



**Melbourne**  
Health



# **Fatigue in Medical Officers at Melbourne Health**

**Presented by**

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**Manager Occupational Risk**

Patient Focus, Ethical Behaviour, Teamwork, Accountability, Transparency, Innovative, Flexible and Responsive Behaviour, Diversity, Effective Partnering with Stakeholders, Leadership



# Transport Industry

- **Driver fatigue is a phenomenon encountered by most people who have been driving for substantial periods of time.**
- **Accident statistics indicate up to 60 % of all crashes involve some form of driver fatigue - (Williamson et al, 1994). The current statistics represent similar trends.**
- **For those employees who drive for a living – this is an OH&S hazard.**
- **Most States and Territories have restrictions on the amount of time between rest breaks for “professional drivers”, as well as total hour limits.**



# Aviation Industry

- The Aviation industry has stringent rules regarding flight crew hours and the number of crew per flight.
- Established limitations are constantly being challenged.
- Flight crews are increasingly flying longer sectors.



# Health Industry

- **Hospitals by the very nature of their existence require staff to undertake shift work – 24 hours per day.**
- **Traditionally shifts have included longer times for both nursing and medical staff.**
- **Nurses would often work 10 hour rostered night shifts.**
- **Resident medical staff are often rostered to 12 hour shifts, some of these shift rotations include 7 day/night cycles.**



# Health Industry

- **Junior hospital doctors are at times required to work for extended periods of time in a stressful work environment with inadequate provision for rest and recovery.**
- **This practice exacts a heavy cost on the health and work performance of those doctors and also exposes patients to a greater hazard, thereby unnecessarily increasing the risk of an adverse medical incident.**
- **Excessive hours and workloads for junior doctors are embedded in the hospital and medical culture.**



# Health Industry

- **The effects of fatigue from sustained wakefulness can be similar to being over the legal blood alcohol limit, with decreased alertness, reaction time and data processing capacity** (Dawson et al, 1997).
- **Fatigue is often associated with feelings of drowsiness or sleepiness, loss of concentration, impaired short-term memory and slowed reactions.**



# Health Industry

- **The trainee hospital Medical Officer phase is characterised by long working hours and heavy workloads which, may not be conducive to high quality work performance or systematic learning.**
- **Studies examining the effects of sleep-deprivation and fatigue in Medical Officers (and other occupations) have not conclusively reported negative effects in terms of work/task performance, although these studies do consistently indicate a negative effect on mood or emotional state.**



## Case 1

- **Medical Officer working night shift rotation – 14 hour nights**
- **Royal Melbourne Hospital is in the University precinct – large bicycle traffic movements – students & hospital staff.**
- **Completion of shift – riding his bicycle home.**
- **Peak hour traffic movements.**
- **RMO fell/struck from his bike (? second incident of RMO's falling asleep whilst riding home).**
- **Journey incidents are not currently covered by WorkCover.**



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## Case 2

- **Medical Officer working extended shift cycle 24 hours roster.**
- **Emergency case arrived just prior to the completion of the shift.**
- **Medical Officer becomes actively involved in the treatment of the patient.**
- **Subsequently involved in road traffic accident on way home.**
- **Journey incidents are not currently covered by WorkCover.**



# Fatigue Risk

- **Work related fatigue can be described as an acute or ongoing state of tiredness that affects employee performance, safety and health and requires rest or sleep for recovery.**
- **“Fatigue risk” occurs where:**
  - **fatigue is likely to affect employee performance and contribute to incidents in the workplace, or**
  - **exposure to fatigue in the longer term may lead to employee health problems.**



# Consultation

- **Electronic reporting system for staff and patient incidents.**
- **Staff consultative committees, OH&S, Safety and Service Improvement, Department Operational Committees, direct communications either by phone, fax or email, as well as Intranet site listing 24 hour contact numbers.**
- **One Senior Medical Officer raised concerns related to staff safety.**
- **The most recent incident resulted in a review of the Medical Officer rostering arrangements.**



