



Fatigue Risk Management System

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FRMS



- Fatigue Risk Management System is a shared responsibility between management and employees





Genesis

LifeFlight

- CASA
- Aircrew 2011
- Paramedics 2014
- Doctors 2015





Governing Principles



- Pre-hospital and Retrieval Medicine clinicians need to be aware of fatigue and the general health management necessary to fulfil their role and training requirements





Medical Crew Member *LifeFlight*

- A person assigned by an operator for duty on an aircraft during flight time
- A person with accredited medical expertise assigned by an operator for duty on an aircraft





24 hour bases



- Cairns
- Townsville
- Sunshine Coast
- Toowoomba





Key Fatigue Risks



- Operational demands requiring longer work hours than normal
- Occupational exposure levels to heat, glare, noise and vibration
- Circadian rhythm disruption due to night tasking
- Sleep inertia following on from callout from sleep
- Ongoing administrative/training requirements
- External effects of full time employment for casual crews



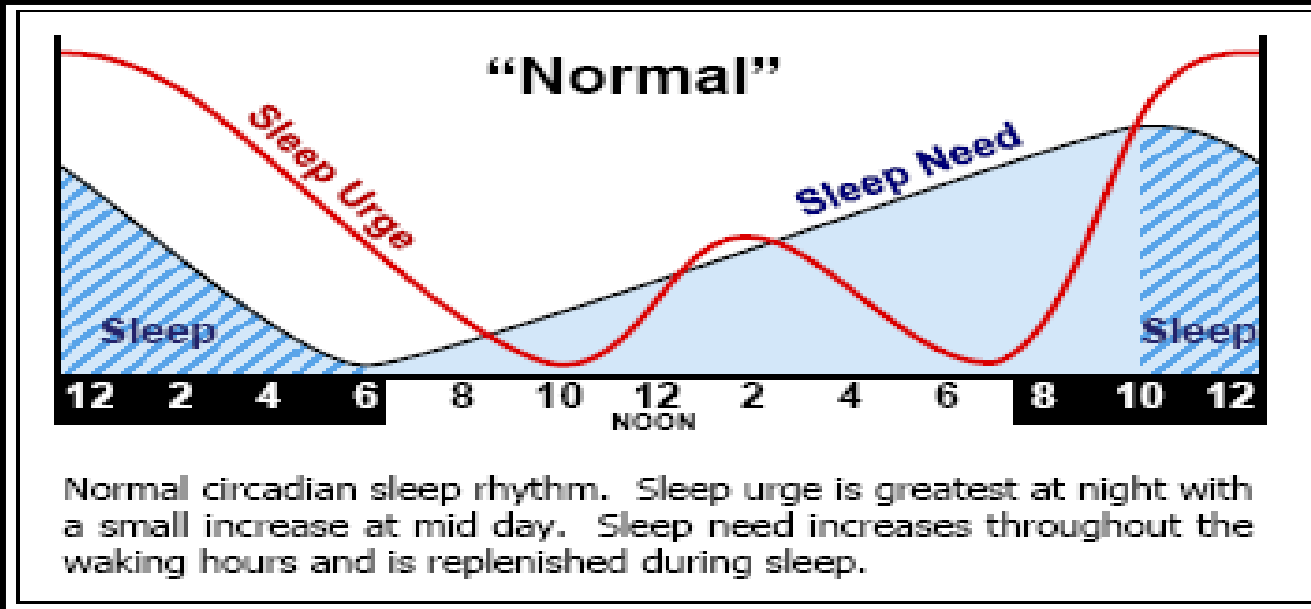


Key Fatigue Risks



- Fatigue resulting from particular tasks such as:
 - Patient in life threatening situation
 - Operations into unfamiliar surroundings
 - Overbuilt up areas into hospital helipads
 - Over water winching
 - International operations
 - NVG
 - Inclement weather







Sleep Debt



- Sleep debt leads to increased levels of fatigue and decreased mental and physical health
- The optimum amount of sleep required by a person varies (7-8hrs)
- Gaining less sleep than necessary will accumulate a sleep debt





Sleep Inertia



- Occurs immediately following an abrupt awakening
- Results in a period of declined motor dexterity and a feeling of grogginess
- Impaired alertness may interfere with mental and physical functions
- Increased effect during window of circadian low (WOCL)
- Longer effect after deep sleep





Fatigue Symptoms

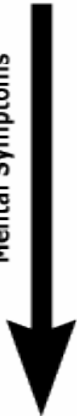


Physical Symptoms




- Yawning
- Heavy Eyelids
- Eye-rubbing
- Head drooping
- Microsleeps

Mental Symptoms



- Difficulty concentrating on tasks
- Lapses in attention
- Difficulty remembering what you are doing
- Failure to communicate important information
- Failure to anticipate events or actions
- Accidentally doing the wrong thing
- Accidentally not doing the right thing

