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AAGBI Core Topics Newcastle 2020



A national survey of the effects of fatigue on trainees in anaesthesia 2016

- After night shift:
 - 84.2% too tired to drive home
 - 57% experienced an accident or near miss when driving home

Anaesthesia 2017, 72, 1069–1077 doi:10.1111/anae.13965

A national survey of the effects of fatigue on trainees in anaesthesia in the UK*

L. McClelland,¹ J. Holland,¹ J.-P. Lomas,² N. Redfern³ and E. Plunkett⁴



The Faculty of
Intensive Care Medicine

Joint initiative set up in 2017

Dr Liam Brennan, President of RCoA:

“Unless we act, the increasingly difficult working conditions for doctors, particularly those in training, will impact on our ability to deliver consistently safe, high quality patient care. We urge all relevant bodies to work with the RCoA, AAGBI and FICM to seek long-term solutions to the problem of fatigue affecting NHS staff and call for the necessary investment to support over-stretched front line services.”

Dr Paul Clyburn, Ex President of AAGBI:

“Fatigue self-assessment and risk management are not familiar steps in routine daily practice. This pack provides some simple resources to help educate clinical staff and their managers about fatigue. We hope that by collectively taking responsibility for making changes to working practice, we can improve working conditions for staff, for the benefit of patients.”



#FightFatigue





Medical backers:

- The Faculty of Public Health
- Health Education England
- The Medical Women's Federation
- Dr Mike Farquhar, Consultant Hospital
- Professor Namita Kumar, B

Political backers:

- John Mason, MSP for Glasgow Shettleston
- Mark McDonald, MSP for Aberdeen Donside
- Anne Marie Morris, MP for Newton Abbot
- Scottish Conservative Party
- Scottish Green Party

"RCSEd are delighted to see the morale, re-energised and supported by the Surgeons"

#FightFatigue campaign backers

We see it as our collective duty to raise awareness and offer practical solutions to help improve the perceptions of fatigue self-assessment and fatigue risk management within the NHS.

As the impact of fatigue is not limited to anaesthesia and intensive care medicine, we're encouraging the support of other healthcare professions, presenting an opportunity for multiple NHS specialties to work together to tackle fatigue in the workplace.

- Association of Anaesthetists
- Association of Paediatric Anaesthetists
- The British Medical Association
- The College of Anaesthetists
- College of Operating Department Practitioners
- The College of Paramedics
- Dr David Eadington, Acting Consultant
- Emergency Medicine Trainees
- The Faculty of Physicians and Surgeons

- Royal College of Paediatric and Child Health
- Royal College of Pathologists
- Royal College of Physicians
- Royal College of Physicians
- Royal College of Physicians
- Royal College of Physicians
- Royal College of Surgeons of Edinburgh (RCSEd)

- Alex Cunningham, MP for Stockton North
- Rhoda Grant, MSP for Highlands and Islands
- Labour Party
- Monica Lennon, MSP for Central Scotland
- Dr Dai Lloyd AM
- John Mason, MSP for Glasgow Shettleston

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Organisational responsibilities

Standards for rest facilities

	During a shift		After a shift	
What is available	Green	Quiet, dark, private room with bed	Green	Quiet, dark, private room with bed and bathroom facilities available for full duration of time between shifts
	Amber	Private area with reclining chair, pull-out mattress or sofa	Amber	Available for limited duration, poor quality facilities
	Red	No or communal facilities	Red	No facilities
Ease of access [N/A if no facilities]	Green	Adequate number of immediately available rooms	Green	Adequate number of immediately available rooms within appropriate walking distance
	Amber	Adequate number of rooms available within 15 mins of request	Amber	Notice required, limited number of rooms or remote location
	Red	Restricted access or limited availability	Red	Pre-shift notice required

¹including location inappropriate for speed of required clinical response

Ratings for rest culture

Green	Positive institutional attitude towards rest; fatigue awareness and introduction to rest facilities included at induction.
Amber	Fatigue awareness and introduction to rest facilities included at induction
Red	Threatening culture towards rest or poor awareness of facilities

Individual responsibilities

	At work	At home
Knowledge	<ul style="list-style-type: none"> Understand national guidelines on fatigue¹ Be aware of the location of rest facilities and how to access them 	<ul style="list-style-type: none"> Understand good sleep hygiene^{1,2} Understand how to manage shift working³
Behaviours	<ul style="list-style-type: none"> Where possible, use breaks on night 	<ul style="list-style-type: none"> Practice good sleep hygiene

#FightFatigue



Link to #FightFatigue resource pack

What's up with shiftwork?

