



Medical Emergency Response and Occupational Health in Oil&Gas sector

Shell Health

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Session Outline

Oil & Gas Medical Standards

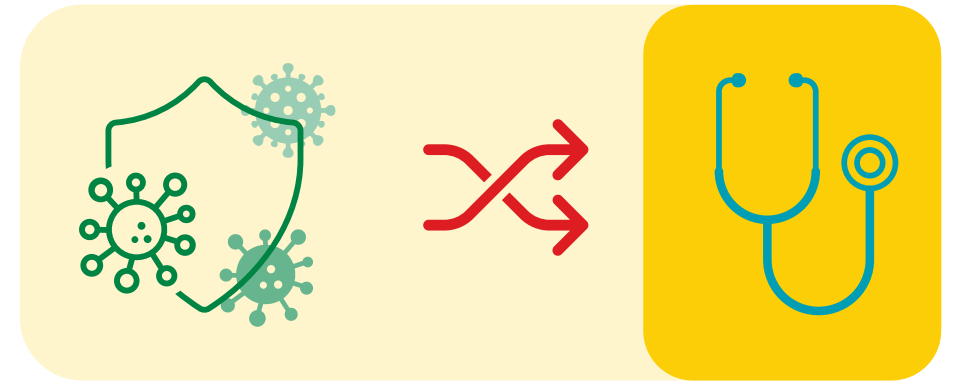
- IOGP & IPIECA Standards
- Overview of Requirement

- Occupational Health Services

- Occupational Health concept
 - Health Risk Assessment
 - Fitness to work
- Telemedical service

- Medical Emergency Responses

- MERP



IOGP – International Association of Oil&Gas Producers (Belgium)



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.

The Global Oil and Gas Industry Association for Environmental and Social Issues (UK)



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.

Managing health for field operations in oil and gas activities

A guide for managers and supervisors
in the oil and gas industry

Health
2011



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*

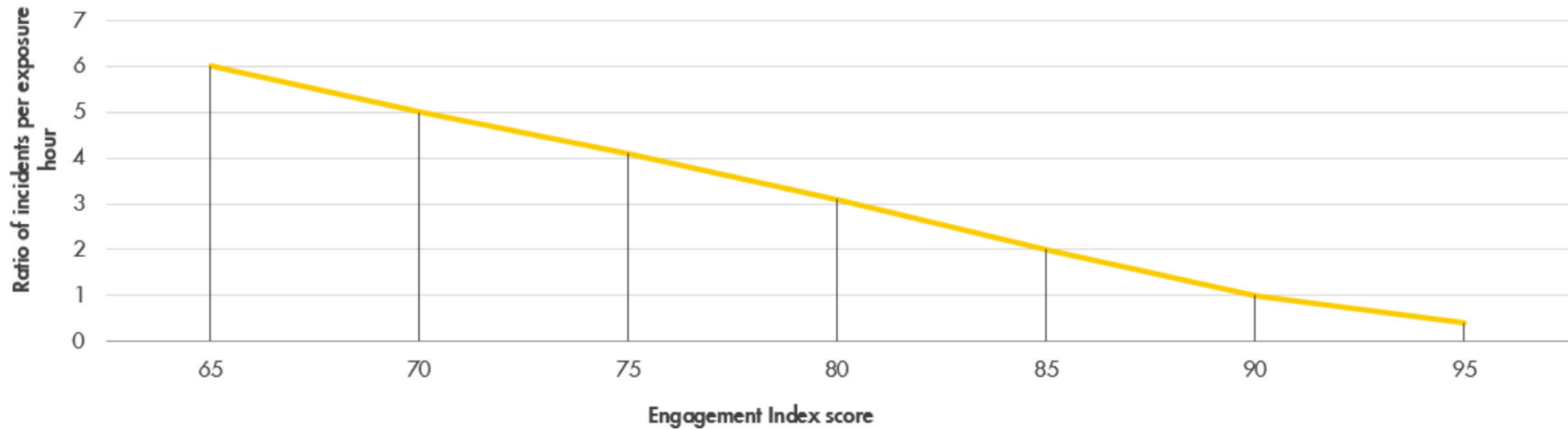
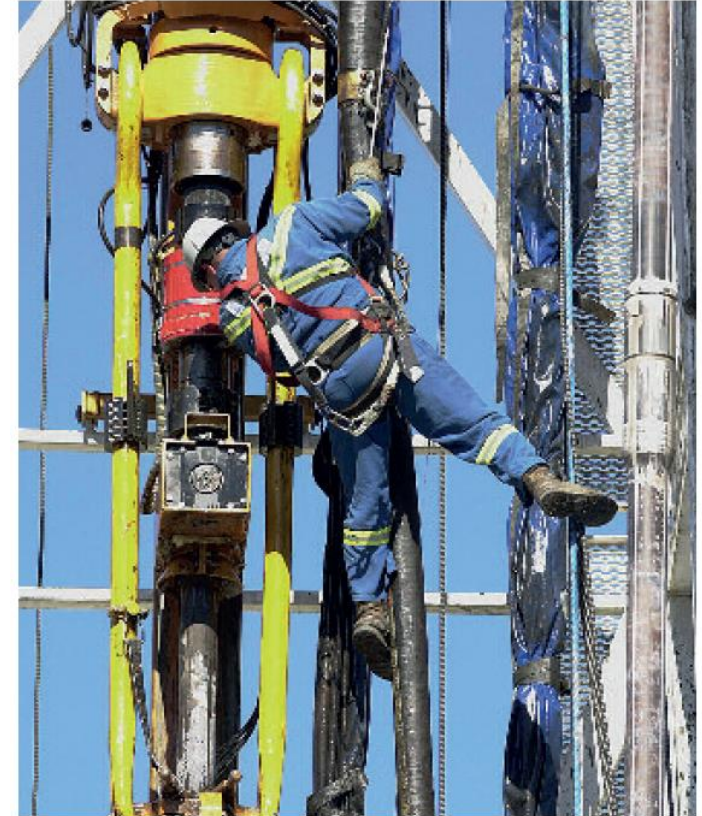