Emotional Symptoms



- More quiet or withdrawn than normal
- Lacking in energy
- Lacking in motivation to do the task well
- Irritable or grumpy behaviour with colleagues, family, or friends





Responsibility and Obligation *LifeFlight*

- CEO:

“Aircrew who are unable to fly due to fatigue will not be discriminated against in any way. Management and staff are expected to comply with FRMS with integrity to avoid fatigue related safety issues “





- Appropriate and safe work roster management
- Assessment, control and monitoring of fatigue
- Development and implementation of polices





Staff Responsibilities *LifeFlight*

- Understand and execute FRMS
- Identify and report potential fatigue risks
- Maximise sleep opportunities
- Allocation of time-free-of duty
- Maintenance of personal health





Operational Points



- Ensure mental and physical fitness
- Report to crew re potential of fatigue
- Report to Central Coordination Centre
- Complete mission and then ensure rest





Fatigue Controls



- Roster design
- Breaks
- Occupational exposure
- Specific Restrictions/Procedures
(Prescriptive Limits)



- Crew are encouraged to take a 2 hour sleep in the afternoon before night standby





On Task Controls



- Supervision and crew monitoring
- Task reallocation
- Accommodation for napping
- Strategic use of caffeine
- Food and drink





LFA FRMS



- Definitions
- Prescriptive Limits
- IFLS



- Duty period
- Standby
- On task
- Time from duty period





Prescriptive Limits



- Shift is 12 hours
- Can extend to 14 hours continuous
- Need to have 10 hour off duty period before shifts
- Maximum IFLS: 15
- Maximum rostered period: 10 days





IFLS



- Total on task time is 14 hours continuous
- A 4 hour break from duty resets time
- Substantive sleep is >2hrs





24 hour Base Key Times



- 0600-0800 On CALL (Response 30 min)
- 0800-1000 On TASK (Flighty Duty Period)
- 1000-1800 STANDBY (Rest 1500-1700)
- 1800-0600 On CALL (Response 30 min)





Key Times



- 1800-0600 - **Caution**
- Higher risk operations due to fatigue and darkness
- High priority tasking only





Fatigue Reports



- Monitor fatigue
- Rate of effort, work habits
- Funding/Staffing allocations
- Retrieval Coordination impacts

