GOOD HEALTH AND WELL-BEING

Health is a crucially important social and economic asset and a cornerstone for human development. Whilst the provision and management of health services remains a global challenge, the use of accredited and structured health services can help drive the quality and consistency of services provided.

Medical laboratory services are essential in the diagnosis and assessment of the health of patients, and encompass arrangements for accreditation, quality assurance, patient identification, collection of samples, transportation, storage, processing and examination of clinical samples, with subsequent result validation, interpretation, communication to patients and healthcare providers for ethics, confidentiality and the safety of the patient. Accreditation to the internationally recognised standard ISO 15189 ensures laboratories to demonstrate their competence to deliver these services reliably.

Also:
- Point of Care Testing – where testing is carried out outside the controlled and regulated environment of a medical laboratory.
- Reference materials producers – to demonstrate that they are competent to provide reference materials to medical laboratories for their ability to measure accurately.
- Medical reference measurement laboratories – to ensure the traceability and accuracy of many measurements in medical laboratories to be determined.
- Accredited certification to ISO 17025 for organisations that provide health and social care services to demonstrate consistent high quality of services.
- Medical doctors under accredited certification to the international standard ISO 19589, demonstrating translations address regulations and have commitment to safety and quality.

SAFE FOOD AND CLEAN DRINKING WATER

Food and water safety is an essential part of everyday life. Accreditation provides assurance that cutting-edge technologies and best practices are used in the delivery of quality food and water safety services.

Management systems or personnel can be evaluated according to specified requirements by accredited laboratories, certification bodies, and inspection bodies that check the products are safe for consumption.

- Food and water testing for a wide range of chemical and microbiological scopes, packaging and environmental monitoring, sensory analysis, and veterinary medication.
- Certification schemes ensure food and water supplies throughout a supply chain with agreed procedures, such as those related to farm-to-fork, traceability, good agricultural practices, good animal husbandry standards, pest- and disease-resistant food labeling, organic certification and ISO 22000.
- Inspections of operators throughout the supply chain for the provision of safe food and clear drinking water, including the inspection of pre-shipment, plant health, meat and slaughterhouses, and hotels.
- Proficiency testing schemes, where performance is confirmed to a set of criteria.
- Reference material producers for a number of materials including drinks, foodstuffs, animal feed, medical medicines, and water.

EXAMPLES OF HOW ACCREDITATION CAN SUPPORT SPECIFIC SDGS

ENHANCING THE USE OF ENERGY

The application of energy-efficient production processes and technologies, along with enhanced availability of renewable energy sources which will provide an opportunity for countries to follow a low-carbon path, is critical for the achievement of the international commitment to limiting the global mean temperature increase to 2 degrees, or preferably 1.5 degrees, by 2050, which is a challenge for energy supply.

The development of energy is an integral part of industries’ supply chains and processes, often involving cross-border trade and the transportation of volatile substances. The commercial development of alternative renewable sources of energy needs to be environmentally-friendly, and energy efficiency needs to be improved in order to support the sustainability and energy savings goals set by governments and organisations in the processes of improving energy efficiencies and improving economic performance, whilst reducing consumption of resources and emissions and preventing unsafe, unhealthy or environmentally harmful products from entering the market place.

Testing of gas, fuel and air in the environment should be based on their intended purposes, including testing for suitability, correct densities, or the presence of toxic contaminants or fire danger awareness.

- Testing new technologies such as wind and energy efficiency.
- Testing products such as windows and solar panels to measure performance, durability, safety, and environmental-friendly characteristics.
- Testing of energy-efficient installations, including solar thermal, solar energy, marine and wind turbines, and offshore wind power.
- Certification of energy management systems to help businesses improve energy-related performance and identify energy-reduction opportunities.

HEALTH AND SAFETY IN THE WORKPLACE

Health and safety are well recognized as having an impact on sustainable development – from eradicating poverty through its creation, sustainable livelihoods, technology and skills development, food security and agriculture, and a healthy workforce through dealing with environmental concerns related to health and safety in the workplace.

Businesses face increased regulatory pressure to assess and control hazards and risks to their operations. Accreditation ensures that employees, businesses and regulators can have confidence in the provision of health and safety services.

- Testing including occupational hygiene, asbestos fibres and air monitoring, identification of eligible bacteria, land and air pollutants, and electrical safety.
- Certification of Occupational Health and Safety Management systems or other management systems.
- Inspection to support the management of effective health and safety.

WASTE MANAGEMENT AND RE-CYCLING

A sustainable environment for communities in the future needs cleaner energy, reduced pollution, cleaner water, and more efficient use of natural resources. By reducing material use, the environment is protected while safeguarding people and the economy. Accreditation, certification and regulation provides assurance that waste management and recycling are being managed effectively.

- Testing of materials such as recycled oil, waste water, or contaminated land and soil being re-used for building developing, and recycling.
- Proficiency standards providing a range of environmental-related laboratories including drinking water, industrial waste, and hazardous waste.
- Reference material producers for a number of materials including waxes, solids, sediments, fuel and their by-products.
- Inspections of adhesives that have an environmental impact including the manufacturing of paper, wood, containers, and adhesives.