- Job must be done
- 2 hrs less sleep in 24 hrs than day shift
- Cognitive decline = legal alcohol limit > 17hrs awake
- Poor self assessment, difficulty reading facial expression, decreased psychomotor vigilance, poor divergent thinking, accidents
- Cost to individual and society



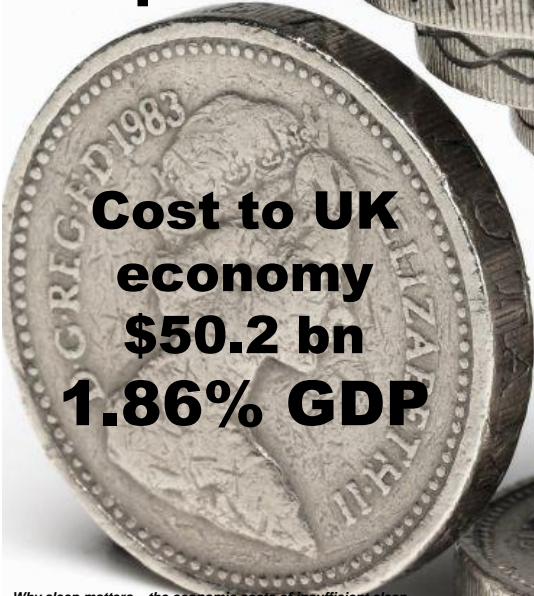
Minutes of sleep lost per day

Financial concerns	10.0
Unrealistic time pressures and stress	8.0
Mental health	17.2
Commute	9.2 / 16.5
Raised BMI	2.5-7.0
Children under 18	4.2

1 hour per day

*Why sleep matters – the economic costs of insufficient sleep -
A cross-country comparative analysis Hafner, 2016 RAND Europe*