Figure 1: Based on a study at Royal Dutch Shell

Higher employee engagement correlates with lower ratio of incidents in the workplace.

Managing Health for Field Operations in Oil & Gas

- Health Management System
- Occupational Health
- Health Risk Assessment
- Industrial Hygiene and Control of workplace exposure
- Medical Emergency Management
- Management of ill health
- Fitness for task assessment and health surveillance
- Health Impact Assessment
- Health reporting and recording
- Public Health interface and promotion of good health



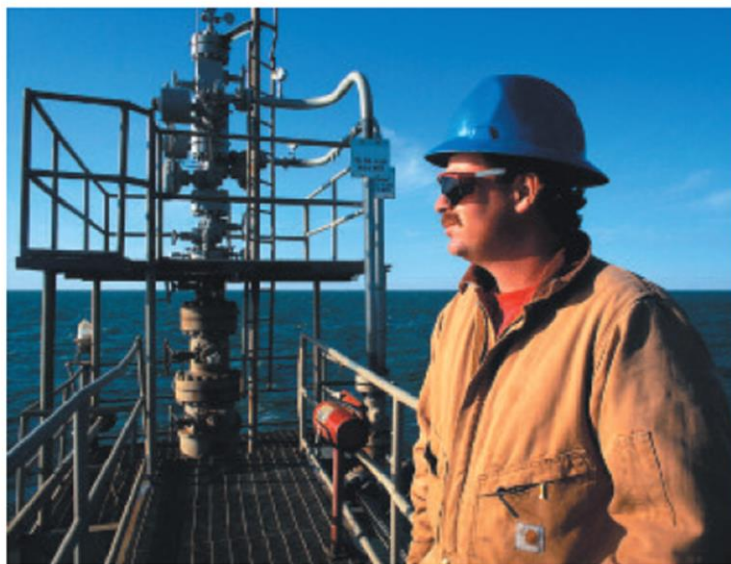


Integrating health projects into a company's corporate social responsibility programme can complement existing government or community health programmes and support local capacity building.

The identification and control of occupational health hazards in the field is key to maintaining appropriate standards of industrial hygiene.



Occupational illness is often poorly reported, but should be given the same importance as reporting an accident or incident occurring at the work site.



