

Risk assessment worksheet essay sample

[Environment](#), [Ecology](#)



Use Table 1. 1 (Ch. 1) in Human and Ecological Risk Assessment as a guide to understanding the origins of ecological and human risk assessment beginning with the industrial revolution. Cite at least two outside sources to summarize the risk assessment innovations.

Format your paper consistent with APA guidelines.

In the 19th century the industrial revolution began with the introduction of steam engines, telegraph machines, and assembly lines, vastly improving the economic standing in America. Transportation modes increased, electricity was mobilized, and industrial mechanisms were heightened. With advancements in technology and transportation beginning in the 1700s, ecological contamination also elevated, creating risks to human health and environmental conditions. An increased awareness of toxins either purposely ingested or found in the environment, and the dose-response relationship that had already been established was studied more thoroughly to gain a better understanding in the role it played in human risk. The expansion of knowledge was vital to the decision-making relationship regarding advancements in risk assessment (Bernstein, 1996). The industrial revolution allowed elevated apprehension to ecological contamination and risks associated with chemical pollution, unsanitary conditions to water and soil, and environmental deterioration.

Waterways were no longer pristine and had become areas for industrial waste (Paustenbach, 2002). The Progressive Era raised awareness to conservation practices and initiated a variety of laws, bills, and organizations to aid in the protection of humans and ecological health. Risk assessment

became an analytical enterprise that was supported by information and facts helping to justify regard to humans and the ecology. Physical, chemical, and biological stressors had proceeded to be identified and field research started characterizing risks. The greenhouse gas effect was identified as an ecological concern and negligent behavior was classified. Risk assessments were developed and proposed as campaigns raised awareness to social and economic discharge that was causing harm to the environment and those relying on it for sustainability.

As the economy and population flourished well into the 1960s and beyond, more effort was initiated to reduce ecological harm and broaden the principles of risk assessments. Guidelines for strict human and ecological assessments were set in motion to identify the strengths and deficiencies of a risk assessment program or plan. The identification of a variety of toxins helped formulate regulatory programs that would prevent exposure and effects to human and the environment from harmful elements and emissions. Human and ecological exposure to chemical and toxins provided a backbone for strict principles and protocol that was needed to conduct the proper risk analyses on uncertainties in the environment, and to wildlife, humans, and living organisms (The History of Risk, 2012).