

NIGHT SHIFT WORK

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ON THE IDENTIFICATION
OF CARCINOGENIC HAZARDS
TO HUMANS



LIST OF ABBREVIATIONS

8-OHdG 13-HODE 13-hydroxyo-2'-deoxyguanosine 13-HODE 13-hydroxyo-tadecadienoic acid 24/7 24 hours per day, 7 days per week aMT6s 6-sulfatoxymelatonin BAP biological antioxidant potential BMI body mass index bw body weight CI71 (ILO) Night Work Convention, 1990 (No. 171) CAT catalase CI confidence interval CLL chronic lymphocytic leukaemia CMR carcinogenic, mutagenic, and reprotoxic CNS central nervous system CRP C-reactive protein CYP cytochrome P450 DEN diethylnitrosamine DMBA 7,12-dimethylbenz[a]anthracene DNFB 2,4-dinitro-1-fluorobenzene d-ROM reactive oxygen metabolite-derived compound DSS dextran sodium sulfate DTH delayed-type hypersensitivity EPIC European Prospective Investigation into Cancer and Nutrition ER exers general reproxidase h h h h h h h h HEAL HER2 human epidermal growth factor 2 HR		
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HER2 human epidermal growth factor 2 HR hazard ratio	h	
HR hazard ratio	HeLa	human cervical cancer cell
HR hazard ratio	HER2	human epidermal growth factor 2
ICAO International Civil Aviation Organization	HR	
	ICAO	International Civil Aviation Organization

IFN	interferon
IL	interleukin
ILO	International Labour Organization
JEM	job-exposure matrix
LD	light-dark schedule
LD0:24	continuous darkness
LD10:14	10 hours of light followed by 14 hours of darkness
LD12:12	12 hours of light followed by 12 hours of darkness
LD24:0	continuous light
LH	luteinizing hormone
LPS	lipopolysaccharide
MCC-Spain	multicase-control Spain study
MDA	malondialdehyde
MDSC	myeloid-derived suppressor cell
miRNA	microRNA
MNU	N-methyl-N-nitrosourea
mRNA	messenger RNA
NHANES	National Health and Nutrition Examination Survey
NHL	non-Hodgkin lymphoma
NHS	Nurses' Health Study
NK	natural killer
NL	natural light
OR	odds ratio
OSI	total oxidative stress index
PC3	human prostate cancer cell
PCNA	proliferating cell nuclear antigen
PIP	prolactin-induced protein
PR	progesterone receptor
PRL	prolactin
R178	(ILO) Night Work Recommendation, 1990 (No. 178)
RNU	Rowett nude
RR	relative risk or rate ratio
Rsg16	regulator of G protein signalling-16
SCN	suprachiasmatic nucleus
SIR	standardized incidence ratio
SNP	single-nucleotide polymorphism
SOD	superoxide dismutase
SRBCs	sheep red blood cells
SRR	standardized rate ratio
TAC	total antioxidant capacity
TAS	total antioxidant status
TERT	telomerase reverse transcriptase
TNFα	tumour necrosis factor alpha
TOS	total oxidative status
vs	versus
wk	week
WTD	European Working Time Directive No. 2003/88/EC
	year
yr	, cui