Management of worker health care in remote locations poses a considerable challenge to the implementation and continuity of the operations of organizations in the energy sector, such as oil and gas exploration and production, long distance seafaring, mining, biofuels, and renewable energy. The notions and examples related to the management of worker health care in remote locations include the definition of remote location, examples of operations of the energy industry in remote locations, assessment of hazards, risk management and control measures, and indicators.

According to the Institute of Remote Healthcare (IRHC), remote locations are those where the medical evacuation of an injured or ill person to a hospital cannot be guaranteed to be achieved within 4 hours in foreseeable circumstances (e.g. inclement weather).

A common example in the oil and gas industry is the offshore production platform. While most platforms can be reached within 4 hours by helicopter, this transportation time is not guaranteed in the event of adverse weather, aircraft availability, or at night. Examples in marine operations include vessels sailing within 4 hours of a nearest port, or vessels with a helipad sailing within 4 hours of flying time to a hospital.

Given their wide spread across the land, also the medical evacuation of ill people to hospitals might be difficult in the case of the agricultural operations of the sugarcane industry which serve biofuel power plants, the operations of wind and solar power plants, and in the mining sector.

Work in remote locations poses several challenges to the management of worker health care. Health risk assessment (HRA) is the process of mapping hazards and health risks according to the various stages of the lifecycle of operations (project, construction, commissioning, operation, maintenance, decommissioning). The tools used to assess health risks include several components, which as a rule are:

- Risks to general health: these are external (“outside the fences”) risks, proper to a given country, area or specific location, or to the corresponding population. This type of health risks are not caused by an economic activity/operation as such, but might interfere with the state of health of workers. Examples of this type of risk are infectious diseases (pandemics, epidemics, endemic conditions), diseases caused by contaminated food, water or air, diseases caused by climatic conditions and noncommunicable diseases, among others;
- Occupational risks: these are risks resulting from exposure to environmental agents (physical, chemical, biological, ergonomic and psychological). They are usually directly related to the economic activities of organizations (“inside the fences”);
- Risks related to the medical infrastructure: the response to an emergency might be longer than the expected for urban environments. The patient’s health might deteriorate along this period, resulting in disability or even death. Communication resources are often limited in remote locations (e.g., lack of telephone lines, mobile network, satellite or internet communication). As a result, the risk to health is higher (unless appropriate preventive controls are implemented). In other words, when someone falls ill or gets hurt, the odds of complications or aggravation are high when no mitigation measures are taken. Also the non-emergency medical infrastructure usually poses a challenge to care delivery to workers;
- Risks derived from noncompliance with local legislation: compliance with the local legislation is necessary to ensure the regularity and continuity of any operation. In general, the body of legal requirements provides a management system to reduce health and safety risks as a function of the local conditions. Noncompliance with legislation implies risk for operations (fines, embargoes, penalties) and the reputation of companies.
There is a diversity of measures for management and control of health risks, to be selected as a function of the risks and the lifecycle stage identified on health risk assessment. Some examples are: programs for prevention of infectious diseases, occupational hygiene and occupational health medical control programs, medical emergencies programs, and prequalification and audit of suppliers, among others2-5.

The indicators used might be reactive or proactive. Reactive indicators address past incidents and their severity, such as work-related accidents and diseases. Proactive indicators usually apply to the results of prevention programs, as e.g., evaluations of occupational hygiene, occupational medical examinations, training, and immunization campaigns, among others.

REFERENCES