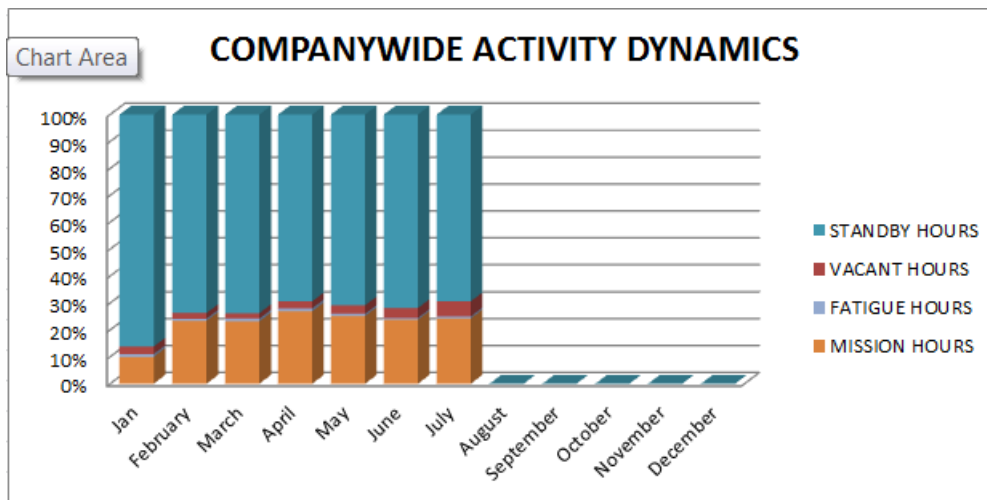


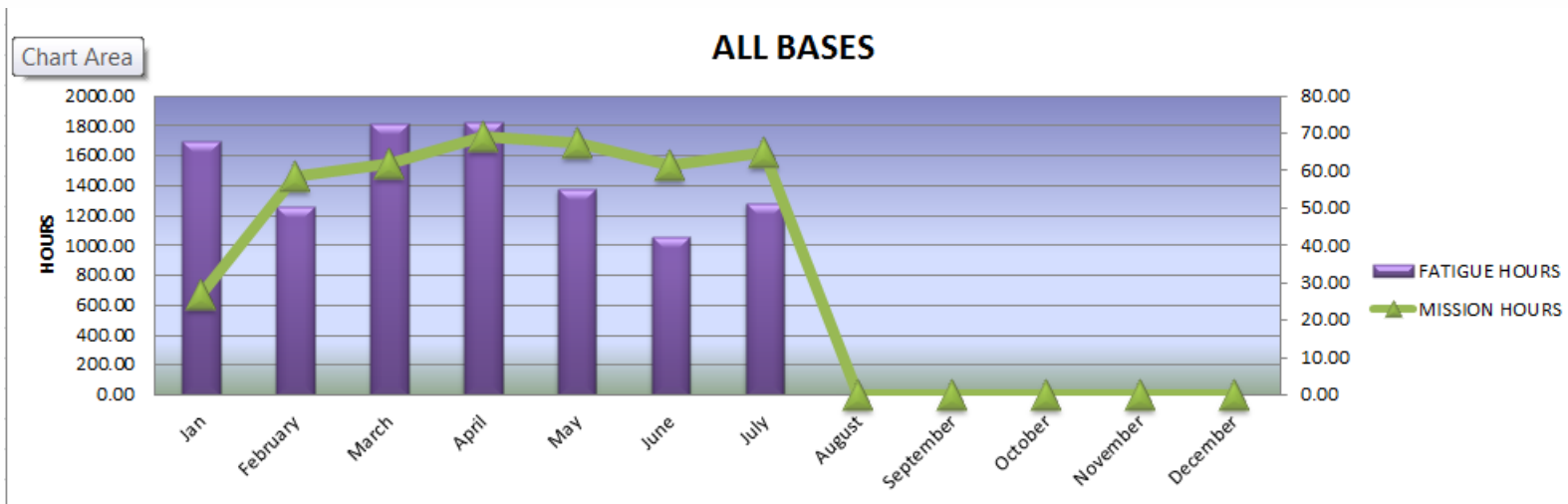


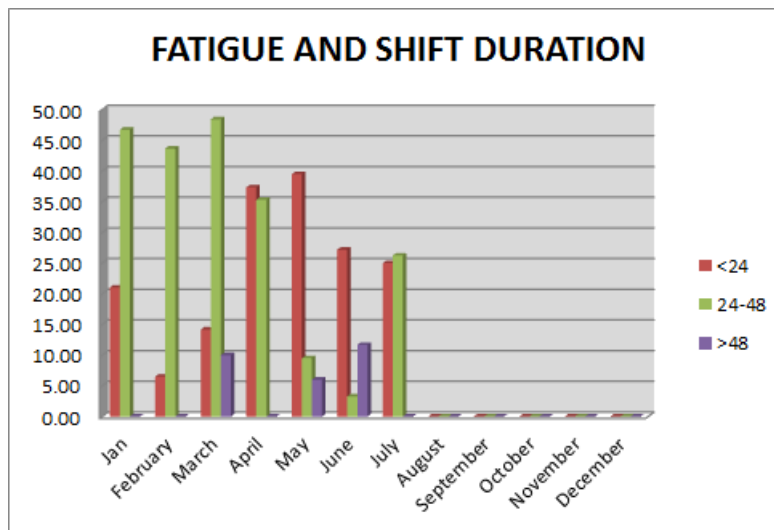
Medical Fatigue Register

Time that fatigue was called in (format: DDMMYY HH:MM)	Medical Officer's Name	Location where medical officer is on shift	Date & time of shift commencement (format: DDMMYY HH:MM)	Date & time the shift is scheduled to end (format: DDMMYY HH:MM)	Fatigue Start	Fatigue End	Total fatigue period in Hours (self calculating cell)	Time of activation & completion of all tasks during their duty/call period	Name of C3 Coordinator	Comments
8/07/2016 2:45	KNAPMAN, Karl	Brisbane CareFlight	7/07/2016 18:00	8/07/2016 6:00	8/07/2016 3:00	8/07/2016 6:00	3:00	Task 1: 22:00 - 03:00	Daniel MORETTI	RSQ notified
9/07/2016 23:25	FAKIRIS, Kostas	Toowoomba Community	9/07/2016 6:00	11/07/2016 6:00	9/07/2016 23:30	10/07/2016 9:30	10:00	Task 1: 09:00 - 16:30 Task 2: 19:00 - 23:15	Brett COCHRANE	RSQ notified
16/07/2016 6:17	DUGGAN, Paul	Toowoomba Community	15/07/2016 18:00	16/07/2016 6:00	16/07/2016 6:00	16/07/2016 18:00	10:00	Task 1: 19:45 - 22:30 Task 2: 00:30 - 08:00	Daniel MORETTI	RSQ notified. Dr. DUGGAN was rostered on SGAS Toowoomba (R577) 0600-1800, 16/07/2016
24/07/2016 0:40	PRITCHARD, Adam	Cairns	23/07/2016 18:00	25/07/2016 18:00	24/07/2016 0:45	24/07/2016 7:00	6:15	Task 1: 12:00-16:00 Task 2: 16:00-20:00 Task 3: 20:00-12:30	Brett COCHRANE	RSQ Notified (Tess)
24/07/2016 13:00	GINGATHIAMMAH, Vinay	Townsville	24/07/2016 18:00	25/07/2016 6:00	24/07/2016 13:00	25/07/2016 1:00	12:00	Task 1: 22:30 - 13:00	Kirsten FROST	RSQ Notified. Rostered as MIN shift, however as M2 shift was vacant he was tasked on several RFDs shifts.



