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Managing fatigue in the workplace

Biomathematical fatigue models reference list

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IOGP Report 626-2

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BIOMATHEMATICAL FATIGUE MODELS:

- FAID Fatigue Assessment Tool
- CAS-5 Aviation Fatigue Risk Model
- Fatigue Accident/Incident Causation Testing System (FACTS)
- System for Aircrew Fatigue Evaluation (SAFE)
- Fatigue and Risk Index Calculator (FIC) – UK Health and Safety Executive Research Report 446
- Sleep, Activity, Fatigue, and Task Effectiveness (SAFTE)

Several government agencies and private companies have developed several biomathematical fatigue models used to assess and monitor fatigue. Some of these models have been developed for use in specific industries, such as aviation, but can still be applied to any organisation which has people at its core.

The above biomathematical models have taken many years to develop, validate, and use. The IOGP-IPIECA Health Committee has prepared a comprehensive reference list of the sources used in modelling, as well as investigative reports that have utilised these models. IOGP-IPIECA does not endorse the use of any particular biomathematical fatigue model and is providing the names of the models and resource links as a reference only.

This list, IOGP Report 626-2, is available as a companion resource to Report 626.

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IPIECA is the global oil and gas industry association for environmental and social issues. It develops, shares and promotes good practices and knowledge to help the industry improve its environmental and social performance, and is the industry's principal channel of communication with the United Nations.

Through its member-led working groups and executive leadership, IPIECA brings together the collective expertise of oil and gas companies and associations. Its unique position within the industry enables its members to respond effectively to key environmental and social issues.

International Association of Oil & Gas Producers

IOGP represents the upstream oil and gas industry before international organizations including the International Maritime Organization, the United Nations Environment Programme (UNEP) Regional Seas Conventions and other groups under the UN umbrella. At the regional level, IOGP is the industry representative to the European Commission and Parliament and the OSPAR Commission for the North East Atlantic. Equally important is IOGP's role in promulgating best practices, particularly in the areas of health, safety, the environment and social responsibility.

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