strategies.

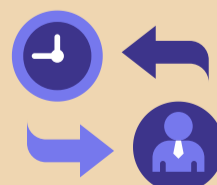
#### Possible prevention strategies

Sleep interventions, including advising how to improve sleep quality and allowing naps during work shifts



Develop healthy work place policies for night shift work schedules, such as reducing bright light during work hours at night

Design shift patterns around a fast forward rotating system (working day shifts followed by night shifts)



Encourage healthy lifestyle behaviours, such as a healthy diet, physical activity, and limiting alcohol intake and smoking

### REFERENCES

1. Stevens et al. Considerations of circadian impact for defining 'shift work' in cancer studies: IARC Working Group Report. *Occup Environ Med* 2011;68:154-62.
2. Rydz et al. Prevalence and recent trends in exposure to night shiftwork in Canada. *Ann Work Expo Health*. 2020;64(3):270-81.
3. International Agency for Research on Cancer. Monograph Volume 124: Night Shift Work.
4. Ritonja et al. Working Time Society consensus statements: Individual differences in shift work tolerance and recommendations for research and practice. *Ind Health*. 2019 ;57(2):201-12.