The workforce may consist of a combination of local, national and international staff; management should be sensitive to the diversity and requirements of its workforce and their dependants.

Occupational Health

“Better Prevention, Less Emergency”



Prevention is
better than cure.

Desiderius Erasmus

quote fancy



Occupational Health

“Better Prevention, Less Emergency”

HRA: Health Risk Assessment

- Risk = Hazard x Exposure

TABLE III. Risk assessment matrix

RISK ASSESSMENT MATRIX				
SEVERITY PROBABILITY	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)
Frequent (A)	High	High	Serious	Medium
Probable (B)	High	High	Serious	Medium
Occasional (C)	High	Serious	Medium	Low
Remote (D)	Serious	Medium	Medium	Low
Improbable (E)	Medium	Medium	Medium	Low
Eliminated (F)	Eliminated			



Hierarchy of Controls

Most
effective



Least
effective

Elimination

Physically remove
the hazard

Substitution

Replace
the hazard

**Engineering
Controls**

Isolate people from
the hazard

**Administrative
Controls**

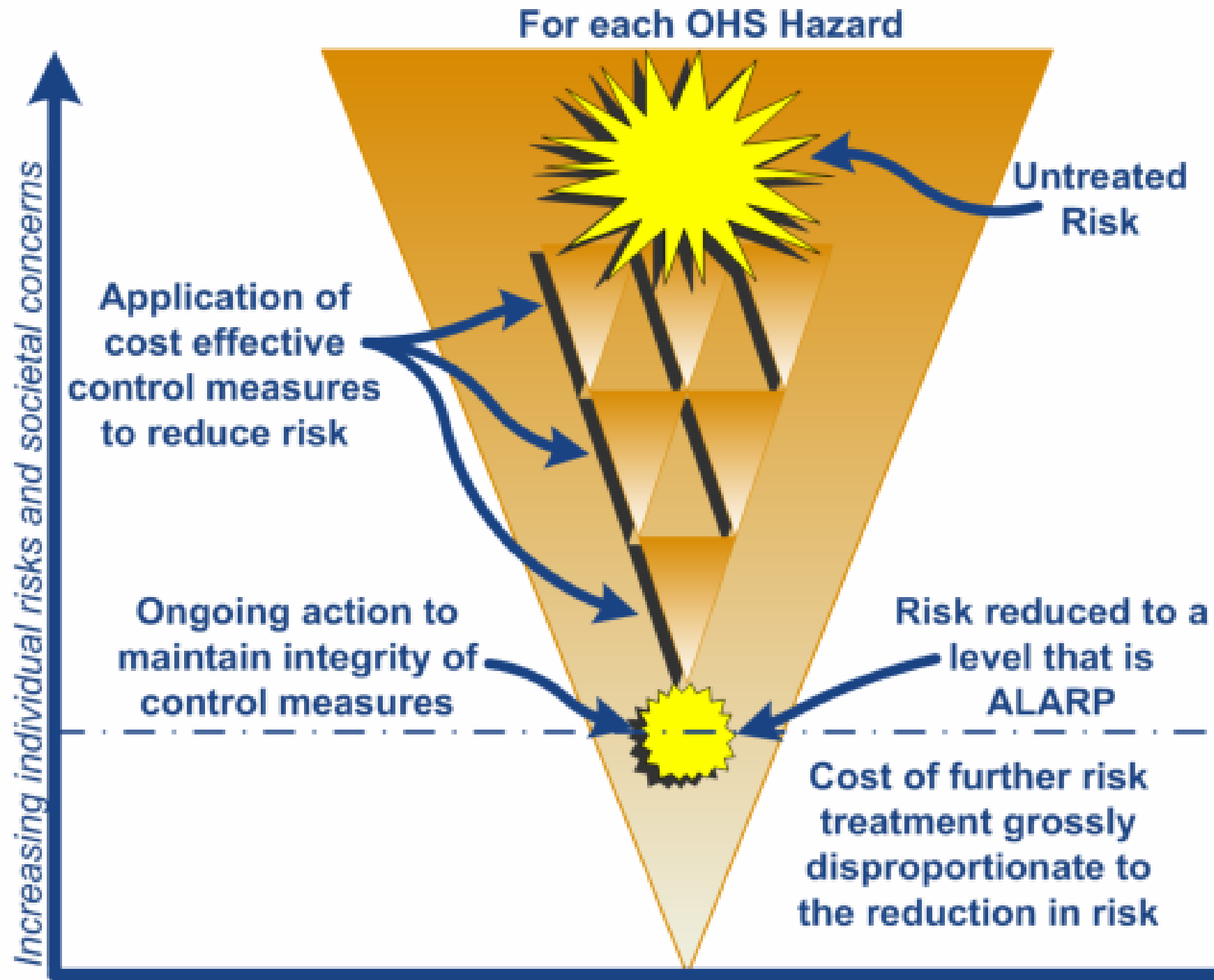
Change the way
people work

PPE

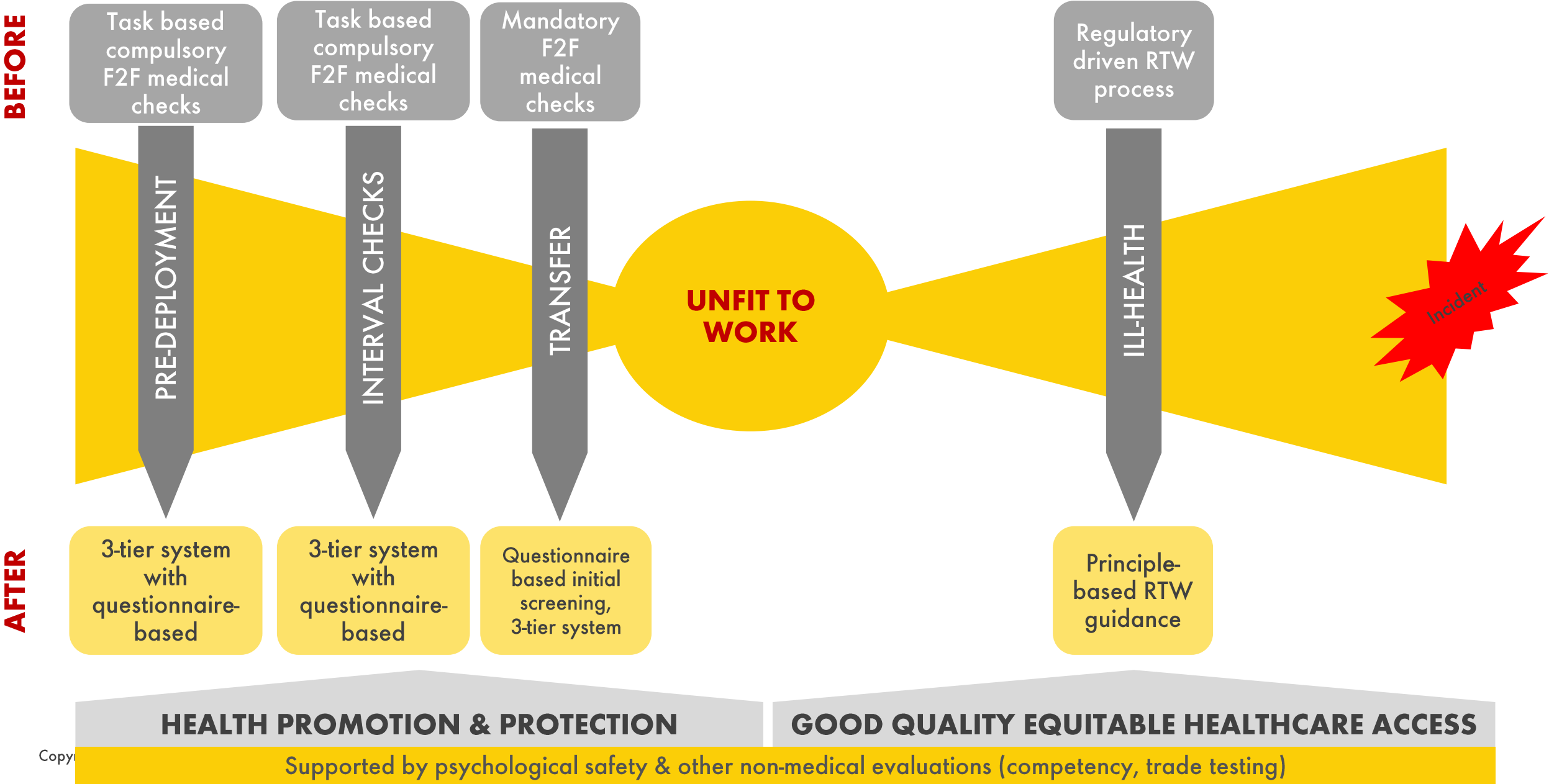
Protect the worker with
Personal Protective Equipment