# Consultation

- **Master Roster complied with the Hours of Work Provisions in the “Registrars Industrial Agreement”. This includes:**
  - **Not being rostered for duty for more than 30 consecutive hours (unless agreement has been reached between the doctor, the Association and the hospital);**
  - **Being free for duty for at least 10 hours between rostered ordinary shifts.**
- **Further assessment was recommended to ascertain whether the roster caused an excessive or unsafe work pattern to exist.**



# Consultation

- **Junior Medical Officer Meeting**
- **Most registrars liked the existing roster and the large chunks of time off in between rostered shifts.**
- **Rest breaks while on night shift. Whilst it was not condoned, it was reported that on quiet shifts, some doctors would take the opportunity to take a short “nap” (eg. up to one hour) to recharge the “batteries”. Doctors reported this assists them to remain refreshed.**
- **They requested this be supported by management and that a bed be provided for this to occur on a regular basis.**



# Preliminary Risk Assessment

- **Workload Factors**
  - High mental work demands (complex decision making, high concentration)
  - Emotionally demanding work
  - Work under pressure
  - Inadequate rest breaks



# Preliminary Risk Assessment

- Organisational Factors
- Long hours of work – e.g. 14 hour night shifts over 3 or 4 consecutive days; 13 hour day shifts over 6 consecutive days.
- Regular work at night during the circadian low period (2am – 6am) is a risk factor:
  - “A” roster – 6 week cycle including 3 X 14 hour nights, then 7 days off, then 4 X 14 hour nights, then 2 days off (2 days off after 4 nights not considered adequate).
  - “B” roster – 5 week cycle including 3 X 14 hour nights, then 5 days off, then 3 X 14 hour nights, then 3 days off.



# Preliminary Risk Assessment

- Organisational Factors (cont)
- Overtime is not worked at RMH, but some doctors may work elsewhere on their days off and this may contribute to fatigue risk.
- Regular work schedules that require sleep during the day may contribute to fatigue risk.
- Fatigue is considered a normal part of work and this culture may discourage the reporting of fatigue risk.



# Preliminary Risk Assessment

- Individual Factors
- health problems, inadequate nutrition and hydration
- poor sleep quality or duration (less than 6 hours uninterrupted sleep per 24 hours)
- ongoing reliance on temporary fatigue relief strategies (such as napping, alcohol, ???)
- are difficult to assess, but may be a contributing factor in some instances



# Preliminary Risk Assessment

- Life away from work factors
- Financial commitments, e.g. large mortgages,
- Other work commitments (some undertake a second job on days off)
- Methods of commuting to work (e.g. bicycle, car, ??public transport).



# Fatigue Index

- **A simple tool to provide an assessment of short-term, daily fatigue and cumulative fatigue risks associated with shift work.**
- **The FI is based on five main factors known to have an impact on fatigue:**
  - **Shift start time**
  - **Shift duration**
  - **Length of the interval between finishing one shift turn and starting the next**
  - **Breaks**
  - **Number of consecutive shifts**



# Fatigue Index

- **Used to compare different shift patterns to see if the average fatigue of one pattern is better than the other**
- **The FI takes account of day, night and early shifts. It enables calculation of the build up of cumulative levels of fatigue over a number of shifts.**
- **The FI is not appropriate for rosters where permanent night shifts are worked. It is also not suited for extraordinary shift patterns such as those worked offshore. Split shift systems are also not covered.**