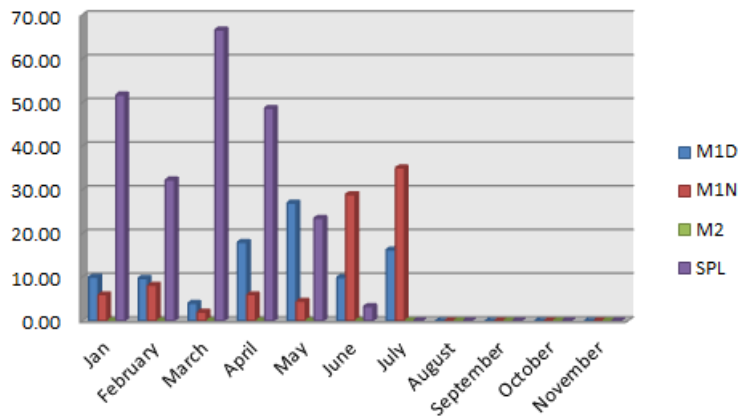


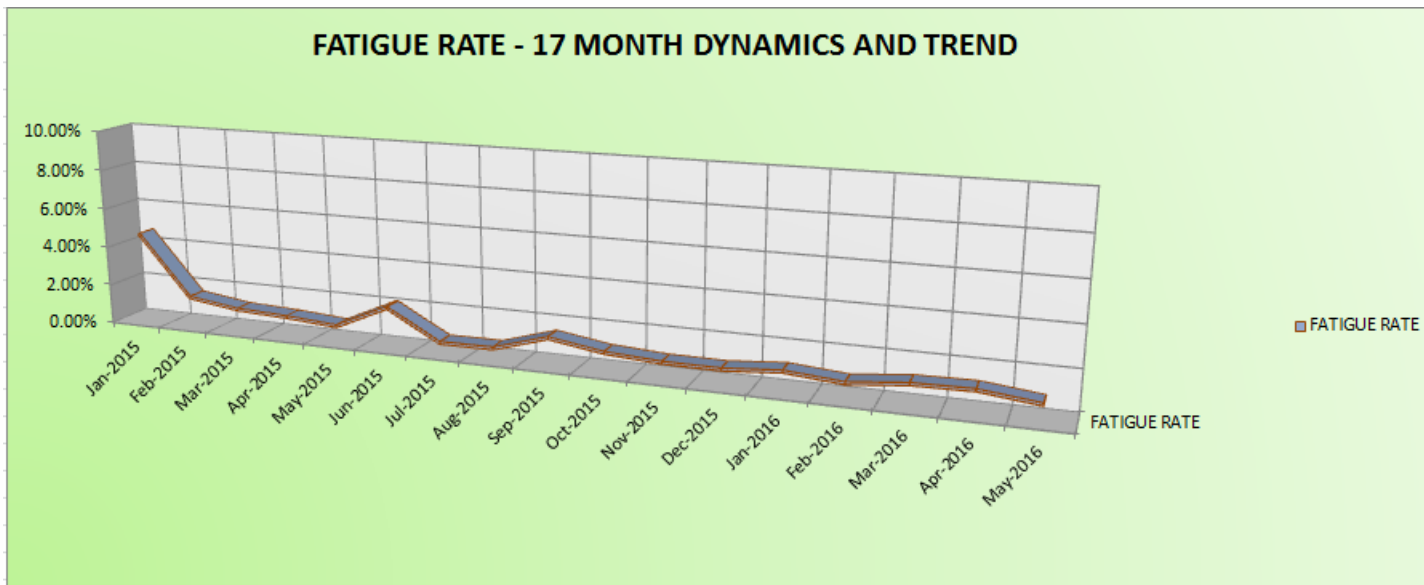






FATIGUE BY SHIFT TYPE







LifeFlight



SAVING LIVES *Anyone... Anywhere... Anytime*