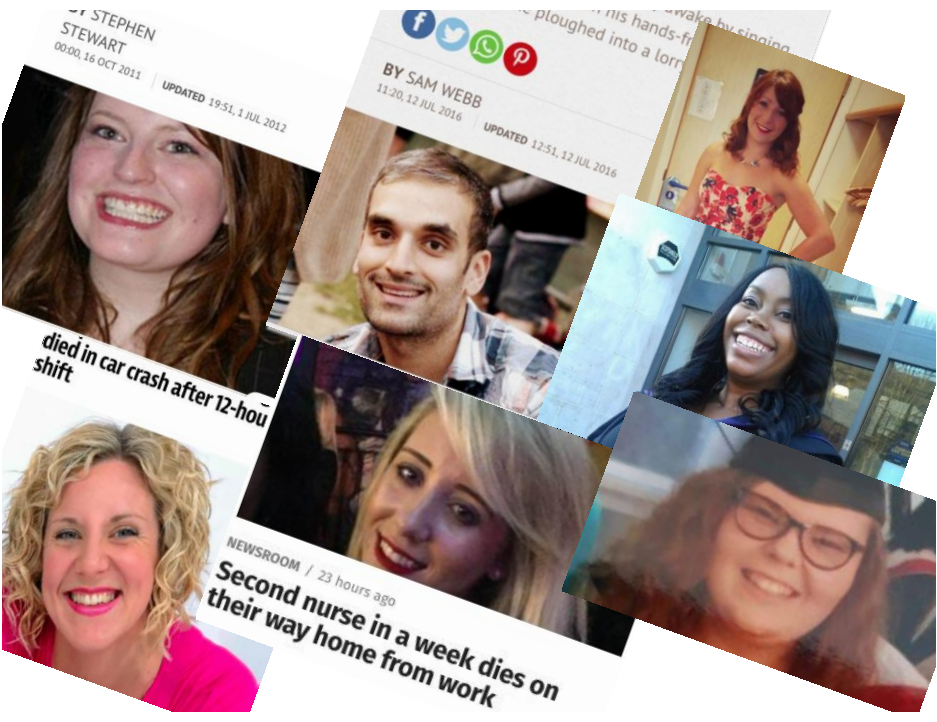
Sleep Loss



**Cost to UK
economy
\$50.2 bn
1.86% GDP**

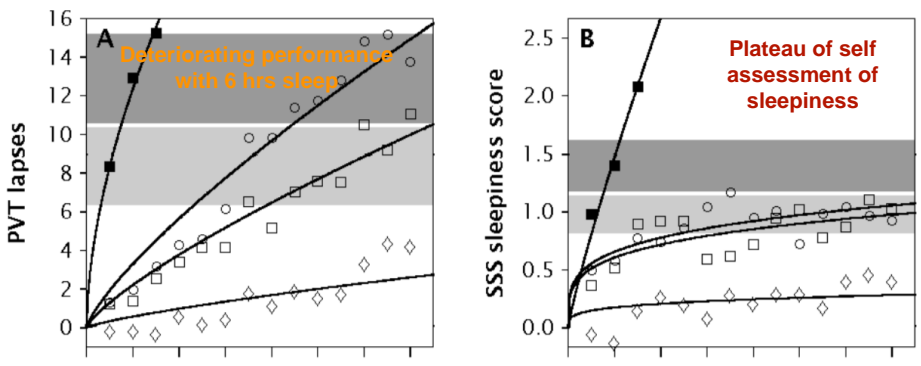


*Why sleep matters – the economic costs of insufficient sleep -
A cross-country comparative analysis Hafner, 2016 RAND Europe*





Self assessment and sleep deprivation



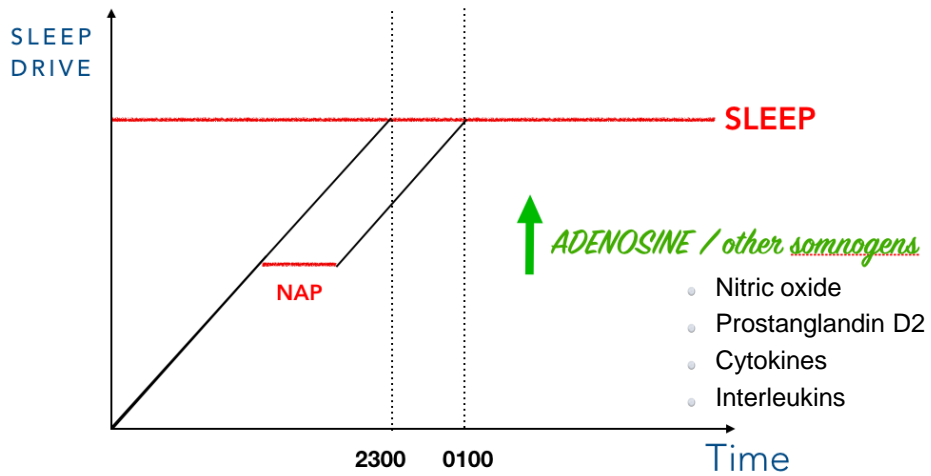
The Cumulative Cost of Additional Wakefulness—Van Dongen et al 2003

