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International Association of Oil & Gas Producers

Health management in the oil and gas industry

An overview

Health

Advancing environmental and social performance across oil and gas

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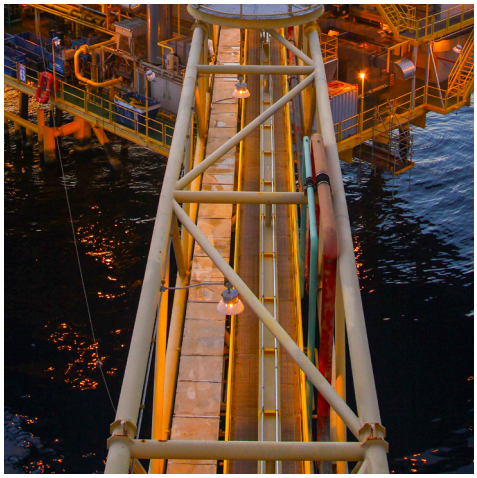

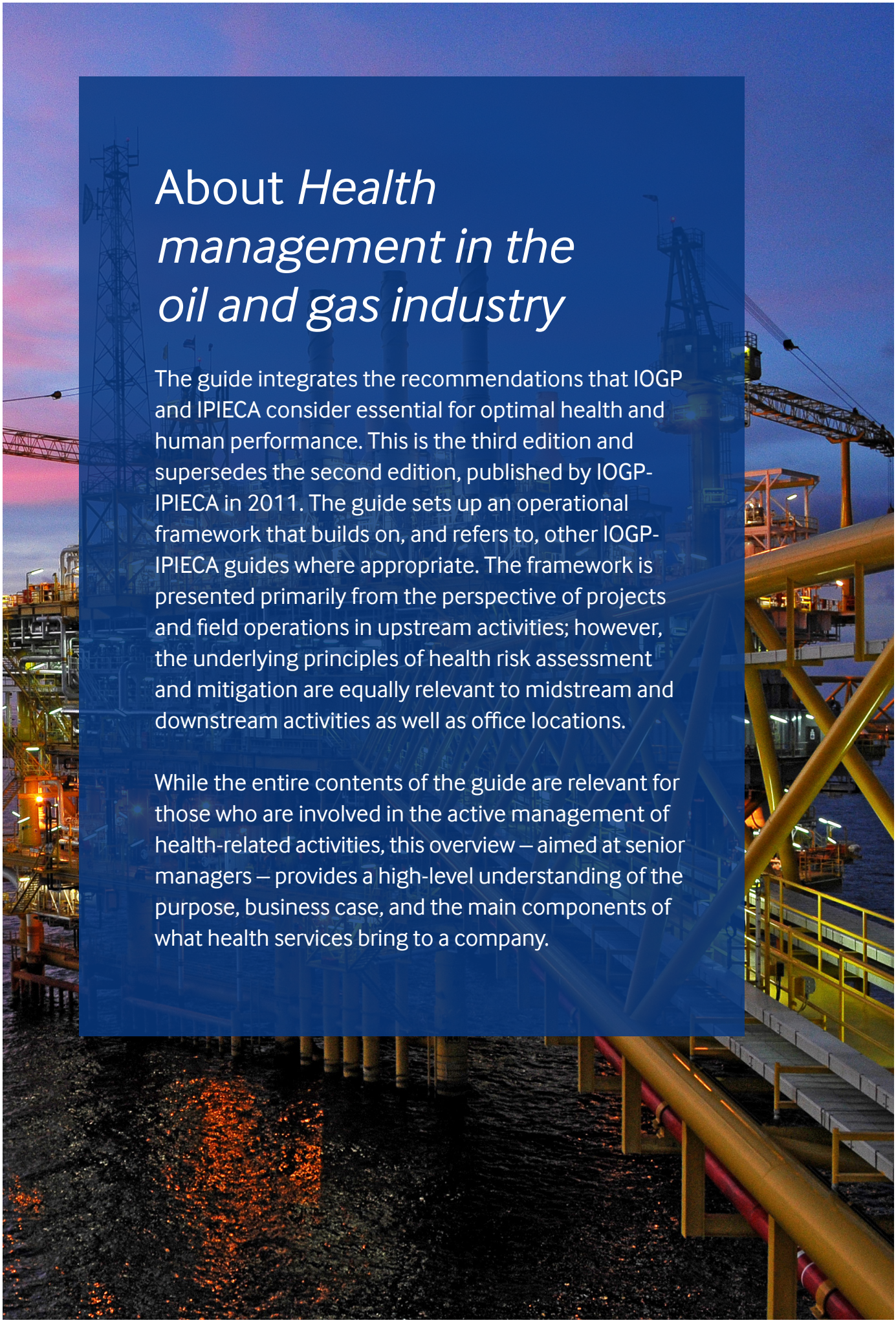

About *Health management in the oil and gas industry*

The guide integrates the recommendations that IOGP and IPIECA consider essential for optimal health and human performance. This is the third edition and supersedes the second edition, published by IOGP-IPIECA in 2011. The guide sets up an operational framework that builds on, and refers to, other IOGP-IPIECA guides where appropriate. The framework is presented primarily from the perspective of projects and field operations in upstream activities; however, the underlying principles of health risk assessment and mitigation are equally relevant to midstream and downstream activities as well as office locations.