ALARP: As Low As Reasonably Practicable

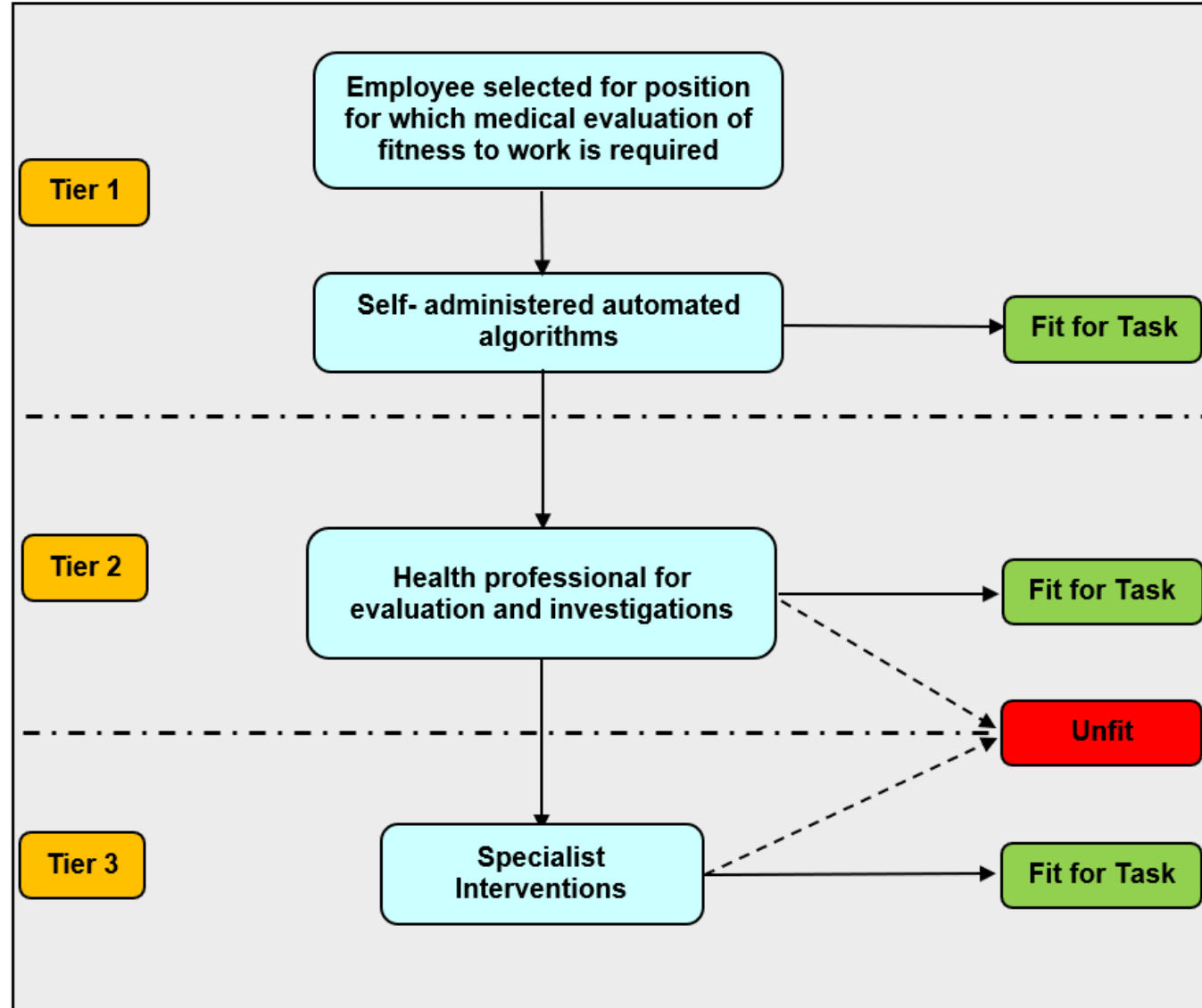




FITNESS TO WORK PRINCIPLE



OVERVIEW SCREENING PROCESS



LESS
is the
NEW
MORE.