Circadian
Process C

Homeostatic
Process S

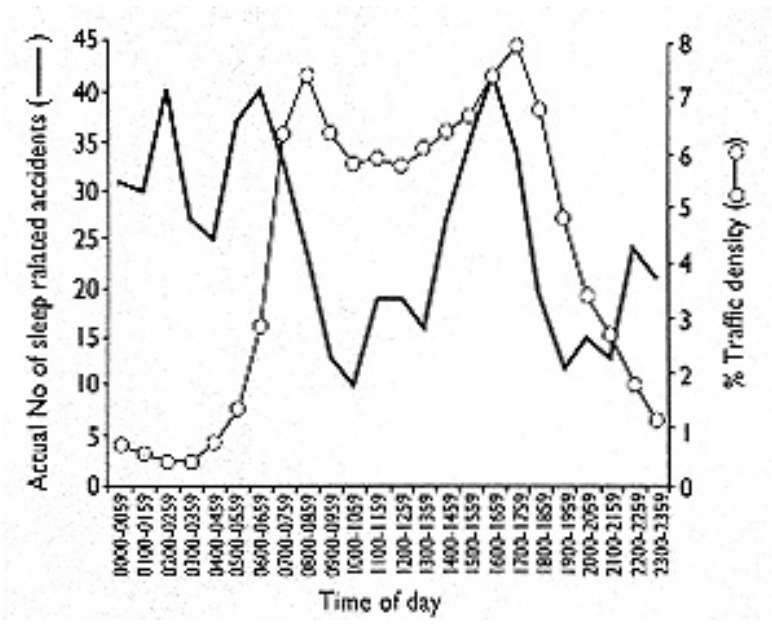


Sleep fuel and napping



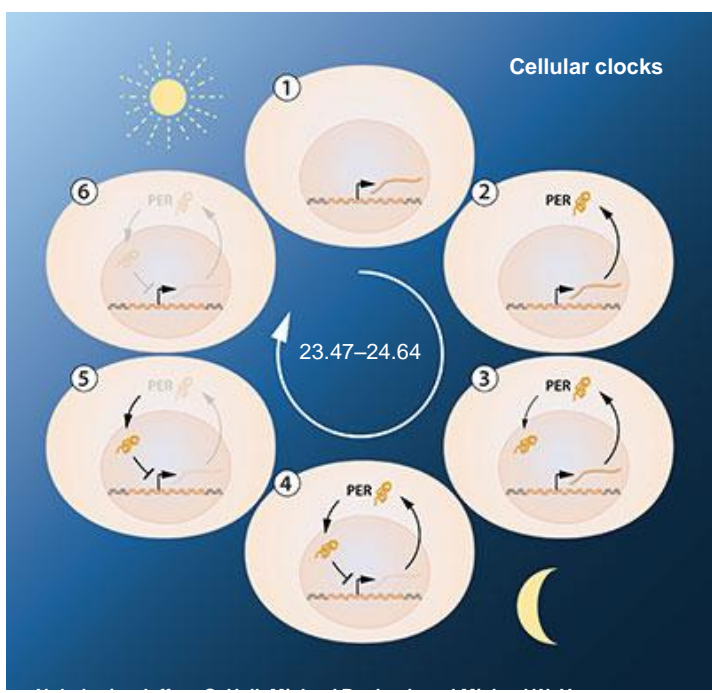
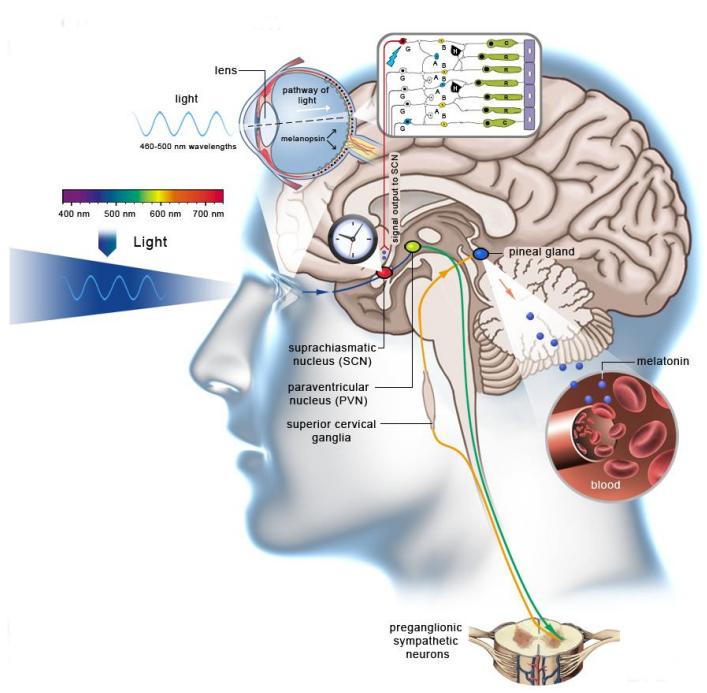
https://www.youtube.com/watch?v=Fd-Zqzd_mlg

