

Normal Accidents: Living with High-Risk Technologies.

January 29, 2019

Perrow C. Princeton NJ: Princeton University Press; 1999.

<https://psnet.ahrq.gov/issue/normal-accidents-living-high-risk-technologies>

Though less often cited than [high-reliability theory](#) in the health care literature, normal accidents theory is equally prominent in the study of complex organizations. A more pessimistic view, normal accidents theory suggests that, in some settings, a major accident becomes almost inevitable. Perrow identifies "complexity" and "tight coupling" as the two factors that create an environment in which a major accident becomes more rather than less probable over time, regardless of steps taken to increase safety. The degree of complexity Perrow has in mind occurs when no single operator can immediately foresee the consequences of a given action in the system. Tight coupling occurs when processes are intrinsically time-dependent: once a process has been set in motion, it must be completed within a certain period of time. Many health care organizations would meet Perrow's definition of complexity, but only hospitals would be regarded as exhibiting tight coupling. Nuclear power provides the archetypal complex, tightly coupled system, and an analysis of the near disaster at Three Mile Island provides the centerpiece of the book. Even if one does not share Perrow's conclusion about the potential for catastrophe as an intrinsic property of certain complex systems, the case studies offer many fascinating insights into the possible failure modes for complex organizations, including hospitals.