NIGHT SHIFT WORK
VOLUME 124

IARC MONOGRAPHS
ON THE IDENTIFICATION
OF CARCINOGENIC HAZARDS
TO HUMANS
This publication represents the views and expert opinions of an IARC Working Group on the Identification of Carcinogenic Hazards to Humans, which met in Lyon, 4–11 June 2019.
In 1969, the International Agency for Research on Cancer (IARC) initiated a programme on the evaluation of the carcinogenic hazard of chemicals to humans, involving the production of critically evaluated monographs on individual chemicals. The programme was subsequently expanded to include evaluations of carcinogenic hazards associated with exposures to complex mixtures, lifestyle factors and biological and physical agents, as well as those in specific occupations. The objective of the programme is to elaborate and publish in the form of monographs critical reviews of data on carcinogenicity for agents to which humans are known to be exposed and on specific exposure situations; to evaluate these data in terms of cancer hazard to humans with the help of international working groups of experts in carcinogenesis and related fields; and to identify gaps in evidence. The lists of IARC evaluations are regularly updated and are available on the internet at http://monographs.iarc.fr/.

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“Night shift work” involves work, including transmeridian travel, that occurs during the regular sleeping hours of the general population. This alters exposure to the natural light–dark schedule and disrupts circadian rhythms.

About the cover: the image depicts night shift workers performing maintenance on a railway track.
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This volume of the *IARC Monographs* provides an evaluation of the carcinogenicity of night shift work, that is, work occurring during the regular sleeping hours of the general population. Globally, an estimated one out of five workers is engaged in regular night shift work, with percentages increasing over time in some countries. Night shift work is most common in the following industry sectors: transportation (for example, aircrew and truck drivers on long-haul trips), health care, manufacturing, and services (for example, social assistance, accommodation and food services, information and communications, travel and tourism).

An *IARC Monographs* Working Group reviewed studies of cancer in people exposed to night shift work (including transmeridian air travel), studies of cancer in experimental animals exposed to shifts in the light–dark schedule, and mechanistic evidence in both exposed humans and experimental systems. The review of the present Working Group was the first to be guided by the amended Preamble to the *IARC Monographs*, which was substantially updated in 2019.