

generate deep social consequences that mark human life. Managing a human disaster remains a challenge for the health policy in Brazil. The difficulties faced are related to the lack of interface with other public policies. The urgency to incorporate intervention/action strategies into health plans is important. Implementation of prevention and training programs, and adopting strategies and protocols for the whole network of attention is critical.

**Discussion:** It is important to emphasize the importance of broadening the theoretical definitions by overcoming the divergences of the concepts adopted between the theoretical and operational field, by elaborating a review of the Brazilian legislation in order to broaden and contemplate the needs of different people.

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### Human Factor and Disasters: Possible Equations

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**Introduction:** This research starts from the assumption that work accidents, in addition to fortuitous or individual phenomena, imply social and organizational factors, and highlights the social character of the production of the accident at work. For this reason, this study investigates the living conditions and the ways of workers in the oil and gas industry in Brazil.

**Aim:** To analyze the human factors in the relationship with work accidents on oil platforms from the social dimensions.

**Methods:** It is qualitative research and it has as instruments of collection the focal group and individual interviews with workers and managers of the platforms, participant observation, and documentary analysis.

**Results:** The research is still being carried out, but some reflections are possible so far: accidents at work depend on the direct or indirect relationship of workers with the work process itself, the modalities of production of work, and management of work. Possible causes underlying the accident are the quality of life and the conceptions of health and safety. Associated with it are social constructs and the multifactorial causes of occupational accidents including the relations between acts and unsafe conditions.

**Discussion:** The increase in outsourcing and the decrease in training quality, as well as the prioritization of production, targets the detriment of meeting safety criteria. There is a need to reassess labor management, safety policies, and outsourcing processes. Lack of awareness of the proper use of safety equipment and the organization of the work environment are major causes of work-related accidents. The human factor focuses on the individual, group, organizational, and social dimensions in complex interactions. The identification of social processes between working groups in empirical reality, the influence of elements of culture, organizational management, and their impacts on relations and on safe work performance allows an understanding of social risks.

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### Identification of Preventable Death and Severe Complications in Train Crashes in Rural and Cold Environment Using a Simulation-Based Model

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**Introduction:** The use of rail transport is increasing in Sweden, as well as within Europe, and train speeds are escalating. These factors contribute to an increasing frequency of train crashes and major crashes so severe that they can be classified as disasters. There is a lack of knowledge concerning factors of importance related to the rescue operation that can influence survival rate at train crashes, especially in cold environments.

**Aim:** The aim was to identify preventable death and severe complications among passengers in a train crash in rural and cold environments using a simulation-based model.

**Methods:** A train crash scenario was developed based on scientific research, crash reports, and lessons observed in incidents. The scenario was set to a train with seven carriages consisting of 150 passengers that derailed in a curve in 160km/h, 10km from the hospital. In Umeå in the north of Sweden, 12 participants from seven emergency/disaster organizations joined in two preparing workshops and a real-time simulation-based train crash. The Emergo Train System (ETS) was chosen as a simulation tool. Data collection such as rescue capacities, response time, and patient surge were collected and transferred into the ETS.

**Results:** The results show 17 preventable death and 9 preventable severe complications since the actions were not implemented in the recommended time.

**Discussion:** The results show that an extended rescue operation can have devastating consequences especially in cold environments. Further experimental simulations are needed with defined interventions to find out how preventable deaths and severe complications can be reduced.

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### Immunization Readiness of a Deploying Emergency Medical Team

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**Introduction:** It is a requirement for a World Health Organization verified Emergency Medical Team (EMT) that all members be immunized against common diseases in the deploying region. Most jurisdictions use private suppliers such as travel doctors for immunization services. When a deployment is announced, members are nominated by their jurisdiction under the condition they are fully immunized. It is up to the individual to monitor their immunization status.

**Aim:** To determine how many members nominated for deployment were fully immunized.

**Methods:** Nominated members sent their completed vaccination record to a central location for assessment of their immunization status. The following data were recorded: vaccination