

COVID-19

Containing coronavirus

Energy companies are taking action to reduce the spread of COVID-19 within their facilities. Keith Nuthall, Paul Cochrane, Poorna Rodrigo and Sarah Gibbons report.

The enemy – the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the bug that causes COVID-19

Photo: NIAID

alcohol available. Respiratory etiquette, including covering coughs and sneezes, should be promoted, while discouraging workers from using other workers' phones, desks, offices, tools and equipment. Regular cleaning and disinfecting of surfaces and equipment is important.

Finally, ILO says while personal protective equipment (PPE) can prevent exposure, it should not replace other strategies. PPE should be free, properly fitted and periodically refitted; worn consistently and properly; regularly inspected, maintained and replaced; and properly removed, cleaned, stored or disposed of, as applicable.

US guidance

The US, which had at the time of writing, the largest number of COVID-19 related deaths (139,659 on 19 July 2020 according to the US Center for Disease Control & Prevention) worldwide, has nonetheless plenty of commercial and government resources to help the energy sector maintain maximum and safe operations, with the US Department of Energy (DoE) stressing to all states that they should regard energy infrastructure workers as delivering a 'critical service'. As for pipeline and other oil and gas installations, the DoE has called for such workers to have continued freedom of movement (including to restricted areas) plus access to PPE, testing services and cleaning supplies. It has released guidance for energy production companies – notably on 'sequestering' staff, organising crews with appropriate skillsets who share the same shift, 'but not be exposed to other personnel'. It also recommends 'creating a total separation of living, sleeping, cooking, laundry, and rest/entertainment areas for the individual work crews'.²

US industry associations have also been responding. The American Fuel & Petrochemical Manufacturers (AFPM) organisation, for example, has released good practice information, including placing tape on floors to indicate necessary social distancing, infrared body temperature sensors for automatic fever detection, and

As governments worldwide loosen lockdowns imposed to impede the spread of COVID-19, energy companies are assessing their health and safety (H&S) policies to ensure workplaces are not new infection hotspots, protecting workers and hence production. These changes come as energy industries have downscaled workloads to reflect a collapse in demand for their output. International Energy Agency (IEA) data (up to mid-April) showed that countries in full lockdown were experiencing an average 25% fall in energy demand and countries in partial lockdown an average 18% decline.

Meanwhile, the UN's International Labour Organisation (ILO) has released a brief on formulating safe and healthy returns to work.¹ It suggests a cascading set of workplace priorities. First, it recommends continuing lockdown practices where possible, such as increased use of remote working and virtual meetings. Second, the installation of engineering controls such as

improved ventilation and installing high-efficiency air filters when required. Third, special return-to-work plans should introduce extra shifts and schedule work for alternate days depending on how many workers are within a facility.

Policies on health monitoring and managing sick or potentially infected workers should be established, says ILO, with 'physical distancing... implemented to the greatest extent possible' – two metres between workers. Hygiene policies and facilities should promote frequent thorough handwashing, with alcohol-based hand rubs containing 60–80%

Oil and gas workers work closely together – making social distancing tough

Photo: USEPA

foot pedal operating tech for high trafficked areas, such as doors and toilets.³ The American Petroleum Institute (API) has released a pandemic planning guide for its member companies, which includes strategic and practical advice, including disinfection protocols and maximising the use of remote working.⁴

The US International Association of Drilling Contractors (IADC) has released a database of links to global energy sector COVID-19 H&S advice and regulatory controls⁵ and recommends additional use of remote rig monitoring devices rather than human checks, to reduce worker movement during the pandemic. It has also proposed that regulators ease requirements for human-only inspection to facilitate additional machine-based assessments.

UK advice

The UK also sees the oil and gas sector as an 'essential service', according to UK Oil and Gas (OGUK) HSE Director Trevor Stapleton, with the sector 'reducing crews to essential personal known as down-manning very early on' as it worked to 'understand the risk and to put mitigations in place to protect the health of the workforce including pre-mobilisation advice'. An OGUK pandemic steering group was set up in April to help protect the offshore workforce with a comprehensive set of guidance.⁶ Among these measures are risk assessments for vulnerable groups, enhanced hygiene regimes as well as social distancing measures such as staggered meal times, revised work procedures and emergency arrangements, and reducing cabin occupancy.

