

FATIGUE MANAGEMENT

When tiredness is
always there

Authors:

I. Tone, A. Irwin



Applied
Psychology &
Human
Factors
Group



NON-TECHNICAL SKILLS IN AGRICULTURE



1495
UNIVERSITY OF
ABERDEEN

WHAT IS FATIGUE?

The Health and Safety Executive defines fatigue as 'a decline in mental and/or physical performance that results from prolonged exertion, sleep loss and/or disruption of the internal clock.'¹ Fatigue is a constant state of tiredness or weakness.²

Busier periods at calving and lambing time and at harvest time increase the risk of fatigue, as you work harder and may have difficulties in sleeping. Such periods are associated with an increased fatality rate.³

What causes^{1,2,3} fatigue on the farm?

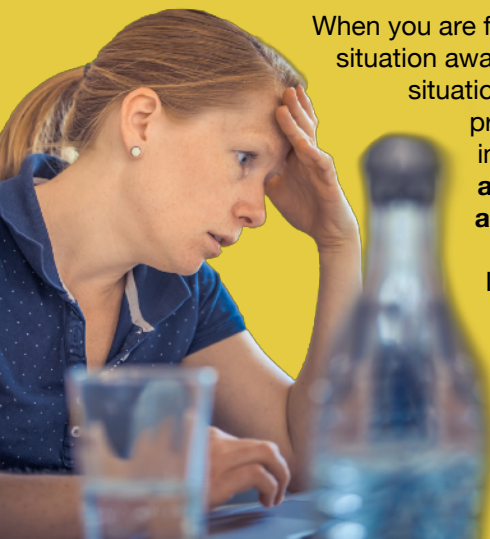
- ✓ Poor sleep patterns or poor quality of sleep
- ✓ Poor diet or lack of eating
- ✓ Mental Health issues such as stress or depression
- ✓ Grief and loss
- ✓ Feeling ill and the side effects of taking medication
- ✓ Working long hours
- ✓ A high workload
- ✓ Working early mornings or late nights
- ✓ Complex or monotonous tasks
- ✓ Adverse weather conditions
- ✓ Excessive noise levels

When can fatigue become **DANGEROUS**?

Fatigue is one of the main contributory factors to accidents in agriculture.^{2,3}

When you are fatigued and **under time pressure**, your situation awareness – your ability to perceive the current situation, to understand what is going on and to predict future consequences – may be impaired.⁴ This is **especially dangerous if you are operating machinery and working with animals**, as you need to be alert at all times.²

If you are **working remotely or alone** and you are tired, lack of communication and coordination with others, such as sharing your plans and establishing contingency measures, can also delay help in case of an emergency.²



SIGNS OF FATIGUE²



Physical changes

- ▶ Headaches
- ▶ Dizziness
- ▶ Blurry vision
- ▶ Slow reflexes
- ▶ Aching muscles
- ▶ Micro-sleeps
- ▶ Insomnia



How you might feel

- ▶ Irritable or short-tempered
- ▶ Moody
- ▶ Tired or sleepy



How you might act

- ▶ Unable to concentrate
- ▶ Slow reactions
- ▶ Avoiding social situations
- ▶ Snapping at people

QUICK CHECK FOR FATIGUE AND RISK FACTORS

- ✓ **Sleep** – are you getting enough rest?
- ✓ **Symptoms of fatigue** – Do you recognise any of the following in your current state?
 - ▶ *Dizziness, headaches, blurred vision*
 - ▶ *Aching muscles*
 - ▶ *Poor concentration*
 - ▶ *Slow reflexes and reactions*
 - ▶ *Mood changes and social changes*
- ✓ **Stress** – How are your current stress levels?
- ✓ **Diet & exercise** – Are you eating and drinking water regularly? Do you exercise regularly?
- ✓ **Stimulants** – How much do you rely on caffeine?
- ✓ **Communication & coordination** – Do you regularly keep in touch with others and share your plans?