While the entire contents of the guide are relevant for those who are involved in the active management of health-related activities, this overview – aimed at senior managers – provides a high-level understanding of the purpose, business case, and the main components of what health services bring to a company.

Executive summary

The purpose of health services in the oil and gas sector is to improve performance and wellbeing of workers and, in doing so, to manage risks to health and safety.

Safeguarding and improving the health and wellbeing of staff – employed or contracted – is in the best interest of companies in the oil and gas industry. This 'best interest' goes beyond compliance and corporate duty of care; it goes directly to the bottom line of a business. Effective leadership around health and human performance brings significant additional value, both to people and the business.

This edition of the guide focuses on the purpose of health services. The content has been organised in such a way that it links the different components of health services and how they together deliver on the overall purpose. The content has also been updated to reference other guidance published by IOGP-IPIECA and can be used as the starting point for organising health services.

HEALTH IN THE ORGANISATIONAL CULTURE

Worksite cultures vary. Some worksites see health requirements as a regulatory requirement only, and a hindrance to efficiency and profitability. Other organisations are intrinsically motivated to manage health, viewing health management as a natural component of operating a business. Safety is now embedded in the culture of the oil and gas industry, and embedding health concerns in a similar way is the next step. It has been observed that sites with a well-developed health and safety culture show higher levels of worker engagement and enjoy more sustainable health, safety, and business performance outcomes compared to others. Instilling a culture of care takes time, and is possible only with leadership commitment from line to senior management, competent healthcare practitioners, and a mature health management system in place.

THE BOTTOM LINE - A BUSINESS CASE AND RETURN ON INVESTMENT FOR HEALTH SERVICES

Investing in the health and safety of staff is not only often legislatively mandated, but is also the right thing to do and can provide a solid return on investment for a business. Fit for purpose health management systems which utilise a risk-based management approach can avoid significant direct and indirect costs.

The examples below describe two main mechanisms in which health interventions contribute to a business's overall business performance. The *direct* impact on the bottom line comes primarily from a reduction of a company's costs stemming from production loss due to illness, medical bills and insurance premiums, in addition to the substantial expenses associated with substituting staff that must end an assignment early due to poor health. *Indirect* positive impact on the bottom line comes from focussing on staff performance, health and wellbeing which all drive worker engagement, which in turn is linked to overall business and safety performance.

Additionally, indirect cost from work interruptions and scheduled delays can be reduced by introducing simple health and wellbeing interventions. These interventions have been shown to improve project delivery and HSE performance in projects and operational assets. In addition to avoiding cost, the right health interventions can contribute directly to the bottom line, by increasing the healthy high performance of staff by empowering people and the business to thrive and perform at their best.

Why? Engagement drives better performance!

Engagement and ratio of incidents per exposure hour
A 10 point increase in employee engagement score is associated with a 30-40% drop in the number of incidents*

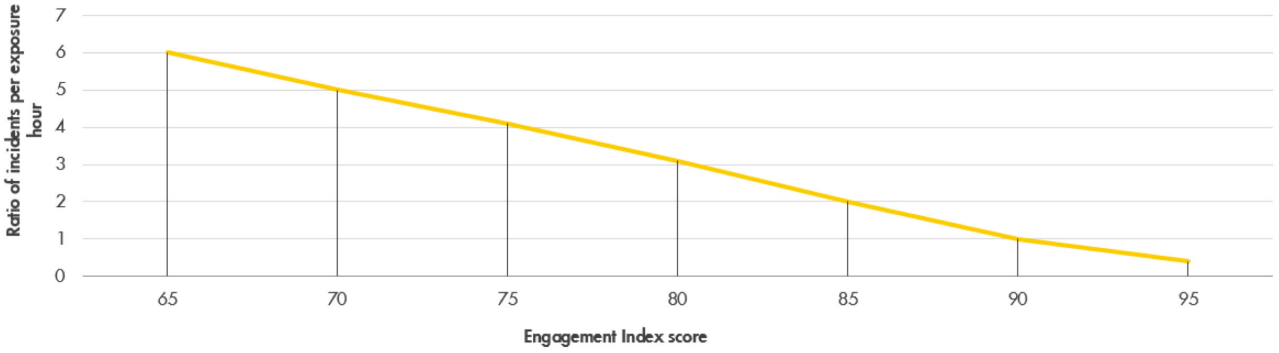

Figure 1: Based on a study at Royal Dutch Shell
Higher employee engagement correlates with lower ratio of incidents in the workplace.

Additionally, these types of programmes can positively impact recruitment and retention of staff, further reducing cost and improving performance.

A series of interventions implemented in projects at one company consistently improved business performance metrics:

- 30% above average hands on tools time (HoTT)
- Four times improvement quality in welding
- 60% fewer unsafe acts and conditions
- A significant reduction (more than 20%) in total recordable cases, when combined with a reduction in total hours

Studies showing similar returns on investment from health interventions were published by the Harvard Business Review and the Journal of the American Medical Association.[1, 2] The RAND Corporation put the return on investment at $3.80 for every dollar spent by businesses on disease management.[3, 4]

Together, these examples show the clear business opportunity that good health management provides.

