Preventive Safety Management - A Remedy for Malaise in Man and Machine

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Preventive safety management refers to not just prevention of workplace related accidents and diseases but more importantly to the elimination and reduction of all risks to the life and health of workers. By its nature, preventive safety requires the identification and assessment of all potential work-related risks in advance. In recent years, the oil & gas (O&G) and the chemical industries in most countries are also subject to significant legislative requirements in this regard. Is the safety record of the O&G, chemical industries improving over time?. In this talk, we will review the available evidence to answer this. To prevent accidents, it is important to design plants that are inherently safe and operate them so that accidents are prevented. Inherent safety related concepts are becoming increasingly popular in the design of chemical plants. However there is considerable variation in operational practices and significant deficiencies exist in safety related behavior. It is increasingly apparent that besides the "old" chemical, biological and process risks, "new" risks arise from overload of operators psychologically and ergonomically. We will review and evaluate the role of human factors and "intangible" organization factors in improving safety. Techniques for identifying and addressing these would be discussed with examples.