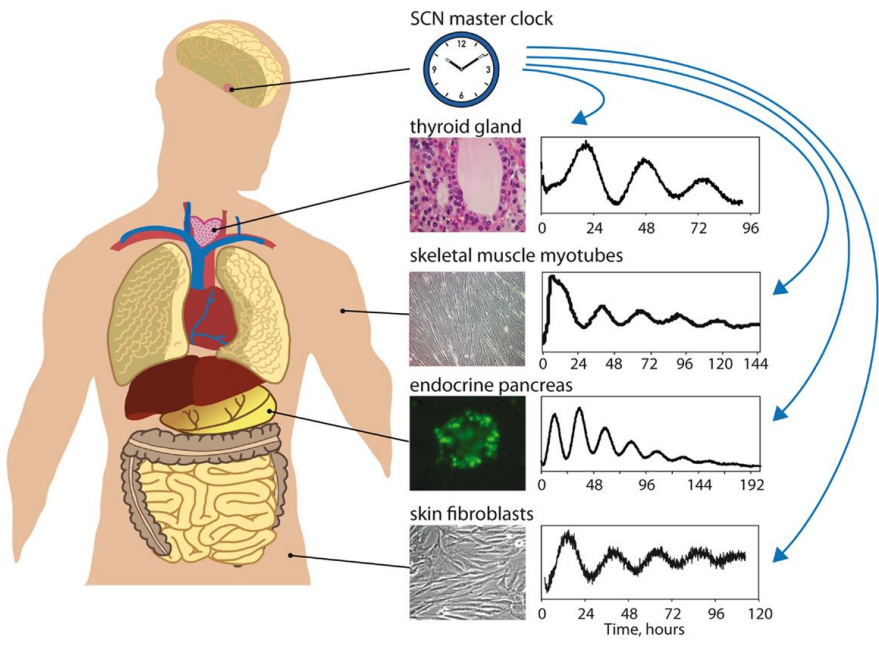
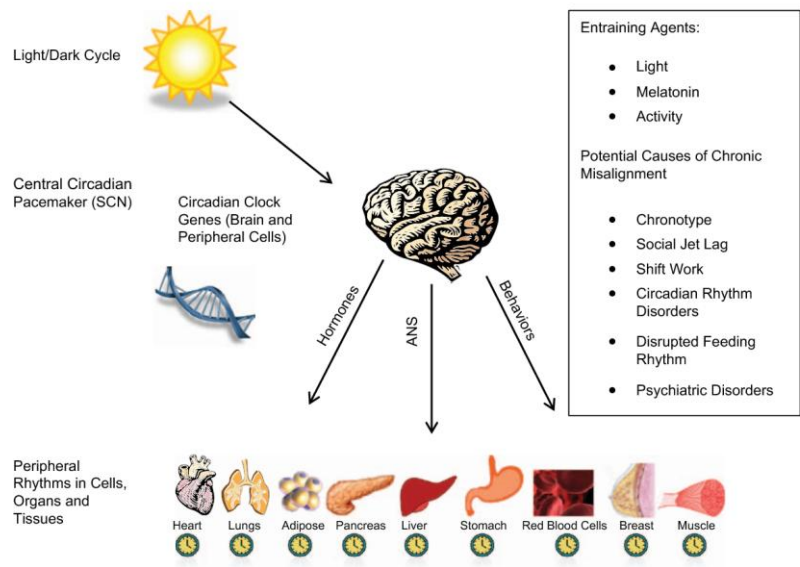
<https://www.youtube.com/watch?v=BSi66mcHkUM>