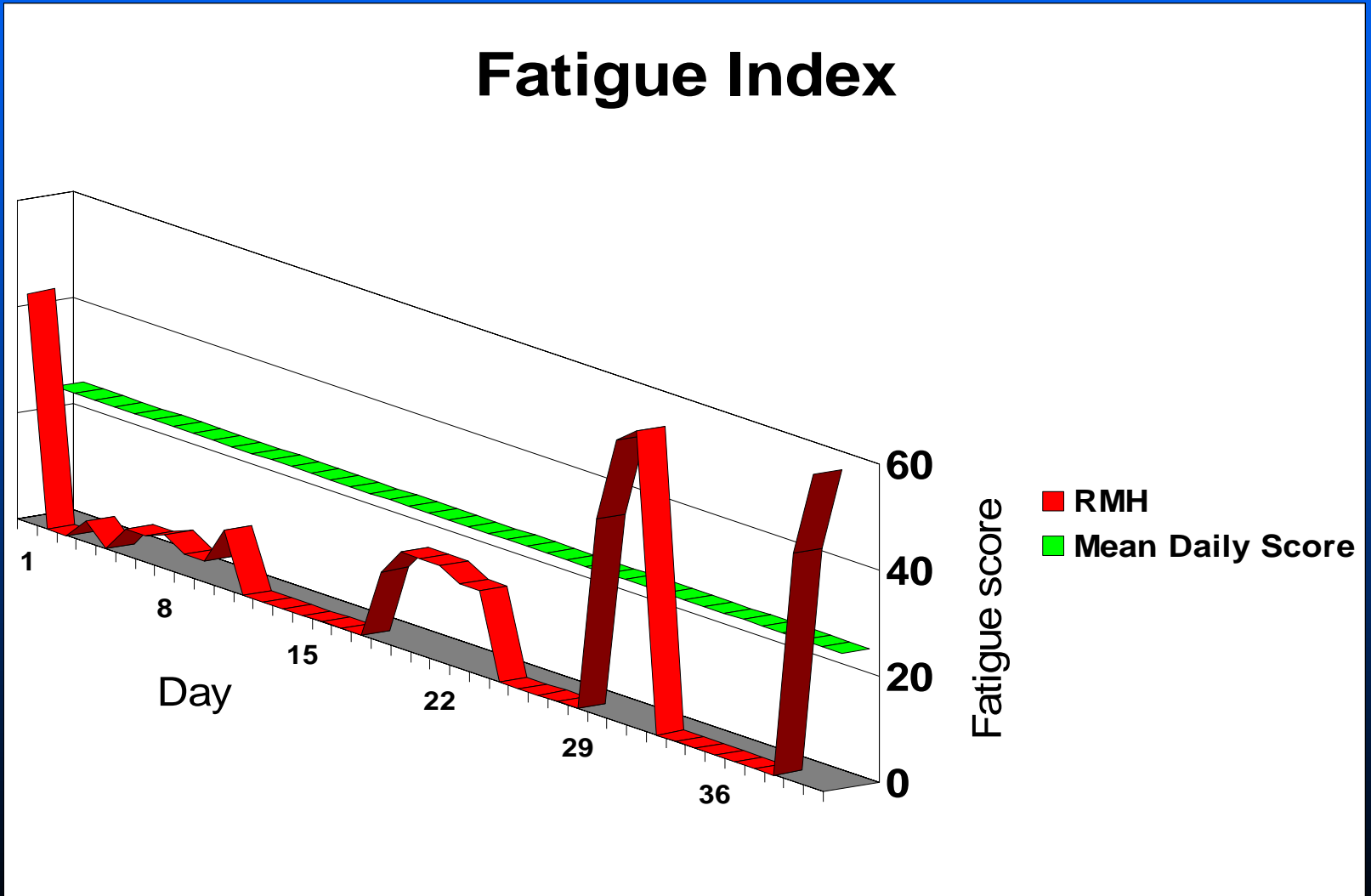
# Fatigue Index

- **Centre for Human Sciences at DERA in a research project commissioned by HSE. The research was published in 1999 as HSE Contract Research Report 254 and is available on HSE's website**
- **([www.hse.gov.uk/research/content/crr/1999/crr99254.pdf](http://www.hse.gov.uk/research/content/crr/1999/crr99254.pdf))**