Fitness to Work Guide

WHAT'S NEW

-  • Holistic approach to Fitness to Work (Promote / Protect / Access)
-  • 3-tier system with questionnaire-based assessment
-  • F2F medical checks when indicated
-  • Reset frequency to every 2 year
-  • CVS score removed
-  • Q1 Form updated
-  • Outcome-focused Fitness to Work KPIs (WIP)
-  • Included Comprehensive guidance on RTW
-  • Included International Transfer Process



Links and Additional supports

- [LINK](#) for Guide to Medical Evaluation of FTW Specification
- [LINK](#) for Return to Work
- [LINK](#) for International Transfers

Question?

Contact: [Thanawat Supanitayanon](#), [Kelvin Gee](#) , [Folusho Alamina](#), [Rincy Lal](#)

Telemedicine

- Disruption for Healthcare
 - Healthcare Resource at risk & Risk from Healthcare
 - Worker Health Protection
 - **Promote – Protect – Access**
- COVID Era
 - No F2F possible → Telemedical
 - Sentinel Study yielded no change in Health outcome
 - “Holistically” put effort in all worker health protection
i.e. **Trade testing, supervisor vigilance, psychological safety environment i.e. stop work**



Image Credit: Ju Jae-young / Shutterstock.com



Medical Emergency Response



Medical Emergency Response **Recommended Practice**

1st August 2016

Medical Emergency Response Procedure (MERP)

To effectively manage medical emergencies, develop a site-specific (or activity-specific) medical emergency response procedure (MERP) prior to mobilisation. Take into account specific needs of the work activities and the general situation of the country in which these activities are carried out, as well as any collaboration with local authorities. See [Appendix A: Medical Emergency Response Procedure \(MERP\) Example](#)

- Design the MERP in a way that achieves:
 - Tier 1: First aid treatment, including defibrillation, by a Designated First Aider within 4 minutes
 - Tier 2: Assessment and stabilisation by a medical Emergency professional within 1 hour
 - Tier 3: Admission to and care at the nearest Local Hospital within 4 hours
 - Tier 4: Referral to an appropriate Specialist Hospital (casualty specific)
- Obtain Shell Health's advice in designing the MERP.

Take into account the potential for individual and multiple casualties. Consider specific needs of the work activities and the general situation of the country in which these activities are carried out, as well as any collaboration with local authorities.

Tier	by	at	Time (after incident)	Equipment/Transport requirements	Training requirements	Skills maintenance requirements
Tier 0 (Initiation)	Bystander	Site	Immediate	-	• Call for help • Make area safe • Do's and don'ts (usually one hour on induction, for everyone on site)	• Annually
Tier 1 (First aid and Defibrillation)	Designated First Aider (DFA)	Site	4 minutes	• First aid box • Automated External Defibrillator (AED)	• DFA Training (see Appendix F: DFA Competency)	• DFA skills refresher (Usually every 3 months, for 2 hours)
Tier 2 (Medical stabilisation)	Medical professional (e.g. Paramedic /Nurse /Doctor)	Ambulance / Clinic / Site Clinic	1 hour	• Trauma Bag • Ambulance, and ambulance Equipment • Site Clinic Equipment and Supplies	• Professional medical training • Advanced Life Support (ALS) training	• ALS training every 3 years
Tier 3 (Hospital admission and care)	Emergency physician	Hospital	4 hours	• Ground, sea or air transportation	-	-

Summary

- Oil & Gas with New Energy Transition
- Industry standards: IOGP and IPIECA
- Fit-for-purpose actions: new approach to Fitness to Work (less is more)
- Focus to do only what is needed (Risk matrix)
- ALARP – As low as reasonably practicable
- MERP – Tier response 0,1,2,3