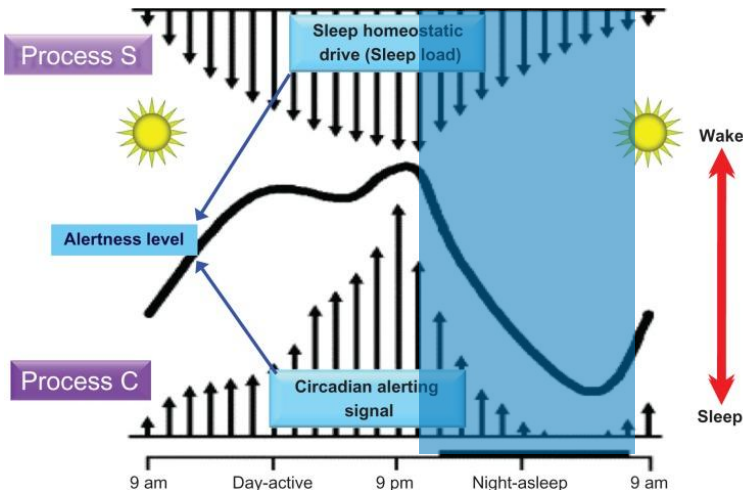
1996 J A Horne, professor, L A Reyner, research associa



