Non-communicable Disease and Wellness Programs

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Which NCDs are most prevalent within the oil and gas sector?....all

<table>
<thead>
<tr>
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<th>Tobacco Use</th>
<th>Unhealthy diets</th>
<th>Physical Inactivity</th>
<th>Harmful Use of Alcohol</th>
<th>Poor work life balance/ Sleep</th>
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<tbody>
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<td>Cardio-vascular</td>
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<td>Cancer</td>
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<td>Mental Health</td>
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<tr>
<td>Chronic Respiratory</td>
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Global transition

85% of all deaths occurred in LMIC
48% of the deaths are premature
The Why

Past and projected future overweight rates in selected OECD countries
Why offshore/remote workers are particularly susceptible to NCDs

- Underlying socioeconomic, cultural, political and environmental determinants
  - Globalization/Urbanization
  - Away from home/isolated
  - Population ageing
  - Heredity

- Common Modifiable Risk Factors
  - Unhealthy diet
  - Physical inactivity
  - Tobacco use
  - Alcohol

- Intermediate Risk Factors
  - Raised blood pressure
  - Raised blood glucose
  - Abnormal blood lipids
  - Overweight/obesity

- Non-Modifiable Risk Factors
  - Age/Sex
  - Heredity

- NCDs
  - Heart Disease
  - Stroke
  - Cancer
  - Chronic respiratory diseases
  - Diabetes
  - Mental Health
How do you prevent within the extractive industry?

A case study at 4,800m ASL
Current NCD/Wellness Scene

Workplace wellness is like teenage sex. Everyone talks about it, everyone claims that they are doing it but very few are and the ones that are doing it are probably doing it wrong.
Remote?

- Freeport-McMoRan Copper & Gold
- 30,000 Population
Step 1 look at number of NCD cases

Ischemic Heart Disease hospital discharge rates 2008-2013

Younger patients each year

Source: International SOS 2014

= youngest patient per year
Step 2 Look at Risk Factors
Workforce with Raised Cholesterol

Where we are projected to be by 2014, 2015

57%

Source: International SOS 2014
Step 3 Benchmark Against National & Regional Level

Workforce with Raised Cholesterol

Raised cholesterol

Source: WHO modified by International SOS 2014
Fives steps for Workplace Wellbeing

Our approach to wellness

1-Problem Identification

1. Claims data, medical data, etc.

2. Company policies, office layout etc.

2-Roll out

3. Design programs

4. Implement

3-Monitoring

5. Monitor & Evaluate

“Random acts of Wellness”

WORLDWIDE REACH. HUMAN TOUCH.
High Risk Approach
Population based approach
Implement
Selected levels of intervention

Policy
- Enforced smoking regulation
- Catering service regulation
- Active transport policy

Organizational
- Traffic light system
- No smoking area
- Mass media posters

Individual
- Individual counseling
- Peer group support
- Nutritional counseling

Community
- Community farming subsidies
- Local champion program
- Local restaurants
- Local supermarket
- Schools

Clinical service
- Capacity building for all health workforce
- Active case detection
- NCD Out Patient clinic
- Pharmacy-adherence improvement

Macro-level environments

Community

Physical environments

Clinical

Individual
The How

Behavioural Priming

Nudging via posters, etc
Does it work?
Our Results-Case Study

A 50% decrease in population Raised Blood Pressure

A 20% decrease in population Raised Cholesterol

Prevalence in percent

Prevalence in percent

Prevalence in percent

New Stroke Cases

Overweight

Obese

- Raised BP

- Raised Cholesterol

Worldwide Reach. Human Touch.
Key takeaways

- NCD will continue to rise rapidly across the globe within the next 2 decades.
- The O&G sector is projected to be hit hard.
- All 5 disease groups are preventable.
- Interventions should focus on a mix between population and high risk approaches.
Importance of annual check-ups


Tobacco Control

Goliath Versus Goliath: Leveraging Private Mining Industry Resources for Public Health Gains in Tobacco Control

Private Sectors role in NCD prevention

What can we do to mobilize international cooperation on Non-Communicable Diseases (NCDs) to help attain the goal and targets of the Sustainable Development Goals (SDG’s)

Reducing Heart Disease

Estimation of Salt Intake by 24-Hour Urinary Sodium Excretion: Findings from the Cardiovascular Outcomes in a Papuan Population and Estimation of Risk (Copper) Study

Case Study-Indonesia

Non-communicable disease risk factor patterns among mining industry workers in Occup Environ Med Published Online First:2015 doi:10.1136/oemed-2014-102664

Workplace screening for NCDs

Workplace Screening Within the Extractive Industry: Providing New Insights as to What Causes Non-Communicable Diseases.

Heart Asia

Occupational & Environmental Medicine