Meanwhile, the UK International Association of Oil and Gas Producers (IOGP) has released a range of data and guidance.⁷ Its Safety Director Olav Skår has explained in a video how the offshore oil and gas sector has had to address some specific concerns such as ensuring helicopter passengers are kept as far apart as possible, and how to clean these aircraft if they carry a worker who is infected. It has also been developing advice on how to get

divers who may quickly develop coronavirus symptoms to urgent medical attention. The Energy Institute, too, has collated a range of useful COVID-19 related information.⁸

Norwegian guidelines

In neighbouring Norway, while national guidelines have delivered an overarching framework for testing and isolating regimes to prevent COVID-19 spreading within the industry, detailed implementation of policies has been left to individual operating companies. According to Norway's Petroleum Safety Authority (PSA), companies are 'restricting activities which are not necessary for ensuring prudent operation and production'.⁹

Maintenance of safety-critical equipment is continuing as normal, although some planned shutdowns for upgrading and maintenance have been postponed.

Looking onshore, the Norwegian Labour Inspection Authority has produced advice guidance for onshore facilities saying that energy companies should undertake risk assessments of their facilities to limit the spread of COVID-19 and advising how this should take place.¹⁰

Meanwhile, the Norwegian Institute of Public Health offers specific advice to sectors where workers live on site (civil engineering, shipyards, ships etc) as such workplaces are deemed 'particularly vulnerable to transmission', with guidance recommending hygiene measures should be 'intensified'. Separate areas for anyone diagnosed with the virus must be set aside for patients unable to travel home; workers should, where possible, operate in teams which do not mix with other teams; numbers using the canteen at one time should be limited, as should the number of people in common living areas.¹¹ Based on such advice, individual companies such as Aker BP, Equinor and Odfjell Drilling have all produced detailed procedures for health-checks on staff prior to

them leaving for periods offshore, including at heliports.

Middle East policies

A similar determination to keep the oil and gas sector open during the pandemic has been seen in the Middle East, where leading oil producers Saudi Arabia and the United Arab Emirates (UAE), for example, have kept production and infrastructure running as an essential service. Both introduced stay-at-home policies in March, which have been gradually eased since June. Saudi Arabia had a night-time curfew in place, from 8pm until 6am, until 21 June, while each of the seven UAE emirates had their own lockdown policies. Although these did not apply to the oil and gas sector, the governments required all oil and gas facilities to abide by COVID-19 protective measures. Protective masks and social distancing are required; hygiene stations have been installed; and employee numbers on sites reduced. Oversight has largely been left to company management.

Some 33% of the UAE's workforce is involved in extractive industries, and in Saudi Arabia 24%, according to ILO. A challenge has been containing the spread of the virus among the large number of foreign workers, with lower skilled employees often housed in labour camps sleeping up to eight in a room. Such camps can be conducive to the spread of communicable diseases and efforts have been made to reduce the number of migrant oil workers per room and increase the rate of disinfecting facilities. Oil major Saudi Aramco is using Johns Hopkins Aramco Healthcare, a healthcare service joint venture with Johns Hopkins Medicine, to spread awareness among employees, with free testing and medical assistance available for those who contract the virus.

A serious matter

Although many countries now seem to be over the peak of the pandemic, others, such as Brazil, are still seeing increasing numbers of deaths relating to COVID-19. While there is no breakdown of the numbers of oil and gas employees affected globally, isolated outbreaks have been reported in various countries.

However, it is clear from the plethora of guidance and advice available to those working in the sector during this crisis, the oil and gas sector is taking the disease seriously. ●

Top: Doctor in the UK protected against COVID-19 – energy workers will want similar health guarantees as the industry gets back to work

Photo: Dr Javed Anees

Centre: Helicopter landing on oil rig off Long Beach, California – keeping oil workers socially distanced in a cramped helicopter is a special challenge for oil companies

Photo: US Navy

Footnotes

- 1 - bit.ly/PRAug2020ILO
- 2 - bit.ly/PRAug2020DoE
- 3 - bit.ly/PRAug2020AFPM
- 4 - bit.ly/PRAug2020API
- 5 - bit.ly/PRAug2020IADC
- 6 - bit.ly/PRAug2020OGUK
- 7 - bit.ly/PRAug2020IOGP
- 8 - bit.ly/PRAug2020EI
- 9 - bit.ly/PRAug2020PSA
- 10 - bit.ly/PRAug2020NLIA
- 11 - bit.ly/PRAug2020NIPH