# Registrar 1

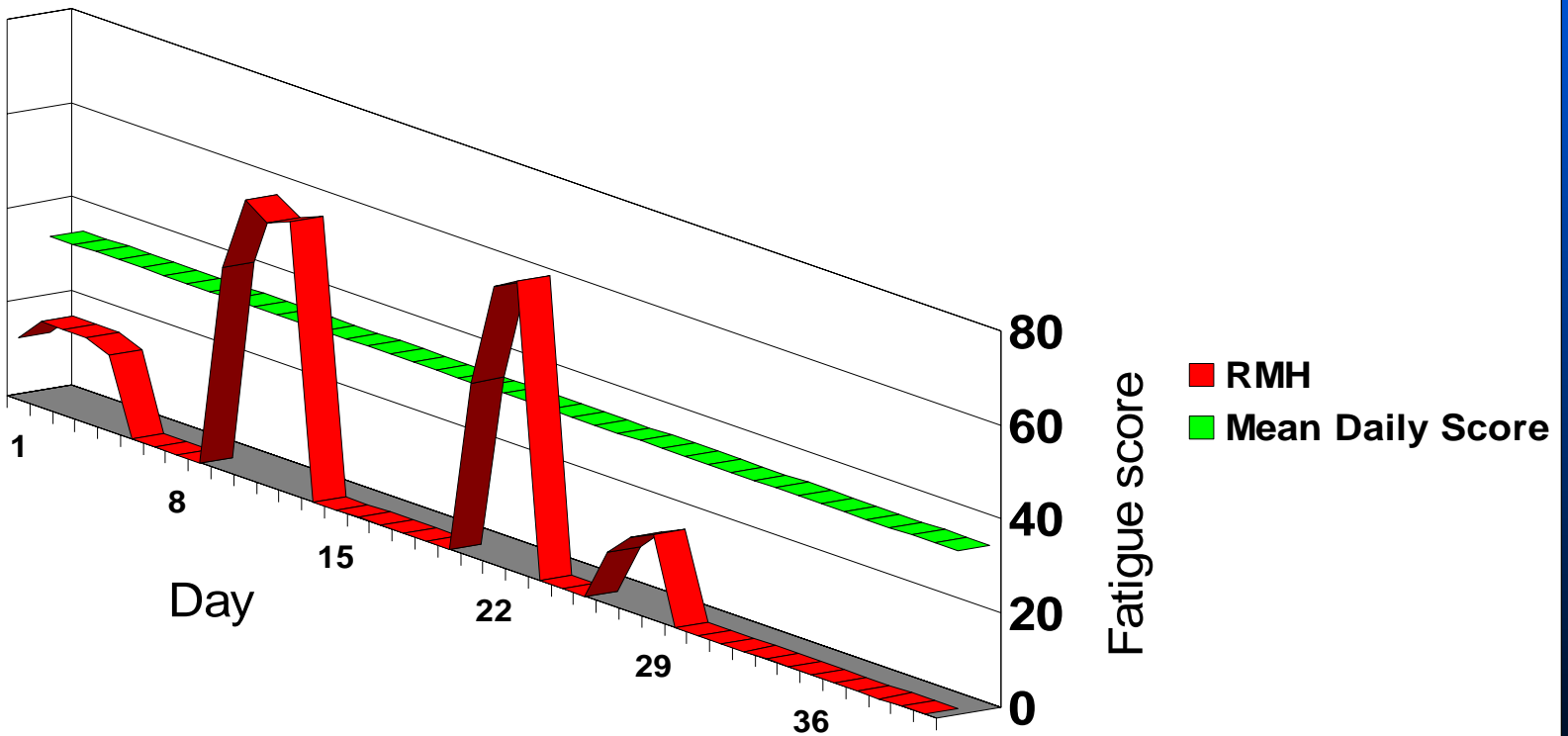
## Fatigue Index





# Registrar 2

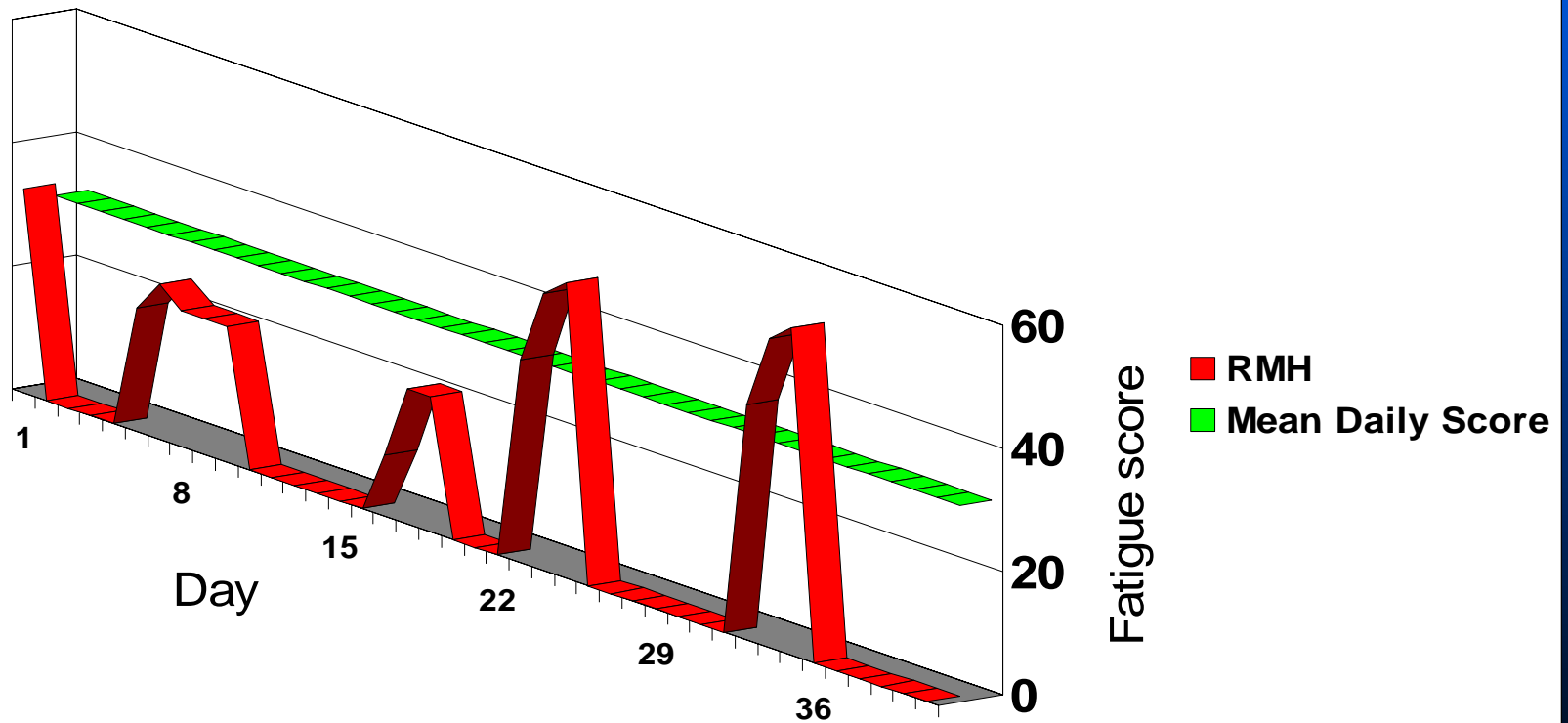
## Fatigue Index





# Registrar 3

## Fatigue Index





# Risk Controls

Risk Factor	Risk Control options
<u>Workload Factors</u>	Ensure regular rest breaks are taken (frequent short breaks recommended). Provide facilities for recovery rest and sleep where long hours of work are required*. Maintain adequate staff coverage.
<u>Organisational Factors</u>	Reduce 14 hour night shift to shorter hours. Reduce 14 hour night shift to a maximum of 2 – 3 consecutive days (rather than 4 consecutive nights), then having at least 3 days off. Review 6 X 13 hour day shift schedules. Provide information to junior doctors on fatigue risk and encourage the recognition and reporting of fatigue.
<u>Individual Factors &amp; life away from work factors.</u>	Provide information to junior doctors on fatigue risk and positive coping strategies. Provide employee assistance for: <ul style="list-style-type: none"><li>• developing suitable strategies for coping with fatigue</li><li>• financial, personal &amp; relationship counselling where fatigue from outside workplace factors are identified.</li></ul> Monitor and provide guidance on the risks associated with working a second job on days off.



# Policy

- An Occupational Health and Safety Committee structure will be established and maintained at each campus and program to monitor and report on health and safety matters and performance.
- Health and Safety Representatives must comprise at least 50% of the membership of operational Health and Safety Committees.