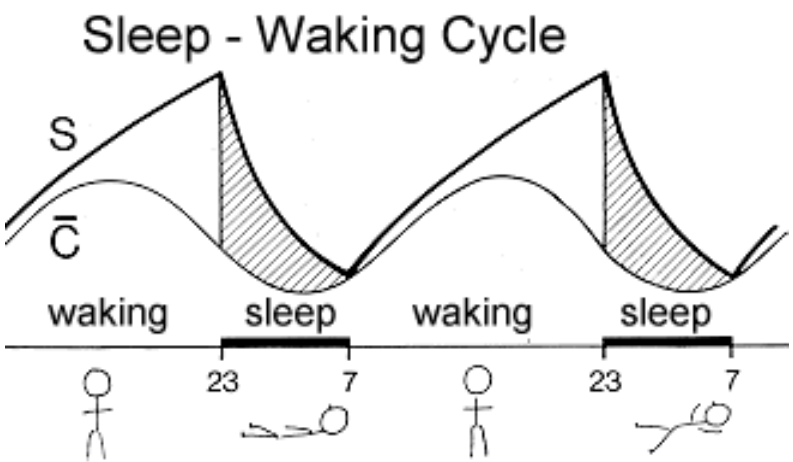




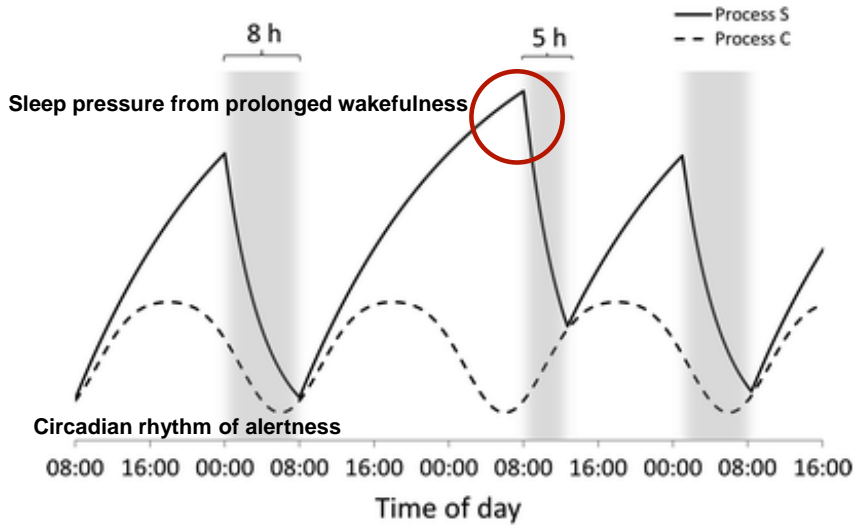
Normal sleep, wake and alertness



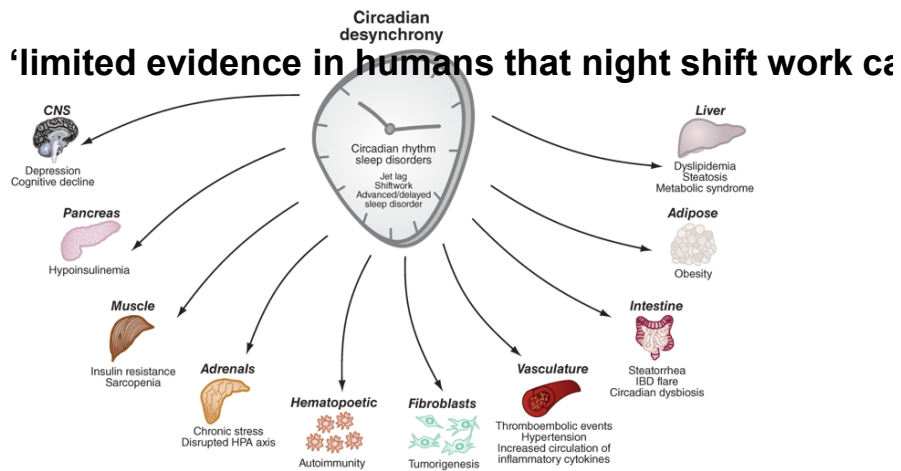
Circadian rhythm of alertness



Sleepiness on the night shift



IARC Working Group 2019



Source: J.L. Jameson, A.S. Fauci, D.L. Kasper, S.L. Hauser, D.L. Longo, J. Loscalzo: Harrison's Principles of Internal Medicine, 20th Edition Copyright © McGraw-Hill Education. All rights reserved.



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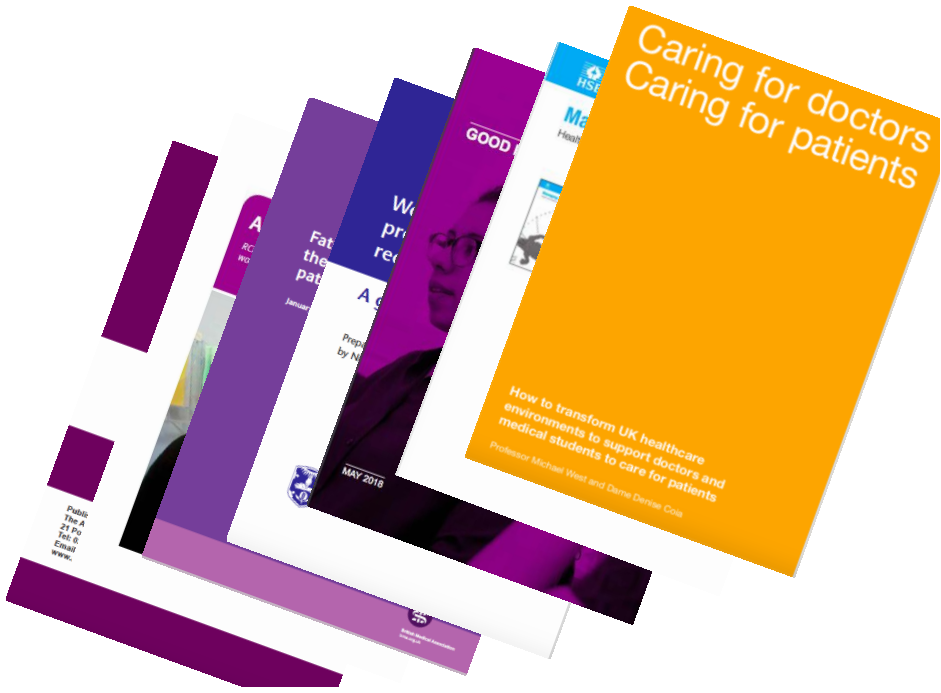
Fatigue Risk Management System
for the Canadian Aviation Industry