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1 Hemp, P. "Presenteeism: At Work—But Out of It". *Harvard Business Review.* October 2004.

2 Stewart, WF et al. "Lost Productive Time and Cost Due to Common Pain Conditions in the US Workforce." *Journal of the American Medical Association* 290 (18). 2003. p.2443-54. 10.1001/jama.290.18.2443.

3 Mattke S et al. "Workplace Wellness Programs Study: Final Report". *RAND Health Quarterly* 3 (2).

4 Caloyeras et al. "Managing Manifest Diseases, But Not Health Risks, Saved PepsiCo Money Over Seven Years," *Health Affairs.* 33 (1). 2014. p. 124–131.

HOW TO USE THE GUIDE

The guide is aimed at three distinct groups of staff: (Senior) Business Managers, HSE and health managers or equivalent, and health professionals. Successfully delivering on the purpose of health services will require wider employee participation, but in the guide, it is assumed that this will occur as a result of the actions of the three categories of users.

1. (Senior) Business Managers: The people who influence budgets and decide on project and asset strategies, but who are not involved in the actual running of health programmes, benefit from a broad understanding of the opportunities that an integrated health strategy brings to a business.
2. HSE and health managers or equivalent: Those people responsible for the design and overall management of health-related activities, as well as providing leadership on health for their business stakeholders.
3. Health professionals: The implementers of health programmes within the health strategies.

The report is organised into four sections: (1) Integrated Health Management Systems, (2) Health Risk Assessment and Opportunities, (3) Health Risk Mitigation and Management, and (4) Healthcare Delivery.

Together, these four sections provide the narrative of the health system's purpose: implementing a robust integrated health management system enables companies to optimise health and wellbeing at their sites. The integrated health management system will identify health risks and opportunities and act on these by introducing preventive health strategies, delivered by competent health professionals, who should also be able to respond to medical emergencies should they occur.

Also published by IOGP and IPIECA:

- Health Performance Indicators
- Health Risk Assessment
- Health Impact Assessment
- Infectious disease outbreak management
- Substance misuse
- Managing Fatigue in the workplace
- Fitness to work
- A Guide to Food & Water Safety
- Health aspects of work in extreme climates
- Multiple casualty planning and preparation
- Medical facilities assessment: checklist for medical professionals in the oil and gas industry

All available from the IOGP (www.iogp.org/bookstore/product-category/health) or IPIECA (www.ipieca.org/resources) websites

Main components of a health system

Managing Health Services

- Based on the Operating Management System (OMS - see IOGP Report 510 - *Operating Management System Framework*) an integrated health management system should enable a company to optimise health and wellbeing at their sites and to organise the right mix of professionals, equipment, and other resources in order to achieve the desired health and business outcomes.
- Outcomes depend on: (1) leadership, (2) risk management, (3) continuous improvement and (4) implementation and should address the scope of work, competence requirements, reporting, assurance and data privacy/records management.

Health Risk Assessment and Opportunities

- The purpose of a Health Risk Assessment (HRA) is to provide the necessary information and understanding of health risk to prevent acute and chronic health effects to the workers in that work location.
- Major risks include: injuries, illness, foodborne illness outbreaks, fatigue, extreme heat/cold, psychological hazards and stress, infectious disease, etc. These risks change over time and need to be frequently reassessed by competent staff.

Health Risk Mitigation and Management

- According to the hierarchy of controls methodology, major risk mitigation activities include fitness for task assessment, health surveillance, worker welfare and wellbeing, waste water management, food and water safety, occupational health, fatigue risk management, and drugs and alcohol misuse management.
- Mitigation of health risk is not exclusively the task of health professionals, and requires active involvement of all staff and collaboration with other parts of the business such as Human Resources and Real Estate.

Healthcare Delivery

- Response to (acute) injury and illness relies on a tiered response involving first aiders, health professionals embedded in the business, and external medical services such as hospitals and clinics.
- In remote locations, the reliance on embedded staff increases and becomes more high risk. This risk can be mitigated by using remote healthcare technology.
- The effectiveness of the Medical Emergency Response (MER) system depends on the competence of staff, the available medical resources, the flexibility of the plan to deal with large and small emergencies. Frequent drills on diverse scenarios are essential to ensure this effectiveness.

Download the full report at:

www.iogp.org/bookstore/product/managing-health-for-field-operations-in-oil-gas-activities

www.ipieca.org/resources/good-practice/health-management-in-the-oil-and-gas-industry

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IPIECA is the global oil and gas industry association for advancing environmental and social performance. IPIECA convenes a significant portion of the oil and gas industry across the value chain, bringing together the expertise of companies and associations to develop, share and promote good practice and knowledge.

IPIECA is the industry's principal channel of engagement with the United Nations. Its unique position enables its members to support the energy transition and contribute to sustainable development.

IOGP 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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