

Submitted question to the Help Desk of the OSMET on May 14th, 2019

<u>Question</u>: Are there benefits associated with a 4-day compressed weekly schedule for either productivity or worker health?

The OSMET has proceeded with a systematic review of existing meta-analyses and reviews during the 2008-2019 period. The Annex-1 displays the methodological details of the answer to this question.

<u>Answer</u>: The 4-day compressed workweek does not seem to elicit changes in regards to health, according to evidence-based data, except accentuating risks for miners and factory operators. In regards to productivity, the 4-day compressed workweek seems to influence the perception of quality of care offered by nurses but it could also raise absenteeism in miners and factory operators.

A synthesis of the obtained results is displayed in the following table:

Compressed workweek type/occupation/Country	Health	Productivity	Reference
3 or 4 days (11 hours per shift) vs 5 days with 7.5 hours shift	N/A	Increased perception of care quality	2
Nurses, USA			
4 days (10 hours per shift) and 3 days leave	Increased physical activity practice	No effect on absenteeism	1
Police Officers, Canada			
4 days (12 hours shift) and 4 days leave	No effect on sleep	Increase of absenteeism	1
Miners and factory operators, Canada	problems nor on fatigue		
, ,	Positive effect on wellbeing, mental health and quality/duration of	Increased vigilance during night shifts	3

Compressed workweek type/occupation/Country	Health	Productivity	Reference
days leave	sleep		
Police officers, UK	No effect on digestion, cardiovascular problems nor pain		
4 days (10 hours shift) vs 3 days (12 hours shift) with a 4 th day (8 hours shift)	No reduction of vigilance compared to 10 hours shift	No effect on work performance	2
Police officers, USA			

References:

- 1. Bambra C, Whitehead M, Sowden A, et al "A hard day's night?" The effects of Compressed Working Week interventions on the health and work-life balance of shift workers: a systematic review, Journal of Epidemiology & Community Health 2008; 62:764-777. http://dx.doi.org/10.1136/jech.2007.067249
- 2. Dall'Ora C, Ball J, Recio-Saucedo A; Griffiths P. Characteristics of shift work and their impact on employee performance and wellbeing: A literature review. *International journal of nursing studies*, Vol. 57, pp. 12- 27. http://doi.org/10.1016/j.ijnurstu.2016.01.007
- 3. Joyce K, Pabayo R, Critchley JA, Bambra C. Flexible working conditions and their effects on employee health and wellbeing. *Cochrane Database of Systematic Reviews* 2010, Issue 2. Art. No.: CD008009. http://doi.org/10.1002/14651858.CD008009.pub2

Annex 1 Methodology

The OSMET has proceeded with a systematic review of existing reviews and metaanalyses that were referenced on the following databases: Scopus, PsycInfo, Web of science, EBSCO (Business Source Premier, Cinhal), PubMed, OVID (EBM reviews, Cochrane database of systematic reviews, Embase, Medline). We used the following keywords: ("compressed working week" OR "compressed workweek" OR "four day workweek") AND (health OR wellbeing) AND (efficacy OR productivity).

Twenty studies corresponded to the targeted criteria, based on their title or abstract section. After a thorough reading, three systematic reviews published between 2008 and 2016 were retained. There are only a few studies aimed at the question while simultaneously offering data on the impacts of a compressed workweek schedule and worker's health and productivity in an organizational context.

Broader studies often reference the 4-day compressed weekly schedule while researching topics such as the flexibility of work schedules, work time variability or, more recently, practices that pertain to work/family conciliation.

Thus, we have only retained systematic reviews or meta-analyses answering, partially or in full, the question asked through the Help Desk. Said studies yielded adequately measured results of interventions pertaining to the testing of a compressed schedule while measure its effects on health or productivity.