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The Theories of Accident Causation Model Development

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Abstract

Accidents occur in all types of industry resulting in injury, fatalities and damage to human, assets or environment. Occupational accidents are substantial expense to the society and individual companies. Accident causation models can specify and explain from different perspectives how an accident occurs. The following concepts are successfully explained by accident causation models: (i) why accidents happen, and (ii) how accidents happen. These models serve as a crucial theoretical foundation for safety research because they provide support for a thorough method of accident analysis and prevention. This study reviews accident causation models established by previous researchers and summarizes their findings as follows: (i) the function and history of accident causation models, and (ii) the strength and limitation of accident causation model. The development trends of several accident causation models are compared and analyzed.

Keywords: Accident causation model; Accident causation; Accident.