- Health and Safety Representatives shall be elected by their co-workers in each designated workgroup and shall represent the workgroup at Occupational Health and Safety Committee meetings.
- Health and Safety Representatives are entitled to paid time-off from work to attend a Victorian WorkCover Authority - approved Health and Safety Representative training course.
- Health and Safety Representatives will undertake specific functions with respect to health and safety, including those functions specified by the *Occupational Health and Safety Act (2004)\*\**.
- Where significant changes are planned for workplace design and layout or work processes undertaken in a workplace the employees in the workplace, including the relevant Health and Safety Representative, must be consulted.



# Organisational Values

- **Patient Focus:** We will deliver compassionate health care and treat all patients with dignity and respect.
- **Ethical Behaviour:** All our actions and behaviours will reflect the highest ethical standards.
- **Teamwork:** We will act professionally and work together to achieve the goals of Melbourne Health and deliver on our aspirations.
- **Accountability:** As individuals we take responsibility for our actions and value feedback so that we can learn from their experience.
- **Transparency:** We value openness and honesty at all levels throughout the organisation.



# Organisational Values

- **Innovative, Flexible and Responsive Behaviour: We aim to achieve the best outcomes for our communities by embracing change and adapting to our environment.**
- **Diversity: Our words and actions acknowledge and value the range of people and cultures in our workplaces and communities.**