Introduction to Fatigue Audit Tools

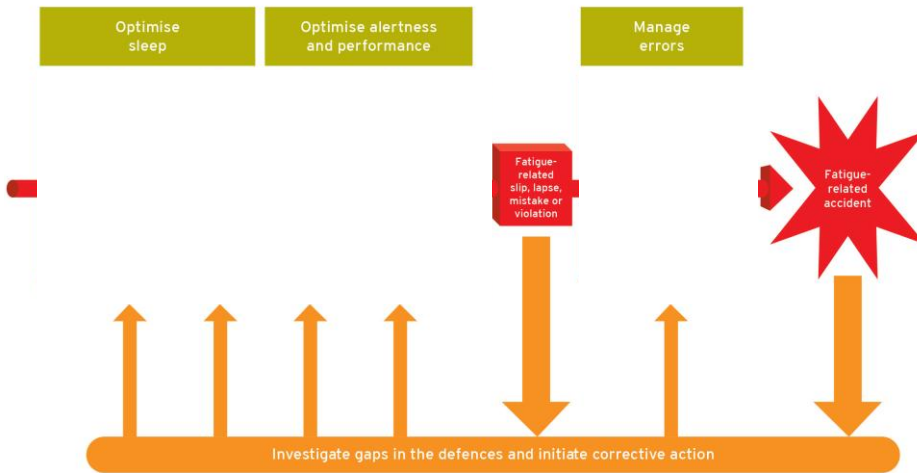
Transport Canada / Transports Canada

edu.au
FRMS consultants
Adelaide, Australia

The image shows the cover of a report titled "Introduction to Fatigue Audit Tools". The cover features a collage of images on the left side, including a sunset, a road, and a person. The main title is "Introduction to Fatigue Audit Tools" and it is part of the "Fatigue Risk Management System for the Canadian Aviation Industry". The report is published by Transport Canada (Transports Canada) in April 2007. The report number is TC-1002862 and TP 14577E. The cover also includes the Transport Canada logo and the website edu.au, along with the name of the consultants, FRMS consultants, located in Adelaide, Australia.



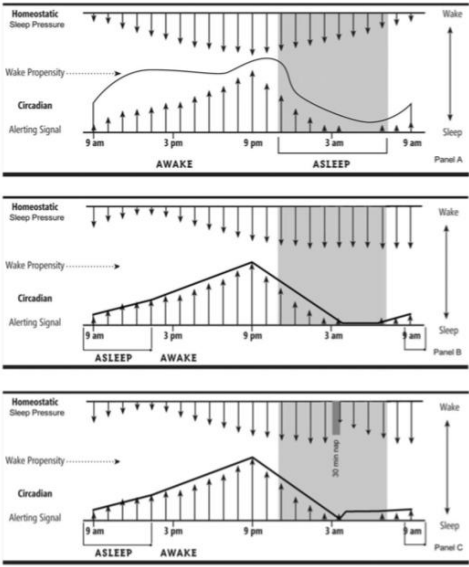
FATIGUE RISK MANAGEMENT SYSTEM



Adapted from Reason (1997), Dawson and McCulloch (2003) and Moore-Ede *et al* (2009)

NAPS





The two-process model of sleep. Panel A (Top) represents the homeostatic and circadian processes in a day working nurse. Panel B (Middle) shows these same processes for a night shift nurse without a nap who retires upon arriving home at 8 AM, goes to sleep at 8:30 AM and wakes at 1 PM. Panel C (Bottom) shows these same processes with a 30 minute nap taken at 3:30 AM.



LIGHT

FOOD



SUPPORT



128725H [RF] © www.visualphotos.com

Adequate sleep opportunity on days off

Think about sleep disorders

Eat a full meal *before* night shift

Nap before your night shift starts

Take 10-20 minute undisturbed naps during your shift

Limit the amount of alcohol before going to bed before night shift

A NAP CAN SAVE A LIFE

Expose yourself to bright light to stay more alert on night shift

Night risk for errors is highest at 2am-5am

Embrace individual differences

Strategic departmental planning to avoid danger

Speak up about sleepiness