Your role in managing fatigue

Fatigue management is a shared responsibility between farm employers and employees. Research shows that this participatory approach has proved successful in small and medium farms.⁵



Consider these fatigue proofing techniques:⁶

TASK

Task slowing - you may find that when you are tired, you may need to slow down in order to be mindful of the task

Task rotation - if you are working in groups or pairs, you may find it helpful to rotate tasks with other workers to avoid boredom or excessive workload

Task buffer - you may want to make others aware of your tiredness so you are allowed extra time to complete your tasks

Load shedding/delegation - remember that you can postpone or delegate tasks which are not urgent

Double-checking - it is easy to make mistakes when you are tired, so checking twice can be a useful strategy

BEHAVIOUR

Active communication & increased social interaction - discussing and interacting with others can keep you alert

Task verbalisation - describing the steps of the task to yourself or to others can help avoid procedural errors

Supervision - keeping an eye on fatigued peers can help spot errors and avoid accidents - you can ask others to do the same for you

Quick tips for coping with fatigue⁷

1 Sleep well and rest

2 Exercise regularly

3 Eat healthy and
drink water

4 Keep in touch and
share plans

5 Ask for help if you
are feeling tired

ON-THE-JOB STRATEGIES



- ★ Share plans when working alone or remotely
- ★ Ask for help if tired and report any instances of fatigue
- ★ Pay specific attention to tasks during early mornings and late evenings and during busier times
- ★ Rest regularly in a safe space
- ★ Manage the environment, *e.g. maintain good lighting if possible*
- ★ Share the responsibility of operating machinery and handling cattle
- ★ Mildly exercise before work to improve alertness



OFF-THE-JOB STRATEGIES



Sleep and rest

- ★ Find a sleep pattern which works for you and document any sleep issues
- ★ Try to rest if you have troubles sleeping
- ★ Make the environment suitable for sleeping



Relaxation techniques

- ★ Read a book or a newspaper before bed
- ★ Go for a walk
- ★ Meet friends or spend some time with your family



Diet

- ★ Hydrate regularly
- ★ Avoid drinking too much caffeine, as coffee only helps temporarily
- ★ Eat healthy snacks instead of chocolate
- ★ Light meals at regular times are better than irregular heavy meals

If you find that your fatigue affects you excessively, either on a personal or a professional level, or if you experience stress and depression, seek immediate help: speak to someone you trust, talk to your GP or the support organisations listed here.

LINKS TO FURTHER SUPPORT

Each of these websites features useful information and some include helplines that you can call for additional support.



Farming community network
fcn.org.uk



Farming Help
farminghelp.co.uk



Farmers weekly - Fit2Farm campaign
goo.gl/c5zTkS

References

1. HSE (2018). Human factors: Fatigue. Why is fatigue important? Retrieved from <http://www.hse.gov.uk/humanfactors/topics/fatigue.htm>
2. National Centre for Farmer Health. (2017). Fatigue. Retrieved from <https://www.farmerhealth.org.au/page/health-centre/fatigue>
3. HAS (N.D.) Fatigue. Retrieved from https://www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/Other_Hazards/Fatigue/
4. Irwin, A., & Poots, J. (2015). The human factor in agriculture: An interview study to identify farmers' non-technical skills. *Safety Science*, 74, 114-121.
5. Fletcher, A., Hooper, B., Dunican, I., & Kogi, K. (2015). Fatigue management in safety-critical operations: history, terminology, management system frameworks, and industry challenges. *Reviews of human factors and ergonomics*, 10(1), 6-28.
6. Dawson, D., Cleggett, C., Thompson, K., & Thomas, M. J. (2017). Fatigue proofing: The role of protective behaviours in mediating fatigue-related risk in a defence aviation environment. *Accident Analysis & Prevention*, 99, 465-468.
7. HSE (2010). Hints and tips for shift-workers. Retrieved from <http://www.hse.gov.uk/humanfactors/topics/shift-workers.htm>