- **Effective Partnering with Stakeholders: Our success relies on effective collaboration and enduring partnerships.**
- **Leadership: We are committed to providing effective leadership that champions new ways of improving services.**



# Workplace Behaviour Review

Over the last three years Melbourne Health has developed and strengthened policies and procedures on bad behaviours.

- **Staff Survey – consultation.**
- ***Prevalence of unacceptable behaviour.***
- ***Zero tolerance policy.***
- ***“The Way We Work Together”*** - induction programs, development programs, annual performance reviews, during daily interaction, and as the framework for categorising, managing and monitoring behavioural complaints.



# Workplace Behaviour Review

- *Behavioural complaints mechanisms .*
- *Mutual understanding between disciplines.*
- *Melbourne Health's 'management style' .*
- *Patient flows and competing priorities.*
- *Attraction, recruitment, and retention.*
- *Organisational development strategy.*



Bruno Bozzetto  
presents



# REFERENCES

- NATIONAL CODE OF PRACTICE - HOURS OF WORK, SHIFTWORK AND ROSTERING FOR HOSPITAL DOCTORS – *Australian Medical Association*
- RESEARCH PROJECT - HSE CONTRACT RESEARCH REPORT 254 - Centre for Human Sciences at DERA - ([www.hse.gov.uk/research/content/crr/1999/crr99254.pdf](http://www.hse.gov.uk/research/content/crr/1999/crr99254.pdf))
- VARIOUS INCIDENT / INVESTIGATION REPORTS - Fiona Begg



# Questions ???

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**Thank you**

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